

Chinese corporate acquisitions in Sweden: A survey

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MAIN CONCLUSIONS

- This survey has resulted in the first comprehensive and openly accessible compilation of Chinese corporate acquisitions in Sweden.
- The audit has identified 51 companies in Sweden in which Chinese (including Hong Kong) companies have acquired a majority ownership. In addition, the survey has identified another 14 minority acquisitions.
- Zhejiang Geely's acquisition of a minority stake in Swedish truck-maker AB Volvo was among the largest Chinese acquisitions completed in Europe and North America in 2018.
- Through these acquisitions, Chinese investors have taken control of at least some one hundred subsidiaries.
- Most of the identified acquisitions were made since 2014. The highest annual amount of acquisitions was recorded in 2017.
- The majority of the acquired companies belong to the following five sectors: industrial products and machinery, health and biotechnology, information and communications technology (ICT), electronics, and the automotive industry.
- For nearly half of the acquired companies, there is a correlation between their operations and the technology sectors highlighted in the "Made in China 2025" plan for China's national industrial development. The sectors included in the plan are of particular importance to the Chinese state.
- This survey includes several companies that have not been identified as Chinese acquisitions in previous compilations of Chinese investments.
- More than 1,000 companies have reported to Sweden's Companies Registration Office that their beneficial owner is a citizen of either China or Hong Kong. For the majority of these companies, however, the Chinese ownership is not a result of an acquisition. Companies established in Sweden by a Chinese owner are not included in this survey.
- The extent of Chinese acquisitions in Sweden is, in fact, larger than what this survey has been able to identify. There are potentially many acquisitions that this study has not been able to identify due to factors that pertain to collection and analysis of data.
- Due to the potentially high number of unidentified acquisitions, there is ample room to follow up this survey in order to create a more comprehensive understanding of Chinese corporate acquisitions in Sweden. Future surveys of acquisitions in Sweden could strive to identify additional transactions, including venture capital investments, but could also examine ownership structures and methods for acquisitions, as well as assess the patents and technologies of the acquired companies.
- The methodology used in this study can also be applied to surveys of acquisitions from other countries than China.

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1. INTRODUCTION

Chinese overseas corporate acquisitions during the 2010s have contributed to an increasingly intense debate about China's strategic objectives and the consequences for countries where the acquisitions occur. The rise in investments by Chinese companies in Europe in recent years has prompted concerns in the countries concerned that interests relating to national security and competitiveness are now being challenged.

Chinese direct investment in the EU in 2018 amounted to just over an estimated EUR 17 billion (SEK 180 billion), of which the absolute majority were corporate acquisitions.¹ One of the largest transactions in Europe and North America in 2018 took place in Sweden, when Zhejiang Geely acquired a minority stake in AB Volvo for an estimated SEK 32 billion.

The first major Chinese acquisition in Sweden was Geely's USD 1.8 billion takeover of Volvo Cars, in 2010, from its American owner, Ford Motor Co. Other well-known deals include the acquisitions of the electric car company NEVS, Nordic Cinema Group (which includes Swedish cinema chain Filmstaden) and the hotel chain company, Radisson.

This report identifies additional acquisitions that have thus far been completed in Sweden with capital from China, including Hong Kong. The survey shows that the majority of the deals are acquisitions of smaller companies with operations in industrial products, biotechnology, and information and communication technology (ICT), as well as electronics.

One motive for the acquisitions is China's efforts to acquire expertise in high-tech industries and services, which has led to a shift in focus from investment in natural-resource-rich developing economies to countries with an advanced industrial base. In Sweden, as well as in the rest of the EU, there is a certain correlation between the industries in which the acquisitions have been made and the sectors that are highlighted in China's state strategies for industrial development.² This study discusses China's industrial plans, such as *Made in China 2025*, which reflect possible national Chinese motives for overseas acquisitions.

Alongside company acquisitions, China also acquires technology from abroad via greenfield investments (i.e.

the establishment of subsidiaries, research and development activities, and investments in infrastructure), venture capital, patent acquisitions, and research collaborations.³ In addition, technologies can also be obtained through illegal methods, such as industrial espionage.⁴

In parallel to the Chinese state and industrial interests in acquiring technologies, there are also other motives behind the corporate acquisitions, e.g. profit interests, as well as access to brands, markets and supply chains.

An indispensable tool for this survey has been a database based on the Swedish Companies Registration Office's Beneficial Ownership Register. The database was developed by Tommy Westman, Senior Scientist at FOI's Division for Defence & Security, Systems and Technology.

1.1 Purpose, outline and limitations

This study aims to map the Chinese company acquisitions that have been completed in Sweden to date, and to analyse to what extent these acquisitions correlate with China's industrial policies.

Chapter 2 presents the available information on Chinese investments in Sweden, as well as the results from the survey of corporate acquisitions. Moreover, it discusses the industrial sectors concerned and the various methods that can be used to quantify acquisitions. The results of the survey have been compiled as a list of companies (Table 1), which is supplemented with tables and charts in the Appendix. Chapter 3 discusses China's plans for industrial development and promotion of foreign acquisitions, and the extent to which the acquisitions correlate with China's national plan to develop the manufacturing sector, *Made in China 2025* (2015). The study concludes with reflections in Chapter 4.

The study sets out to chart and analyse Chinese acquisitions in Sweden, but not greenfield investments. It does not claim to provide the full picture of Chinese ownership in the country. It should also be noted that the majority of the companies that have registered Chinese citizens as their beneficial owners appear to have been established in Sweden by their current owners and thus have not been the subject of acquisitions.

1 Hanemann (2019).

2 Ibid.

3 Bennion (forthcoming).

4 Englund (2019).

1.2 Method

The survey in Chapter 2 is based on data from the Swedish Companies Registration Office's Beneficial Ownership Register (BOR), which is supplemented with information from other open sources. Data in BOR has initially been delimited to include only companies whose owners are Chinese citizens (including Hong Kong), but whose domicile is a country other than Sweden. In total, just over 300 companies meet these criteria.

These companies have subsequently been examined individually in order to determine whether the ownership is the result of an acquisition. When there is no clear indication that a company has been acquired, it has been omitted from further examination. The survey also includes companies whose beneficial owners are not registered as Chinese citizens but can be identified as having been acquired by Chinese companies using other sources (see 1.3 below).

The identified acquired companies have then been categorised according to their industrial sector and the extent to which there is a notable correlation between the scope of their operations and the sectors highlighted in the Chinese industrial plan *Made in China 2025*. The classification of operations is based on a weighted average of information available in the companies' annual reports and established industrial classifications.⁵ Assessments of the correlation between Chinese industrial policy objectives and the operations of the acquired companies draw on information from corporate websites and annual reports.

Chapter 3 provides an analysis of official Chinese documents, such as the five-year plans of China's Central Government and the relevant industrial plans.

1.3 Sources

The survey is based on data from a variety of registers and previous audits.

As noted above, the Swedish Companies Registration Office's Beneficial Ownership Register is a key source in this study. Other important sources include the websites

and annual reports of the acquired companies as well as of the enterprises that have carried out the investments.

In addition, company-specific information has been obtained from sources in China, such as the National Enterprise Credit Information Publicity System (国家企业信用信息公示系统)⁶ and the Cyber Search Centre of the Integrated Companies Registry Information System (ICRIS)⁷ in Hong Kong.

The survey also draws on data from the company registers in the United Kingdom (Companies House) and Germany (Unternehmensregister), as well as from data providers such as Rhodium Group, Bloomberg, Thomson Reuters and Baker McKenzie. In addition, it has utilized information on Chinese corporate ownership in Sweden from Statistics Sweden/Swedish Agency for Growth Policy Analysis, which in turn is based on data from the data provider Bisnode.

Information from press reports and websites in China has also been included in the survey. In a few individual cases, companies have also been contacted to provide additional information in cases where open information has been inconsistent or incomplete. In general, however, the companies concerned have not been contacted to verify the information in the survey, hence the possibility of individual inaccuracies in the data cannot be ruled out.

The Swedish Companies Registration Office's Beneficial Ownership Register

BOR comprises just over 600,000 active companies.⁸ As of October 15, 2019, a total of 1,015 companies in Sweden had registered a Chinese citizen (including Hong Kong) as its beneficial owner. A beneficial owner is the person (or persons) who ultimately owns or controls a company, association, or other type of legal entity.⁹ A beneficial owner may be an individual who holds more than 25 per cent of the voting rights in a limited liability company through shares, voting rights, or ownership interest, or individuals who have the right to remove or appoint more than half of the board members.¹⁰

5 Other industrial classifications include the Swedish Standard Industrial Classification (SNI), the International Standard Industrial Classification of All Economic Activities (ISIC), the Thomson Reuters Business Classification and the Global Industry Classification Standard (GICS).

6 See <http://www.gsxt.gov.cn/index.html>.

7 See <https://www.icris.cr.gov.hk/csci/>.

8 There were 626,156 active companies in Sweden in March 2019.

9 Bolagsverket [Swedish Companies Registration Office] (2018).

10 Bisnode (no year of publication).

The BOR was established in October 2017 in accordance with the EU anti-money-laundering directive, which is in turn based on the recommendations by the Financial Action Task Force (FATF).¹¹ It has since been possible for Swedish companies to voluntarily report their beneficial owner, and for the public to search the register for information about those owners, based on business registration number, social security number, or company name.

Although the BOR is the most comprehensive register of company ownership in Sweden, it is far from comprehensive. All limited companies must notify the Swedish Companies Registration Office of their beneficial owner, but it is up to each individual company to ensure that the information is complete and correct.¹² Therefore, if a company has failed to inform the Companies Registration Office about its beneficial owner, the information in the BOR will be incomplete. The Swedish Companies Registration Office does not have the task of determining the veracity of information from companies regarding beneficial ownership.¹³

When companies do not report a beneficial owner, or submit incorrect information, they may, for example, wish to hide links to organised crime or financial crime. Based on such risks, it is also in the interest of banks to gain knowledge of the beneficial ownership of their corporate clients. Companies that provide incorrect information about their beneficial owner risk the possibility that banks do not approve them as customers.¹⁴

Publicly traded companies are exempt from the obligation to notify the BOR. The holdings in these companies are instead registered by Euroclear Sweden, which provides information on ownership on the Stockholm Stock Exchange. Out of the 65 acquisitions identified in this survey, six are publically traded companies.

2. CHINESE ACQUISITIONS OF SWEDISH COMPANIES

This survey allows us to draw a number of conclusions about Chinese corporate acquisitions in Sweden, based on openly available information. In order to provide an image of the overall situation, the acquisitions can be quantified, as follows: by the total amount of completed acquisitions, by the combined value of the deals, by the combined annual turnover of the acquired companies, or by the amount of acquisitions divided by industrial sector. These parameters are discussed below. In addition, to the extent that it is possible to identify a correlation between the expertise of an acquired company and China's industrial priorities, the amount of acquisitions may also be divided by the technology area highlighted in China's plans for industrial development (see Chapter 3).

2.1 Previously available information on Chinese corporate ownership and investments in Sweden

Prior to the publication of this survey, the information available on the extent of Chinese corporate acquisitions in Sweden has been very limited.¹⁵ The majority of the data found in this study is absent in previous compilations of Chinese corporate ownership in Sweden. This can in part be explained by the use of other calculation methods and delimitations.¹⁶ According to data obtained from Statistics Sweden (SCB), in Sweden there are 165 active companies with a group parent in China or Hong Kong.¹⁷ Another 33 Chinese-owned firms are registered as not active. Statistics Sweden's data includes information on parent companies, but does not indicate whether the ownership is a result of acquisitions.¹⁸ For 28 of the 51 Chinese majority acquisitions that are identified in this survey, there was no information in the Statistics Sweden dataset about Chinese ownership.

In an April 2018 survey touted as "the most comprehensive audit to date of China's presence in Europe," financial information company Bloomberg said that the value of

11 Finansdepartementet [Swedish Ministry of Finance] (2017).

12 Bolagsverket [Swedish Companies Registration Office] (2018).

13 Email correspondence with the Swedish Companies Registration Office, March 2019.

14 Ibid.

15 See, e.g., Nylander (2019).

16 See, e.g., Hanemann (2019). This report only covers investments valued above EUR 1 million.

17 Excerpt from SCB [Statistics Sweden], October 2019.

18 Correspondence with SCB [Statistics Sweden], October 2019.

Chinese investments in Europe since 2008 amounted to USD 255 billion.¹⁹ The Bloomberg report had identified 24 investments in Sweden, which it valued at USD \$7.4 billion, but it did not disclose which transactions were included in the dataset. To offer a comparison, this survey has identified 54 acquisitions during the same period.²⁰

Rhodium Group has identified 56 investments during the years 2000-2018, with a combined value of EUR 6.1 billion. Rhodium does not specify how many of these transactions are acquisitions, but most likely they only constitute a minority.²¹

To sum up, there is a large number of Chinese corporate acquisitions in Sweden that do not appear in previous compilations.

This survey does not include corporate acquisitions outside Sweden and therefore makes no comparison with Chinese investments in other European countries. While Rhodium Group's audits refer to the combined value of acquisitions, measured by total purchase price, the Bloomberg report mentioned above also includes the amount of transactions. Bloomberg's compilation, which covers Chinese investments during 2008-2018, lists 24 deals in Sweden, 21 in Finland, 11 in Norway, 18 in Denmark and two in Iceland. Measured by the amount of transactions, Bloomberg's data thus indicate that Sweden is not unique in the Nordic region in terms of Chinese investments. For Europe's three largest economies, the amount of deals is significantly larger; 227 in the U.K., 225 in Germany and 89 in France.²²

2.2 Results of the survey

This survey has identified 51 Chinese majority acquisitions of Swedish parent companies since 2002. In addition to these, it includes 14 minority acquisitions. These minority holdings are included, as many are large investments and may lead to an investor's becoming the single largest owner in a company. It should be emphasised, however,

that some minority acquisitions do not lead to control over the acquired company. Of the 65 companies identified, 11 have gone bankrupt since the acquisition or been transferred to non-Chinese owners (see Table 1).

Until the start of 2014, no more than three acquisitions were completed each year. Since then, the number of identified acquisitions ranges from six to nine on an annual basis, except for 2017, when 13 of the identified acquisitions were completed (Chart 2). This can be compared with Rhodium Group's data, which points to an increase from 2014, while 2016 is the year when activity was highest, measured in total value.²³

While this survey only covers parent companies, the motives behind individual acquisitions may have been to gain access to certain subsidiaries' operations and technologies. By including all subsidiaries in this audit, there would have been a risk of providing a distorted picture of the extent of Chinese investments. For example, Zhejiang Geely's owner, Li Shufu, is registered as the beneficial owner of 109 Swedish companies in the BOR. This is the result of one single investment: Zhejiang Geely's acquisition of Volvo Cars, in 2010.

Purchase price information is rarely openly available. The largest known acquisitions are reported in a separate table (Table 3), but in the broader summary, information on purchase price is omitted. The largest deals where there is knowledge of the purchase price are Zhejiang Geely's investment in AB Volvo (just over SEK 32 billion),²⁴ Tencent Music's acquisition of 9.2 per cent in Spotify Technology SA (approx. SEK 21 billion)²⁵ and Zhejiang Geely's acquisition of Volvo Cars AB (about SEK 18 billion).²⁶

It is also possible to measure the size of the acquisitions by the acquired companies' annual turnover. As it has not been possible to obtain turnover figures for the actual year of each acquisition, Table 1 only includes figures for annual turnover in 2017. Measured by turnover, the largest acquisitions that the survey has identified are AB Volvo

19 Tartar (2018).

20 In regard to the total amount of Chinese acquisitions in Sweden, and the total purchase price for the acquisitions, relevant reports from, e.g., Rhodium Group and Bloomberg (Tartar 2018) do not disclose any information on individual acquisitions.

21 Hanemann (2019); correspondence with Rhodium Group, May 2019. Rhodium has identified 12 acquisitions and 21 greenfield investments during 2000-2015.

22 Tartar (2018).

23 Hanemann (2019).

24 The purchase price for 8 per cent of the share capital and 15 per cent of votes in AB Volvo is not known. According to an estimate by Swedish daily Dagens Nyheter the total value of the acquisition was over SEK 32 billion. See Dagens Nyheter (2017).

25 This estimate is based on the value of Tencent's holding in Spotify (9.2 % of shares) as of February. See Carlsson (2019).

26 The 2010 annual report for Geely Sweden Holdings refers to a "total purchase price" of SEK 18.3 billion for Volvo Cars. See Matson (2019).

Table 1: Identified Chinese acquisitions in Sweden (in alphabetical order)

No	Company	Sector	Operations	MIC2025
1	AB Volvo	Automotive	Truck manufacturing	6
2	Acne Studios	Consumer products and services	Clothing	-
3	Amanzitel [4]	ICT	Computer network products	1
4	Anima [5]	Electronics	Smart watches	1
5	Ascatron [6]	Electronics	Semiconductors	1
6	ATrain	Transport and infrastructure	Railway transport	-
7	Bassoe Technology	Industrial products and machinery	Offshore- and maritime design	4
8	Bengtsfors Utvecklings AB	Finance and corporate services	Företagsutveckling	-
9	Breas Medical	Healthcare and biotech	Ventilator manufacturing	10
10	Bröderna Hanssons i Göteborg Export	Agriculture and foodstuffs	Fishery exports	-
11	Camanio Care [7]	Healthcare and biotech	Robotics and welfare technology	2
12	Celemi International	Consumer products and services	Corporate education	-
13	CentriClean Systems	Industrial products and machinery	Air purification technology	-
14	Century Europe [8]	Electronics	Manufacturing of retail security solutions	1
15	Chematur Engineering	Industrial products and machinery	Chemical products	9
16	ExScale Biospecimen Solutions	Healthcare and biotech	Nucleic acid extraction	10
17	Fastighets AB Bunge Kronhagen [10]	Real estate	Fårösund marine shipyard	-
18	Fatshark	ICT	Video game development	-
19	Fiskexporten Varberg	Agriculture and foodstuffs	Fishery exports	-
20	Geosolution i Göteborg	ICT	Satellite positioning solutions	3
21	Hammargren Pyroteknik	Consumer products and services	Fireworks	-
22	Hanssons fyrverkeri	Consumer products and services	Fireworks	-
23	Herrgårdshotell Dalsland	Hospitality	Hotels	-
24	Hotell Dalia	Hospitality	Hotels	-
25	IBIAT (Dragon Gate) [12]	Hospitality	Hotels	-
26	Imego	Electronics	MEMS sensors	1
27	JC Sverige [13]	Consumer products and services	Clothing	-
28	Josab Water Solutions	Industrial products and machinery	Water purification products	-
29	Karolinska Development	Healthcare and biotech	Investeringar inom life science	10
30	Leax Arkivator Telecom	ICT	Wireless communication technology	1
31	Markbygden Ett	Energy/utilities	Wind farm	7
32	Medirox	Healthcare and biotech	Diagnostic instruments	10
33	Neodynamics	Healthcare and biotech	Breast cancer diagnosis and care	10
34	NEVS	Automotive	Electric car manufacturing	6
35	Nordic Biomarker	Healthcare and biotech	Latex reagents manufacturing	10
36	Nordic Cinema Group [14]	Entertainment	Cinemas	-
37	Nordic Paper Holding	Pulp and paper	Craft paper production	-
38	Norstel	Electronics	Semiconductors	1
39	Oatly	Agriculture and foodstuffs	Oat-based beverages	-
40	Opcon Compressor Technology	Industrial products and machinery	Gas compressor manufacturing	2
41	Paradox Interactive	ICT	Video game publisher	-
42	Plantamed	Healthcare and biotech	Herbal drugs	-
43	Polestar Performance	Automotive	Electric car manufacturing	6
44	Preh Sweden (f d ePower El)	Automotive	Power electronics for the automotive industry	6
45	Purac	Industrial products and machinery	Water purification products	-
46	Radisson Hospitality	Hospitality	Hotels	-
47	Rechon Life Science	Healthcare and biotech	Pharmaceuticals	-
48	Rillco	Industrial products and machinery	Scaffolding and construction products	-
49	Sentoclone International	Healthcare and biotech	Cancer treatment technology	10
50	Setrab	Industrial products and machinery	Heat exchangers and radiators for cars	-
51	Sharkmob	ICT	Video game development	-
52	Silex Microsystems	Electronics	Semiconductors/MEMS	1
53	Solibro Research [20]	Industrial products and machinery	Solar panel manufacturing	7
54	Spotify Technology S.A.	ICT	Audio streaming services	-
55	Stjernberg Automation	Industrial products and machinery	Laser technology	2
56	Strand 2 i Vaxholm Fastighets Aktiebolag	Real estate	Hotels	-
57	Strandhotellet i Kevinge	Hospitality	Hotels	-
58	T Engineering [23]	Automotive	Control systems for electrified vehicles	6
59	Tain	ICT	Internet gambling services	-
60	Talpidae 9	Real estate	Real estate development	-
61	Tepidus	Real estate	Real estate development	-
62	Weigl Transmission Plant [24]	Automotive	Gearbox manufacturing	-
63	Victor Hasselblad	Electronics	Manufacturing of cameras and lenses	1
64	Volvo Cars	Automotive	Car manufacturing	6
65	Ymrod Fastigheter	Real estate	Real estate development	-

Year	2017 sales (SEK)	Share [1]	Acquiring company	Beneficial owner 2019 [2]
2018	332 834	15,6% [3]	Zhejiang Geely	* Publically listed company
2018	1486	10,90%	IT Group, HK	Carl Johansson and Mikael Fabian
2011	0	51%	DingLi Communications Corp	Ian Vernon
2015	36	100%	Goertek	Jiang Bin and Jiang Long
2016	11	Not available	InteBridge Technology	* Previously owned by InteBridge
2014	906	37,50%	SAFE	*
2013	40	90%	China International Marine Containers Co Ltd	*
2016	0	100%	Private individual	Guo Hongsheng
2017	251	80%	Shanghai Fosun Pharmaceutical	*
2018	452	100%	Hui Tai Investment Group Ltd	Zhang Dateng
2017	7	16%	Zhongrui Funing Robotics (Beijing) Co., Ltd.	*
2018	36	100%	JaKMa Holding AB	Kjell Åke Lindkvist and Jeremy Zhu
2010	0	40%	Multi-weal Ecotec Ltd.	Raymond Yui Lee
2012	15	100%	Century (Hangzhou) Co., Ltd	*
2014	78	100%	Jilin Connell Chemical Industry Co. Ltd.[9]	Song Zhiping
2018	1	34%	Edge Medical Technology Pte. Ltd.	Liang Weimin
2017	1	100%	Private individual	Ming Wai Lau
2019	66	36%	Tencent	Rikard Blomberg and Martin Wahlund
2019	88	100%	Hui Tai Investment Group Ltd.	Zhang Dateng
2015	20	100%	Hi-Target Surveying Instrument Co.,Ltd	*
2002	15	100%	Brothers Pyrotechnics	Wang Guoqiang
2002	23	100%	Panda Fireworks	Chao Shan
2015	11	>75% [11]	Private individual	Guo Hongsheng
2017	12	89%	Private individual	Guo Hongsheng
2004	0	100%	Private individual (Li Jingchun)	*
2014	0	100%	Not available	Xu Xinghui
2013	440	100%	Denim Island AB	Wu Yixiong
2014	1	44%	Heilongjiang Interchina Water Treatment Company	* Publically listed company
2014	257	10%	Sino Biopharma	* Publically listed company
2017	114	80%	HF Overseas	Yan Yu
2017	0	75%	China General Nuclear	Wolfgang Kropp
2016	39	100%	Ahead Global	Yao Shiping
2016	15	32,00%	Boai NKY Medical Holdings	* Publically listed company
2019	72	51%	Evergrande Group	Ka Yanhui and Kai Johan Jiang
2014	40	100%	Ahead Global	Yao Shiping
2017	83	81% [15]	Dalian Wanda Group [16]	Wang Jianlin
2017	2 777	100%	Taison Group	Wu Mingwu
2016	18	100%	An Xin Capital LLP [17]	Lin Xiucheng
2016	636	30%	China Resources Verlinvest Health Investment Ltd	*
2015	27	100%	Fujian Snowman Co., Ltd.	*
2016	814	5%	Tencent Holdings Ltd.	* Publically listed company
2018	10	70%	Zhejiang BioAsia Pharmaceutical Company, Ltd.	Henrik Raimo Grathwohl-Heino
2015	375	100%	Zhejiang Geely Holding Group	Li Shufu
2018	48 [18]	100%	Ningbo Joyson Electronics	Wang Jianfeng
2015	884	92%	SDIC & Beijing Drainage Investment Fund	*
2016	9 500	100%	HNA Tourism Group [19]	* Publ listed until 03/22/2019
2007	178	100%	Shanghai Dongbao Biopharmaceutical	Li Zhaoqi
2012	12	100%	Qingdao Scaffolding Co., Ltd	Zhang Jiajun
2010	0	100%	Jiangsu Sinorda Biomedicine Co Ltd	Hu Pingsheng
2019	90	100%	Zhejiang Yinlun Machinery Co Ltd	Lars Åke Wramell
2019	10	100%	Tencent	*
2015	402	100%	Nav Technology Co., Ltd.	Yang Yunchun
2012	52	100%	Hanergy Thin Film Power Group	*
2017	41 000	7,5% [21]	Tencent Music Entertainment Hong Kong Ltd.	*
2017	22	66,6% [22]	Tus-Holdings Co., Ltd.	Jan Stjernberg
2017	8	100%	Private individual	Ming Wai Lau
2004	0	100%	Lizi Development Group LDG AB	Li Jingchun
2014	127	100%	Dongfeng Motor Corp	*
2016	22	100%	Betting Promotion Holdings Ltd	Hong Wai (Ricky) Cheng
2017	4	100%	Private individual	Ming Wai Lau
2018	6	100%	Private individual	Kjell Bakken
2011	121	100%	Beijing Automotive Industry Holding Co Ltd	*
2017	608	>51%	DJI Technology Co., Ltd	Wang Tao
2010	208 000	100%	Zhejiang Geely Holding Group	Li Shufu
2019	7	100%	Private individual	Ming Wai Lau

Explanatory notes to Table 1

* Information missing in the Beneficial Ownership Register.

[1] Ownership percentages refer to the time of the acquisition and may have changed subsequently.

[2] Information according to the Companies Registration Office in 2019. Information on the buyer refers to the year of acquisition, while information on the beneficial owner refers to 2019. As a result, the two may diverge in some cases.

[3] Refers to Geely's share of voting rights; the share of capital is 8.2 per cent.

[4] DingLi divested its ownership in 2014.

[5] Bankruptcy in 2019.

[6] InteBridge has subsequently divested its ownership.

[7] Camanio Care sold its operations and its subsidiary Camanio AB in 2019 to the healthcare company Brighter.

[8] Formerly known as MW Security AB.

[9] Resold to Wanhua Chemical in July 2019.

[10] Decision to liquidate the company in May 2018.

[11] Ownership 75-100 %, according to information provided to the Companies Registration Office.

[12] Li Jingchun divested the company in 2018.

[13] Bankruptcy in 2019.

[14] Nordic Cinema Group AB is the owner of Filmstaden (formerly known as SF Bio).

[15] Refers to share of voting rights, the share of the capital is 59.4 per cent.

[16] Dalian Wanda divested parts of its stake in NCG's parent company, AMC, in 2018 and decreased its ownership to 75 per cent of votes.

[17] Sold in 2019 to STMicroelectronics.

[18] Refers to 2018. Information for 2017 is not available.

[19] State-owned enterprise Jin Jiang International acquired Radisson from HNA Group in 2018/2019.

[20] Filed for bankruptcy in 2019.

[21] Tencent increased its holding to 9.2 per cent in 2019.

[22] Holdings in the company are shared by several Chinese companies.

[23] Bankruptcy in 2011.

[24] Bankruptcy in 2016.

(SEK 335 billion), Volvo Cars (SEK 209 billion), Spotify (SEK 32 billion) and Radisson (SEK 9.5 billion).

The largest Chinese investments have been made in Sweden's automotive sector, both in terms of purchase price and total turnover.

This is explained by two individual acquisitions: Volvo Cars and AB Volvo. Measured by the amount of acquired parent companies, the main sectors are industrial products and machinery, health and biotechnology, ICT and electronics (see Table 3 and Chart 2).

Nevertheless, it should be noted that the magnitude of Chinese acquisitions in Sweden is greater than what this survey shows. There is potentially a large number of acquisitions that we have not been able to identify due to factors relating to data collection and analysis. A more thorough investigation would likely be able to identify further acquisitions.

During the work on this survey, it has become clear that the actual magnitude of Chinese acquisitions in Sweden is very difficult to ascertain. Several acquisitions have only been identified through information obtained from the websites of the investing Chinese companies, from their annual reports, as well as from news media. In several cases, the acquired companies have neither released any information about their new owners on their corporate websites, nor in their annual reports. The survey also includes several cases where the information given by acquired companies to the Swedish Companies Registration Office does not reflect the current ownership. It is likely that there are additional cases where the companies involved have not shared information about their current ownership. As a result, many details about Chinese acquisitions in Sweden remain unknown.

3. STRATEGIES BEHIND CHINESE CORPORATE ACQUISITIONS

The Chinese state's interest in acquiring technology is one of many motives behind Chinese overseas acquisitions. Other motives include companies' own technology needs, state and private interests in acquiring well-known brands as well as access to supply chains and markets, just to name a few. This chapter focuses on the sectors and technologies highlighted in official Chinese documents as being vital for China's long-term industrial development.

It should be noted that acquiring companies is just one of several means to gain access to technology and know-how. Other methods include greenfield investment, venture capital investment, patent acquisitions, research collaborations, technology transfer and industrial espionage.

The survey has identified a correlation between the operations of some of the acquired companies and the industrial sectors that are in focus in the Chinese state's plans for industrial development (see Figure 2).

3.1 Strategies and plans

The Chinese central government in 1999 formulated the so-called "Go out" strategy ("走出去" 战略, "zou chuqu" zhanlüe). The strategy aimed at promoting Chinese corporate acquisitions and other investments abroad, in part by facilitating the raising of capital for companies from state-owned banks.

The Chinese leadership has since continued to emphasise the importance of Chinese investment outside China's borders. The Chinese government's 12th and 13th five-year plans, for 2011-2015 and 2016-2020, respectively, encourage companies to invest abroad and to acquire companies. The stated objective is gain access to global value chains, advanced technology and know-how, and high-quality brands.

By launching the so-called Silk Road Initiative, or the "Belt and Road" initiative ("一带一路" 倡议, "yi dai yi lu" changyi), the Chinese state has also signalled to companies and officials that overseas investment is a matter of higher priority. A key objective for the Chinese leadership is for China to advance in global value chains and become a major power in high-tech industries. According to national strategies, China needs to strengthen its innovative capabilities and become more technologically self-sufficient.

Chinese strategy documents highlight specific industry sectors that China should strive to develop, and thereby reflect desirable targets for overseas acquisitions. In 2006,

the State Council issued the "Medium- and Long-Term Plan for Science and Technology Development" (MLP). MLP aims to promote domestic innovation and to develop China into a high-tech nation. The plan highlights 'frontier technologies' as central to China's science and technology development and its development of its competitive capabilities in high-technology research and development.

These frontier technologies include biotech, information technology, advanced materials, advanced manufacturing, advanced energy technology, marine technology, laser technology, and aerospace technology.

The five-year plans in many ways overlap with the MLP of 2006. China's 13th Five-Year Plan strongly emphasizes China's domestic innovation capabilities and the importance of moving Chinese companies upwards and integrating them in high-tech value chains. The plan identifies strategic industries that are particularly important for China's future economic development, including agricultural machinery, aerospace technology, biotech, new energy vehicles, information technology, and advanced manufacturing.

These strategic industries are also highlighted in *Made in China 2025* (MIC2025), which is a national strategic plan to develop the Chinese manufacturing industry. The plan, which was launched in 2015, focuses on ten technology fields in which China aims to become more self-sufficient and, in some cases, a global leader.

Technology fields in MIC2025

1. New information technology
2. High-end numerically controlled machine tools and robots
3. Aerospace equipment
4. Ocean engineering equipment and high-end vessels
5. High-end rail transportation equipment
6. Energy-saving cars and new energy cars
7. Electrical equipment
8. Farming machinery
9. New materials, such as polymers.
10. Bio-medicine and high-end medical equipment.

According to the European Union Chamber of Commerce in China, the launch of MIC2025 coincided with an increase in Chinese investment in Europe. For example, Chinese investments in the semiconductor industry increased significantly in 2015 and 2016. In 2014, the Chinese government set up a state fund to develop its semiconductor sector, as part of a development program launched the same year. The fund, *China Integrated Circuit Industry Investment Fund* (CICF, also known as the "Big Fund"), has raised CNY 200 billion (approximately SEK 270 billion) in financing.

For 30 of the 65 identified acquisitions, there is an apparent correlation with the ten technology fields highlighted in MIC205. While it is possible to identify such a correlation, this does not in itself mean that these acquisitions have more state backing than other Chinese foreign investments. In order to ascertain whether an acquisition has been motivated by state interests in gaining access to specific technologies, an in-depth examination of individual cases is required.

Table 3 shows the acquired companies divided by industrial sectors. The number of cases where it is possible to discern a correlation with the industrial sectors in the MIC2025 plan are shown in Chart 2. The companies whose operations correlate with MIC2025 are primarily to be found in the medical and biotechnology sector (8 out of 10), electronics (7 out of 7), automotive industry (6 out of 7) and industrial products and machinery (5 out of 10). It should be noted that the operations of all electronics companies correlate with the MIC2025 sectors, e.g., companies within the fields of semiconductors and micro-electromechanical sensors.

4. FINAL REMARKS

This survey has resulted in the first comprehensive compilation of Chinese acquisitions in Sweden and includes information on acquired companies, investing companies and beneficial owners. Based on ownership and investment data, each company has been examined in order to determine whether the current ownership is a result of an acquisition. In cases where there are indications that a Swedish company has been acquired by a Chinese investor, but this has not been possible to ascertain, the company has not been included in the survey.

Due to the potentially high number of unidentified acquisitions, there is ample room to follow up this survey in order to create a more comprehensive understanding of Chinese corporate acquisitions in Sweden. Future surveys of acquisitions in Sweden could strive to identify additional transactions, including venture capital investments, but could also examine ownership structures, methods for acquisitions, and assess the patents and technologies of the acquired companies.

In order to be able to contextualise the issue of Chinese corporate acquisitions in Sweden, there is also room for comparative studies, both of company acquisitions in Sweden and the rest of Europe by investors of other origins than China, and of Chinese corporate acquisitions outside Sweden. ■

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APPENDIX: CHARTS AND TABLES

Chart 1: Annual amount of acquisitions

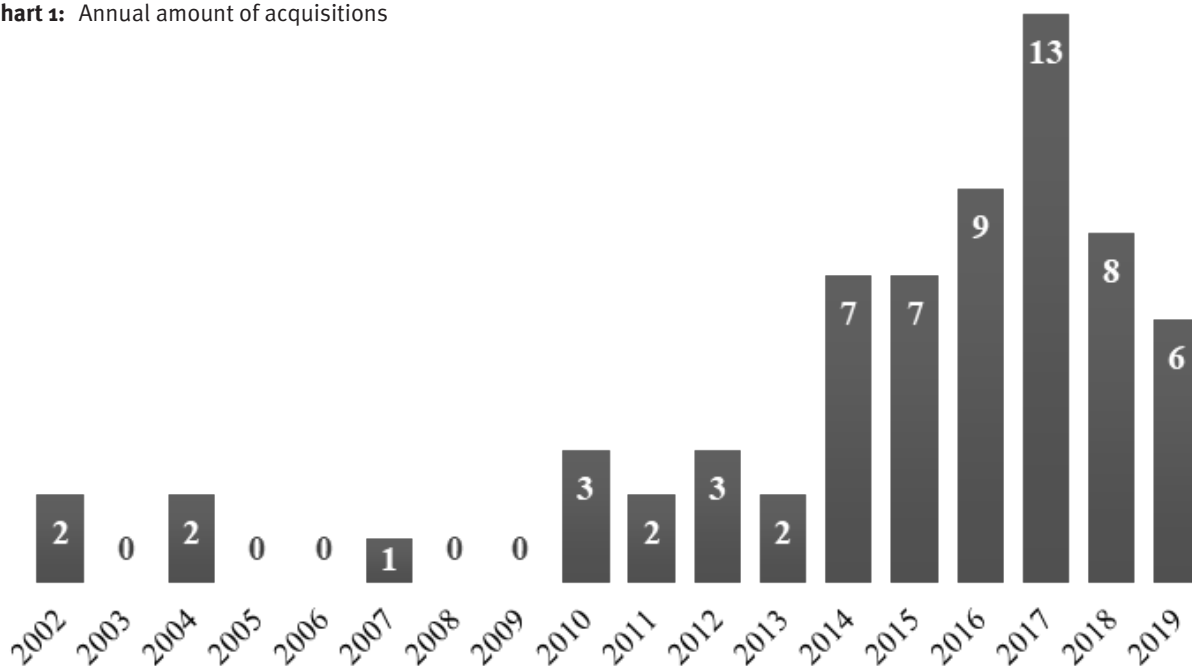


Table A: Largest acquisitions with known purchase price

Acquisition target	Year	Purchase price (SEK)	Acquiring company
AB Volvo	2018	~32,000 Mln	Zhejiang Geely Holding
Spotify Technology SA *	2019	~21,000 Mln	Tencent Holdings
Volvo Cars AB	2010	~18,300 Mln	Zhejiang Geely Holding
NEVS	2019	8,300 Mln	Evergrande
Nordic Cinema Group AB	2017	8,250 Mln	Dalian Wanda
Radisson Hospitality AB **	2016	2,900 Mln	HNA Tourism Group
Nordic Paper AB	2017	2,400 Mln	Taison group
Breas Medical	2017	800 Mln	Shanghai Fosun Pharmaceutical
Fatshark	2019	500 Mln	Tencent Holdings

* Tencent became the owner of 7.5 % of Spotify shares in 2017 and increased its holding to 9.2 % in 2019. The purchase price refers to the value of the holdings in February 2019.

** Radisson was known as Rezidor until 2018. Chinese state-owned enterprise Jin Jiang International acquired Radisson in late 2018/early 2019 for SEK 3.1 billion

Table B: Acquired companies by sector

Company	Sector	Operations
Bassoe Technology	Industrial products and machinery	Offshore- and maritime design
CentriClean Systems	Industrial products and machinery	Air purification technology
Chematur Engineering	Industrial products and machinery	Chemical products
Josab Water Solutions	Industrial products and machinery	Water purification products
Opcon Compressor Technology	Industrial products and machinery	Gas compressor manufacturing
Purac	Industrial products and machinery	Water purification products
Rillco	Industrial products and machinery	Scaffolding and construction products
Setrab	Industrial products and machinery	Heat exchangers and radiators for cars
Solibro Research	Industrial products and machinery	Solar panel manufacturing
Stjernberg Automation	Industrial products and machinery	Laser technology
Breas Medical	Healthcare and biotech	Ventilator manufacturing
Camano Care	Healthcare and biotech	Robotics and welfare technology
ExScale Biospecimen Solutions	Healthcare and biotech	Nucleic acid extraction
Karolinska Development	Healthcare and biotech	Investments in the life science sector
Medirox Aktiebolag	Healthcare and biotech	Diagnostic instruments
Neodynamics	Healthcare and biotech	Breast cancer diagnosis and care
Nordic Biomarker	Healthcare and biotech	Latex reagents manufacturing
Plantamed	Healthcare and biotech	Herbal drugs
Rechon Life Science	Healthcare and biotech	Pharmaceuticals
Sentoclone International	Healthcare and biotech	Cancer treatment technology
Amanzitel	ICT	Computer network products
Fatshark	ICT	Video game development
Geosolution i Göteborg	ICT	Satellite positioning solutions
Leax Arkivator Telecom	ICT	Wireless communication technology
Paradox Interactive	ICT	Video game publisher
Sharkmob	ICT	Video game development
Spotify Technology S.A.	ICT	Audio streaming services
Tain	ICT	Internet gambling services
Anima	Electronics	Smart watches
Ascatron	Electronics	Semiconductors
Century Europe	Electronics	Manufacturing of retail security solutions
Imego	Electronics	MEMS sensors
Norstel	Electronics	Semiconductors
Silex Microsystems	Electronics	Semiconductors/MEMS
Victor Hasselblad	Electronics	Manufacturing of cameras and lenses
AB Volvo	Automotive	Truck manufacturing
NEVS	Automotive	Electric car manufacturing
Polestar Performance	Automotive	Electric car manufacturing
Preh Sweden (f d ePower EI)	Automotive	Power electronics for the automotive industry
T Engineering	Automotive	Control systems for electrified vehicles
Weigl Transmission Plant	Automotive	Gearbox manufacturing
Volvo Cars	Automotive	Car manufacturing
Fastighets AB Bunge Kronhagen	Real estate	Fårösund marine shipyard
Strand 2 i Vaxholm Fastighets Aktiebolag	Real estate	Hotels
Talpidae 9	Real estate	Real estate development
Tepidus	Real estate	Real estate development
Ymrod Fastigheter	Real estate	Real estate development
Herrgårdshotell Dalsland	Hospitality	Hotels
Hotell Dalia	Hospitality	Hotels
IBIAT (Dragon Gate)	Hospitality	Hotels
Radisson Hospitality	Hospitality	Hotels
Strandhotellet i Kevinge	Hospitality	Hotels
Acne Studios	Consumer products and services	Clothing
Celemi International	Consumer products and services	Corporate education
Hammargren Pyroteknik	Consumer products and services	Fireworks
Hanssons fyrverkeri	Consumer products and services	Fireworks
JC Sverige	Consumer products and services	Clothing
Bröderna Hanssons i Göteborg Export	Agriculture and foodstuffs	Fishery exports
Fiskexporten Varberg	Agriculture and foodstuffs	Fishery exports
Oatly	Agriculture and foodstuffs	Oat-based beverages
ATrain	Transport and infrastructure	Railway transport
Nordic Paper Holding	Pulp and paper	Craft paper production
Nordic Cinema Group	Entertainment	Cinemas
Bengtsfors Utvecklings	Finance and corporate services	Municipal business development
Markbygden Ett	Energy/utilities	Wind farm

Chart 2: Amount of acquired companies per sector and correlation with MIC2025

