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# Contents

# Chinese Investment in Nordic Countries: Key Points

There are strong mutual economic interests between China and the Nordic region. The region enthusiastically welcomes free trade and foreign investment and this openness is attractive to Chinese investors. In 2018, for example, Sweden attracted the greatest amount of Chinese investment in Europe. Although there is growing awareness across the Nordic region of the risks of Chinese investment, this awareness is reluctant and episodic. This report identifies concerns about Chinese investments providing access to technology (including researchers), infrastructure, and markets.

*The Balancing Dilemma*. Despite growing concerns and skepticism about Chinese acquisitions, Denmark, Sweden, and Finland will not soon renounce Chinese foreign direct investment (FDI). These countries have decided that foreign investment is of greater value to their national economies than the risks to competitiveness. China's predatory behavior, however, could eventually make the Nordic region less welcoming to Chinese investment.

*Acquisitions of Specific Technologies*. The primary motive for Chinese investment in the Nordics is commercial, but there is considerable opacity in this assessment. Strategic interests could drive Chinese investments in semiconductors and munitions-related technology and in emerging technology such as FinTech, GreenTech, BioTech, and MaritimeTech.

*Sweden is China's Nordic Hub*. Sweden is an innovative nation, making it attractive to Chinese investors and an enticing target for Chinese espionage. Sweden's regulation of foreign investment is spotty; it does not have the intelligence resources to review the Chinese entity party to an acquisition and what regulation does exist focuses on defense exports (as defined by the Wassenaar Arrangement's control lists).

*Denmark as China's Niche Technology Spoke*. Denmark has had far fewer Chinese investments than Sweden, but there are small yet important investments in renewable energy, the financial sectors, and computer technology. Chinese investors that first targeted Sweden are now entering Denmark. Denmark uses foundations, large, powerful domestic institutions, to shield companies from acquisition. There are, however, significant connections between Danish universities and Chinese venture capital firms that provide an avenue for technology transfer.

*Finland as an Emerging Digital Infrastructure Platform for China*. China's investment in Finland is largely unrelated to technology, with only about 10 percent of Chinese acquisitions (approximately $1 billion) aimed at information and communications technology (ICT), including in the semiconductors and telecom sectors. Finland and China seek to maintain a model relationship marked by mutual respect and interests. Finnish officials' highest priority remains market access in China. Although Finnish businesses acknowledge the risks of selling their intellectual property or cutting-edge enterprises to Chinese investors, they seem unwilling to pass up the opportunity because of a desire for revenue.

China favors investment in the Nordic countries because they represent sources of technology with few regulatory hurdles. This has been true until recently for all of Europe, but the Nordics now attract special interest because of the value of the technology acquisitions and the relative absence of regulatory obstacles to foreign investment.

All countries in the European Union must balance foreign investment opportunities and greater protection of sensitive industries and technologies to ensure their future economic competitiveness. As they prepare national legislation to implement the new EU framework regulation—coupled with growing domestic concern over foreign investments—the three countries are strengthening investment screening. This offers a unique opportunity for the United States to engage with all three.

The lack of intelligence about Chinese acquisitions and funding was an issue that came up repeatedly. The inability of Nordic countries to trace funding and beneficial ownership of Chinese acquisitions is an area where greater use of cooperative mechanisms, with the United States supplying the Nordics with non-public information on China's intentions and financing, would be helpful and welcome.

# Introduction

There are strong mutual economic interests between China and Europe, and specifically the Nordic region. The Nordic region enthusiastically welcomes free and open trade as well as foreign direct investment (FDI) and views it as a matter of national pride. This economic openness is attractive to Chinese investors. In 2018, more than 50 percent of Chinese foreign acquisitions worldwide took place in the European Union, and countries in the European Union accounted for 6 of the top 10 destinations for Chinese overseas mergers and acquisitions.[1] Although total Chinese investments in Europe dropped in 2018, in the first half of that year, Sweden emerged as the European country that attracted the most Chinese investments. In 2018, Sweden attracted the highest amount of Chinese investment in Europe, receiving $3.6 billion, followed by the United Kingdom ($1.6 billion), Germany ($1.5 billion), and France ($1.4 billion).

The United States government has taken a very proactive role regarding the Chinese economic penetration of Europe. U.S. policy has focused on significant national acquisitions such as Chinese-built or owned European infrastructure (e.g., related to the Belt and Road Initiative) and China's role in Europe's telecommunications sector. Much less attention has been focused on the Nordic region and the number of small, unrelated Chinese acquisitions and investments in small Nordic technology start-ups, particularly in specialized technological ecosystems, such as clean tech, maritime tech, or biotech. These small acquisitions represent less than 10 percent of Chinese investment in the Nordic countries and would not necessarily capture news headlines or attract government scrutiny. However, these start-ups make a vital contribution to economic competitiveness. Frequently, the size of these start-ups and how they are financially structured fall below the radar of government agencies that review foreign investment regimes or below the threshold of national and European screening mechanisms.

The CSIS Europe, Russia, and Eurasia Program and Technology Policy Program set out to better understand why and how three Nordic countries—Sweden, Finland, and Denmark—approach Chinese investment in small, indigenous technology start-ups. The programs also assessed whether there were specific acquisition patterns related to this sector. One of the central analytical questions was whether these technology acquisitions were designed with strategic intent as part of Beijing's larger global technology acquisition strategy or whether they are primarily commercial. Given their small size and diversity, these investments seem driven mainly by commercial motives more than by an official strategy, part of a more significant and wide-ranging effort by Chinese investors to find profitable venues outside of China for their money.

1. "中国贸促会研究院发布《欧盟投资环境报告》," financialnews.com.cn, April 23, 2019, http://www.financialnews.com.cn/cj/sj/201904/t20190423_158755.html.

Where data was available, the study team examined investment patterns in the three countries since 2015, when notable activity picked up. Through open-source research and interviews with public officials and private sector actors, the team also examined how Nordic government and public attitudes toward China and Chinese attitudes toward and relations with these three Nordic countries affected China's technology acquisitions. This research effort came at a particularly timely moment, as the European Union finalized its tool kit of investment screening mechanisms, requiring the three Nordic EU members to translate this EU regulation into national law. The team sought insights into whether Chinese acquisitions of tech start-ups were (or were not) brought to the attention of national regulatory authorities and how the Chinese used technology acquisition channels such as universities, trade associations, or chambers of commerce in their focus on regional technology hubs.

Why were Finland, Denmark, and Sweden chosen for this analysis? These Nordic economies, though small, are very attractive for Chinese investment given their strengths and national policies that emphasize technological innovation. All three countries have well-educated, highly skilled workforces, good infrastructure, and are politically and economically stable. Sweden in particular, with its strong start-up culture, is a magnet for investment, and China, with its immense financial resources and national strategies for innovation-driven industry, is increasingly turning to Europe and specifically to the Nordics as the United States has tightened its foreign investment regulations and has heightened political sensitivities to Chinese investment.

The Nordics' "extreme openness" to free trade and foreign investment led to a general reluctance until recently to screen foreign investment from any source (except perhaps Russia), fearing that other nations could initiate trade and retaliatory investment measures. Before joining the European Union in 1995, Sweden did have a national screening mechanism, but once it achieved membership, Sweden (and also Denmark) did not have formal national investment screening mechanisms before the development of the EU screening tool kit. Finland has had a screening mechanism since 2012 and is currently updating it to reflect the European Union's new investment screening.[2] FDI does not, for the most part, fall under the scope of their national laws.

Because all three countries are highly dependent on trade and foreign investment to a much greater degree than the United States, their trade dependence shapes their views regarding both Chinese investment and the rapidly changing international political environment. Because of an increasingly difficult political relationship between the United States and China, there is growing concern about Chinese investment, particularly in Sweden, which has received the most Chinese investment of the three countries. All three Nordic states place greater weight on preventing damage to Nordic investment and long-term economic competitiveness rather than on concerns about Chinese acquisition of their technology. There is also great concern about being increasingly squeezed between two giants—the United States and China—and the impact that might have on openness to trade. For these reasons, Nordic attitudes toward Chinese investment should be viewed as still evolving.

During the past five years, EU member states have increased their scrutiny of Chinese investment in the technology and critical infrastructure sectors. Each state maintains a limited national assessment of the dangers of inviting and accepting both Chinese state-owned and privately-owned companies—

2. Though not a member of the European Union, Norway nevertheless seeks to align with EU regulations due to its inclusion in the European Economic Area and has implemented its own investment screening process.

although governments increasingly acknowledge this distinction may not necessarily exist—within industries deemed essential to national security and economic growth. Thus, foreign investment screening mechanisms have become critical because they facilitate dialogue and mandate information sharing among member states and the European Commission regarding incoming foreign investment and acquisition across the European Union. The new regulations also allow both member states and the European Commission to make inquiries about investments in other countries, though each member state will maintain national control over and final adjudication of investments within its borders.

All countries in the European Union, including the three Nordic countries examined here, continue a delicate balancing act between seeking foreign investment opportunities and protection of sensitive industries and technologies that will assure their future economic competitiveness. Maintaining this balance depends on the countries' desire for FDI and potential capacity to mitigate competitiveness risks through legislation, regulatory review, and other methods.

This balancing dilemma is further strained by the Nordic publics' views on openness to foreign investment from China. An ongoing poll conducted by the Norwegian Institute of International Affairs (NUPI) found that Nordic citizens generally view screening mechanisms as a legitimate tool to protect sensitive industries, including defense and natural resources, *as long as governments do not use them excessively* (emphasis added).[3] The poll additionally concluded that foreign investment from the European Union is viewed more positively than from Russia and China. In contrast, Chinese investment is viewed less negatively than that from Russia.[4] Larger geostrategic challenges with Russia dominate the political and security agendas of the Nordic states, whereas Chinese technology and small and medium-sized enterprise (SME) acquisition pose a relatively new and physically distant strategic test that is primarily viewed through a free-trade lens. There is also a generational dimension: young Nordic respondents, especially those under the age of 35, are significantly less skeptical of foreign investment from Russia and China than older citizens.[5]

3. Morten Andersen, Hrik Hiim, and Ulf Scerdrup, "The Nordic Shift: China's Uphill Battle for Approval in Northern Europe," European Council on Foreign Relations, March 18, 2020, https://www.ecfr.eu/article/commentary_the_nordic_shift_chinas_uphill_battle_for_public_approval_in_nor.

4. Ibid.

5. Ibid.

# China's Nordic Investment Hub: The Case of Sweden

Public attitudes regarding Chinese investment in Sweden, including the acquisition of technology firms and SMEs, are generally positive, both within government and business circles as well as within labor unions, interest groups, and the media.[6] Investment and acquisition are viewed as success stories, reinforcing Sweden's image as an attractive destination for global investment, with its capable workforce as an engine for employment opportunities and increased production of goods and services. Most publicly and privately driven Chinese investment in Sweden, however, does not receive government and media oversight unless it is significantly large, such as the acquisition of Swedish automaker Volvo in 2015 by the Chinese conglomerate Zhejiang Geely Holding Group (Geely). Geely's $3.3 billion investment in Volvo grabbed national and international attention. Although some individuals had concerns about the due diligence conducted about the deal and the outsourcing of Swedish automotive jobs, as well as the potential implications of political influence in Sweden, many public officials touted the acquisition as a success story of Swedish industry.[7]

Chinese officials and investors view Sweden as a technological hub for its investments across the Nordic region. Sweden describes itself as an innovation and knowledge nation and receives a significant proportion of non-European tech investment.[8] A 2014 Google-funded report found 22,000 technology companies in Stockholm, and 18 percent of the workforce is employed in the tech sector.[9] Sweden received 15 percent of all foreign investment in the European Union's tech sector, an impressive feat considering the country has just over 2 percent of the European Union's 435 million people (excluding the United Kingdom).

6. Nicola Nymalm and Martin Forslund, "Chinese Investment in Sweden: Encountering Open Doors," in Chinese Investment in Europe: A Country-Level Approach, John Seaman, Miko Huotari, and Miguel Otero-Iglesias, eds. (European Think Tank Network on China, December 2017), https://www.ifri.org/sites/default/files/atoms/files/etnc_reports_2017_final_20dec2017.pdf.

7. Phone interview with scholar based in Stockholm.

8. "How Stockholm Became a 'Unicorn Factory'," Wharton, University of Pennsylvania, November 9, 2015, https://knowledge.wharton.upenn.edu/article/how-stockholm-became-a-unicorn-factory.

9. Stefan Löfven and Hans Dahlgren, "Approach to matters relating to China," Swedish Ministry of Foreign Affairs, September 26, 2019, https://www.government.se/4adb19/contentassets/e597d50630fa4eaba140d28fb252c29f/government-communication-approach-to-matters-relating-to-china.pdf.

In 2018, there were 114 companies in Sweden with Chinese majority-ownership, less than 1 percent of all foreign-owned companies in the country (most foreign owners are from neighboring Nordic countries). However, there are a significant number of companies in Sweden whose principal investors are Chinese, with an estimated 25,000 Swedes working for Chinese-owned companies, the vast majority (perhaps 20,000) working for Volvo and its Chinese owner. The Geely investment in Volvo dwarfs all other Chinese investment in Sweden.

Geely's investment in Volvo is a classic example of an entrepreneurial Chinese firm that emerged from the evolution of the Chinese economy as it moved away from strict government control of production to a semi-market economy. Geely began as a refrigerator manufacturer using borrowed money in the 1980s and grew to produce cheap appliances for China's domestic market. It bought failing state-owned enterprises (SOE), including one that made motorcycles. In a few years, Geely gambled that it could also make cars using "repurposed" talent from SOE acquisitions. Its most ambitious acquisition was Volvo. Its next ambition is to dominate the electric vehicle (EV) sector by leveraging its acquisition of Volvo.

Sweden's status as "an innovation and knowledge nation" is one of the key factors that make it so attractive to Chinese investors.[10] It also makes it an enticing target for Chinese commercial espionage.[11] The Säkerhetspolisen (Sweden's Security Service, which has counter-intelligence functions similar to the FBI in the United States) believes that China is actively engaged in intelligence gathering using both human and cyber collection (e.g., electronic attacks). One former Swedish intelligence official stated that there is a pattern of Chinese intelligence agencies targeting Swedish technology start-ups and stealing their intellectual property, with the result that the technology would often be commercialized in China before being brought to market in Sweden. These start-ups, typically small and focused on growing their businesses, do not always prioritize national security or competitiveness issues and are uninterested in the larger strategic dimensions at play.

The national disparities are striking, and Sweden is in a class by itself. Overall, the level of venture capital (VC) funding across the Nordic region is relatively small, with all foreign investment (not just China) totaling about €8.2 billion (approximately $9.7 billion), with €312 million (approximately $169 million) spent in the semiconductor sector. Of the total VC investment in the last five years, Sweden accounts for almost 60 percent. Looking at VC investment in tech start-ups for the same period, Sweden accounts for 49 percent and Finland for 25 percent. In the semiconductor sector, Finland accounts for slightly more than half of investment (probably a reflection of Nokia's changing fortunes), whereas Sweden accounts for 25 percent.

There is some evidence that China is seeking to acquire Swedish companies that are developing technologies with both civilian and military, or dual-use, applications. This reflects China's commercial and strategic interest in Swedish technology, innovation, and research. The Chinese company NavTech, which has links to the defense sector, acquired Swedish micro-electromechanical systems manufacturer Silex Microsystems in 2015 using state-backed investment holding companies.[12]

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10. Emily Feng, "How China acquired mastery of vital microchip technology," *Financial Times*, January 29, 2019, https://www.ft.com/content/7cfb2f82-1ecc-11e9-b126-46fc3ad87c65.

11. Sveinung Sleire, "Nordic Nations Want to Step Up Scrutiny of Foreign Investments," Bloomberg, October 31, 2018, https://www.bloomberg.com/news/articles/2018-10-31/nordic-nations-want-to-step-up-scrutiny-of-foreign-investments.

12. Justitiedepartementet, *Ett system för granskning av utländska direktinvesteringar inomskyddsvärda områden*, Dir. 2019:50 (Stockholm: 2019), 3, https://www.regeringen.se/4adadf/contentassets/62a15f4410db4b0aab960ad0210c439a/ett-system-for-granskning-av-utlandska-direktinvesteringar-inom-skyddsvarda-omraden-dir.-2019-50.pdf.

The purchase of Chematur by the Chinese SOE Wanhua is more troubling. Chematur is a spin-off from Nobel, the Swedish munitions maker. Chematur's history and location put it at "the center of Sweden's defense industrial base" (according to one source) and provides potential access for this SOE. Wanhua is one of the world's largest chemical manufacturers, and its complicated ownership structure includes the State-owned Assets Supervision and Administration Commission (SASAC) of the Yantai Municipal People's Government as the largest shareholder. Although the Silex acquisition led Swedish policymakers to begin to reassess their investment safeguards related to China, it did not face scrutiny from the Swedish government at the time.[13]

Many Chinese delegations visit Sweden every year, and China sends many delegations and students to major university research technology centers with which it has cooperative R&D agreements. However, out of the roughly 600,000 Chinese citizens who study abroad globally, only 2,671 came to Sweden for the 2017–2018 academic year (about half came to the United States). It does not appear that the cooperative R&D arrangements between Sweden and China, or the presence of Chinese students in Sweden, are significant avenues for technology transfer. Technology transfer to China primarily occurs through acquisitions of Swedish companies and through the presence of Swedish companies in China. One area to closely monitor in the future is Chinese scientific research in relation to the Arctic (Sweden is a member of the Arctic Council). Since 2016, Sweden has hosted a Chinese Remote Sensing Satellite North Polar Ground Station.

Sweden's regulatory oversight of foreign investment is spotty. Many acquired Swedish companies simply did not report transactions, making it difficult for the government to measure acquisitions and risk or acquire actionable data. Sweden does not have the intelligence resources to review the Chinese party to an acquisition. What regulation does exist focuses on defense exports (as defined by the Wassenaar Arrangement's control lists), and there is some degree of investment control in certain sectors (such as the Military Equipment Act of 1992), but these are limited in scope.[14] In addition, in the event that a foreign investment occurs in an entity responsible for security-sensitive activities, the updated Protective Security Act of 2018 requires the operator to notify Swedish security services or the military. However, the act does not require scrutiny of the foreign acquirer.

Outside of these defense-focused regulations, Sweden currently does not maintain a national security screening mechanism for foreign investment. Before Sweden became a member of the European Union, the Act on Foreign Acquisition of Swedish Corporations required official authorization of acquisition of Swedish firms, but the Swedish government repealed the act in 1992.[15] The need for national legislation to implement the new EU framework regulation coupled with growing domestic concern over foreign investments prompted efforts to establish an investment screening mechanism to monitor and control foreign acquisitions of Swedish companies.[16] In August 2019, the Swedish government formed a special commission—the Direct Investment Investigation—to explore proposals

13. Ibid.

14. "The European Commission urges member states to tighten their foreign direct investment rules," Roschier, March 31, 2020, https://www.roschier.com/newsroom/the-european-commission-urges-member-states-to-tighten-their-foreign-direct-investment-rules/.

15. Justitiedepartementet, *Ett system för granskning av utländska direktinvesteringar inomskyddsvärda områden*.

16. Direktinvesteringsutredningen, *Kompletterande bestämmelser till EU:s förordning om utländska direktinvesteringar* (Stockholm: SOU, 2020), 17, https://www.regeringen.se/49336a/contentassets/770db2b3490449f6ac3383b7252af2a8/kompletterande-bestammelser-till-eus-forordning-om-utlandska-direktinvesteringar-sou-2020-11.pdf.

for a Swedish system for reviewing FDI in protected areas.[17]

In March 2020, the Direct Investment Investigation commission released an interim report containing proposals to align Swedish regulations with the EU framework regulation. Notably, the report recommended that the National Inspectorate of Strategic Products—a foreign ministry agency responsible for defense exports (similar to the Department of State's Office of Defense Trade Controls)—serve as the primary point of contact for EU member states on matters pertaining to foreign investment screening.[18] A final report containing proposals for a Swedish investment screening mechanism is scheduled for release in November 2021.

17. Phone interview with Danish government official based in Copenhagen.

18. Phone interview with scholar based in Copenhagen.

# A Bespoke Spoke of China's Nordic "Hub and Spoke" Strategy: The Case of Denmark

Denmark has had far less Chinese private investment and SME acquisition than Sweden despite the significant media attention (and U.S. concern) about Chinese infrastructure and mining investments in Greenland. Similar to Sweden, Denmark is a small but very attractive foreign investment destination. Danish companies are leaders in several high-tech industries, including information technology (IT), life sciences, clean or green technology, and maritime technology. Denmark is also highly dependent on foreign trade and investment; exports comprise 55 percent of GDP. An assessment of investment practices shows that Chinese investors are acquiring business in all markets across Denmark: small-scale technology firms, large-scale industrial projects, and all-sized operators in the maritime, quantum, and cyber fields.[19]

Copenhagen welcomes foreign investment to strengthen the Danish economy. Relatively small Chinese investments have been made in the renewable energy sector and computer technology, but most acquisitions or investments attract less attention. Similar to its Nordic counterparts, Danes have largely viewed Chinese financial investment as a success story for its openness to trade and investment. Chinese companies and investments that initially targeted Sweden are now entering Denmark.[20]

Similar to Sweden, public and media attention have focused primarily on multimillion-dollar acquisitions of notable companies, whereas smaller investments and acquisitions mostly fly under the radar. But the largest and most recent Chinese acquisition in Denmark is both notable for its size and its technology function: Geely's 2017 purchase of 51 percent of Danish Saxo Bank. This acquisition established a technological joint venture to provide financial and regulatory technology solutions to financial institutions and China's fintech sector.[21] The joint venture allows Saxo Bank to directly sell financial and regulatory technology solutions, including trading platforms and robo-advisers, to local lenders in China.[22] Media reporting suggests that Beijing supported Geely to gain access to

19. "Saxo Bank and Geely Holding Group to Establish Fintech Joint Venture Serving the China Market," Saxo Bank, December 17, 2019, https://www.home.saxo/campaigns/pr/2019-h2/saxo-bank-and-geely-holding-group-to-establish-fintech-joint-venture.

20. Richard Milne, "Saxo Bank Targets Chinese Market with Geely Joint Venture," *Financial Times*, December 17, 2019, https://www.ft.com/content/21268e6a-20b3-11ea-b8a1-584213ee7b2b.

21. Teis Jensen, "China's Geely to take control of Denmark's Saxo Bank," Reuters, October 2, 2017, https://www.reuters.com/article/us-saxobank-m-a/chinas-geely-to-take-control-of-denmarks-saxo-bank-idUSKCN1C70RG.

22. Phone interview with scholar based in Copenhagen.

new technologies.[23] Geely was able to take control of one of Europe's most technologically advanced financial institutions, which is deeply involved in developing future fintech and regtech applications. Investment in these new technological areas will likely be used to strengthen Geely's investment position in the region.

The Danish government also "doesn't know what it does not know" about China's footprint in Denmark's technology start-up market. Government officials and external analysts in Copenhagen have yet to conduct a broad assessment, and some interviews suggested that this is not a priority for government agencies. Denmark appears to focus on remaining an attractive market for foreign investment, partnering with China on new technology drivers, and retaining its technological expertise amid more intense global competition (including from China).[24] Officials and analysts are not yet overly concerned about Chinese technology acquisitions in Denmark. Some are concerned about maintaining Danish technological competitiveness, which may be reduced if Chinese-owned companies become more competitive at the expense of Danish and other European firms.

Denmark's foreign investment policies are welcoming to all. Although Denmark is bound by EU rules on the free movement of goods and capital, it does not distinguish between EU and foreign-national investors.[25] Danish authorities do recognize China's growing global strength in the technology and surveillance industry and China's focus on foreign technology acquisition as a tool to strengthen its domestic economic development, but Copenhagen lacks national screening mechanisms to regulate the foreign acquisition of its technology-based start-ups.[26] The Danish government may conduct limited screening if there are monopoly concerns (in any industry). Copenhagen does not require additional permits for foreign investors to purchase a business or acquire capital, though there remain a few ownership restrictions that are overseen by governing authorities. Denmark also has specific legislation that allows for some limited investment screening in certain sectors, including defense, cybersecurity, supply chain reliability, outer-space activities, and financial enterprises.[27]

Danish authorities are preparing a national law that incorporates the EU investment screening mechanism. In February 2019, the government's interdepartmental working committee was tasked with presenting policy proposals to allow direct government intervention against mergers and acquisitions that might affect national security and to better assess investment in critical infrastructure, energy programs, IT and telecommunications, transport, food, health, and dual-use technologies.[28] The government's current decentralized approach to investment screening is cooperative; government agencies, private sector actors, and universities maintain open lines of communication regarding foreign investment and potential acquisition opportunities, regardless of

23. Ibid.

24. Danish Defense Intelligence Service, *DDIS Intelligence Risk Assessment 2019* (Copenhagen: December 2019), https://fe-ddis.dk/eng/Products/Intelligence-Risk-Assessments/Pages/Intelligence-RiskAssessment-2019.aspx.

25. Per Hemmer, "Government to introduce new screening of foreign direct investments and regulatory intervention," Bech Bruun, March 27, 2019 https://www.bechbruun.com/en/news/2019/regeringen-vil-indfre-screening-af-udenlandske-investeringer-og-indgrebslov.

26. Ibid.

27. Phone interview with Danish government official based in Copenhagen.

28. "Digital Innovation is Coded in the Finnish DNA," Business Finland, https://www.businessfinland.fi/en/do-business-with-finland/explore-finland/ict-digitalization/.

country of origin.[29] The small Danish intelligence service devotes most of its resources to tracking and countering Russian interference and coercion and lacks both the resources and political direction to monitor Chinese investment.

One particularly unique approach that protects Danish companies from predatory takeover is their use of foundations. Much of Denmark's business landscape is under the auspices of non-profit foundations, which are primarily tied to the companies' origins. Entities such as the Novo Nordisk Foundation (the largest financial endowment of any Danish foundation) and the Carlsberg Foundation largely shield companies from external acquisition by preventative voting. They also use endowments to sustain funding for operations should entities not be self-sufficient. These foundations allow companies to take a long-term approach to business operations, investments, and risk since their activities have steady financial backing. International entities, including Chinese private and state-owned entities, cannot conduct takeovers when large and powerful domestic institutions shield the organization from predatory actions.

Another divergence in Chinese approaches to Sweden and Denmark could be a more significant connection between Danish universities and Chinese venture capital firms, with the firms viewing universities as incubators for growth with relatively low-cost labor and innovation. The Danish Technical University (DTU), Denmark's leading science and engineering institution, conducts partnerships with Chinese universities and firms across the technological spectrum.

29. "2019 Investment Climate Statements: Finland," Department of State, https://www.state.gov/reports/2019-investment-climate-statements/finland/.

# A Digital Infrastructure Hub in the Making? The Case of Finland

Of the three case study countries, Finland has the highest number of digital start-ups per capita in the world and maintains advanced industrialization in the natural resource marketplace.[30] Finland seeks to position itself as an international traffic node for data communications. The government has taken steps to attract foreign businesses and investment in Finland, cutting the corporate tax rate from 24.5 percent to 20 percent in 2014 in a bid to stimulate anemic growth and revitalize its once powerful telecommunications sector. Finland has simplified its residence permit system for foreign experts and established Business Finland, a state-funded network that promotes foreign investment.[31]

China's investment strategy in Finland does not appear to be as focused as it is in Denmark and Sweden. Chinese acquisition and investment have increased in Finland over the last 10 years, with the bulk (90 percent) of Chinese funds invested in just two corporate acquisitions: a majority acquisition of Finnish gaming company Supercell by the Chinese company Tencent and a majority acquisition of Finnish sporting goods company Amer Sports by Anta Sports, the world's third-largest sporting goods manufacturing company. These acquisitions were purely commercial, with no strategic intent. However, the remaining 10 percent of investments and acquisitions (around $1 billion in investment), which have been geared toward the information and communications technology (ICT) sector, including the silicon/smart device manufacturing, automotive, atomic layers deposition (ALD), and design software spaces, are strategically important.[32]

Finland's high-tech sector and open economy are attractive to Chinese investment and acquisition. Although Chinese state-owned and private firms have not been overly aggressive, they have been increasingly present in Finland and are actively searching for acquisitions. There may be additional opportunities in the immediate aftermath of the Covid-19 pandemic as Finnish businesses were hit especially hard, with a 14 percent drop in exports to China from January to May 2020.[33]

30. Interview with government official based in Helsinki.

31. Phone interview with Finnish government official in Helsinki.

32. Mia Heiskanen, "Google announced one-billion-euro renewable energy investments in Finland and the rest of Europe," Nordic Business Forum, September 20, 2019, https://www.nbforum.com/nbreport/google-announced-one-billion-euro-renewable-energy-investments-in-finland-and-the-rest-of-europe/.

33. Phone interview with Finnish government official based in Helsinki.

The Finnish government has no official position on, nor has it formally joined, the Belt and Road Initiative (BRI), although many Finnish companies are interested in participating in BRI projects. Take the Talsinki Tunnel, announced in May 2016, which would be the largest tunnel in the world, connecting Tallinn, Estonia and Helsinki, Finland by a 103 km rail line under/on the seabed of the Gulf of Finland. Interestingly, an infrastructure initiative and its financing connect back to Finland's gaming industry. One of the Talsinki Tunnel principal backers is a former executive of the Angry Birds computer game. The Finnish tunnel development firm received a pledged investment of €15 billion from China's Touchstone Capital Partners, an investment vehicle for Chinese SOEs, accompanied by a memorandum of understanding with major Chinese state rail and communications conglomerates ensuring that Chinese firms designed and built the tunnel. Concerns about the Chinese investment and opposition to the overall costs of the project have delayed it for seven years, and it is unlikely to ever come to fruition.

The Talsinki Tunnel raises two noteworthy aspects of Chinese infrastructure investments. First, although many significant Chinese investment projects are announced, few are completed. CSIS research of Chinese investment patterns in the Western Balkans discovered that only a quarter of all announced Chinese projects between 2012 and 2019 were completed. Second, Chinese infrastructure projects, be they roads, railway, tunnels, or ports, contain a digital telecommunication component embedded within them, which propels a second digital investment wave of ICT-focused projects.

The Digital Silk Road, another more significant dimension of the BRI, is also active in Finland, particularly in relation to a 10,500 km trans-Arctic undersea internet cable which would stretch from Finland across Russia to Japan and Beijing. This project brings together the Finnish state-owned Cinia Group Oy and the state-owned China Telecom. Moreover, Finland and China have also agreed to develop a joint research center for Arctic Space Observation and Data Sharing Services. Although Google remains the largest data-center investor, drawn by Finland's relatively cheap power and tech workforce, these efforts may suggest a growing interest by Beijing in assisting Finland to become a more significant data communications hub.[34]

There is a shared positivity in Sino-Finnish relations that does not exist in Sweden or Denmark. Finland and China actively seek to maintain a "model relationship" marked by mutual respect and interests. Finland and China maintain a mutually beneficial investment relationship within the SME technology space. Finnish government officials, however, are monitoring targeted investment in their vital national industries.[35] Thus far, neither government officials nor the public interest have been tarnished by Chinese investment.

What does concern Finnish officials is market access in China. The Finnish government remains primarily focused on analyzing and assisting the needs of hundreds of Finnish companies for them to better compete within the Chinese market since state-backed firms generally receive preferential treatment. Regulatory regimes remain a challenging impediment for Finnish access to the Chinese market despite the Finnish government warmly welcoming Chinese investment and business in Finland. Reciprocity is lacking.

34. Interview with government official based in Helsinki.

35. Ibid.

Finnish businesses know the risks of selling their intellectual property or cutting-edge enterprises to Chinese investors, but many simply cannot pass the opportunity to sell because of the sizable potential revenue.[36] Chinese state-backed and private firms utilize multiple pathways to assess the viability of acquisition and investment in Finnish firms. Consultancies are emerging in Helsinki and beyond that specialize in Chinese-language and China-based consulting—and that profit by connecting state-backed and private firms with businesses throughout Finland's emerging technological community.[37] Often, Chinese companies rely on such Finnish-based interlocutors to form relationships with the commercial sector and to help cut through bureaucratic obstacles that would limit or create hostility toward ownership takeover, acquisition, and partnerships. One expert noted that it seemed firms were "willingly taking Finnish innovation to China."

The Finnish government does monitor foreign investors that establish cooperative and financial partnerships with universities, trade associations, and chambers of commerce for both general networking and conducting business through subnational means.[38] But there does not appear to be much concern about Chinese economic concentration around Finnish university and research and development (R&D) centers, even though Huawei has two R&D centers situated near Finland's advanced research universities that currently focus on 6G technologies.

There are no general regulatory limitations for foreign acquisition of Finnish companies. Under the Act on Monitoring of Foreign Corporate Acquisitions in Finland (172/2012), Finnish authorities may monitor and restrict the transfer of corporate influence to foreign individuals or organizations on the grounds of vital national interests.[39] The Ministry of Economic Affairs and Employment (TEM), in consultation with other authorities, conducts this monitoring, which includes the areas of defense, security of supply, and functions fundamental to society.[40]

In addition, all defense acquisitions, including goods or services supplied to the Ministry of Defense, Defense Forces, Border Guard, and entities dealing in dual-use goods, must receive approval from TEM and the Ministry of Defense. If TEM discovers and determines that an acquisition conflicts with vital national interests, it refers the matter to a government plenary group that determines an outcome.[41] Although the Finnish screening system targets acquisitions as opposed to investments, what constitutes acquisitions in the act corresponds closely with FDI.[42] According to TEM, a corporate acquisition encompasses activities that result in a foreign owner gaining control of "at least one-tenth, at least one-third, or at least one-half of the aggregate number of votes conferred by all shares in the

36. Ibid.

37. "Ministry of Economic Affairs and Employment monitors corporate acquisitions," Ministry of Economic Affairs and Employment of Finland, March 28, 2020, https://tem.fi/en/acquisitions.

38. Ibid.

39. Ibid.

40. Jonas Hallberg, "Investment Screening in Four Nordic Countries – An Overview," National Board of Trade Sweden, 2019, 6, https://www.kommerskollegium.se/contentassets/2781b31214234afabd749e170c77c8ff/investment-screening-in-four-northern-countries.pdf.

41. "Ministry of Economic Affairs and Employment monitors corporate acquisitions," Ministry of Economic Affairs and Employment of Finland, March 28, 2020, https://tem.fi/en/acquisitions.

42. Eva Rytter Sunesen and Morten May Hansen, *Screening of FDI Towards the EU* (Copenhagen: Copenhagen Economics, Danish Business Authority, January 2018), 39, https://www.copenhageneconomics.com/dyn/resources/Publication/publicationPDF/2/422/1516698849/copenhagen-economics-2018-screening-of-fdi-towards-the-eu.pdf.

company, or holding that otherwise corresponds to a decision-making authority in a limited liability company or other monitored entity."[43]

The TEM monitoring mechanism allows for approval of investments both before and after they have taken place. All corporate acquisitions pertaining to the defense sectors require advance approval by authorities. The defense sector encompasses entities dealing with dual-use goods. Within the defense materials industry, monitoring covers all foreign owners, including foreign owners residing or domiciled elsewhere in the European Union and the European Free Trade Association (EFTA).

In the non-defense sector, TEM primarily monitors transactions related to acquisitions of Finnish entities considered critical for securing vital functions of society. Unlike the defense sector, monitoring rules for the non-defense sector only apply to foreign owners residing or domiciled outside the European Union. Finland does not specifically screen such acquisitions made by foreign SOEs.[44] In that case, dual-nationals or EU citizens do not undergo the same screening process while acquiring start-ups or SMEs.

In February 2020, TEM announced a future amendment to the act to meet the requirements of the EU foreign investment screening framework.[45] The amendment includes establishing TEM as the point of contact with other member states and the European Union on matters pertaining to the EU framework regulation, including the security sector in provisions concerning acquisitions in the defense sector; and enabling TEM to impose conditions for the confirmation of a corporate acquisition, and when necessary, enforce compliance with the conditions by a conditional fine.

Finland's national act, the overarching legislation that monitors foreign acquisition in Finland, will be amended with an expectation of parliamentary review and action in mid-2020 to align, by October 2020, with EU foreign investment screening regulations. The current act does not specify company size or sector. One test that remains for the Finnish government is whether the revisions to national law will or will *not* cover FDI in any industry.

Although Finland does not preclude foreign investment, some of its tax policies may make it unattractive to investors. Tax authorities treat the movement of ownership shares in a Finnish company into a foreign company as a taxable event, though Finland complies with EU directives that require it to allow such transactions in other EU member states without taxing them.[46]

Technological espionage has been and remains a problem in Finland, though it is not only China-related. Russia also engages in espionage. Companies are largely transparent with government counterparts on this, helping them understand patterns of economic espionage or subversion. But there is a lack of ongoing education of business owners and corporate leadership regarding the evolution and adaption of potential dangers of foreign investment. Business Finland, Finland's public investment and trade promotional organization, under the purview of the Finnish Ministry

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43. "Act on the Screening of Foreign Corporate Acquisitions updated," Ministry of Economic Affairs and Employment of Finland, February 28, 2020, https://tem.fi/en/article/-/asset_publisher/paivityksia-lakiin-ulkomaalaisten-yritysostojen-seurannasta.

44. Phone interview with Finnish government official based in Helsinki.

45. "2019 Investment Climate Statements: Finland," Department of State.

46. "EU foreign investment screening regulation enters into force," European Commission, April 10, 2019, http://trade.ec.europa.eu/doclib/press/index.cfm?id=2008.

of Employment and the Economy, is currently attempting to better analyze ongoing patterns of SME acquisition as well as to educate leading business and corporate officials to strengthen their understanding of predatory practices.

# The European Union's Investment Screening Regulation: An Essential Tool

There is an outdatedness and naïveté to the Nordic countries' investment review processes. Although there is growing unease about Chinese investment, it is accompanied by: (1) a lack of data and visibility into Chinese acquisition patterns (companies do not know to let their government know and communication across ministries is poor); (2) a lack of understanding of the strategic intent behind particular Chinese investments and the technological ecosystems China seeks to penetrate; and (3) the strategic implications of the Nordic trade and investment balancing dilemma, which in practical terms gives greater weight to the Nordic countries' strong preference for open trade over their future technological competitiveness or their response to risks from China. A government-related think tank wrote that Nordic countries "always held liberalized trade and investment policies in high esteem, opposing increasing restrictions on capital flows as a matter of principle."[47] Most Nordic interlocutors view Russia as the closer and more important security concern to the region than China.

Encouragingly, all three Nordic countries are updating national legislation related to their investment screening regimes because of a landmark EU framework regulation for screening FDI that came into force in April 2019, prompted in good measure by concerns over Chinese investment.[48] This exercise is prompting a fresh look at national requirements because the framework regulation represents the first effort to implement a common FDI screening structure in the European Union on the basis of national security and public order. It aims to enhance cooperation and coordination between individual member states, obligates member states and the European Commission to exchange information on specific transactions, and provides member states and the commission the option to issue opinions and comments on transactions of concern. Yet there is still plenty of room for national maneuver: the member state in which the transaction takes place is fully entitled to the final say on how to treat investments of concern. After an 18-month transition period, the framework will be fully applied in October 2020, hence the adjustments to national laws.[49]

47. "With eyes on China, EU lawmakers back investment screening," Reuters, February 14, 2019, https://www.reuters.com/article/us-eu-china-investment/with-eyes-on-china-eu-lawmakers-back-investment-screening-idUSKCN1Q31JU.

48. Ibid.; and "Screening of Foreign Direct Investment—An EU Framework," European Commission, https://trade.ec.europa.eu/doclib/docs/2019/february/tradoc_157683.pdf.

49. "List of screening mechanisms notified by Member States," European Commission, https://trade.ec.europa.eu/doclib/docs/2019/june/tradoc_157946.pdf.

In determining whether an investment affects national security and public order, EU member states and the commission consider the effect of the investment on critical infrastructure, critical technologies, the supply of critical inputs (e.g., energy and raw materials), access to sensitive information or the ability to control information, and freedom and pluralism of the media.[50] The framework regulation does not provide for a mandatory EU-level screening mechanism, with FDI screening remaining under the purview of each individual member state. Nor does the framing regulation require member states to introduce investment screening mechanisms, instead giving them the ability to maintain existing mechanisms, introduce new mechanisms, or continue without any screening mechanisms.

Under the framework regulation, member states with existing national screening mechanisms must ensure that their mechanisms adhere to standards for transparency of rules and procedures, non-discrimination among foreign investors, confidentiality of information, the possibility of recourse against screening decisions, and measures to identify and prevent circumvention by foreign investors. For those member states with existing national FDI screening mechanisms, the framework regulation also comes with a requirement to notify the commission of such mechanisms. As of April 2020, some form of national FDI screening mechanisms exist in 14 of 28 member states.[51] Although their screening systems differ in scope and form, they all aim to maintain security and public order at the national level. In the meantime, member states are updating their screening systems or adopting new systems to adhere to the framework regulation.

50. Morten Andersen, Henrik Hiim, and Ulf Sverdurp, "The Nordic shift: China's uphill battle for public approval in northern Europe," European Council on Foreign Relations, March 18, 2020, https://www.ecfr.eu/article/commentary_the_nordic_shift_chinas_uphill_battle_for_public_approval_in_nor.

51. "中国贸促会研究院发布《欧盟投资环境报告》," China Council for the Promotion of International Trade, April 25, 2019, http://www.ccpit.org/Contents/Channel_3434/2019/0425/1157693/content_1157693.htm.

# Chinese Views of Investment in Europe and the Nordic Countries

China remains dependent on the West for advanced technology, and it uses four techniques to acquire it: (1) forced technology transfers as a prerequisite to conducting business in China; (2) placement of students and workers in universities and companies in the West; (3) cyber espionage; and (4) the acquisition of foreign firms. Economic espionage is part of Chinese activity in the three Nordic countries, both to gain commercial advantage in negotiations and to obtain technology and business-sensitive information.

The trade politics of the Nordic countries, which view themselves as staunch supporters of market liberalization and free trade, make them attractive venues for foreign investment. They are politically and socially stable, with high incomes and skilled workforces.[52] China views them as sources of great technology with few regulatory hurdles. This has been true, until recently, for all of Europe, but the Nordics now attract special interest both because of the value of the acquisition targets and the relative absence of regulatory obstacles to foreign investment.

The Nordic countries' predilection for free trade gives them a special place in the already welcoming EU investment environment. In 2019, the China Council for the Promotion of International Trade published a report on the European Union's investment climate that found that the European Union is the most attractive destination for Chinese investment, with China establishing more than 2,900 direct investment enterprises by 2017.[53] Almost 80 percent of Chinese firms surveyed for the report listed the European Union as their investment destination of choice, and many expressed interest in expanding investments in the European Union, a slight increase from the previous year. In 2018, more than 50 percent of Chinese foreign acquisitions worldwide were in the European Union, and EU countries accounted for 6 of the top 10 destinations for Chinese overseas mergers and acquisitions (but this is expected to change as the European Union's new FDI restrictions come into place).

China's Ministry of Finance views this accommodating European environment as "beneficial for the transition to the EU of Chinese investments [previously] bound for the U.S."[58] Another Chinese

52. "中国贸促会研究院发布《欧盟投资环境报告》," financialnews.com.cn.

53. Jia Yingzi [贾英姿] et al., "The impact of the European Union Overseas Foreign Direct Investment Screening Framework regulation [《欧盟外商直接投资审查框架》条例的影响]," Fiscal Science 5, 2019, http://www.cssn.cn/jjx_lljjx_1/sjjjygjjjx/201908/t20190815_4958032.shtml.

researcher pointed out that there are “invisible champions” in Europe that have accumulated manufacturing and management experience and that if Chinese companies can acquire them through mergers and acquisitions, they will save a lot of research and development time and avoid taking many detours.[54] Chinese firms see this investment as complementary to their own growth plans and very much as a win-win: China gets the R&D and know-how and European companies get capital and, they hope, access to the Chinese market. However, once technology has been transferred to China, Chinese companies likely will use it to compete against Nordic firms while these firms simultaneously struggle to gain access to Chinese markets.

Not all technology transfer occurs through licit channels. Chinese technological espionage came to the attention of Nordic security services almost a decade ago, with activities in Sweden, Finland, and Norway in particular (although Norway is outside the scope of this research).  Chinese human espionage in the Nordic region focuses more on Chinese dissidents and human rights activists (such as the case in Sweden of Hong Kong bookseller Gui Minhai). In contrast, cyberespionage appears (from publicly reported cases) to focus on the acquisition of technology.  A former Swedish intelligence official notes that start-ups in his country are a prime target for Chinese cyber espionage. The Swedish Security Service has expressed concerns about Chinese investments in the country and the risk of forced technology transfers. A Finnish official acknowledged that this was, in effect, an accepted part of the risk of doing business in China.

To gain a greater understanding of Chinese investment patterns in Nordic countries and their modalities, it is vital to distinguish between commercial and strategic intent, and then whether the acquisition in question has strategic effect. Most Chinese investments in Nordic countries appear to be driven by commercial motives (e.g., Amer Sport in Finland). China hopes that these acquisitions reinforce the image of a benign China as a trade and economic partner. In the three Nordic countries examined, the Chinese have not been able to translate their economic presence into political influence.

The motives for specific investments can be opaque. Investments that are driven by commercial motives can obscure investments with strategic motives. These investments, though small in number, frequently serve Chinese military or industrial policy goals, or potentially as a vehicle to exert political influence. Some are beneficiaries of Chinese government-supported financing, although ultimate beneficial ownership and the sources of financing are obscured. Some Chinese investments blend both commercial and strategic motives, which confuses the landscape further.

The sources of Chinese financing of these acquisitions—SOEs or private financing—require more detailed analysis. Chinese private investors currently remain the main force of Chinese acquisitions in the Nordic countries. That said, even if the motives for an acquisition are entirely commercial and the acquiring Chinese company is entirely private, this does not preclude the later exploitation by the Chinese state of the investment.

Some technology acquisitions reveal China’s strategic intent. The Swedish acquisition of Silex Microsystems in 2015 is a perfect example, as the ultimate beneficial owner of the acquisition was eventually revealed to be the Chinese military. Moreover, a major unrelated investment in Sweden (the Geely acquisition of Volvo) led to Geely’s move into Denmark with the purchase of Saxo-Bank, which could be used to further advance Chinese acquisitions in the Nordic region.

54. Phone interview with a Chinese researcher.

# Conclusion: Safeguarding the Nordic Technology Treasure Chest

The Nordic countries' regulatory openness, human capital (the product of strong education systems), R&D investments, and technological expertise draws Chinese investment to the region. Access to advanced technology is also a driver for Chinese investors (as is gaining access to the European single market). Global brand recognition is also sought after, such as the acquisition of Finland's Amer Sport, because it creates the value and worldwide approval that Chinese firms need.

This study identifies three areas of concern if acquisitions provide the Chinese state with access to technology (including skilled researchers), infrastructure, or markets.

**The Balancing Dilemma:** Despite the concerns expressed in this report, Denmark, Sweden, and Finland will not be quick to renounce Chinese FDI and acquisition of technology SMEs within their borders. These countries have determined that foreign investment in their economies maintains their national competitiveness, in Europe and internationally. The potential for future job loss from technology transfer pales in comparison to the need for investment in critical sectors in the Nordic countries, and China looks to these countries for both market and strategic reasons.[55] Although the post-Covid geopolitical landscape may force countries to reassess their national screening mechanisms and protect critical industries, industry leaders will continue to search for foreign investment to strengthen their companies.

**Technological Ecosystems and Greater Financial and Acquisition Transparency:** Although this report concludes that the primary motive for Chinese investment in the Nordics is commercial, there is a high degree of opaqueness in that assessment. Some Chinese investments, particularly in semiconductors and munitions-related technology, appear to be strategically driven by the interests of the Chinese Communist Party. Sectors identified as important in Chinese Five-Year plans receive more investment, but whether this reflects strategic intent, a purely commercial decision, or a commercial decision incentivized by Beijing's strategic interests (and perhaps subsidies) is unclear. What is clear is the focus of Chinese investors on the Nordic tech sector in general and Sweden in particular.

The inability of the Nordic countries to effectively trace the funding sources and beneficial ownership of Chinese acquisitions must be addressed if there is to be improvement. This problem is not unique

55. Phone interview with scholar based in Stockholm.

to the Nordics, but there is a lack of basic awareness among Nordic firms on why they should ask or demand who is acquiring them. And, should these firms submit their data to the appropriate government authority, there is no centralized data center or government agency tasked with verifying that the information is accurate. Because of the excellent work of Swedish researchers, there is a growing understanding of the necessity of more complete and centralized data as well as a more proactive whole-of-government effort to arrest economic espionage and more closely scrutinize acquisitions for their strategic effect—even if they represent just 10 percent of total Chinese investment. However, this is not occurring. Government officials are focused on amending their national laws for investment screening, which is important, but there is much more work to be done. This is an area where greater cooperative efforts by the United States in supplying the Nordics with non-public information on China's intentions and financing would be helpful and welcome.

**From Skepticism and Scrutiny to Safeguarding:** Unfortunately for Chinese investors—but fortunately for Europe and the Nordic countries—there is growing skepticism about Chinese investment and acquisitions. This skepticism is not universal, and the Nordics will preserve their open economy and not go as far as the United States in restricting Chinese investment. Nordic investment policies that actively pursue the Chinese market have not caught up to changing Nordic political attitudes about risk, and China's predatory behavior could make the Nordic region a less welcoming environment for Chinese investment.

One topic that came up repeatedly is the intelligence shortcomings of the Nordic countries on Chinese acquisition patterns. Developing background information on potential Chinese acquirers is difficult even for the United States. Assessing the strategic relevance of a technology and where it may fit into China's larger planning is also difficult. Although the European Union has some capabilities in the area (significantly reduced by the departure of the United Kingdom), it lacks intelligence resources. Similar to revealing beneficial ownership and financing sources, the United States could develop a specific intelligence sharing and cooperation mechanism with the Nordic countries. Alternatively, the United States could start by establishing a bilateral mechanism with Sweden specifically related to Chinese technology acquisition, or perhaps a trilateral (United States-United Kingdom-Sweden) mechanism to develop a technology acquisition database as a first step to safeguard these technologies.

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