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**Chinese Mergers and Acquisitions (M&As) in Europe:
a preferential pathway to technology transfer?**

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Abstract

Chinese direct investments into Europe have become a heated topic of discussion, especially after 2017 when for the first time Chinese investment into Europe exceeded their counterpart, namely European investment into the Middle Kingdom. That year represented a milestone in Sino-EU economic relations since Chinese outward direct investment value into the bloc reached US\$41 billion. Nevertheless, recent policies on capital control in China have curbed the expenditure related to cross-border acquisition into the continent, making foreign direct investment value drop by more than half. This research intends to provide an overall picture of Chinese M&As into Europe, the dominant channel for investments, and closely look into a sample of acquisition cases to investigate the motives driving the considered transactions.

A particular focus is given to the risk of technology transfer which analysed transactions could entail, and the relevance of know-how absorption compared to other investment motives. In particular, the first chapter will provide a guideline for Chinese M&As into Europe. The second will be devoted to an analysis of the most recent normative tools and trade policies enacted by the European Union to regulate the phenomenon. Through the third, and final, chapter I will closely analyse the performance of a sample of 54 companies after being acquired by a Chinese investor, as to make more informed assumptions over the acquisition motives.

摘要

近年来，不断地有一些中国公司参与中国境内外的收购。尽管有连续的相关资金注入，大众对于中国跨境投资的理解仍然匮乏。如此，主要因为这是一个近二十年来才出现的现象。现有的文献对此仍然存有较多空白，而大部分上世纪的相关文献也主要针对于发达国家的收购行为。

在这篇论文中，我想要揭示中国方面在欧洲的收购，从而来填补现有文献的空白。就此而言，提升相关类型交易的透明度，并且扩展已有文献，是提升大众对此话题的理解度的为数不多的方法之一。论文主要针对以下问题：中国在欧洲的并购（**M&A transaction**）行为，是否是中国公司试图掌握外国的相关技术知识（**know-how**）？

第一章的内容主要为中国在欧洲的并购现象提供了大纲。在第二章中，我会详细描述欧盟近来的相关法律与政策对于此类并购现象的管理与调控。在结尾的第三章中，我

会对一些收购案例展开实证研究，从而评估在何种程度内，（中国）收购者的目的是出于掌握欧洲的知识技术。

就此目标而言，我决定将研究主要锚定在中国对外直接投资（**CODI**）。这主要是因为此类投资的相关性，以及其重点聚焦于中国在欧洲的高科技收购（**high-tech acquisiton**）。

结尾章，在为整体研究提供连贯性的基础上，将会很大程度上解答第二段中提到的研究问题，因为高科技投资中涉及到的数据，可能被用于掌握核心技术。

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CHAPTER ONE

Acquisitions with Chinese characteristics: an overview on Chinese investments into the European Union

1. Introduction

In recent years, Chinese companies have consistently been engaged in acquisitions both inside and outside China. It is also true that the general understanding of Chinese cross-border investments is still limited, mainly due to the fact that they constitute a recent phenomenon which has only emerged over the past two decades. Therefore there is a considerable gap in the existing literature which, over the past century, has in turn mainly focused on developed countries acquisitions.

Throughout this thesis I would like to contribute to the existing research on the subject helping to fill the existing gap and thereby help unravelling the topic of Chinese acquisitions. Enhance the transparency of discussed transactions and expanding the present literature is the only way to lead observers to have a better understanding of the subject. I will focus pre-eminently on the following research question: are Chinese M&As transactions in Europe a means through which Chinese companies seek to acquire foreign countries know-how? The first chapter is mainly going to provide an outline of the phenomenon of Chinese M&As activities into Europe. Throughout the second chapter I will be describing the most recent legislative tools and policies enacted by the European Union to better regulate the flux of acquisitions from China. With the third, and last, chapter I aim at conducting empirical research on a sample of acquisitions and try to assess to what extent the acquirers decide to engage in such transaction with the mere objective of acquiring European know-how.

For this reason, I decided to anchor my research on Chinese Outbound Direct Investments (CODI) taking place in Europe. This is mainly due to the relevance of such investments and for the substantial focus of Chinese companies on high-tech acquisitions when investing into Europe.

The last chapter can provide consistency to the research and help me answer the proposed research question due to the availability of data on high-tech European companies' acquisitions which, allegedly, could be driven by the desire to acquire critical knowledge.

Basing the first two chapters on existing literature, I would like to start the study by trying to frame the subject and delineate a broader description of Chinese cross-border acquisitions into Europe. The objective is to provide a guideline for what we could refer to as “acquisitions with Chinese characteristics”. As explained, rather than considering Chinese investments worldwide, I will just try to focus on Chinese acquisitions into Europe. The broader objective of the first chapter and its sections will then be to define overall trends for Chinese investment behaviours into the bloc. This first chapter has the main goal of providing a background to the topic and to introduce what will then be discussed throughout the third section, namely the risk of technology transfer that Chinese cross-border investments seem to carry along.

In China, four decades of expansion and economic development has proceeded in sync with a gradual increase also in Chinese companies’ cross-border investment activities. Chinese Outbound Foreign Investments (OFI) have grown significantly, especially from 2000 onwards¹. As I will further explain in the next sections, when it comes at Chinese investment into Europe, we can notice that these are carried out especially in the form of Merger and Acquisitions, which seem to be the preferential mode of establishment in the continent.

According to the research carried out by MERICS², since 2009, *European companies have received approximately €160 billion from China*. Beside the relevant money flow related to these transactions and the possible distortions which could bring along within the European market, the reason why such activities are more and more subject to a close institutional scrutiny worldwide is also related to the alleged technology transfer supposedly involved in the transactions. Over more, Chinese presence in foreign countries causes concerns due to the related currency inflow that could bring about market-distortive trade practices and result in political intrusiveness. The financial benefits foreseen by the companies to be purchased, could affect the recipient countries’ ability to keep a hard stance on the phenomena and preserve their independence in the arena of foreign investments³.

¹ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

² Arcesati R., Hanemann T., Huotari M., Kratz A., “Chinese FDI in Europe: 2019 Update”, MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

³ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

Lastly, some may argue that, when engaging in cross-border acquisitions, Chinese actors benefit from government-backed subsidies that involved companies could dispose when venturing out their national borders, especially if the targeted sector is a strategic one.

In conclusion, technology transfer, state-backed subsidies leading to market distortive trade practices and political vulnerability are, at present, the three main pressing concerns when it comes at tackling Chinese acquisitions abroad.

The threat towards the target country's assertiveness and the "technology transfer peril" are two of the main reasons which made some countries intervene and try to take a harder stance on the topic, drafting ad-hoc regulations to better tackle the issue and rebalancing the level-playing field within the realm of bilateral investments. When it comes at analysing Sino-EU investment relations, one of the most discussed among such regulations is surely the *Comprehensive Agreement on Investment (CAI)*⁴, which scope and effects will be discussed in the next chapter. Nevertheless, it is also important to mention more recent policies such as the *EU New Regulation to address distortions by foreign subsidies*⁵ or the *EU framework on investment screening*.

Throughout the years, the Chinese economy has kept on evolving in sync with government relevant policies, among which the "Made in China 2025" represents the most updated version, displaying China's current main ambitions and industrial development outlooks⁶.

It is in fact possible to say that this prominent flow in Chinese outbound investments (COFDI) is a direct manifestation of the "Go Global" policy enacted by the Chinese Communist Party in 2001. Said policy can be seen as the cornerstone and the starting point of Chinese current industry development strategy⁷.

But it has not always been like that. After China first opened-up in 1979, carrying out economic activities abroad was not high on the central government's list. Chinese main investment

⁴ "EU Trade News.". Accessed September 22, 2021.
<https://trade.ec.europa.eu/doclib/press/index.cfm?id=2237>.

⁵ "Press Corner." Questions and Answers: Proposal for new Regulation to address distortions caused by foreign subsidies in the Single Market. European Commission, May 5, 2021.
https://ec.europa.eu/commission/presscorner/detail/en/qanda_21_1984.

⁶ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁷ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

abroad where in the form of US government bonds purchases, acquired through its revenue from export activities surplus. In that respect, it is estimated that nowadays Chinese entities hold around 5% of U.S. debt which is *equal to \$1.2 trillion*⁸. Among U.S foreign creditors, *China is ranked right after Japan which instead holds 5.2%*⁹.

In this view, Cross-borders investment activities can be considered as a more recent trend pursued by the Chinese government to diversify foreign investments and to face current internal challenges by having access to new and more sophisticated markets, key suppliers, and raw materials¹⁰.

This kind of activities have grown at a steady pace reaching their peak in 2016¹¹. Since then, China's investment activity overseas has been declining each year. This is mainly due to domestic constraints on outbound capital flows and tighter scrutiny of Chinese investments abroad. Total investment value shrank even further in 2020 after the Covid-19 pandemic which put said transaction at a halt¹².

According to MERICS report on Chinese investments throughout 2020, in 2019 alone, Chinese investment into the EU *stood at only €11.3 billion, 33 percent smaller than 2018 and 69 percent smaller than its peak in 2016*¹³.

Among the reasons which led to more stringent capital controls, we can find the devaluation of the renminbi in 2015, which caused relevant capital flight and made it necessary for the central government to reduce the external use of the domestic currency¹⁴.

⁸ The Investopedia team. "How Much U.S. Debt Does China Own?" Investopedia. Investopedia, June 9, 2021. <https://www.investopedia.com/articles/investing/080615/china-owns-us-debt-how-much.asp>.

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¹⁰ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

¹¹ Arcesati R., Hanemann T., Huotari M., Kratz A., "Chinese FDI in Europe: 2019 Update", MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

¹² Arcesati R., Hanemann T., Huotari M., Kratz A., "Chinese FDI in Europe: 2019 Update", MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

¹³ Ibid.

¹⁴ Bradsher, Keith. "China Tightens Controls on Overseas Use of Its Currency." The New York Times. The New York Times, November 29, 2016. Available at: <https://www.nytimes.com/2016/11/29/business/economy/china-tightens-controls-on-overseas-use-of-its-currency.html>.

According to MERICS report and update on Chinese outbound investment activities, *“in 2020 China’s global outbound M&A activity slipped to a 13-year low; completed deals totalled just EUR 25 billion, down from EUR 47 billion in 2019, a drop of 45 percent.”*¹⁵

Despite the recent slow-down, the growth in Chinese acquisitions and concerns brewing around these transactions, have led to the issuing of regulations and restrictions which mainly aim at rebalancing the level-playing field in the foreign investment realm, as the recent EU policy on foreign investments.

All these concerns arise from speculations based on the opacity and difficulty in risk assessment of these acquisitions but there still is little evidence about the danger hidden behind these investments and whether they are different from the ones coming from different countries¹⁶.

Apparently, the country of origin of the investor seems to be a crucial element in the evaluation. For instance, investment activities from the US and Canada are often regarded as less controversial and do not receive as much attention, even though US direct investment into Europe are equally, if not more, relevant, *having totalled 3.57 trillion U.S in 2019 alone*¹⁷. (articolo foreign invest) It is important to note that State Owned Enterprises (SOEs) are more and more involved in mergers and acquisitions, with almost 400 European companies having been acquired by foreign SOEs since 2007. By the way, evidence show us that a third of transactions originated from SOEs established in EFTA countries, while only 60 of them involved Chinese SOEs¹⁸.

Anyway, having a better understanding of Chinese cross-border acquisitions could ease investment screening mechanisms targeting such activities and, most of all, could enhance the level-playing field in Sino-EU bilateral economic relations. This is now more than ever important considering the ever-increasing influence of China in the worldwide markets.

Before starting to dig into the alleged technology transfer happening throughout the mentioned acquisitions, it is useful to have a meaningful insight into Chinese investment abroad and shape

¹⁵ Ibid.

¹⁶ Domínguez-Jiménez M., Poitiers N., Bruegel, “Europe’s China problem: investment screening and state aid”, Bruegel, Publication date: July 2, 2020. Available at: <https://www.bruegel.org/2020/07/europes-china-problem-investment-screening-and-state-aid/>

¹⁷ Ibid.

¹⁸ Ibid.

a guideline by analysing trends in transactions and what direction we assume they will take in the next future.

As mentioned before, to narrow down the scope of my research, I will mainly refer to Sino-EU bilateral investment relations.

Through an analysis of existing literature on the topic, I will try first to provide a general guideline when it comes at Chinese cross borders acquisitions into Europe and try to see if there is a common thread or rationale behind the discussed transactions.

What this first section mainly aims at is to answer the question: are Chinese cross-border investments practices different? And if so, are we able to trace a common pattern in this respect?

The answers to these questions could then help us better tackle the alleged risk of technology transfer and know-how expropriation allegedly emerging from Chinese investments into EU.

To achieve my research objective, I will mainly refer to what are, in my view, the most relevant determinants to be aware of when determining the uniqueness of Chinese cross-borders acquisitions.

I argue that Chinese outward foreign direct investment as a subject could be analysed throughout the lenses of sector, the crucial role of domestic State-Owned Enterprises, host country's geographic and cultural proximity, host countries' natural resources and host country's governance environment. Another relevant aspect which cannot be left out when tackling the subject, is to assess whether OFDI conducted by Chinese state-owned enterprises can be regarded as different from those of private firms.

For example, for Chinese private investors foreign acquisitions could have the aim of sheltering assets from seizure by the Chinese government and to escape the intrusiveness of the state on companies' assets. Collected evidence shows that Chinese State-owned companies are less concerned about political risk in the host country are less market orientated and more resource seeking. In this respect, such acquisition behaviour does not seem to be different from other countries' SOEs¹⁹.

¹⁹ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

Another important feature to keep in mind is that most Chinese acquirers have ties with the government, not only state-owned ones but also private acquirers may have some connections with the government in implicit ways.

1.2 Chinese investments into EU and overall acquisition trends

According to Deloitte report on Chinese Outbound M&A activities in Europe²⁰, China Europe M&A transactions have accounted for most of China's outbound investment activities in 2017. In this sense, the main key drivers for this huge investment flow seem to mainly be internal business growth needs. Among these, relevant drivers also appear to be: key capability or asset acquisition, rapid market entry, business portfolio expansion, market share increases and profitability improvements.

As defined by Deloitte report "China-Europe outbound M&A trends"²¹, amongst the main reasons for investment abroad we find: "key capability or asset acquisitions" which would make up for the Country's 31% cross-borders investments. In this view, Europe is an important venue, since, overall, its market relies on strong infrastructures, well developed industries, and availability of high-quality talents.

Another important reason for engaging in M&As in Europe for China is the rapid new market entry which, according to Deloitte, is the reason laying behind *26% of the total EU focused acquisitions*²². The nimble market entry would be specifically enabled by a mature customer base which can be found in the European market, the overall stability in demand granted by high salaries of the population, a regulated and healthy competitor landscape, and a stable political and social development. Another important drive for acquisition is represented by the need for business portfolio expansion, being it the reason for 23% of total acquisitions within EU and granted by a constructive regulatory environment, a developed local industry and availability of natural resource²³.

²⁰ "China outbound M&A activities in Europe and North America Trend and Forecast" Deloitte China, publication date: August 2017

²¹ Ibid.

²² Ibid.

²³ Ibid.

Market share increase is also a crucial element when a Chinese company decides to venture outside national borders. It is regarded to be the drive for 13% of Chinese outbound direct investment²⁴. The European market is appealing in this sense because it is characterized by an averagely mature customer base, stable demand, and promising market growth. Lastly, market share protection is also a relevant element, constituting 3% of Chinese investment into EU²⁵ concerning those companies which, throughout the last two decades already succeeded in establishing themselves into the market.

1.3 FDI-supportive Government Policies

Given the appeal of new markets, Chinese cross-borders investments have been fostered and encouraged by the central government throughout the years. Three are the top-level strategies enacted by the Central government that grant an effective environment supportive of investments abroad. These are the “Going Out Policy”, “The Belt and Road Initiative” and the “Supply Side Reform”.

Starting from the oldest, the Going Out Policy, it has been conceived after China entered the WTO in 2001. In Chinese “zou chuqu (走出去)” or the ‘going out’ strategy has been introduced in order for China to become an international economic actor and to better deal with external economic risks, such as the 1997 Asian financial crisis²⁶. The issuing of the policy also marked a shift in the country’s industrial strategy: from a “please come in” attitude through which the State aimed to encourage foreign investment, towards a wish to penetrate foreign markets to facilitate the country’s international rise. In this context, the China Council for the Promotion of International Trade (CCPIT), a statutory organisation under China’s Ministry of Commerce (MOFCOM) has had a relevant role. The Council was established in 1952, but only become operational from 1978 with the opening-up and economic reforms. Within the scope of the going out strategy, it has the key role of monitoring the proposed initiatives and promote industries and trade.

The “zou chuqu strategy” is an institutional mean through which China aimed at reinventing its economic institutions with the relevant aim of keeping the economic growth pace and

²⁴ Ibid.

²⁵ Ibid.

²⁶ Yelery, Aravind. “China's 'Going Out' Policy: Sub-National Economic Trajectories.” ICS. Accessed September 22, 2021. <https://www.icsin.org/publications/chinas-going-out-policy-sub-national-economic-trajectories>.

manage to be resilient even when challenged from external shocks, such as the mentioned financial crisis which emerged through Asia in 1997. In fact, the latter had showed the pitfalls of basing the country's economic development solely on export activities and, under these circumstances, the *zou chuqu* policy was shaped to encourage domestic firms to pursue overseas investments and extend manufacturing activities also outside Chinese borders.

In other words, at the turn of the century, the Chinese state decided to shift its focus from welcoming foreign investments into China towards more diversified investments abroad, by employing measures to internationalise domestic companies' presence and exploring new markets.

Before the policies of 'going out' were formalised, *minjian xianxing* (民间先行) or the 'non-government (private) first', *was the core value which guided the business involvement of Chinese enterprises outside China*²⁷. Following this line of thought, since 1979, a huge number of entrepreneurs, especially from areas as Wenzhou and Zhejiang began to venture into new markets abroad, including Africa, Middle East and Russia.

Due to internal macroeconomic reasons and external economic factors, such as the rising concerns towards overdependence on manufacturing sector and exports, the main objective brought forward by CCPIT Chairman Jiang Zengwei was "*engineering the (economic) system*" (一项系统工程)²⁸ and shift from the pressing need of attracting outbound foreign investment into the country to conceive a more sustainable growth model which could also include the exploration of foreign markets²⁹.

As far as the other two grand policies are concerned, namely the "Belt and Road Initiative" and the "Supply-side reform", I would like to consider them as intertwined so to show how these major policies are not stand-alone initiatives but are rather to be considered as coordinated answers to the country's internal challenges.

²⁷ Ibid.

²⁸ Ibid.

²⁹ Ibid.

The Belt and Road Initiative (BRI) was first conceived in 2013 and then incorporated into the People Republic of China constitution in 2017. The project mainly aims at boosting infrastructure development and economic cooperation throughout Eurasia.

On the other end, the need for a “supply-side structural reform” (SSSR) arose in late 2015 under Xi Jinping’s rule. In a speech to the 19th Party Congress, Xi stated that *“We should pursue supply-side structural reform as our main task, and work hard for better quality, higher efficiency, and more robust drivers of economic growth through reform”*³⁰.

In those years, the deleveraging of state-owned enterprises was among the country’s top priorities. Since the “Four Modernizations Program” launch in 1979, Chinese economy had heavily leaned on state-fuelled investments and exports as drivers for growth³¹. Internal challenges and the 2008 financial crisis exposed the weaknesses of this model. Since he came into power in 2013, Xi Jinping has committed a lot of efforts in his “war against debt”. From 2016 a decade of reforms was launched to *“break the spiral of ever-ending lending to pay for ever-decreasing growth”*³².

This was easier to implement into China, a nation in which the leadership, due to the state structure, can easily tap into an extensive set of tools to shape the overall economy and financial system. To put it simple, due to a huge flow of cheap domestic funding, Chinese companies had high production output which then resulted into an excessive manufacturing capacity, subsequently flowing into the market. This was the main reason for the launch of a deleveraging campaign in 2016 which foremostly aimed at providing a healthier economic development model to China.

Due to the leveraging campaign which was conceived as a recovery tool for the dire financial situation, in those years, a return to the experimented double-digit growth rate would be impossible. In those years, the main economic national goal became the attainment of a more qualitative and sustainable development with a stronger focus on high-end manufacturing rather than rapid and low-cost industrial processes.

³⁰ Jiang, Jon (Yuan). “Understanding the Intersection of the Belt and ROAD Initiative and China's Supply-Side Structural Reform.” Jamestown, October 9, 2020. <https://jamestown.org/program/understanding-the-intersection-of-the-belt-and-road-initiative-and-chinas-supply-side-structural-reform/>.

³¹ Ibid.

³² Orlik T. (2020), China: The Bubble that Never Pops, Oxford University Press

Following this rationale, the “Supply Side Reform” has the goals of improving the quality and efficiency of supply, spurring a structural reshaping of manufacturing processes, a better management of factors of production, enabling the supply structure to constantly adjust to changes in demand³³. In brief, five are the main objectives for this grand transformational campaign: *cutting the excess in industrial production, reduce and maximise the leverage in the corporate sector, reducing and maximise inventories, lowering costs and addressing “weak links” in the economy*, a euphemism for expanding the demand base by promoting poverty reduction³⁴.

How does all this link to the Belt and Road Initiative (BRI)?

First announced during president Xi visit to Central and East Asia in 2013, the construction of the Silk and road economic belt and 21st Century Maritime road, the BRI has the potential of addressing the goals stated within the Supply-Side reform scope³⁵.

Hu Huaibang (胡怀邦), former Chairman of the China Development Bank, has argued that the Belt and Road Initiative can offset the problem of *increasing labour costs through the structural transformation of China’s economy*³⁶. This transformation has the main goal of lightening the burden of the national industry overcapacity by moving low-end manufacturing industries to developing countries which can provide lower labour costs³⁷.

As stated in MERICS latest report on Chinese investments abroad³⁸, acquisitions abroad have declined consistently after reaching a peak in 2016, also due to national strict policies on capital outflows and a closer scrutiny over cross-border investments.

In this context, the BRI has also the role of promoting China’s overseas investment activities.

All the three policies discussed in this chapter have had and still have the objective of reshaping Chinese internal industrial activities, which are more and more geared towards the technological advancement of the country. In terms of investment policies, more and more

³³ Jiang, Jon (Yuan). “Understanding the Intersection of the Belt and ROAD Initiative and China's Supply-Side Structural Reform.” Jamestown, October 9, 2020. <https://jamestown.org/program/understanding-the-intersection-of-the-belt-and-road-initiative-and-chinas-supply-side-structural-reform/>.

³⁴ Ibid.

³⁵ Ibid.

³⁶ Ibid.

³⁷ Ibid.

³⁸ Arcesati R., Hanemann T., Huotari M., Kratz A., “Chinese FDI in Europe: 2019 Update”, MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

acquisitions of foreign companies have taken place since the launch of the “Go out policy”. Their main features and trends will be further discussed in the next chapters.

1.4 European countries’ specific advantages

Focusing now on the other side of the coin, I would like to briefly outline some of the perceived benefits for China when targeting European countries for its Outbound Foreign Direct Investments.

Even though until now we referred to Europe as a unified bloc, it is noteworthy to mention each region’s peculiarities and specific investment advantages to better understand the specific interests that a third actor might have in each national economy.

Starting from Western European countries, investment in this area seem to be eased by the availability of mature customer groups providing sustainable market demand which is crucial for a company future expansion forecast. Targeted companies generally can dispose of well-trained talent and management teams. The high-quality of infrastructure and healthy competition environment also makes Western Europe an appealing geographical area for investments³⁹.

As also stated within MERICS latest report on Chinese Outbound Investment, Western Europe seems to be the “hottest region” for outbound investment with Germany and the UK being the most targeted countries. From figures we can see that also in 2020 Germany has continued to be the most sought out country, being the main recipient of Chinese cross border investments, even though these mainly consisted in relatively small transactions⁴⁰. The UK still ranked third in the overall group of countries with a significant drop in Chinese investments into the country, marking the lowest point in the last ten years⁴¹.

³⁹ “China outbound M&A activities in Europe and North America Trend and Forecast” Deloitte China, publication date: August 2017

⁴⁰ Arcesati R., Hanemann T., Huotari M., Kratz A., “Chinese FDI in Europe: 2019 Update”, MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

⁴¹ Ibid.

Focusing our attention now on Northern Europe, in this area, TMT and E&R seem to be particularly targeted areas of investment by Chinese acquirers. Demand in those sectors appears to be sustainable and the overall stable economy grants promising growth in business. In countries as Sweden, foreign direct investment is subject to few limitations being the country main goal attracting external investments. For example, there are no restrictions on foreign ownership of shares or there are no requirements for foreign investors to register or obtain authorization for making investments in Sweden⁴².

Furthermore, these regions are rich in natural resources spanning from petroleum and natural gas. According to Deloitte forecasts, Northern Europe will experience a relevant increase in Chinese investments as the country seeks to boost the domestic production of high-end technology. Despite the bright forecasts concerning investments in this region, according to MERICS report, in 2020 total acquisition value has come back to normal experiencing a substantial decline if compared to the deal value of 2019 ().

Passing on to Southern Europe, CP&S industry is well developed, especially the luxury products sector which is also the most targeted by Chinese investors. Overall, until recent years, the regulatory environment is favourable towards foreign investment. In recent years, many acquisitions in the energy sector have been carried on in this region, especially within nuclear and solar. An example of this trend, with share purchase in Energia de Portugal by China Three Gorges and the takeover of the Spain-based Empresarios Agrupados and Ghesa by the state-owned China Energy Engineering Corporation (CEEC). Even though according to Deloitte forecasts investments in this area are expected to increase also due to the BRI, Southern European countries received slight gains from Chinese cross-borders acquisition in 2020 probably mostly due to the impact of the Covid pandemic on such operations.

⁴² ILP Abogados, "Foreign investment law in Sweden", Published on: June 24, 2019, Available at: <https://www.ilpabogados.com/en/foreign-investment-law-in-sweden/> INVESTMENTS into Sweden

1.5 The investors: between the mighty State-owned Enterprises and the Private sector

After having framed the subject and introduced Chinese government's main strategies and policies, it is now useful to have a closer look to who are the main economic actors implementing them: national companies.

When investigating into Chinese economic landscape, three are the main type of companies that we can find: State Owned Enterprises (SOEs), Private companies and State Powered Private Enterprises.

1.5.1 State Owned Enterprises: SOEs

After the establishment of the communist rule in 1949, Chinese State-Owned Enterprises were conceived as organizations leading to the adoption of a centrally planned economy molded on the Soviet Central Planning model⁴³. Nowadays, relevant examples of Chinese SOEs are China Ocean Shipping Company (COSCO), which, for example, is now the majority owner of the Greek Piraeus port, or SinoChem, the Chinese chemical giant which also undertook many acquisitions in Europe in recent years.

Originally, the context in which SOEs operated into was extremely top-down and the companies' output was directly managed by party officials which had the duty of setting factory outputs and allocating resources. The role of company managers was not considered relevant, and the focus was put on output targets rather than on products quality or an efficient managerial and organizational framework. Strict production targets governed production rather than processes' efficiency.

With Deng Xiaoping opening-up reforms, more margin of negotiation was given to such organizations' managers and more emphasis was put on organizational efficiency with western companies having then become the referential model. Research and Development departments also started gaining importance.

⁴³ Jingrong Lin K., Lu X., Zhang J., Zheng Y., "State-owned enterprises in China: A review of 40 years of research and practice", China Journal of Accounting Research, Volume 13, Issue 1, March 2020, Pages 31-55

SOEs have been surely crucial for the implementation of the going out policy at the beginning of the XX century, since they have largely been deployed as main actors for Chinese FDI strategy⁴⁴.

As long as their financing mix is concerned, SOEs expansion has been mainly, if not solely, relying on state-fueled debt. When Andrew Collier reviewed the finances of five SOEs in 2016, he found that they collectively held roughly \$106Bn of debt on their balance sheets⁴⁵. If compared to non-Chinese firms investing overseas, Chinese companies scored way higher gearing ratio.

Such high debt accumulation could arise concern and suspicion among foreign observers. This is reasonable considering that China has reached unprecedented levels of debt in the last five years: by 2018, *it was estimated that total debt held in China was 329% of GDP*⁴⁶.

But if we have a deeper look at who issues all this debt, we can notice that SOEs' main creditors have been national state policy banks, namely China Development Bank (CDB) and the China Investment Corporation (CIC)⁴⁷. This means that the solvency of such companies is ultimately granted by the Chinese government.

But how are the two entities, namely SOEs and the central government intertwined nowadays?

This connection is mainly displayed by investigating who the Ultimate Beneficial Owner (UBO) is within these entities. The main criteria to be considered as a SOEs, thus, is by having an ownership structure leading back to the State Council, in general via the State-owned Assets Supervision and Administration Commission. This link sometimes can be hidden by several layers of ownership: the State Council can make use of state-owned intermediaries or investment vehicles to ultimately control an enterprise.

To better understand the role of Chinese SOEs in Chinese economy and thereby have a clearer understanding of their presence abroad, it is useful to briefly outline the different stages of

⁴⁴ Jingrong Lin K., Lu X., Zhang J., Zheng Y., "State-owned enterprises in China: A review of 40 years of research and practice", *China Journal of Accounting Research*, Volume 13, Issue 1, March 2020, Pages 31-55

⁴⁵ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁴⁶ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁴⁷ Ibid.

reform which State Owned Enterprises have gone through since the launch of marketization reform in 1978.

- **1978-1984: improve SOEs' efficiency under a planned economy**

As in every socialist country, also in China SOEs before 1978 were considered as production units which solely responded to centralized economic planned needs. SOEs were both state-owned and state-operated, this meaning that the state both detained the entity's ownership and the operating rights of SOEs. Production plans were shaped at the governmental level and the only role for these companies was to implement them, together with other strategic decisions spanning from personnel recruiting, financial control, or sales⁴⁸.

In the planning conducted at the central level, nor product price settings or customers' demand was considered. Over more, all profits made by SOEs were remitted back to the state and, at the same time, if losses happened, these were also backed by the state. Under this framework, managers really had little margin of action and were not stimulated in supporting internal operations. This is one of the main reasons laying behind SOEs' low operational efficiency.

Throughout the modernization reforms launched by Deng Xiaoping, attempts to improve SOEs performance have been made. The first step towards this objective has been to reshape SOEs' decision-making rights⁴⁹.

Throughout a pilot reform conducted in 1983 in Sichuan, SOEs started to be allowed to engage in economic activities beyond the state's mandatory plans and, for those SOEs which conducted export activities, it began possible to retain some of their foreign exchanges.

Further operational autonomy was granted to SOEs when it was convened that these entities could start keep part of their profits and remit the rest back to the state in the form of taxation. Even though tax rate was as high as 55%⁵⁰, it still can be considered as a major change from the previous model.

⁴⁸ Jingrong Lin K., Lu X., Zhang J., Zheng Y., "State-owned enterprises in China: A review of 40 years of research and practice", China Journal of Accounting Research, Volume 13, Issue 1, March 2020, Pages 31-55

⁴⁹ Ibid.

⁵⁰ Ibid.

The expansion of SOEs' autonomy culminated at this stage with the issuing of "Interim Ordinances on State-operated Enterprises" by the State Council in April 1983. The document is a milestone in the sense that, for the first time, a policy addressed "SOEs" as legal persons with the right of independent production and operations.

- **1984-1992: the establishment of the contract responsibility system (CRS)**

Being the state the sole actor in charge for a SOEs' operations and ownership at the same time, it sometimes lacked information on the entity to implement pondered decisions.

A shift was therefore necessary and in 1984, the third plenary session of the 12th Central Committee of the Communist Party of China (CPC) made clear the need of starting separate ownership from operating rights. The policy that first tackled this problem was the Contract Responsibility System (CRS) issued in the same year.

Throughout this legislation, managers of SOEs were allowed to retain part of the excess profit of the company and were also assigned operating rights of SOEs throughout employment contracts. The duration of these contracts was from three to five years.

The main goal of such far-reaching policy was to improve operating performance of SOEs. Nevertheless, the Contract Responsibility System had its shortcomings: managers were granted contracts which only lasted from three to five years and this short-term engagement gave little motivation to them to invest in long term projects and in the company's long-lasting stability.

- **1992-2002: establishing a modern enterprise system based on the market economy**

Although the Contract Responsibility System reform was to some extent, there were still improvements to be made. Among these, one crucial element to be implemented was the promotion of the market in economic development. This is consistent with the statement that market the 14th National Congress of the Chinese Communist Party: "*the goal of China's economic reform is to establish a socialist market economy*"⁵¹.

⁵¹ Jingrong Lin K., Lu X., Zhang J., Zheng Y., "State-owned enterprises in China: A review of 40 years of research and practice", China Journal of Accounting Research, Volume 13, Issue 1, March 2020, Pages 31-55

In this sense, the creation of market-supporting institutions could ease the separation of ownership and operations within SOEs. To this end, a new round of reforms was launched to shape a modern enterprise system. This process is called corporatization and consisted in the restructuring of the internal governance system of SOEs which were still kept under the state ownership.

Another important change was brought about by the establishment of the Shanghai and Shenzhen Stock Exchanges. These could provide SOEs with channels that could enable them to dispose of alternative financial channels throughout the capital market.

Another milestone in that timeframe has been the drafting of the Company law which came into effect in 1994 and provided a legal framework for the establishment of a steady governance structure of Chinese SOEs. Thanks to the new law, since 1994 the general meeting of shareholders, the board of directors and the board of supervisors have become the three main distinct bodies of Chinese companies.

- 2003-2012: the creation of an SOEs' assets management system

After 2003, the ongoing reform on SOEs was mainly revolving around improving large SOEs operational efficiency. By then there was the need to better define SOEs' property rights by establishing a state-owned assets management system. This happened throughout the work of the 16th National Congress of the CPC in 2002⁵², which formulated that central and local governments were the direct owners of SOEs. Particularly, the central government should be regarded as the responsible for large SOEs operating in key sectors for national economy. Local governments instead were the owners of smaller SOEs operating in less crucial fields.

This principle became operational throughout the establishment in 2003 of the State-owned Assets Supervision and Administration Commission (SASAC), entity which become the shareholder of important and large SOEs on the behalf of the state. The SASAC launched the reform of central SOEs board of directors. Before that moment, the board of directors of central SOEs was embodied by the companies' top management. This sometimes was the cause for prejudice to the monitoring and advising activities towards the management team. The reform brought about by the SASAC, introduced the rule of hiring external directors which could

⁵² Ibid.

participate on strategy, funding and investment decisions and, of foremost importance, evaluate SOEs managers' performance.

- **2012-present: reorganizing SOEs**

The 18th Congress of the Communist Party was convened in November 2012. It was followed by a remarkable anti-corruption campaign which also led to a further reform of SOEs⁵³. This stage of the reform was anchored on the “Guiding Opinions on Deepening the reform of State-owned Enterprises” published in 2015. The reform process was also known as the “1+N policy system” due to the fact that the reform has been guided by one core document. The latter was based on the principle that SOEs needed to be reformed according to their classification. This principle defines that SOEs are to be classified as commercial SOEs or public service SOEs. The one falling within the first category can be further differentiated between SOEs operating into “perfect competitive sectors” or into “strategic sectors”. Following this rationale, the state can arbitrarily decide how to allocate resources among SOEs. For instance, because of their nature, it could decide to let commercial SOEs compete freely with the private sector and to devote more resources to public service SOEs.

Another important objective of this reform has been the strengthening of the role of the CPC leadership within SOEs. This goal was reached by mandating the board of directors of SOEs to hear opinions of the CPC committee of the company before deciding on important issues.

Lastly, the “1+N policy” has had the role of reorganizing central SOEs. Between 2012 and 2018, the SASAC promoted the merging of 20 central SOEs. This reorganization process was mainly geared toward the fulfilment of the “One Belt, One Road” initiative and to the implementation in the already mentioned “Supply-side reform”. This mergers campaign sought a *drop in central SOEs in China from 189 in to 2002 to 96 at the end of 2018*⁵⁴.

But at present, what is the role of SOEs within China's corporate environment?

⁵³ Ibid.

⁵⁴ Jingrong Lin K., Lu X., Zhang J., Zheng Y., “State-owned enterprises in China: A review of 40 years of research and practice”, China Journal of Accounting Research, Volume 13, Issue 1, March 2020, Pages 31-55

Especially in recent years, there seem to be more signs of a *toughening up of SOEs' role, rather than a shrinking*, within the national economy⁵⁵. There seem to be the tendency of *increasing their prominence* within the country rather than to soften it.

Throughout the different stages of reforms of public firms, there was a pervasive sense that China was committed to an extensive reform of the public sector, aiming at making the economy more liberalized.

After the 2000, though, these hopes slowly started to vanish. Even if it is true that SOEs started looking more like companies rather than direct branches of the government, it is also true that the creation of the State-Owned Assets Supervision and Administration Commission of the State Council (SASAC) left less margin to further open-up and liberalize the economy. It was, in turn, an evident shift towards a tighter control on state owned enterprises. The reform put in place during previous years granted public companies with consistent targets in productivity and efficiency to increase these giants' profitability. The role of the private sector became more evident and private companies became an important force within the corporate landscape as well as beginning to displace SOEs in many key areas of the economy.

In the early 2000, in order to renew SOEs' role within society, the plan has been to promote huge merging between state owned companies throughout the so-called campaign "zhuada fangxiao" namely to get a grip on the big ones and merge the little in order to save them from shut down. The outcome of the campaign was the birth of enormous state-owned companies' conglomerates.

The national reform of SOEs started slowing down with the rise of Xi Jinping to power⁵⁶. The new chairman envisioned to reinforce the Chinese Communist Party and boosting Chinese assertiveness abroad by the means of State-owned enterprises and their role within national economy. In Xi's view, SOEs are a major source of stability for the economy in times of volatility, they are the prime tool to drive the government industrial policies and goals.

Nowadays, under Xi Jinping rule we see the implementation of the "Mixed-ownership" strategy, a decision aimed at boosting the role of state-owned capital and, at the same time,

⁵⁵ Bort N., "Has China given up on state-owned enterprise reform?" The Interpreter, Published 15 Apr 2021, available at: <https://www.lowyinstitute.org/the-interpreter/has-china-given-state-owned-enterprise-reform>

⁵⁶ Wu C., Meyer M. W., "Making Ownership Matter: Prospects for China's Mixed Ownership Economy", published in: September 2014, available at: http://www.paulsoninstitute.org/wp-content/uploads/2017/01/PPM_Making-Ownership-Matter_Meyer-and-Wu_English_R.pdf

make it more efficient. In essence, it promotes the injection of private capital into State-owned enterprises to make them more efficient and competitive. The first two SOEs to implement pilot mixed ownership reform schemes have been *China National Building Materials Group and China National Pharmaceutical Group Corporation (Sinopharm)*⁵⁷.

The deployment of these giants is geared towards the development of in-house key technologies or towards the implementation of the Belt and Road Initiative throughout the world. Similarly, during the recent Covid-19 pandemic, Chinese SOEs have constituted the main economic engine within the country so to avoid a massive shrink in economy and ease its recovering.

Nowadays SOEs account for around 25% of the Chinese economy⁵⁸, but are still at the forefront in national key industries such as the energy, state grid, aviation, and defence field in which they are dominant and almost operate under monopoly conditions.

Over more, not only Chinese SOEs enjoy substantial state-fuelled financial aid, they also play a huge role in China's equity market within which they account for 40% of the market capitalization of Chinese companies⁵⁹.

However, even if the goals enshrined within by past reforms are sensitive, SOEs which have been included in the restructuring process seem to have changed little in practical terms. Furthermore, the lack of transparency around and the apparent halt of the SOEs' reform have contributed to the rise of growing concerns both within and inside China about the government goals.

Strengths and weaknesses of Chinese SOEs

Since China opening-up and reform process, and according to data disclosed by the State-owned Supervision and Administration Commission of the State Council, China's SOE sector is growing significantly: *their total asset reached RMB 51,711 billion and they sold more*

⁵⁷ Wu C., Meyer M. W., "Making Ownership Matter: Prospects for China's Mixed Ownership Economy", published in: September 2014, available at: http://www.paulsoninstitute.org/wp-content/uploads/2017/01/PPM_Making-Ownership-Matter_Meyer-and-Wu_English_R.pdf

⁵⁸ Bort N., "Has China given up on state-owned enterprise reform?" The Interpreter, Published 15 Apr 2021, available at: <https://www.lowyinstitute.org/the-interpreter/has-china-given-state-owned-enterprise-reform>

⁵⁹ Ibid.

than RMB 52,200 billion in goods and services in 2017⁶⁰. These figures can make us perceive the relevance of these companies not only within the country but also worldwide.

Nevertheless, State-owned Enterprises are often regarded to have lower economic performance than private companies. The sheer Chinese economy, which growth ranks among the top in the world, substantially relies on public companies. This is the base of the “China Puzzle” which, in essence, questions about why the country still scores relevant growth rates even without the presence of market-supporting institutions and while leaning heavily on state-fuelled investments.

To further analyse this kind of enterprises, we could briefly outline some advantages and disadvantages characterizing Chinese SOEs and their role in the economy.

As far as advantages are concerned, the state intervention can indeed grant SOEs with liquidity which is needed especially for capital-intensive industries. These large subsidies provided by the state can grant resources mobility and quick infrastructure construction which would be impossible to achieve just by relying on market, or at least not at this rapid pace. Another advantageous element is that SOEs are seen as means through which the state can grant social stability because, when the latter is low, SOEs are an efficient way to absorb excess labour force by absorbing it when unemployment rates rise⁶¹.

Over more, through SOEs the state can maintain control over key elements of society like strategic firms’ outputs and productivity and make them consistent with the government’s overall interests.

On the other end, SOEs are said to have lower economic performances if compared to non-SOEs. A prominent issue causing SOEs’ underperformance is the inherent defect of SOEs. SOEs are public goods subject to various externalities, impairing their operational efficiency⁶².

Company case – NXP RF Power Units (Ampleon) Acquisition 2015

An eminent example of acquisition conducted by a State-owned company within Europe, is the one which saw the acquisition of a division of the Netherlands-based NXP Semiconductors company in 2015. The division was RF Power Units (Ampleon) which main activities are the

⁶⁰ Jingrong Lin K., Lu X., Zhang J., Zheng Y., “State-owned enterprises in China: A review of 40 years of research and practice”, China Journal of Accounting Research, Volume 13, Issue 1, March 2020, Pages 31-55

⁶¹ Ibid.

⁶² Ibid.

manufacture of products and components for mobile broadband infrastructure, particle accelerators as well as video and radio signal equipment⁶³.

The chips produced are to be used in a wide range of consumer products like mobile phones or also in military equipment, like radar systems.

And who is the investor?

The investor at stake is Jianguang Asset Management (JAC Capital), a state-owned investment fund which, through different layers of ownerships, links back to China Investment Corporation (CIC).

The deal was concluded with the takeover of 77% stake in Ampleon by JAC Capital for €1.67 Bn⁶⁴. The remaining stake was acquired by an offshore special purpose vehicle (SPB), namely Wise Road Capital.

After the transaction, the RF Power Units Division's activities were transferred to a new company in the Netherlands under the name of Ampleon. The 2000 employees and the management were kept. All patents and intellectual property, along with back-end manufacturing sites in the Philippines were also transferred to the acquirer.

Why is this case relevant? Despite being one of the most heated area of competition, when it comes at semiconductor manufacturing China is still hugely dependent on foreign supply. Becoming self-sufficient in this kind of production and all the niches involved could take hundreds of years, considering the complexity of the manufacturing processes and the varied manufacturing inputs that chips require. Despite that they represent a key industry for Chinese ambitions, as stated the 14th five-year plan outlined last year throughout the goal of "technology independence" by the end of the five-years period.

Being JAC capital a state-owned company, is committed to specific portfolio acquisition within the semiconductor manufacture and affiliated industries. In this view, the acquirer and the target displayed clear synergies. We can say that the acquisition is aligned with the government broader policies and long-term objectives.

⁶³ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁶⁴ "The Acquisition of Ampleon", Datenna. available at:

1.5.2 Private enterprises

China's private sector began to emerge under the Deng's reform era, local private enterprises have played more and more relevant role in China's economy since the opening-up process and have been at the core of Chinese activities and influence in outbound direct investments worldwide⁶⁵. They resemble their counterparts worldwide when it comes at the operational side, and as far as their ownership structure is concerned. They also mainly conduct their business activities in the pursuit of their commercial interests and to satisfy and attain internal corporate goals. This is the main difference with public companies. Despite their independency, if their production strategy is in line with parameters set by the central government and the companies prove to be commercially efficient, they can also receive subsidies and substantial financial aids in order to boost their expansion⁶⁶.

They also have proven to be the most innovative domestic enterprises and their transaction abroad have proven largely successful. Since they first came into light during the reform period, they could fill the gaps in the market in which SOEs, due to their ties with central government, failed to modernize and adapt.

They can be regarded as an answer to the American Silicon Valley. The domestic BATs, namely Baidu, Alibaba/Ant Group, and Tencent versus the US's FANGs, Facebook, Amazon Netflix and Google⁶⁷.

For these reasons, throughout the decades, these companies have been able to generate profits that outperform SOEs with much higher returns on investments.

I mentioned that also private enterprises can, in some circumstances, access subsidies and cheap financing options from Chinese state banks. Nevertheless, it is also true that in times in which the Communist Party imposes stringent controls on capital, private enterprises are also the last to have access to this financing option.

⁶⁵ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁶⁶ Ibid.

⁶⁷ Ibid.

At the same time, they can be listed on foreign stock exchanges. According to the Organization for Economic Co-operation and Development (OECD)'s last Asian equity market review of 2019, Chinese companies *were able to raise almost US\$ 60 billion from Initial Public Offerings (IPO) in capital markets*⁶⁸. Nevertheless, it is also true that recent episodes such as the cancellation of the Alibaba IPO can give us an idea of the State's massive influence and reach even over private businesses.

Company case- KUKA Robotics Acquisition

The target, KUKA Robotics, is a German company and world leader in the manufacturing of robotics and in industrial production automation, sub-sector in which the firm can boast a pioneering role. It was established in 1898 in the German city of Augsburg and has 25 subsidiaries worldwide⁶⁹.

The acquirer, Midea Group, is a Chinese private company established in 1969 in Beijiao, Foshan. Its original scope of business was the production and sale of electrical consumer appliances. Today it also comprises other fields such as the robotics and production automation. At present, the group generates over US 40.5 billion in annual revenue and employs almost 150,000 people worldwide⁷⁰.

The takeover of the German KUKA by Midea took place in 2016. To carry out the deal, the acquirer exploited its position within KUKA's board. In fact, when the deal took place the Chinese company already held 13% of KUKA's stock. Due to the relevant equity share held, it was able to force the decision within the board to place a tender offer for the 82% of the remaining stock in August 2016.

⁶⁸ Ibid.

⁶⁹ "KUKA." Wikipedia. Wikimedia Foundation, August 1, 2021. <https://it.wikipedia.org/wiki/KUKA>.

⁷⁰ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

After the transaction Midea Group promised to grant the integrity and independence of KUKA for the following 7 years, until 2023⁷¹. In the acquisition agreement the acquirer committed to the independence of the executive board, the protection of KUKA's brand, its R&D obligations, and the business data of its partners. Over more there was the commitment not to conduct any company restructuring and to retain the German headquarters together with its employees.

The original shareholder of KUKA regarded the operation as advantageous since Midea offered euro 115 euro per share. This constituted an appetible premium of 60% on the closing stock price of the company⁷².

After the takeover, Midea Group was faithful to the terms of the agreements by not holding any position on the executive board of KUKA but instead being present only in the supervisory board of the company.

Important changes that may suggest the beginning of an increasing importance towards operations carried on in China. The evidence would be the establishment of a KUKA robotics plant at Midea's Shunde manufacturing site in Foshan, Guangdong Province.

1.5.3 State-Powered Private Enterprises

Far from being able to make a clear-cut distinction of what can be defines as state-owned or private, within Chinese economy and corporate landscape we can at least identify another type of entity which Gareth Christopher Heywood in his report on Chinese Foreign Direct Investment in Euro-Tech report defines as "State powered private enterprise"⁷³.

This kind of companies are characterized by a more obscure ownership structure if compared to the other two kinds of companies. They appear as Special Purpose Vehicles mainly geared for overseas investment and domestic equity investment funds⁷⁴.

⁷¹ 'Company Presentation 2020', KUKA, p 3

⁷² Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

⁷³ Ibid.

⁷⁴ Ibid.

Eminent examples of State-powered private enterprises can be the HNA Group which originated from and is now involved in investments in numerous sectors such as aviation, financial services, real estate, and tourism. In 2015 only it purchased dollars 40 billion in assets worldwide⁷⁵. From 2016 and with subsequent more stringent controls over subsidies granted to domestic companies, the State Council decided to curb this kind of investments. The Group filled bankruptcy and debt restructuring in early 2021.

State-powered enterprises, as a company category, emerged in the past five years after an audit of China's Policy Banks from which emerged that, for instance, the China Investment Corporation (CIC), which since 2007 has had the role of managing the state's foreign exchange reserves, had carried out 12 loss-making overseas investments mostly because of lack of due diligence in the transactions⁷⁶.

The State-powered private enterprise thus are mainly subsidiaries of Chinese government organizations that engage in foreign direct investment activities and are strictly related to the central government. However, their ownership structure is more layered than the one of a state-owned enterprise. In fact, the entities are tied to the central government through the control by other entities, and this signals a certain degree of separation in the decision-making between the CCP and the executives managing these enterprises.

As far as the financing mix is concerned, the State-powered private enterprises receive financing from policy banks but also through equity funding from national and local authorities. We can also find some listed entities among them, and which are thereby able to raise funds from capital markets worldwide in the form of bonds and shares.

Company case – Imagination Technologies Acquisition 2017

An acquisition that may exemplify a takeover of a European company by a Chinese State-powered private enterprise is the one which concerned the acquisition of the British Imagination Technologies by Canyon Bridge in 2016.

⁷⁵ 'China Plans Sale of HNA's Non-Aviation Assets via Trust', Bloomberg, January 21st 2021, available at: <https://www.bloomberg.com/news/articles/2021-01-29/china-said-to-plan-sale-of-hna-s-non-aviation-assets-via-a-trust>

⁷⁶ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

Starting from a brief description of the target, Imagination Technologies was established in 1985 in Britain. It is a “*semiconductor and software design company that develop and license silicon and software intellectual property for system-on-chip devices that serve mobile, consumer, automotive, enterprise, infrastructure, IoT and embedded electronics’ products.*”⁷⁷.

Moving on to the acquires, Canyon Bridge is described as a Silicon-valley based private equity firm that brands itself as “*a global private equity firm that equips technology companies with capital, strategic expertise and access to high-growth Asian markets*”⁷⁸

Despite this branding strategy, the company is registered in Beijing.

The deal between the two companies was concluded with the purchase of the entire stock of Imagination Technologies (Imgtec) by Canyon Bridge at the price of dollars 740 million. Subsequently, Imgtec was delisted by the London Stock Exchange and was re-molded into a private company structure⁷⁹.

After the acquisition, evidence of synergies between the acquirer and target can be the creation of the Imagination University Programme together with Peking University. This programme provides Chinese students in the field of engineering with a toolkit for the mastering of Imgtec hardwares and technologies. This is a clear example of export and absorption of know-how, element that shouldn’t be underestimated: in an era in which China strives for AI supremacy and technology self-sufficiency, being able to dispose of AI-literate engineers is of uttermost importance for the country.

1.5.4 Differences in acquisition behavioural patterns

After having displayed the main features of the three principal economic actors within China’s corporate landscape, I will try to outline the main trends and behavioural patterns concerning

⁷⁷ “Imagination Technologies.” Wikipedia. Wikimedia Foundation, March 20, 2021. https://it.wikipedia.org/wiki/Imagination_Technologies.

⁷⁸ Home, Canyon Bridge. Accessed September 22, 2021. <https://canyonbridge.com/>.

⁷⁹ Martin, Ben. “Canyon Bridge Bid for Imagination Technologies Approved by UK Court.” Reuters. Thomson Reuters, November 2, 2017. <https://www.reuters.com/article/uk-imagination-technologies-deal-idUKKBN1D22FQ>.

Chinese companies cross-borders acquisitions abroad and try to show whether it is possible to spot differences among the different type of companies that have just been discussed.

Taking the study conducted by Fuest C. et al. “Chinese acquisitions abroad: are they different?”⁸⁰ as the main reference, we can spot some relevant trends in this respect.

Starting from transaction size, the study finds out that if compared to private companies, Chinese State-Owned investors tend to conduct larger deals when venturing abroad. Another important finding is that in the surge in acquisitions abroad before 2008 the main actors involved were private companies, while from 2011 public enterprises started taking the lead and scored the most relevant acquisitions abroad. This could represent a manifestation of the desire for a closer control on cross-borders acquisitions and transactions abroad by the central government.

Another relevant trend to consider is the percentage of stake acquired. Following the statistics conducted in the study, Chinese state-owned enterprises generally engage in full acquisitions (44.6% of cross-border deal by Chinese SOEs). If they do not engage in full equity acquisitions, they predominantly opt for majority acquisitions more if compared to private enterprises. At the same time, private companies tend to increase their influence and stakes gradually, figures show that 30% of total transaction concluded by Chinese private enterprises involve a progressive stake increase⁸¹. This is an indicator of a more cautious approach towards investment abroad which perfectly makes sense considered the more restrained financial resources that they can tap into.

Beside the influence exercised within the targets, also the sector plays an important role in relation with the investor type. If Chinese private enterprises are more focused in investments into the finance and insurance industries, SOEs tend to approach more the manufacturing sector or industries which are tied with natural resources like mining and agriculture.

Other differences concern the presence into tax heavens: Chinese private companies tend to carry on said transactions into tax heavens, probably to escape from the home country control

⁸⁰ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

⁸¹ Fuest C., Hugger F., Sultan S., Xing J. (2019), Chinese acquisitions abroad: Are they different? Center for Economic Studies, University of Munich (CESifo), Germany

over capital. On the other end, Chinese SOEs seem to target more resource-rich countries when conducting investments, private companies do not seem to have such preference.

Over more, if compared with non-Chinese investors, Chinese ones tend to purchase targets with larger assets' pool and which have a lower return on assets⁸². So, from the study it appears that the main significant difference between Chinese SOEs and non-Chinese one is the size of the company acquired, while as long as Chinese private investors are concerned, compared to non-Chinese ones tend to purchase targets with significantly lower return on investments and in financial distress and with more patents. This could be an indicator of an attempt to access technology and knowledge.

Overall, Chinese investors both state-owned and private ones, if compared to non-Chinese ones tend to invest and acquire companies in industries different from their own, with lower profitability, larger size, higher level of debt and more patents⁸³.

Another important question: are Chinese soes different in M&As activities if compared to state-owned acquirers from other countries?

Government-led acquirers, both Chinese ones and non-Chinese ones, generally are more geared towards research seeking activities and to acquire targets that could potentially enlarge and differentiate their company portfolio. The study⁸⁴ conclusions show thus that the two actors are not different in these dimensions, I can still argue that state control and influence over cross-border acquisitions have specific implications in China.

Following this line of thought, Chinese acquisitions, compared to non-Chinese ones appear to be more influenced by the main strategic policies at the central-government level. The two main policies in this sense are for sure the "Belt and Road Initiative" which has already been discussed in previous paragraphs and the "Made In China 2025" issued by Li Keqiang and which will be discussed further within the next sections.

⁸² Ibid.

⁸³ Ibid.

⁸⁴ Ibid.

By having the main aim of improving economic relations, infrastructure construction and investment activities among the involved countries, the BRI could change focus of Chinese investments abroad. The countries that took part to the initiative are 65 at present and stretch from Central, South and South-east Asia to Europe and the Middle east and North Africa.

To summarize the findings, it is possible to say that when Chinese SOEs acquire the control of a company it is not unusual to observe an influence from central policies as far as the location and industry decisions of the acquirer are concerned. Their acquisitions seem to mirror government intentions. In contrast, Chinese private acquirers do not seem to be particularly affected by policy guidance.

Statistically, taking the transaction value as main indicator, it is observable that Chinese private firms usually pay less for the takeover of a company if compared to their non-Chinese peers. There might be different explanations for this.

In the first place it can be possible that Chinese investors pursue smarter investment tactics or prove to have better negotiations skills⁸⁵. Over more is important to mention that given the fact that Chinese investors frequently target companies affected by higher debt this could allow the Chinese party lower acquisition prices. This is also due to lack of significant competitors. Other acquirer may avoid targeting companies with high debt. This does not seem to be the case for Chinese investors which can also have access to cheaper state-fuelled financing in multiple cases and thereby does not seem to be particularly affected by higher ROAs ratios concerning the to-be acquired company. Finally, it is also arguable that some foreign acquirers might decide not to compete with Chinese ones since this might have a bad influence on their existing operations in China.

Other interesting observations have been made by Heywood C. G⁸⁶. In fact, if we consider the distribution of the capital invested by differentiating investor types, it appears that private companies invest into a wider range of sectors if compared to State-owned ones. Out of the eight subsectors identified, namely telecoms, semiconductors, robotics, ai, big data, cloud

⁸⁵ Ibid.

⁸⁶ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

services, internet and “other”, private actors are present in seven of them⁸⁷. The only one to be left out being telecoms. State-owned enterprises and state-powered private enterprises are instead more specific in their purchases, with a bigger emphasis on telecom. It is important to mention that SOEs invested in a significant spread of semiconductor companies and cloud computing while SPPs invested exclusively in artificial intelligence besides telecoms. Examples can be found in the NXP Voice and Audio solutions experience, now Nexperia, who supply components and license patents to almost every electronic design in the world spanning from automotive and 5G to consumer products and cloud computing services. Also relevant is Imagination Technologies, whose artificial intelligence products are licensed to Apple.

Due to the width of target industries for private companies, it is possible to argue that this acquisition pattern reflects the fact that, for those actors, commercial motives take precedence. EU market access is a factor in at least 50% of the acquisitions or investments in the European technology sector made by private companies⁸⁸.

On the other end, as we already mentioned, companies which have links with the State Council prioritize national strategic objectives when conducting M&A activities abroad. These are in line with industrial plans drafted by the Chinese Communist Party.

If we are to consider the level of control exercised by each kind of investor over the target, overall, all of the three types of investors identified in the previous section try to get absolute ownership over the acquired company. Control categories are four: “absolute control” relates to the acquisition of 61% of a company’s total equity, “control” refers to the acquisition of 30% of total equity, with 9% the investor instead acquires a “word to say” and no control is obtained over the target if less than 9% stake is acquired⁸⁹.

As mentioned, there is a clear trend towards the attainment of absolute ownership across all three investor types, but State Powered Private Enterprise constitute an exception regarding the proportion of capital spent in investments abroad and the influence deriving from those. These entities are often involved in high-value but minority stakes (no more than 2%). Clear examples are the acquisition of 2% stakes into the Italian Prysiam and Telecom Italia by People’s Bank of China with a combined transaction value of dollars 620 milion.

⁸⁷ Ibid.

⁸⁸ Ibid.

⁸⁹ Ibid.

These operations are to be considered as geared towards a transfer of assets offshore from China, and this is especially true in the case of SPPs who largely operate as special purpose investment vehicles for these types of operations⁹⁰. The reason to employ such vehicles rather than party branches is the need of professional and well-reasoned investments to maximize the performance and avoid financial losses. These investments are the main mean of depletion of the country's foreign currency reserves.

Heywood C.G's research⁹¹ also shows that Chinese investors show a preference for majority control when investing into Euro-Tech companies. This is both true for SOEs who are mainly informed by broader national policies in their overseas operations and for private firms which seek market access into Europe.

At the same time, there is no evidence yet that these outright acquisitions represent an attempt of dismantling target companies in parts or direct transfer of acquired IP back to China.

In most cases we can see the attempt by China of integrating the acquired assets into a broader technology ecosystem (as seen in the Acquisition case of Ampleon division by JAC Capital). This trend is to be noticed in the evidence that after the acquisition of controlling stake in an entity in Europe, the target company maintains a high degree of autonomy and its asset preserve a certain degree of integrity too. In this respect, there seems not to be a direct attempt of coordination of overseas acquisitions from the Chinese State Council.

Focusing now on the other face of the coin, European companies, when they are targeted by Chinese investors, they are primarily concerned with the commercial opportunities granted by such investment. This is because it represents the opportunity to partner up with a Chinese firm which could subsequently grant them the opportunity to enter the Chinese market with its huge potential.

At the same time, these investments are a reliable source of liquidity for big companies, such as NXP.

These alleged mutual beneficial acquisitions often lead to the advantage of establishing lasting relationships with investors, a preferential venue for entering the Chinese market afterwards.

⁹⁰ Ibid.

⁹¹ Ibid.

There is also the case of acquisitions of companies in dire circumstances, to which Chinese companies have offered the possibility of refinancing since the acquirer not only acquires the target for its intrinsic value but also takes over any debt. This was something that Imagination Technologies' management probably had in mind when deciding to opt for investment partners, in order to make up for the company's no longer sustainable debt obligations⁹².

Evidence of synergies between Chinese companies and European ones is that, especially before 2017, European companies longed to enter the Chinese market and were also experiencing strategic divestment campaigns in order to align with the developing global technological environment. At the same time, Chinese investors were already equipped with financial resources to match the bloc's aforementioned internal desires and trends.

To summarize, during the last two decades until 2017 we noticed a favorable environment for Chinese investments into EU. As previously analyzed, from the Chinese side several factors pushed domestic companies' investment into the bloc, such as the acquisition of cutting-edge technology and IP, acquisition of advanced management and organizational skills and talents, increase of market share and integration into a global technology ecosystem. From the policy perspective, this approach is the tangible experience of broader national policies such the "Go Out Policy" and the more recent "Made in China 2025" with far reaching ambitions for the national future technological development.

2017 was also a turning point and marked a relevant shift in Chinese cross-border acquisition trends. As also reported by MERICS in their overview on Chinese FDI in 2020, *Chinese outbound foreign investment is undergoing a decline since 2018 due to China's implementation of Capital Control mechanisms which make approval process for overseas spending more complicated both for SOEs and private companies*⁹³. This also resulting in more strict regulations on private capital to leave China. Furthermore, the ambition to develop and boost internal high-tech manufacturing also makes China focus more on internal production and economic activities rather than the one happening outside of its borders.

⁹² Ibid.

⁹³ Arcesati R., Hanemann T., Huotari M., Kratz A., "Chinese FDI in Europe: 2019 Update", MERICS, published: Apr 08, 2020, available at: <https://merics.org/en/report/chinese-fdi-europe-2019-update>

From the policy perspective, there has been an adjustment on the government industrial strategy diverting attention on large scale production and instead trying to promote the development and, subsequently investment, in key industries like the semiconductor one.

Instead, from a European perspective, the Sino-US trade war has let the union to balance Asian Market aspirations against USA interests. This created some frictions and contributed to slow down Sino-EU investment relations.

From a political angle, the EU Commission has introduced a more compelling Investment Screening mechanism which has been operational from 11 October 2011. This legislative tool has also a coordinative role: it requires Member states legislators to hold a harder stance on the matter by adopting more rigorous investment screening practices. All these decisions have been primarily implemented in order to better shelter EU member states national economies after domestic companies have been left angry for external investments, and thus vulnerable, due to the impact of the Covid 19 Pandemic.

1.5.5 The Chinese communist party's presence into the private sector

Trying to navigate and making sense of the intricate corporate landscape present into China can be sometimes a tricky task. This is especially true when it comes at categorizing the different ownership type afferent to different companies in China.

In previous sections I tried to categorize Chinese firms in the “State-owned”, “Private” and “State-powered private” clusters. I argue, though, that we are not always able to precisely define whether a company is purely private or state-owned. The main reason is that in China, especially in recent years, the expansion of the Communist party presence into the private sector is a visible trend, confirmed by a nationwide survey on private enterprises into China⁹⁴.

Apart from empirical surveys, there is also formal evidence of this phenomena. This can be seen with the CCP central Committee's 2012 publication of Document No.11 in which It was displayed the ambition of rebuilding CCP branches in private enterprises. Already 8 years ago, the ambitious goal of this campaign was for the party-state to extend its presence within every private Chinese firm.

⁹⁴ Livingston, Scott. “The Chinese Communist Party Targets the Private Sector.” The Chinese Communist Party Targets the Private Sector | Center for Strategic and International Studies, October 8, 2020. <https://www.csis.org/analysis/chinese-communist-party-targets-private-sector>.

Just two years after the issuance of the mentioned document, in 2014, *it was estimated that 1.579.000 private Chinese firms established some form of connection with the CCP*⁹⁵. In other terms, at the time, around 53.1% of Chinese private companies had ties with the Chinese communist party.

Despite several studies demonstrated that a burgeoning private sector should ease the emergence of a middle class which is supportive to political democratization, in China traditionally the state has always held relevant control on economy and entrepreneurial activities and, thereby, private business have always been interested in maintaining good relationship with the regime to be able to have access to state-controlled resources rather than actively questioning the status-quo⁹⁶. Under these circumstances, the entrepreneurial class which materialized after Mao's death in 1974 seems to be keener to maintain the existing state of affairs rather than questioning the party-state role in society and within the economic landscape. In this context, both party officials and entrepreneurs can thrive. The interaction between the state and the private sector unfolds in several clientelist ties of private firms with local administrations, and surveys demonstrate that Chinese most successful private companies can boast tight relations with local politicians⁹⁷.

This is why it is extremely hard to precisely determine and point out at what elsewhere can be defined as the private sector in China. This interdependence between the entrepreneurial world and party officials fades the boundaries between state and private companies. (*Dorothy Solinger*)

To quote Margaret Pearson, since the reform era the Chinese government tried to form a beehive of business associations to represent and guard the interests of the newly materializing entrepreneurial class. This mechanism grants a certain degree of autonomy but also hinders the formation of horizontal ties between entrepreneurs and ultimately prevents class formation. Since the early 2000, many entrepreneurs have entered the party and other public institutions. It is a relevant phenomenon to be aware of given the fact that just few decades ago entrepreneurs were considered as the main party's enemies. This inclusion can be considered as a strategic move from the state to increase the stake of the new emerging business actors in

⁹⁵ Livingston, Scott. "The Chinese Communist Party Targets the Private Sector." The Chinese Communist Party Targets the Private Sector | Center for Strategic and International Studies, October 8, 2020. <https://www.csis.org/analysis/chinese-communist-party-targets-private-sector>.

⁹⁶ Ibid.

⁹⁷ Ibid

the party-state framework and thereby reducing the risk of putting the existing system in doubt. Of similar relevance is the fact that, throughout the decades, the new business elites have failed to create an independent social identity among them, this is why Margaret Pearson refers to them as “capitalists without a class”. This lack of a clear-cut identity within the entrepreneurial circle and among its components, also substantially hinders, or at least softens, contestations towards the CCP’s monopoly on power.

After Deng’s travel to the South China in 1992 the development and shaping of China’s private sector accelerated. Subsequently, with the Party’s 14th national congress in 1992 a restructuring process of state enterprises started. Since then, many SOEs were transformed into private enterprises so to increase their performance efficiency. This led to an enormous growth of the nation private economy by the end of the century. Nevertheless, this growth was mainly happening outside the state’s control and thereby started causing concerns at the central government level. The preoccupation towards the independency and power given to the private economy, led to the issuing of a landmark document: “*Opinions on conducting party building work in individual household businesses and private enterprises*”, which aimed to an assertive party-building campaign into private sector. Before this document, the state foremostly sought control over Sino-foreign joint ventures within China and, in general, over foreign investment into the country. The goal now was to extend such scrutiny to the private sector as a whole. For the first time also the role of party branches into business was clarified, in fact in the document was specified that those were the “political core” which linked workforces.

By the way, the goal of establishing the CCP dominance over the private sector wasn’t as easy as expected. The main obstacle to the campaign was the lack of recognition and inclusion of private entrepreneurs within the communist party. As a matter of fact, until then private entrepreneurs were banned from becoming party members. This limitation was set after Tiananmen square protests in 1989 when the communist party’s admission policies resorted to orthodox Marxism. It is only with the speech given by Jiang Zemin in 2002 in the occasion of the 80th anniversary of the party, that the theory of the “three represents” had been put forward and supported the idea of recruiting “advanced workforce” into the CCP, clearly referring to China’s new business elites. The theory of the three represents is a clear departure from orthodox Marxism according to which the party should be representative of the proletariat only⁹⁸.

⁹⁸ The three represents theory: Kwan C. H., "Three Represents Theory" aims for "Peaceful Evolution", Research Institute of Economy, Trade and Industry, Published on: August 23, 2002, available at:

With this new theory, the party has become expression of the advanced productivity, advanced culture and the fundamental interests of the overwhelming majority of the people of China⁹⁹.

This trend was strengthened even further with the issuing of the document “Opinions on strengthening and improving party building in Nonstate enterprises” by the Central committee. Throughout those lines, a far-reaching objective was outlined: in the short-term all private businesses with party members were also asked to establish party branches, and the ones which still didn’t have any party member within the management were subject to the party’s organizational reach. This meant that local authorities at county level were entitled to establish special agencies to execute party building activities within private enterprises.

To better uncover the subject of the interconnection between party-state and private enterprises... the study... takes the Chinese Anhui experience as an example. Anhui, after 1992 was among the most rapidly industrializing regions and it is important to mention that, nowadays, in the region the private sector accounts for almost 60% of the province’s GDP.

The study conducted by Yan et al. points out that *“by the end of 2012, 91.6% of private enterprises in Anhui had established party cells representing an increase of almost 50% since 2011”*¹⁰⁰. For this incredibly fast-paced infiltration of the party within private economy, it is worth it to spend few words on how the state was able to penetrate the province’s private sector.

In Anhui the party building campaign revolved mainly around the “Non-state Economic Organizations and Social Organization Working Committee” (NPEOSOWC) which was a state agency purportedly created for that aim. The Committee was set in September 2012 and is a senior-level party agency¹⁰¹.

What is important to mention is that the NEOSOWC was tightly tied to other departments that can claim a huge control over the province’s private sector among which we can list the “Bureau of Industry and Commerce”, an institution which is in charge of licensing and

<https://www.rieti.go.jp/en/china/02082301.html#:~:text=The%20Three%20Represents%20Theory%20emphasizes,of%20the%20people%20of%20China>.

⁹⁹ Ibid.

¹⁰⁰ Yan, Xiaojun, and Jie Huang. “Navigating Unknown Waters: The Chinese Communist Party’s New Presence in the Private Sector.” *The China Review*, June 2017.

¹⁰¹ Yan, Xiaojun, and Jie Huang. “Navigating Unknown Waters: The Chinese Communist Party’s New Presence in the Private Sector.” *The China Review*, June 2017.

administering private firms and the Provincial Federation of Industry and Commerce which is an association of private enterprises in the province and which, can exert more influence within the private sector if compared to the CCP that couldn't dispose of reliable links within the private sector.

As mentioned, the main role for Anhui's NEOSOWC was to ease and spur the party's presence in the private sector. To this end, a target responsibility system was employed in order to assign a "sub target" to each municipality. The specific target was agreed upon throughout a contract signed with the committee's municipal branches. At this stage, there were no incentives for private firms to promote CCP's organizational building within their management, it was rather imposed by the central government. This was not increasing the party's popularity among entrepreneurs.

To make up for this shortfall, the party started appointing "party building instructors" (党建指导员) *to facilitate the process by providing host firms with meaningful services and benefits*¹⁰².

Still, the main obstacle was private firm owners' resistance. This was mainly justified by the fact that those entrepreneurs were afraid of losing their authority within the firm. The issue was tackled by the government by recruiting private entrepreneurs into the Communist party. It is simple to imagine why this could facilitate party's incursion into the private business: one of the member's obligations is to support the party work and thereby company owners which entered the CCP could not oppose the party building instructors' work into their companies. It has been shown that *by the end of 2015 more than 50% of large-scale private business owners and more than 20% of all private entrepreneurs in the province had obtained Communist party membership*¹⁰³.

In some cases, these measures involved granting of prestigious political appointments (政治安排) for firms' owners. In essence, some private businesses owners could be granted posts like parliamentary membership, party congress membership as a result of their efforts in the alignment between party branches and private companies' work. The posts provisioned were a huge acknowledgement for firm's owners which could in turn increase their status within society and largely benefit their businesses in many ways such as political protection,

¹⁰² Yan, Xiaojun, and Jie Huang. "Navigating Unknown Waters: The Chinese Communist Party's New Presence in the Private Sector ." *The China Review*, June 2017.

¹⁰³ *Ibid.*

favourable policies and access to relevant information. We can thereby conclude that these incentives promoted by the state were optimal in the attempt of building a party network within private companies in the province.

Over more, private entrepreneurs were also incentivized to lead the party organization within their firms and, according to a national survey, *70% of private companies' owners were also at the head of the party organization within their firms.*¹⁰⁴

But, ultimately, once the settlement process has succeeded, what are the functions of party organizations within individual companies?

Unlike their role within state-owned companies, in which these agencies can enjoy relevant decisional power in a broad range of areas, within private enterprises CCP organizations may not be allowed to exercise the same functions. The party is well aware of this, and, for this reason, it has tried to depoliticise its branches within enterprises making them more business oriented. Following this trend, party cells do not specifically intervene in the company's management or production planning as it is the case within SOEs, they rather support production and employees' welfare. Totally in line with this principle, Xi Jinping, then member of CCP's politburo standing committee, commented in 2012 that *"party building in private enterprises cannot be conducted without consideration of production and businesses activities. It should be carried out around the central missions of enterprises and be conducive to business development."*¹⁰⁵

China's economic development is embedded into the CCP's core values and, for this reason, a party member which is also a private business owner has the duty of facilitating the country's economic rise throughout production.

To further uncover the subject of the interconnection between party-state and private enterprises the research conducted by Yan et al. takes the Chinese Anhui experience as an example. The main reason is that Anhui, after 1992 was among the most rapidly industrializing regions in China and it is important to mention that there, nowadays, the private sector accounts for almost 60% of the province's GDP.

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What is important to mention is that the NEOSOWC was tightly tied to other departments that can claim a huge control over the province's private sector among which we can list the “Bureau of Industry and Commerce”, an institution which has the role of licensing and administering private firms and the Provincial Federation of Industry and Commerce which is an association of private enterprises in the province and which, can exert more influence within the private sector if compared to the CCP that couldn't dispose of reliable links within the private sector.

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Ultimately, once the settlement process has succeeded, what are the functions of party organizations within individual companies?

Unlike their role within state-owned companies in which these agencies can enjoy relevant decisional power in a broad range of areas such as finances management or management staff appointment, within private enterprises CCP organizations may not be allowed to exercise the same functions. The party is well aware of this and, for this reason, it has tried to depoliticise its branches within enterprises making them more business oriented. Following this trend, party cells do not specifically intervene in the company's management or production planning as it is the case within SOEs, they rather support production and employees' welfare. Totally in line with this principle, Xi Jinping, then member of CCP's politburo standing committee, commented in 2012 that *"party building in private enterprises cannot be conducted without*

¹⁰⁸ Ibid.

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China’s economic development is embedded into the CCP’s core values and, for this reason, a party member which is also a private business owner has the duty of facilitating the country’s economic rise throughout production.

The most recent wave of party’s incursion within the private sector can be seen with the issuance of the “*Opinion on Strengthening the United Front Work of the Private Economy in the New Era*” by General Office of the Central Committee of the Chinese Communist Party (CCP) on September 15¹¹¹. With this document, the party aims at increasing its ideological footprint and presence into the private sector¹¹².

According to the document, private enterprises should help to establish a “modern enterprise system with Chinese characteristics”. The tone and style are similar to the one used by Xi Jinping when in 2016 announced that it was time to increase the Party’s role in SOEs.

Nowadays there seem to be analogies between Xi Jinping ambitions over the public sector and what Ye Qing, Vice Chairman of the All-China Federation of Industry and Commerce, desire of building a “*modern private enterprise system with Chinese characteristics.*”¹¹³ Following this rationale, the CCP’s presence into the private sector is to be strengthened and extended giving party’s cells the control over human resources management and allowing Party’s branches to conduct company audits. The formalization of the party’s presence into the private sector appears to be geared toward the ambition of having a wider range of businesses willing to cooperate in the achievement of national strategic goals.

It is important to note that this tendency could also affect China’s international trade: many international trade partners will probably be more cautious about assessing the degree of state intervention that they are willing to tolerate when doing business with Chinese companies.

¹¹⁰ Ibid.

¹¹¹ “The Chinese Communist Party Targets the Private Sector”, Center for Strategic and International Studies (CESIS), Published on: October 8, 2020, available at: <https://www.csis.org/analysis/chinese-communist-party-targets-private-sector>

¹¹² Ibid.

¹¹³ Ibid.

1.5.6 Governance theory and establishment mode

Within the scope of this research, I decided to foremostly describe Chinese acquisitions into Europe in the form of mergers and acquisitions. This is because I deem it to be the most relevant type of inbound investment happening nowadays from China into Europe. This view is underpinned by the fact that, according to public statistics, *Chinese M&As deals increased by 30% to us dollars 734 billion in 2020, the highest since 2016*¹¹⁴.

Throughout relevant literature review, in this section I will try to explain the rationale behind this choice and trying to describe why merger and acquisition appear to be the main way through which Chinese investors establish themselves within the European market.

Throughout the years, many scholars have accumulated literature on the topic of companies' establishment modes. This refers to the strategic choice implemented by a company about whether to buy an existing business abroad or create one from scratches. I would suggest analysing the Chinese companies' establishment mode choices throughout the lenses of the host market governance environment and acquirer's characteristics when it comes a internationalizations patterns. This would help to define and outline a trend of Chinese investments into the continent and better disclose the rationale behind the mode of entry choice.

As Alon et al. point out¹¹⁵, a country's *governance environment will have a crucial role when deciding to opt for an establishment mode instead of the other.*

Rule-based governance environments tend to attract more M&As than green field investment. The main reason for that can be the existence a more reliable due diligence on investments. Countries with relation-based governance environments, instead, are more likely to attract greenfield investments since they will provide the investor with full control over the established business and thereby more reliable first-hand information which lowers the risk of information asymmetry. The choice of M&As, instead, could be justified by the need to quickly catch up with local companies, acquire know-how and already dispose of a customer pool. Chinese

¹¹⁴ Offices, and Carl Li. "M&A Report 2021: China." *International Financial Law Review*. *International Financial Law Review*, March 18, 2021. <https://www.iflr.com/article/b1qxjdbpgyf24l/mampa-report-2021-china>.

¹¹⁵ Alon, Ilan, Stefano Elia, and Shaomin Li. "Greenfield or m&a? An Institutional and Learning Perspective on the Establishment Mode Choice of CHINESE OUTWARD INVEST-MENTS." *Journal of International Management* 26, no. 3 (September 2020): 100758. <https://doi.org/10.1016/j.intman.2020.100758>.

enterprises venturing abroad, belonging to a relation-based country would maybe choose M&As over greenfield investments to better cope with institutional environment difference abroad. These principles seem to mirror Chinese companies' tendency to embark into M&As activities when investing into Europe. The latter can be considered as a rule-based environment due to the main presence of constitutional democracies among the bloc's state members.

Over more, when assessing differences between Chinese Outbound foreign investments (OFDI) and non-Chinese ones, of important note is the peculiarity of the logic behind investments abroad.

Evidence show that Chinese investors seem not to follow an incremental and gradual internationalization process. It is more common among Chinese companies to internationalize before having a competitive advantage (i.e Geely or Lenovo), to internationalize too fast and also in high-risk countries thereby following a different internationalization pattern if compared with western firms.

As Ramamurti in his research on "*Developing countries and MNEs: extending and enriching the research agenda*" pointed out, the globalization context appears to be different for Chinese firms. Especially after 2016, companies venturing abroad come from mature industries and thus wish to escape overproduction and domestic institutions' control over capitals. This element could deeply affect and shape Chinese Outbound investments in Europe.

The governance environment theory

As defined by Li et al., *the governance environment theory is the one that divides countries into two main clusters: relation and rule-based societies.*¹¹⁶ This can be of uttermost importance in defining or even forecasting a country's cross-borders' investment patterns. By defining a country's governance environment as rule-based or relation-based it is possible, in theory, to assume what a domestic company's establishment strategy abroad could be. Or, at least, should be in order to maximise the profit.

¹¹⁶ Alon, Ilan, Stefano Elia, and Shaomin Li. "Greenfield or M&A? An Institutional and Learning Perspective on the Establishment Mode Choice of CHINESE OUTWARD INVESTMENTS." *Journal of International Management* 26, no. 3 (September 2020): 100758. <https://doi.org/10.1016/j.intman.2020.100758>.

Firstly, in order to make sense of the governance environment, it is possible to define it as “*the macro social, political, legal and economic institutions that shape and constrain micro governance behaviour in social, political and economic exchanges, namely, what means an investor can resort to in a given social environment to protect his/her rights.*”¹¹⁷

Throughout the research, I will consider the two main types of governance environments, namely the rule-based one and the relation-based one.

A rule-based governance environment is characterized by a transparent legal infrastructure under which laws are enforced following the rule of law principles and free and reliable public information. In this context, economic exchanges are conducted with a recognizable party throughout verifiable contracts. Within a rule-based governance environment, industries’ entry barriers tend to be low and there is a high level of generalized trust in the business environment. Vital to this, is the existence of an efficient information pool and infrastructures.

A perfect rule-based society is hard to obtain, but the best approximation of it could be constitutional democracy, where law is enforced universally and impartially and in which there are frequent and transparent elections. Over more, in this kind of societies power is spread equally between the three separate powers: judiciary, executive and legislative.

Trying now to provide a general description of what a relation-based governance environment looks like, it is possible to define it as an opaque and intricaded system relying on partial and selective law enforcement¹¹⁸. A third party trying to invest into this specific environment might find obstacles. These can be summarized in: a lack of reliable and transparent information, the existence of private connections and intricaded social network within which is hard to position oneself without personal ties. This system revolves more around loyalty and hierarchies rather than trust and compelling information regarding the business activities which are carried on within the country. Accounting and auditing professionals for their part also tend to enjoy less independence if compared to rule-based environments, to an extent to which even listed companies disclose unreliable information sometimes.

In this context, business activities thrive because of personal relations and because of private information that an actor might be able to acquire because of its position within the social

¹¹⁷ Ibid.

¹¹⁸ Ibid.

network. This allows insiders to boost their socioeconomic exchanges and to protect their economic interests. For these reasons, as Li et al. point out, corruption in such environments could be seen as a symptom rather than a cause for the existence of this specific governance structure¹¹⁹. For this reason, in order to conduct business activities and be competitive in such systems, a firm's owner is sometimes induced to resort to bribery.

Within this network it is not necessary to make heavy investment and establish elaborate legal infrastructures. It is arguable then that fixed costs appear to be lower than in other kinds of societies. By the way, the cost of doing business increases as the transaction scope enlarges. This is because in these governance environments being able to follow up with each and every business partner it is of uttermost importance. For this reason, as the economic exchanges expand from a local basis to worldwide or, simply, to unfamiliar environments, the expected costs increase accordingly.

And how does this theory relate to a company's establishment strategy within another country?

Studies point out that a relation-based governance environment could be particularly risky for an external actor wanting to invest within its borders. The reasons for that can be diverse. Good examples could be the lack of public information, accounting and auditing standards which tend to be lax and more flexible, and the easiness through which financial information is altered by companies. In these societies there tend to be an autocratic political system with a strong central government which mainly favours local and big businesses. It goes without saying that in relation-based societies personal ties are relevant and strangers are thereby disadvantaged in transactions.

The situation changes if we consider greenfield investments. Through the latter, the investor is directly and almost solely involved in the settlement of its business abroad, which he or she has to build from scratches. This reduces the risk of information asymmetry and the exposure to an inefficient and blurred legal system which could threaten a firm's know-how and strategic assets under other circumstances. This because the owner can create know-how and an asset basis from scratch through the creation of a separate and almost independent entity.

In contrast, a rule-based governance environment can facilitate M&A activities. Throughout the latter, a company engages in the take-over of a foreign company's assets from the host's market. This establishment mode requires a high-level of internalization commitment and risk

¹¹⁹ Ibid.

exposure apart from the deployment of a huge pool of resources¹²⁰. Because of this, the availability of first-hand and trustable information that can be found in rule-based societies is of relevance. This is the only way an investor can easily and effectively assess the target company's potential and trustworthiness, thereby reducing the risk involved in this kind of transactions. Of important note, the efficient legal infrastructure that can be enjoyed within a rule-based society, grants the investor impartial and effective dispute resolution mechanisms. This constitutes a steady legal basis against the risk of property rights theft and a good legal shield for the buyer.

Conversely, the ease in the assessment of the target process within a rule-based environment makes an investor less keen into opting for a greenfield investment. The main reason lies behind the fact that a greenfield investment is slower and riskier than a merger with or acquisition of an already existing business. So, if the cost of acquisition and prospected benefits resulting from the transactions are equal, an investor might prefer to choose an acquisition due to the speed to market process and the lower uncertainty linked to M&As. Over more, the reliability of information inherent in rule-based markets and the effective legal enforcement generally has the benefit of lowering costs and risks of transactions.

Indeed, a *country's specific institutions alone cannot explain why Chinese firms may employ different establishment modes within a country.*¹²¹

An eminent example of two companies coming from the same country but deciding to employ different entry mode is the one of Huawei and China National Bluestar Co. When deciding to enter the European market the former decided to opt for a greenfield investment while the latter decided to enter the market via acquisitions. In more detail, Huawei Technologies decided to establish a subsidiary in Norway in 2007 to better serve the local Telenor and Netcom companies with telecommunications equipment. On the other end, China's National Bluestar (a branch of the huge state-owned company conglomerate SinoChem) acquired the Norwegian Elkem which produces silicones and other metals¹²². This acquisition gave the Chinese company the opportunity to acquire strategic assets, establish their footing in the market and to

¹²⁰ Ibid.

¹²¹ Alon, Ilan, Stefano Elia, and Shaomin Li. "Greenfield or m&a? An Institutional and Learning Perspective on the Establishment Mode Choice of CHINESE OUTWARD INVESTMENTS." *Journal of International Management* 26, no. 3 (September 2020): 100758. <https://doi.org/10.1016/j.intman.2020.100758>.

¹²² Ibid.

absorb know-how and management practices to be implemented worldwide or to be applied into China.

This is a clear example of how two companies which have the same country of origin decided to employ different establishment modes even if within the same host country.

There might be different causes for this. In general terms, a company which ventures in a foreign market might be able to increase its market knowledge more quickly and absorb technologies through the contact with other business partners. This ultimately may lead to innovation and competitive technological skills.

The reason to choose M&A or Greenfield may be diverse, generally it is true that by expanding abroad a company may decide to embark in a M&A process to rapidly make up for technological gaps or to better adjust to the new market. At the same time, the research-based view informs the internationalization strategy of a company by emphasizing the fact that a company, through international experiences, is able to develop firm's specific advantages and managerial practices that can better be exploited by greenfield investment rather than by acquiring an existing company.

Another relevant theory that might inform a company's strategy when acquiring abroad is the one of "International depth", *which can be defined as a firm's experience and knowledge in a particular host country, as measured by the number of subsidiaries in the country*¹²³.

Following this theory, the more a company is integrated within a country, the better it will be able to overcome the "liability of foreignness", enter local network and make use of intracompany flow of information and capitalize on company's specific advantages within the new market. This is possible through engaging in multiple investment within the same country. Having more subsidiaries within one country enables the firm to become more familiar with the different institutional context and therefore be able to manage differences. This would result in putting less stress on the establishment mode abroad.

Following this rationale, Chinese EMNEs will be no longer forced to undertake M&As to have a better access to the local market. This is because through different investment the company might already have accumulated enough resources to compete with local firms. In a rule-based

¹²³ Alon, Ilan, Stefano Elia, and Shaomin Li. "Greenfield or m&a? An Institutional and Learning Perspective on the Establishment Mode Choice of CHINESE OUTWARD INVEST-MENTS." *Journal of International Management* 26, no. 3 (September 2020): 100758. <https://doi.org/10.1016/j.intman.2020.100758>.

environment such as Europe, Chinese companies can overcome cultural and institutional differences through committing in different investments and therefore rapidly becoming familiar with the rule of the game. This decreases the need for a company to undertake M&A as a way of establishing itself within a market.

Even though the depth strategy is supposed to give more confidence to a Chinese firm which invest into Europe, it is also true that Chinese M&As are the major financial activities into Europe and remain the preferred entry mode¹²⁴. Despite that, the cumulative learning happening at the firm level when it engages in multiple investment into a country, might explain the huge variation in the Chinese investments abroad. Examples of Chinese greenfield investments abroad can especially be found in the English capital where at least 9 large greenfield projects can be pointed out¹²⁵. Other investment projects are the \$24 billion Hinkley Point C nuclear power station, of which China is funding one-third, and a massive \$3.4 billion mall outside Paris that Chinese real estate developer Dalian Wanda Group Co.

This might also help demystify Chinese companies' investment behaviours which, instead of possessing fixed characteristics, are mainly shaped according to the institutional governance environment to be encountered in the host country and the firm's cumulative learning experience.

Therefore, even if it is true that Chinese investment abroad appear to follow common trends and logics, it is also true that just considering the phenomena by applying the "West" versus "East" label to transaction would be too simplistic. In this regard it is arguable that it is more accurate to refer to relation-based versus rule-based environment and heterogeneous versus homogeneous international experience. So, what we refer to as "Europe" might be also called rule-based market and eastern countries, in turn, seem more prone to adopt a more relation-based institutional governance framework.

¹²⁴ Kratz, Agatha, Max Zenglein, and Gregor Sebastian. "Chinese FDI in Europe - 2020 Update." Rhodium Group. Rhodium Group, LLC, June 16, 2021. <https://rhg.com/research/china-europe-2020/#:~:text=Headwinds%20to%20Chinese%20investment%20in,remains%20an%20attractive%20investment%20location.>

¹²⁵ Tartar A., Rojanasakul M., Diamond J.S., "How China Is Buying Its Way Into Europe", "Bloomberg", Published: April 23, 2018, available at: <https://www.bloomberg.com/graphics/2018-china-business-in-europe/>,

1.5.7 New tendencies: the Made in China 2025 and the 14th five-year plan

New envisioned trends in Chinese cross-border direct investment

When considering Chinese cross-border activities abroad it is not possible to overlook the most ultimate version of China's industrial policy, namely the "Made in China 2025" (hereinafter referred to as "MiC2025"). The latter develops even further the need for China to transition from its current role as "factory of the world", inputting billion units of low-tech manufacturing goods both in internal and in external market, to acquiring the status of a "technological powerhouse" positioning itself among most advanced countries in hi-tech products manufacture.

Being considered as Xi's signature project, the Made in China 2025 project mainly enshrines ten industries in which China envisions to become competitive worldwide. These are, namely, aerospace, biotech, information technology, advanced rail, electric vehicles, electrical equipment, new materials, pharmaceuticals, and robotic manufacturing¹²⁶.

It is true that the narrative surrounding the project has been softened in recent months to mitigate criticism coming from foreign observers, but the goal of building China into a technology superpower has not been abandoned in any way.

And how is China trying to reach its objective?

The McKinsey Global Institute (MGI) provides us with a relevant framework which displays the key elements to actively climb-up the global innovation value chain.

1. Investment at scale: the possibility to tap into financial resources such as state held foreign currency reserves, cheap financing products and government-fuelled subsidies specially targeting companies operating into strategic sectors.
2. Effective acquisition of technological know-how throughout patents acquisition, partnering up with foreign firms to establish joint ventures both in China or abroad to absorb knowledge by doing and M&A activities to acquire intellectual property, management skills and synergies between Research and development departments.

¹²⁶ "Made in China 2025." Wikipedia. Wikimedia Foundation, August 9, 2021. https://it.wikipedia.org/wiki/Made_in_China_2025.

3. Seek the entry in new and large markets to enable domestic companies to set their footing within them.
4. Encouragement of competition and innovation by creating an environment with less state intervention and planning.

In this view, both private and state-owned companies mainly strive towards the completion of stated objectives. There yet are discrepancies and overlaps in the run towards the attainment of these aspirations. Nevertheless, there still seems not to be a common framework guiding Chinese companies in the expansion of the country innovation footprint in the global technology value chain¹²⁷.

The made in China 2025

The Made in China 2025, (hereinafter referred to as MiC2025) is a major national policy aimed at making China less dependent on foreign countries in key industries, and to promote technological advancement within the country.

The main rationale laying behind this far-reaching policy is the recent stagnation of the country's economic growth. In fact, the latter has taken a downward path in recent years, especially after 2016/2017, moment in which Chinese private consumption as part of GDP stagnated at about 11%¹²⁸. Another factor of concern is the nation's constantly aging population which is swiftly causing the workforce to shrink.

To better tackle these major issues, the Chinese leadership aims at improving national industries competitiveness in the worldwide arena, by building the country into a technological powerhouse by 2025 and becoming less dependent on foreign know how, pre-eminently by spurring in-house cutting-edge technology development.

¹²⁷ Heywood C. G., "Chinese Foreign Direct Investment in Euro-Tech, Trends & Tendencies, Investor Risk Profiles, Key Strategic Issues for Government Policy", Leiden Asia Centre, published: June 2021

¹²⁸ Diplomat, Alexis Leggeri for The. "What Happens to the CCP If China's Economic Growth Falters?" – The Diplomat. for The Diplomat, October 29, 2020. <https://thediplomat.com/2020/10/what-happens-to-the-ccp-if-chinas-economic-growth-falters/>.

To be able to reach an edge within the global market and build its competitive advantage in terms of skills and know-how, the government set specific development targets to be attained within a specific timeframe. In fact, the goals set into the plan do not just stop in 2025 but also try to go beyond.

The first step consists in letting China match technologically advanced countries and becoming a “major manufacturing power” by 2025. Then, by 2035, the country aims at becoming a “global manufacturing power” and in 2049, when the People’s Republic will turn 100 years old, China wishes to become a technological superpower and to be at the forefront of the world’s technological advancement.

Within the MiC2025, ten are the core industries to be targeted and developed. The industries enshrined within the plan are considered as the main economic growth driver within modern economies and, by the time the project has been launched in 2015, have constituted the main fields of experimentation and industrial development within the country. In all likelihood, they are also the domains in which the government aims at better positioning itself and thus to which it will grant more financial resources.

Throughout the implementation of the said policy, in the first five-year time slot, China aims at starting to compete directly with the world’s most advanced industries.

Of course, the country is not equally lagging in all these sectors. There are fields in which China is substantially ahead other foreign countries, such as the one of transport and advanced railways. In fact, China’s High-speed rail (HSR) is the world’s longest high-speed railway network and the world’s most extensively used one¹²⁹.

By the end of 2020, China’s high speed railway network has accounted for two third of the world’s total high speed railway networks.¹³⁰

These achievements notwithstanding, the same cannot be said for the information technology and new materials industries. For example, despite China’s economy has,

¹²⁹ “High-Speed Rail in China.” Wikipedia. Wikimedia Foundation, September 16, 2021. https://en.wikipedia.org/wiki/High-speed_rail_in_China.

¹³⁰ Ibid.

throughout the years been fuelled mainly by export-led activities, the sub-industry of semiconductors is still one for which China is still relevantly dependent on imports¹³¹.

At the same time, China constitutes the world's largest market for semiconductors. Just earlier this year, Chinese state media reported that the national rover that last year landed on Mars was 100% made with domestically made semiconductors. This already signals a huge development in China's microchip manufacturing activities.

Nevertheless, every year China imports around US\$ 300 billion of semiconductors¹³². Both Tencent and Alibaba, two of the most relevant Chinese tech giants, heavily rely on imports and highly owe their success to foreign microprocessors. By the way, it is also true that Chinese central policies have been beneficial towards foreign investors operating into the computer chips manufacturing field by providing a huge pool of customers, markets, and lower production costs. This also to attract cutting edge technology manufacturing activities into China.

Being semiconductors a heated area of economic contention worldwide at present, I would like to provide a broader insight of how the Chinese semiconductor industry looks like currently and what are the main challenges the country faces in this sector. By assessing the competitiveness of China in the semiconductor industry, it is also possible to have a clearer idea of what it the horizon in terms of indigenous companies' capital spending, and what are the investment strategies that the country is pursuing both domestically and globally.

It is important to specify that, when it comes at the semiconductor value chain, no country can define itself as completely independent. If compared to other industries' value chains, the one of semiconductors is particularly complex and layered and relies on hundreds of inputs from different industries. The tools, processes and materials needed to obtain a single chip are outsourced all around the world and are rarely fully present within one single country. Not only the manufacturing process is strictly complex, also the products deriving from those are extremely diverse spanning from optical sensors to server CPUs or battery management modules. All these categories of final products can serve different purposes and markets. The complexity embedded within the semiconductor value chain creates

¹³¹ Thomas, Christopher A. "Lagging but Motivated: The State of China's Semiconductor Industry." Brookings. Brookings, January 8, 2021. <https://www.brookings.edu/techstream/lagging-but-motivated-the-state-of-chinas-semiconductor-industry/>.

¹³² Ibid.

multiple niches and few companies worldwide have been able to position themselves as leaders in a particular production process and thereby reach an edge in the market.

As a matter of facts, China hugely contributes to the world's electronics production, by massively inputting smartphones, computers, cloud servers and telecom infrastructure into the market, and constituting 36% of the world's electronics manufacture force¹³³.

Not only this, with a population on 1.7 billion people, China is the second largest market for semiconductors after the US¹³⁴.

Looking at figures provided by the Semiconductor Industry Association based in the U.S, in 2020, China has imported US\$ 378 billion in semiconductors¹³⁵, produced 35% of the global total electronic devices, and domestically consumed about one quarter of all the chip-based electronic devices.

At the same time China internally just produces 7.6% of the semiconductors to be sold worldwide. This is mainly due to the relatively still small size of China's semiconductor industry.

At present *"China still lags in the in advanced logic foundry production, EDA tools, chip design IP, semiconductor manufacturing equipment, and semiconductor materials"*¹³⁶. Currently China's supply chain revolves around more mature nodes and consistently relies on older technologies.

Despite these shortcomings, the ratio of global chip sales for China is rising consistently also thanks to an ever-growing internal market demand.

Over more, the country can account for some important achievements already since domestic firms in 2020 scored an 16% within the global fabless semiconductor market, ranking third after the U.S. and Taiwan¹³⁷.

¹³³ Ibid.

¹³⁴ Ibid.

¹³⁵ Ravi, Sarah. "Taking Stock of China's Semiconductor Industry." Semiconductor Industry Association, July 13, 2021. <https://www.semiconductors.org/taking-stock-of-chinas-semiconductor-industry/>.

¹³⁶ Ravi, Sarah. "Taking Stock of China's Semiconductor Industry." Semiconductor Industry Association, July 13, 2021. <https://www.semiconductors.org/taking-stock-of-chinas-semiconductor-industry/>.

¹³⁷ Ibid.

Also due to the need to quickly serve a burgeoning market, China is nowadays an important front-end wafer manufacturer with Chinese and foreign investors' fabs settled into the country to ensure proximity to final consumers. This results in around 23% of the world's installed wafer capacity to be located within Chinese borders¹³⁸.

Throughout the last decades, China has deployed huge efforts and resources to the building of a national and self-sufficient semiconductor industry. Indigenous SOEs played a huge role in this respect and had been granted substantial financial resources for them to be able to compete with their foreign peers. Nonetheless, despite the great leaps forward, Chinese semiconductor companies still score a relatively small percentage of sales within the global semiconductor market.

Unsurprisingly, semiconductors are included also within the scope of the Made in China policy. The latter has been crucial to determine the new shape of the national strategy within the semiconductor industry. In fact, the policy sets the goal for the nation to achieve 70% self-sufficiency in semiconductors by 2025. Key in this sense is the National Integrated Circuits Industry Development Investment Fund, also known as the "Big Fund" and which constitutes the prime financial fund for this end. The fund has been established in 2014 and has immediately been fuelled with US\$ 21 billion deriving from state-backed financing¹³⁹.

In 2019 there has been a second round of financing, through which US\$ 39 billion have been invested into the fund. Almost 70% of the spending was devoted to the development of front-end manufacturing with the final aim to increase China's share of global semiconductor production¹⁴⁰. This national-level fund is coupled with 15 others local government funds. The financial resources to be geared toward national chip manufacturing development now total around US\$ 73 billion, a sum which hasn't been reached by any other country¹⁴¹. Of important note, 43% of the registered capital in the Chinese

¹³⁸ Ibid.

¹³⁹ Ravi, Sarah. "Taking Stock of China's Semiconductor Industry." Semiconductor Industry Association, July 13, 2021. <https://www.semiconductors.org/taking-stock-of-chinas-semiconductor-industry/>.

¹⁴⁰ Thomas, Christopher A. "Lagging but Motivated: The State of China's Semiconductor Industry." Brookings. Brookings, January 8, 2021. <https://www.brookings.edu/techstream/lagging-but-motivated-the-state-of-chinas-semiconductor-industry/>.

¹⁴¹ Ravi, Sarah. "Taking Stock of China's Semiconductor Industry." Semiconductor Industry Association, July 13, 2021. <https://www.semiconductors.org/taking-stock-of-chinas-semiconductor-industry/>.

semiconductor industry seem to be linked to the Chinese government, this sires concerns towards the influence and control of the state over the development of this industry and the threat to neutral competitiveness.

The state support is not only limited to granting local companies with abundant government-backed financial resources. It also consists of grants, reduced utility rates, favourable loans, tax breaks and discounted land to accelerate the country's development in the sector. These elements can generally make indigenous companies shield themselves from market logics when competing abroad.

According to the Semiconductor Industry Association, In August 2020, China's central government issued policies to further expand preferential tax policies for semiconductor firms, which, among others, establish a up to 10-year corporate tax exemption for semiconductor manufacturers, *which could equal \$20 billion*¹⁴².

Equally astonishing is the increase of number of semiconductor companies in China. In 2020, the number of national semiconductor firms has increased by 195% from 2019, with 22,800 new companies having been established¹⁴³.

Indeed, some notable progresses can already be spotted. These are especially visible in the field of back-end manufacturing, which constitutes the most labour intense process through which semiconductor wafers are split into individual chips. Important in this context is HiSilicon, the semiconductor producer controlled by Huawei. In fact, this segment seems to better suit China's consolidated competitive advantages, namely low labour costs and operational efficiency.

As I will further explain in the next section, the 14th five-year plan launched early this year has among its main goals the attainment of technological independence and self-reliance. As Thomas C. A. postulates¹⁴⁴, this goal is not to be achieved easily within an industry such the semiconductor one. Especially if it involves the establishment of a wholly national and solely controlled by China supply chain to serve all Chinese consumers and which only relies on the know-how developed within the country. Therefore, it is arguable that, at

¹⁴² Ibid.

¹⁴³ Ibid.

¹⁴⁴ Thomas, Christopher A. "Lagging but Motivated: The State of China's Semiconductor Industry." Brookings. Brookings, January 8, 2021. <https://www.brookings.edu/techstream/lagging-but-motivated-the-state-of-chinas-semiconductor-industry/>.

present, striving to become a technological powerhouse in the semiconductor industry won't necessarily give China an advantage over the rest of the world. A winning approach could be that of partnering up with foreign companies, finding synergies, cooperate in the development of new technologies throughout R&D centres worldwide and focusing on global customers. This is not a utopic scenario, many Chinese companies such as Vivo, Xiaomi and Lenovo already based their business model on pursuing international sales and customers.

China's 14th five-year plan: a shift towards conservative GDP growth target and technological independence

Another important document to be screened to finalize this outlook on China's future development trends, is for sure the freshly-launched 14th five-year plan.

The fifth plenum of the Chinese Communist Party's 19th Central Committee, which took part in Beijing on October 29, gave birth to China 14th five-year plan, the blueprint and political outlook of how China top leaders conceive the country economic and social policies to be and the goals to be attained in the space of 5 years from now.

The document, which has been the most scrutinized item on the agenda during the gathering of the National People's Congress (5 – 11 March 2021), has amongst its main pillars the attainment of per capita GDP growth, a more efficient and higher quality production, the completion of the run toward a moderately developed country within 2035 and the increase of internal demand¹⁴⁵.

In order to display briefly the content of the plan, I would like to focus mainly on two elements and postulation entailed within the document, namely the envisioned gross domestic product (GDP) growth target and the stated goal of higher quality production.

¹⁴⁵ Shannon Tiezzi, "China's Fifth Plenum: What You Need to Know", in The Diplomat, 29 October 2020 available at <https://thediplomat.com/2020/10/chinas-fifth-plenum-what-you-need-to-know-2>

China's GDP forecast in 2021

The new plan constitutes a historical milestone for China's planned economy. In break from a decades-long tradition, within its five-years plan which was first published in October, China omitted a GDP growth target. Only after the "Two Sessions" within the context of the National People Congress of March 2021, a growth target of above 6% by the end of the year has been announced.

This might sound surprising for two reasons: is it low and below the estimated range of GDP forecasts of 8-9%¹⁴⁶ and secondly it excludes a cap and a floor as long as the growth rate is concerned, granting more flexibility than a fixed objective, strategy in accord with the aim of reaching a moderately developed society in 2035 (小康社会)¹⁴⁷.

The announced threshold of 6% should be seen as a new bottom line, the lowest growth expected and acceptable, in a country in which, from 1979 reforms onward, economic development has been seen mainly through the gross domestic product lenses. The decision of setting a more flexible target for the coming years allows observers to easily grasp the shift in strategy: other objectives are now prioritized over short-term growth and this attempt is crystallized in the statement of a more elastic and adjustable GDP growth objective.

Focusing on policies aimed at improving social welfare, green transition, de-leveraging, and tech independence, undoubtedly the government still wishes to boost productivity, the only new variable at stake now is the time horizon. In this respect, within the country there is significant evidence of a transition from a short-term perspective towards a long-term one. Pursuing the goals included within the plan, requires the bearing of considerable transition costs and the government is well aware of the trade-off. By stating an "above 6%"

¹⁴⁶ Zoey Zhang, "What to Expect as China's Economy Enters 2021" China Briefing, January 12, 2021. Available at <https://www.china-briefing.com/news/china-2021-economic-outlook-foreign-investor-expectations/#:~:text=China's%20GDP%20forecast%20in%202021,on%20year%20in%20Q1%202020.&text=Economists%20estimate%20that%20China's%20GDP,was%20revised%20to%20six%20percent>.

¹⁴⁷ Leng Shumei and Shen Weiduo, "Xi to Announce Achieving Moderately Prosperous Society in H1 of 2021", in Global Times, 4 November 2020, <https://www.globaltimes.cn/content/1205617.shtml>

growth target, the Chinese leadership implicitly accepts to hamper growth today for future development and stability¹⁴⁸.

A prioritized high-quality growth over rapid and quantitative growth

While being cautious in setting a GDP growth target for the upcoming five years, on the other hand China started to emphasize and lean more toward a high-quality growth instead of quantitative and rapid one, one of the main pillars in the new five-years plan. The main goals will be eliminating excess and backward production capacity, technological development, self-sufficiency and national security¹⁴⁹.

The decision to increase security investments in Research & Development by 7% annually is the practical and empirical evidence of this far-reaching objective.

In line with the idea of a “dual-circulation economy” –model which seeks to expand China’s internal consumption– announced in May 2020 by President Xi Jinping, high-quality production’s ultimate goal remains that of increasing the level of China’s self-sufficiency, while facing internal issues as a working age population shrank and yuan appreciation which inevitably increases production costs and threatens price competition in international markets.

The direction to follow is to differentiate on quality and to do so China needs to devote huge investments to R&D to develop high-tech products like semiconductor chips on which manufacturing process China has not reached independence yet.

This does not mean that China will hamper its imports, on the contrary, it will seek to have access to global suppliers and ultimately become a technology powerhouse on the long run. A sign of international cooperation and on-going opening-up, reflecting the external-circulation strategy, can be seen with the agreement on Regional Comprehensive Economic Partnership (RCEP) by Asia-Pacific economies and negotiations on Sino-EU bilateral

¹⁴⁸ Shaun Roache, “China’s Economic Growth Target Reflects New Priorities”, LinkedIn, March 5, 2021. Available at: <https://www.linkedin.com/pulse/chinas-economic-growth-target-reflects-new-priorities-shaun-roache/>.

¹⁴⁹ Francesca Ghiretti, “Caution and Ambition Inform China’s New Five-Year-Plan”, IAI, Inspiring ideas for Italy, Europe and the world, 15 March 2021. Available at <https://www.iai.it/en/pubblicazioni/caution-and-ambition-inform-chinas-new-five-year-plan>

investments level-playing field throughout the Comprehensive Agreement on Investments (CAI) concluded on the 30th of December 2020.

Will the goal of reaching a robust internal market and technological autonomy make China abandon its previous status of “factory of the world”? Whatever the outcomes of the goals entailed within the 14th five-years plan will be, its contents are unprecedented and ambitious. This change in perspective and China’s push toward self-reliance is going to reshape - willingly or unwillingly - the country’s cross-borders commercial relations and should inform foreign countries strategies toward the “Middle country”.

1.5.8 The “technology transfer peril” explained

Throughout the previous sections I provided an overview on Chinese corporate landscape and a description of the motives and behavioural patterns concerning domestic companies cross-borders acquisition activities within Europe.

Ultimately, I described the challenges and opportunities for China’s envisioned future industrial development, emphasizing the role of the semiconductor industry.

The last section of this chapter will be devoted to an analysis of what we refer to as “technology transfer”, why is it considered as a major concern and why it is deemed as an important indicator when it comes at assessing the level-playing field in investment activities.

It straightforward to postulate that Chinese companies’ main outlets when it comes at foreign know-how and knowledge absorption are the acquisition of foreign firms and the settlement of a partnership with a foreign firm seeking to enter the Chinese market.

Following the same line of thought, it is easy to argue that in many cases cross-border M&As can be driven by the wish of acquiring the target company’s strategic assets¹⁵⁰.

To better frame the subject of technology transfer, I will thereby provide a definition of the term “Mergers and acquisitions (M&A)”. In fact, having a clear understanding of this specific form of investment is key for tackling the concern over know-how

¹⁵⁰ “Patent Rights in Corporate Transactions: Mergers and Acquisitions.” visit the Taylor Wessing website, January 2017. <https://www.taylorwessing.com/synapse/funding-patent-rights-in-corporate-transactions-m-and-a.html>.

absorption. M&A is the general term referring to complex economic transactions which can generally span from a merging of two existing companies to form a new entity to an acquisition in which an actor, the acquirer, purchases and obtains the control over another firm. However, the term M&A in its shortened version is often used indistinctively when corporate entities are involved in purchase or sale activities of the entire or part of their businesses. These transactions mainly consist either in the selling or acquisition of a company's shares; or in the selling or acquisition of a company's assets¹⁵¹.

For the scope of this research, it is important to understand that when a target company is acquired as a whole, all its assets including patents, intellectual property rights and liabilities pass on to the acquirer. So, all licenses which have been purchased by the new owner will remain tied to the target firm. On the other hand, in an asset sale, the acquirer just purchases the assets that it would like to acquire from the target. In this latter case, the buyer does not necessarily takeover all the acquired firms' assets and liabilities. In the case of patents, the acquirer must identify the patents to be transferred and purchased and register the related rights. The new ownership of those rights must subsequently be recorded within the relevant registers. When the sale of a company's asset happens, licenses are not automatically transferred. When deciding to buy a licensed-in intellectual property, the acquirer needs the approval of the licensor. The latter is not always open to the transfer and may, in turn, decide that it does not wish to license the purchasing business and rather prefer to terminate the license.

Despite the complexity of such transactions, it is possible to say that technology transfer through the acquisition of a company's strategic assets such as patents and IP rights is common and sometimes constitutes the main driver for a company when deciding to engage in M&A activities.

Patents are one of the ways a company owner can protect its inventions, such as the creation of new technology. The patent owner has the right to protect others from producing, using, distributing, or importing the protected item. Essentially the patent is a property right that can be licensed, sold, mortgaged or assigned¹⁵².

¹⁵¹ Ibid.

¹⁵² "Intellectual Property Law." Georgetown Law. Accessed September 22, 2021.

<https://www.law.georgetown.edu/your-life-career/career-exploration-professional-development/for-id-students/explore-legal-careers/practice-areas/intellectual-property-law/>.

In the study “*Technology Transfer to China: A Study of Strategy in 20 EU Industrial Companies*” Bennet et al. give a definition of what technology transfer is. In the mentioned paper, technology is defined as “*the know-how for making a product or operating a process which may be embodied in equipment, codified in handbooks, blueprints, patents and other records and knowledge and skills which are held by persons or groups of people, and which may or may not be easily transferable to others.*”¹⁵³

Therefore, technology transfer can be described as the transfer of know-how and company intellectual property from the parent company to an external entity. This can take place in various and multiple ways as, for example, through the sale of a machinery, designs, technical consultancy services and related training¹⁵⁴.

When referring to product technologies, the transfer in this case can happen through the supply of prototypes, drawings, technical support, and key components to make a product. In essence, it is about the transfer of some processes and particular know-how.

It is misleading to think about technology transfer as a single action. First of all, it stands to reason that a process involving the use of technology goes through different layers of technology capability which, in order to be developed, require long term collaboration between the transferer and the transferee. This long-term collaboration does not make the technology transfer an immediate process. As argued by Bennet et al., the surveyed firms in the study stated that of their technologies transferred to China, 83% were not transferable without proper training and assistance over time¹⁵⁵.

This percentage could give us a better clue of how misleading is to think about technology transfer as an immediate process. Over more, the technology transfer can also happen partially, as the original owner might try to shelter his own position in the market and don't be prone to the full transmission of the technological knowledge. This is mainly explained by the fact that, European firms' owners by transferring the know-

¹⁵³ Bennett, David, Xiaming Liu, David Parker, Fred Steward, and Kirit Vaidya. “Technology Transfer to CHINA: A Study of Strategy in 20 Eu Industrial Companies.” *Inter-national Journal of Technology Management* 21, no. 1/2 (January 2001): 151. <https://doi.org/10.1504/ijtm.2001.002899>.

¹⁵⁴ Ibid.

¹⁵⁵ Ibid.

how could run the risk of raising technological capability of foreign companies which could in the future start constituting a treat to their commercial activities.

Referring once more to the study conducted by Bennet et al. about technology transfer, from surveys proposed to 20 European Industrial companies resulted that among the products of processes transferred to Chinese firms, *20% included recent innovation and 30% of the technologies to be transferred could potentially provide a competitive edge to the transferee. On the other side, 57% of the technologies were comparable to the competitors' and 30% already used technologies.*

Interesting to note, the surveyed companies deemed that 83% of the technologies to be transmitted required practical training and learning which involved a quite lengthy period. This indeed constitutes a barrier to the technology transfer within China.

All these hurdles notwithstanding, when it comes to technology transfer, the main perceived risk is that the Chinese firm, once obtained the know-how could start constituting a relevant competitor in the world market of the European company which was source to the technical capability.

Turning to the motives for the technology transfer, which also include the motives for investing in China, companies were invited to indicate the reasons for that. From the survey emerges that 80% of the technologies were transferred with a strategy to obtain market access. *However, there was a wide spread of other reasons which were pointed out, including cost advantage (57%), globalisation strategy (48%), a response to competitors' moves (33%) and the settlement of long-term technological or commercial alliances (39%)¹⁵⁶.* Also important were favourable policies and incentives in China which have already been discussed in the previous chapter.

Within this section I would like also to briefly divert the focus from the technology transfer happening through acquisitions within Europe and tackle the subjects of the Forced Technology Transfer (FTT) that could happen through the settlement of a joint venture agreement between a European (or non-Chinese) and a Chinese partner and the trade secrets divulgation which the foreign actor might be subject to when investing in China. This topic is of uttermost importance when assessing the level-playing field between China and EU in the scope of their economic relations.

¹⁵⁶ Ibid.

More in detail, FTT can be defined as informal government practices that require the foreign investor to transfer its technology as a precondition for the envisioned investment or market access¹⁵⁷.

Being it an informal practice, in most cases it is also hard to be proven. In China, once the country first opened-up under the rule of Deng Xiaoping, regulations which called for “market for technology” followed along. These meant that the investor, in order to be granted with market access, had to provide indigenous companies with advanced technology. This makes sense in a moment in which the nation was trying to modernize itself through the reform process and, in this context, external expertise and know-how was a key element and precious resource.

The “market for technology” regulations were then abolished before China’s admission into the World Trade Organization (WTO) in 2001. Nevertheless, it is possible to say that, in practice, requirements for technology transfer when investing in China continue nowadays through equity restrictions and administrative approvals¹⁵⁸.

Although the preferential way to enter the Chinese market for a foreign entrepreneur remains the settlement of a Wholly Foreign Owned Enterprise (WFOE), the national Foreign Investment Negative List, with its latest version being the one issued in 2020, still hinders foreign access to certain industries by setting the requirement of entering a form of cooperative agreement such as joint ventures with a local partner.

When a foreign party establishes a joint venture with a Chinese partner, technology transfer and share of confidential information happen almost automatically in order to make the business operational. Furthermore, since the local government approval is necessary for the settlement of a joint venture, local institutions may require the foreign actor to transfer part of its technology to the Chinese partner. According to experts, these practices have hugely facilitated technology transfer from abroad and thereby lifted China’s technology standards especially in sectors such as the automotive, the aviation and high-speed rail.

¹⁵⁷ LEE J.A, “FORCED TECHNOLOGY TRANSFER IN THE CASE OF CHINA”, Boston University Journal of Science & Technology Law, Vol. 26, No. 2, 2020 The Chinese University of Hong Kong Faculty of Law, Research Paper No. 2020-18

¹⁵⁸ Ibid.

The limitations to foreign investment into China have been formalized throughout the years within the Special Administrative Measures (Negative List) for the Access of Foreign Investment. Its latest version is the one which have been issued on June 30 by the State Development and Reform Commission and the Ministry of Commerce.

It is important to note that all the current limitations to foreign investment do not apply to high-tech industries. The focus seems to be the sheltering of national industries which are more related to national critical infrastructures such as water supply, nuclear energy, airports and basic telecommunications.

Despite important relaxations have been put in place, the indications contained in the Negative list are sometimes blurred and communicated by vaguely worded provisions.

Another legislative landmark that contributed to the relaxation over barriers on foreign investment is the national Foreign Investment Law (FIL) which came into effect on January 1st 2020 with the main aim of protecting the rights and interests of third countries' investors and grant them with a wider access to the Chinese market. The regulation is of uttermost importance also because it constitutes the first legal document to tackle the problem of forced technology transfer. The current law on foreign investments replaces the previous national laws governing foreign investments, namely the law on Sino-Foreign Contractual joint ventures, the Law on Sino-Foreign Equity Joint Ventures, and the Law on Foreign-Capital Enterprises all issued between 1979 and 1990.

The document is of extreme relevance and with its 4th article it stipulates that the “treatment given to foreign investors and their investments during the investment access stage...is not lower than that given to their domestic counterparts¹⁵⁹,” settling the base for the implementation of a more balanced level-playing field when it comes at bilateral investments activities. And foremostly, it also implicitly mandates that non-transparent practice such as the Forced Technology Transfer will no longer take place in the country.

¹⁵⁹ “*Foreign Investment Law of the People's Republic of China*”, National Development and Reform Commission (NDRC) People's Republic of China, Last update: Feb 24, 2021 Available at: https://en.ndrc.gov.cn/policies/202105/t20210527_1281403.html

Furthermore, Article 22 of the FIL provides that: *“The State protects the intellectual property rights of foreign investors and foreign-invested enterprises, protects the legitimate rights and interests of intellectual property rights holders and related rights holders, and holds intellectual property rights infringers legally accountable in strict accordance with the law. The State encourages technical cooperation based on the voluntariness principle and commercial rules in the process of foreign investment. The conditions for technical cooperation are determined by equal negotiation between the parties to the investment in accordance with the principle of fairness. Administrative agencies and their staff are prohibited to use administrative means to force any technology transfer.”*¹⁶⁰

Both the articles can be deemed of historical significance since they tackle the issue for the first time by formalizing its solution within China’s legislative body.

It is also true that the Administrative License Law tackled the trade secret protection during the administrative process of establishing a business into China. Nevertheless, there are major differences between the two laws. First, the new Foreign Investment Law is specifically geared towards a better management of foreign investment into China, while the Administrative License Law has a broader scope and regulates all administrative applications, entailing also the one required by Chinese nationals. Secondly, the legal liability for violations of the Administrative License Law is administrative whilst the Foreign Investment Law foresees the application of both the administrative and Criminal Law in case of infringement.

In order to keep a neutral approach in the research, it is important to mention that technology transfer has been a crucial element for many developing countries when trying to foster economic growth and technological development. China can be taken as an eminent example of this, having been able to benefit from external investments into the country and from foreign know-how.

The only element that causes concern in this respect is the management of informal practices that facilitate technology transfer which, in some cases, can cause distortions to trade activities and threaten the level-playing field when it comes to Sino-foreign

¹⁶⁰ *“Foreign Investment Law of the People’s Republic of China”*, National Development and Reform Commission (NDRC) People’s Republic of China, Last update: Feb 24, 2021 Available at: https://en.ndrc.gov.cn/policies/202105/t20210527_1281403.html

investment transactions. Before in China it was common to induce technology transfer in exchange for market access. This practice, which allegedly continues also nowadays to some extent, derives from a “quid pro quo” policy, the “trade technology for market” policy which was popular in developing countries in the 1970s and was promoted in China since its opening up in 1979.

From a trade law perspective, the requirement for technology transfer by a host country to a foreign entrepreneur can be considered as a “performance requirement” similar to the precondition of purchasing local raw materials, employing of local workforce etc. Thereby, performance requirements are generally accepted specifications within a contract which governs a foreign investment.

Especially in recent years, such practices have been scrutinized and tackled in the shaping of bilateral and multilateral trade agreements. A perfect example for that is the North American Free Trade Agreement (“NAFTA”) which explicitly prohibits forced technology transfer. Under the WTO, only the General Agreement on Trade in Services (“GATS”) as a treaty specifically targets the mandatory JV agreements in its document¹⁶¹.

In this sense, some trade law experts maintain that China by entering the WTO in 2001 already committed to not force foreign companies to transfer their technology when investing into China. It is also worth saying that until such practices will be carried out without being regulated by a written rule, evidence on them will be hardly collected.

At the same time, it is sometimes difficult to define whether technology transfer is mandated by the host country or is voluntary. Following this line of thought, some may argue that Joint ventures are a common international business agreement implemented in many countries worldwide. In the context of a Joint venture agreement, external investors sometimes provide their IP rights as equity rights in exchange for access to the local market and other local resources. Foreign firms are often eager to provide the host country with their unique technology in order to acquire knowledge about the foreign market and overcome the liability of foreignness. It is arguable that the

¹⁶¹ LEE J.A, “FORCED TECHNOLOGY TRANSFER IN THE CASE OF CHINA”, Boston University Journal of Science & Technology Law, Vol. 26, No. 2, 2020 The Chinese University of Hong Kong Faculty of Law, Research Paper No. 2020-18

technology to be transferred is not traded for free, the foreign actor can also acquire relevant benefits from the agreement.

Some observers claim that technology transfer should be better seen as a “tax” of foreign investment into China.

Nonetheless, things might appear under a different light if technology transfer is the sole way a foreign entrepreneur can settle his business into China. In this case we could without doubt refer to mandatory know-how transfer. In fact, there can be a fine line between forced and voluntary technology transfer.

We can define the first as a mandatory performance requirement for foreign investors which, if not implemented, could lead to the impossibility to invest in China or a lack of alternatives for the firm to penetrate the market.

Even if throughout Joint Venture agreements negotiation on licensing fees are possible, this does not imply that the technology transfer is voluntary either. The reason lies in the fact that in many cases the foreign companies will set a cooperation with a Chinese company because it is specifically required by the national law rather than for commercial motives¹⁶². As it appears from the Negative List for Foreign Investments, foreign businesses are still not allowed to establish a Wholly Foreign Owned Entity (WFOE) into China in several sectors. In many cases, the only way they can seek it way into the Chinese market is to establish a Contractual Joint Venture (CJV) or an Equity Joint Venture with a local partner. Since many foreign entrepreneurs are reluctant to share their direct experiences regarding technology transfer practices into China due to fear of retaliation or of loss of their share into the sheer Chinese market, the main evidence we have for such know-how requirements is represented by the existing limitations on foreign investments into the country.

As previously mentioned, with the issuing of the new Foreign Investment Law which became operational on the 1st of January 2020, regulation on external investment in China seem to have taken a more liberal turn. In fact, it seems that the new norm has the specific aim of communicating to the international community the country’s position against Forced Technology transfer into China along with more favourable

¹⁶² Ibid.

conditions for foreign investors. The government seems to be interested in rooting out the informal practice of FTT throughout the use of official laws.

The FIL was also coupled with the 2020 edition of the Negative List for Market Access¹⁶³ which substantially lifted limitations on foreign investment into specific sectors. This also alleviates preoccupation over FTT, because under this new regulative framework, foreign entrepreneurs will have more chances to form WFOE within China's territory.

Even if it is true that the FIL and the new Negative List represent a normative milestone and an important achievement for the foreign investors' community, the enforcement of such laws is still opaque due to the vagueness of the wording included in the provisions.

An example can be represented by regulations regarding the automotive industry. Under the new framework, ownership restrictions in the auto sector will be completely removed by 2022 (The impact of China removal of foreign ownership restrictions in auto sector) and foreign investors operating in the sector won't be obliged anymore to settle joint venture agreements with local entrepreneurs when entering the market. Nevertheless, in practice, notable restrictions are still present. These are represented by market access conditions that a third party has to comply with when entering the market. Among the negative list provisions, we can read that *"the establishment of new traditional fuel-powered motor vehicle enterprises is prohibited. Increasing production capacity for traditional fuel-powered motor vehicle enterprises by existing auto companies shall meet the following conditions"*¹⁶⁴.

These conditions are: *"the utilization rate of automobile capacity in the previous two years has to be higher than the industry average for the same product category and in the province where the project is located there is no fuel vehicle enterprise of the same product category specifically disclosed by the industry regulator"*¹⁶⁵.

¹⁶³ Integra Group. "China's Encouraged Catalogue and Negative List for 2020." Integra Group, February 19, 2021. <https://www.integra-group.cn/china-encouraged-list-negative-list-2020/>.

¹⁶⁴ "#EUTrade News." Trade. Accessed September 24, 2021. <https://trade.ec.europa.eu/doclib/press/index.cfm?id=2237>.

¹⁶⁵ Ibid.

Further vagueness is conveyed to the text throughout article 39 of the Foreign Investment Law in which mentions to the administrative and criminal liability are made. The article provides both administrative and criminal liability for government official who infringe the FTT provision. Nevertheless, the exact administrative liability is not described in the law. This results in broad discretion in imposing the liability. The same applies for criminal liability, article 39 provides the application of criminal law without being specific on the criminal liability to be established if an official violates indications on FTT transfer.

To synthesize, we spot notable steps taken by China in order to tackle the problem of Forcer Technology Transfer within the country. At the same time, FTT still happens in the form of informal practice and the requirement of know-how transmission as a performance requirement is bound to continue until clearer provisions are included in present and future regulations on the matter.

On the other hand, it is fair to say that sometimes foreign investors may also benefit from this tacit practice which, in most cases, can grant them with the bright perspective of being able to enter the ever-expanding Chinese market especially in times in which their own countries' economies are stagnating.

CHAPTER TWO

The European normative tools to regulate foreign direct investments (FDI)

1. European Framework on Investment screening:

Background:

China's enormous economy rise since 1979 reforms led the country to become the world's second largest economy¹⁶⁶.

In the EU, as in the rest of the world, concerns towards the huge amount of Chinese investment have grown consistently since the great investment surge of 2008. For the first time in 2015, the value of Chinese outward direct investments exceeded the value of inward investments.¹⁶⁷

The year 2016, in turn, has represented a peak in terms of Chinese acquisitions' transaction value and number of deals into Europe¹⁶⁸. In fact, during 2016 *Chinese investment into the continent surged to US\$ 200 billion in a year, almost 50% more than within the last ten years combined.*¹⁶⁹

¹⁶⁶ "The EU's response to China's state-driven Investment strategy", the European Think-tank Network on China, published on: December 2017, url: https://www.ifri.org/sites/default/files/atoms/files/etnc_reports_2017_final_20dec2017.pdf, retrieved on 26 July 2020

¹⁶⁷ John Seaman et al., 'Chinese investment in Europe', the European Think-tank Network on China, December 2017, https://www.ifri.org/sites/default/files/atoms/files/etnc_reports_2017_final_20dec2017.pdf (retrieved on 26 July 2020)

¹⁶⁸ Cerulus, Laurens, and Jakob Hanke Vela. "Enter the Dragon." POLITICO. POLITICO, June 25, 2018. <https://www.politico.eu/article/china-and-the-troika-portugal-foreign-investment-screening-takeovers-europe/>.

¹⁶⁹ Hindelang S., Moberg A., "YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)", Springer (2020).

The same cannot be said for the reverse case, namely European investments into Europe which value just *scored US\$8 billion in 2016 from 11.8 billion in 2014*¹⁷⁰. These numbers clearly give us a clue of the imbalances existing when it comes to Sino-EU bilateral investment relations.

The surge in Chinese cross-border investment value is the result of the “Going Global Strategy” policy previously discussed. With Xi Jinping coming into power and the launch of the “Belt and Road Initiative”, capital spending abroad has been encouraged even further by the central government, as explained in the first chapter. Furthermore, of important note, the One Belt and One road initiative has granted the country with new investment vehicles such as the Silk Road Fund (SRF) and the Asian Infrastructure Investment Bank (AIIB) to ease investment abroad. The creation of ad-hoc investment instruments has been coupled with major national guidelines on development such as the Made in China 2025 and the 13th Five-year plan (2016-2020) both revolving around the principle of innovation-driven growth.

In the eyes of Chinese investors, *Europe still constitutes a preferential destination having reached 35 billion euro in 2016 alone with an increase of 77% from the previous year*¹⁷¹. The three main receptors of this huge flow are Germany, the UK and France, also known as “The Big Three”.

Among those, Germany was indeed the main recipient, accounting *for 31% of total Chinese investment directed to Europe*¹⁷².

Those investments, despite being beneficial to the bloc’s economy to some extent, are also causing concern among EU citizens and entrepreneurs. This is mainly due to the alleged Chinese state involvement in the discussed takeovers and acquisitions. Another risk is represented by the potential know-how and technology assets loss and transfer to economic actors which don’t necessarily follow market logics. Due to the value of the transaction involved, the investors might acquire a favourable position within EU business environment which could also result in political control within EU member

¹⁷⁰ Ibid.

¹⁷¹ Ibid.

¹⁷² Ibid.

states and a threat to the bloc's ability to keep a hard stance and be independent in the field of Foreign Direct Investment.

Thereby, since several years, the debate around the need for Europe to equip itself with a coordinative foreign investment screening framework has gained vigour. In fact, EU is the world's main recipient of Foreign Direct Investment (FDI), and it is way more open than the US and China.

We can assume that European institutions are aware of the risks involved in such transactions. This is signalled mainly by the number of regulations that have brought forward the last and current year by the Commission. The three regulations to be discussed in this chapter are the *EU foreign investment screening mechanism*, the *New Regulation to address distortions caused by foreign subsidies in the Single Market* and the *Comprehensive Agreement on Investment*.

I will start this chapter by describing the first normative tool and provide a background to it.

One of the main reasons in support of the implementation of a coordinative framework for FDI screening, is that legislative tools at the national level might not be enough to tackle the problem of state involvement in FDI taking place in the Union. Thereby, in order to convey more transparency and fairness to tackled investments, a solid and comprehensive response at the EU level was needed.

The issue of the lack of a common process on investment screening was first brought forward by a letter sent by France, Italy and Germany in February 2017. In the letter the countries asked the Commission to provide the Member states with an enforceable legal tool at the Union level which could improve and coordinate the different investment screening practices existing in the bloc. They held that the current situation couldn't grant reciprocity to investment and that could have led to the risk of underselling Member states' strategic assets and know-how.

With the European Commission reflection paper of 10 May 2017 named "Harnessing Globalisation", there has been the recognition of such issue. From the paper publication, doubts on the effectiveness of single countries' screening mechanisms started arising¹⁷³.

¹⁷³ "Reflection Paper on Harnessing Globalisation." European Commission - European Commission, August 1, 2018. https://ec.europa.eu/info/publications/reflection-paper-harnessing-globalisation_en.

2.1 The EU foreign investment screening mechanism

The European Union framework for Foreign Direct Investment screening has become fully operational as of 11 October 2020. It is, at present, one of the main coordinative tool to promote a better risk assessment over third countries' investment into the bloc while assuring, at the same time, the Union remains open to external investments.

The regulation on FDI screening was first issued in March 2019 enabling the European Commission and EU Member States to coordinate their actions on foreign investments. The legislative tool become fully operational in October 2020 after *a first stage which sought the implementation of operational requirements for the full application of the Regulation*¹⁷⁴

These included:

- The communication of EU countries' existing national investment screening mechanisms to the European Commission
- The establishment of ad hoc channels at the national level to facilitate information sharing and analysis
- The development of necessary and effective procedures for Member States and the European Commission to respond to FDI concerns and issue opinions

Under the Commission guidance, Member States have agreed to jointly cooperate on a common FDI screening mechanism and several EU countries already started reviewing their current screening mechanisms or adopting new frameworks.

As mentioned in the introduction, the EU hugely benefits from foreign investments. The objective of the new coordinative tool is thereby not to hinder such activities but rather to foster the cooperation among the Union's member states and to enable them to quickly exchange information on specific investments happening on the EU soil. The tool also gives the Commission the power to issue opinions when a takeover or an

¹⁷⁴ "Press Corner." European Commission - European Commission, October 9, 2020. https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1867.

acquisition by a third country's company start constituting a threat to the security of a Member State. The instrument also sets specific requirements on screening practices at the national level and promotes cooperation among members.

Under this framework, each country will be required to adopt its own regulations and enforcement mechanisms and Foreign Direct Investments involving sensitive industries will be scrutinized in order to prevent the expropriation of the Union's critical assets and knowledge, and shelter Member States' industries from opaque and hostile takeovers.

The new regulation has the potential to increase awareness on external investments, emphasizing the need of protecting national economies from acquisitions or takeover of companies operating in sensitive sector such as the transport, health, energy. This especially if the transaction has the potential of threatening the country's public security. It is important to note that in this case the Commission won't directly have the power to block the takeovers, single countries' government will be thereby entitled to block suspect acquisitions through domestic procedural rules¹⁷⁵.

Important to mention, the Regulation on FDI does not constitute a comprehensive screening mechanism and it does not oblige Member States to adopt national screening systems neither. It rather has the function of setting common standards to promote and ease member countries' adoption of their own risk assessment mechanisms and of establishing a system under which cooperation and information exchange is facilitated.

The EU investment policy

The European single market is considered as the most open worldwide in terms of international capital inflow and, at the same time, EU Member States have the less stringent restrictions for FDI¹⁷⁶.

Since the conclusion of the Lisbon Treaty, EU's exclusive competences in the area of Common Commercial Policy has been enlarged. Since then there has been the inclusion

¹⁷⁵ "The EU Foreign Investment Mechanism Is Now OPERATIONAL: Insight: Baker McKenzie." Insight | Baker McKenzie. Accessed September 24, 2021.

<https://www.bakermckenzie.com/en/insight/publications/2020/10/eu-foreign-investment-mechanism>.

¹⁷⁶ Hindelang S., Moberg A., "YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)", Springer (2020).

of Foreign Direct Investment into EU's exclusive competence. Article 207 of the Treaty on the Functioning of the European Union (TFEU) is deemed to be the most straightforward in the definition of the Union's special competence over trade in the internal market.

For this reason, to provide the bloc with a common and comprehensive screening tool to be applied on foreign investments, the EU legislative body decided to choose Article 207 TFEU as the legal basis for a common EU regulation on the matter.

It is just in 2016, after having reached a peak in Inbound FDI transaction value, that the Commission started feeling the pressing need of adopting a legally binding mechanism for investment screening, so to concretely shelter member states' economies from unfair trade practices.

Nevertheless, some Member States' representatives, argue that the adoption of such far-reaching screening process could be in contrast with the free movement of capital principle which is peculiar of the EU Single Market.

Among the fundamental freedoms and principles which underpin the EU Single Market, the free movement of capital is of uttermost importance given the fact that is the only one to comprehend the "third country" element¹⁷⁷.

According to the definition provided by the Court of Justice of the European Union (CJEU), cross-border capital movements include foreign direct investments, real estate investments and purchases, securities investments, granting of loans and credit, and other operations with financial institutions¹⁷⁸. Over more, article 63 of the TFEU forbids limitations on capital movement both among EU Member states and other countries outside the EU when a free trade agreement exists between EU and involved countries. The only limitations to said principle have been defined by the CJEU regarding some Member States' golden share. In essence, the "Golden shares arrangements" refer to a state's ownership of a privatised, formerly state-owned enterprise. The shares held by the state in said companies grant national governments to exercise special powers and control over the organisation and management.

¹⁷⁷ Ibid.

¹⁷⁸ Ibid.

In this context, the European Commission acts as a supervisor and monitors that the principle of free movement of capital is respected and put in place by each member state.

Despite the relevance of the free capital flow principle within the TFEU scope, EU countries are allowed to provide themselves with independent legal measures to avoid that FDI activities endanger the country's public security. At the same time, the EU can independently restrict the free capital movement principle anytime in case of "threat and emergency".

Throughout the introduction of Article 207 in the TFEU by the Lisbon Treaty, the EU monitors FDI activities based on its exclusive competence as defined by article 3(1)(e) of the TFEU and is thereby not subject to any other form of control by national parliaments.

However, according to the principle of best practice, proposals regarding the EU exclusive competence on Common Commercial Policy can be brought forward by national parliament to grant a multilateral dialogue on the subject within the Conference of Parliamentary Committees for Unions Affairs (COSAC), in order to allow an exchange of views among national parliaments, the European Parliament and the European Commission.

Foreign direct investment and the free movement of capital are without any doubt crucial to foster and promote economic growth within the EU.

At the same time, lack of transparency in the transaction can be the cause of pressing concern among EU institutions. When the terms relating to these activities are obscure, the level playing field is threatened and FDI can start constituting a risk rather than an opportunity for member states. This is especially true when described investment practices involve a third state investor which internal economy is sheltered from market forces, if the transaction involves the acquisition of national strategic assets, or if the investor is a state-owner firm.

When the investor is a state-owned company, common when a Chinese company is involved, threats to the level playing field can be represented by the fact that the state can provide generous subsidies to its controlled companies to make them more competitive in the global market.

According to CELIS' analysis, from 2015 to 2017 in Germany 40% of Chinese FDI concerned machinery and equipment and 30% went into utilities and automotive, whilst Chinese investment in France was mainly in the energy sector¹⁷⁹.

Nowadays, Chinese investments into Europe shrank to 17.3 bn EUR, going back to pre-2015 levels and there is consistent evidence that the investments were mainly undertaken by private companies rather than by state-owned companies. All this notwithstanding, it is clear the importance attributed by China to its investment policy and the footprint that its investment activities have left worldwide.

Over more, as described before, China is not giving signals of wanting to open further its economy. When a foreign entrepreneur wants to invest on Chinese soil, regulatory approval requirements remain applicable within a considerable number of sectors which are part of the so-called "Negative list". Even if it is true that notable relaxations in the access parameters into automotive and financial sectors have been put in place recently, the central government still hinders market access in sectors like telecommunications and healthcare.

Even if the Chinese Foreign Investment Law (FIL) released in January 2020 constitutes a huge shift toward a more balanced level playing field in the investment field, details on the implementation of the law are still vague, especially in the case of interventions when "national security interests" (art 35 FIL) are threatened. In fact, when such situation happens and national interests are allegedly in danger, state intervention remains possible without possibility of appeal from the foreign investors.

We can boldly say that, especially for small and medium size foreign companies, market access into China is still an intricate process. On the contrary, Chinese investors enjoy the most relaxed investment regime having access to all sectors within the country's border.

Before the work on foreign direct investment screening started, the main question was how to tackle these unbalances. And not only the ones deriving from the competition with China but from all the investment carried out by certain countries or SOEs which enter the EU Single market with specific national, public interests.

¹⁷⁹ Hindelang S., Moberg A., "YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)", Springer (2020).

Among the proposed solutions at the EU-level we can list the push for the settlement of free trade agreements (FTAs) or bilateral investment treaties. I.e EU-China Comprehensive Investment Agreement (CAI). These were and are regarded as an optimal tool to improve market access opportunities for investors by eliminating existing imbalances.

Other solution was to harmonize and setting up a common investment screening framework throughout Europe.

Since the risk of an excessive intrusiveness deriving from Foreign Direct Investments had been perceived, the legislative procedure was quick, only in September 2017 the proposal was published, negotiations between the EU commission, the European Parliament and the Council of the EU were concluded in November 2018 and the EU screening regulation entered into force on 10 April 2019 and is applicable from 11 October 2020¹⁸⁰.

The main takeaway from this process is the creation of a “cooperation mechanism” between commission and Member states, allowing the Commission and EU states to raise and share concerns related to specific investments.

Despite it being mentioned several times in the document, there is no detailed description provided for “national security” and “public order” in Article 2 of the Regulation on definitions. It is also true though, that the terms “security” and “public order” often appears within the Treaty on the Functioning of the European Union (TFEU) since they both constitute important justifications for the Member States to have their freedoms restricted in several cases.

An important indicator for the EU Commission to determine whether an external investment is likely to affect public order is to verify if it is has effects on critical infrastructures such as *energy, water, transport, and health, or on critical technologies, including artificial intelligence and robotics; on food security; on access to sensitive information, including personal data; and on the freedom and pluralism of the media*¹⁸¹.

¹⁸⁰ “Press Corner.” European Commission - European Commission, October 9, 2020. https://ec.europa.eu/commission/presscorner/detail/en/ip_20_1867.

¹⁸¹ Hindelang S., Moberg A., “YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)”, Springer (2020).

At present, the creation of the Cooperation framework in the scope of the FDI screening mechanism does not seem to implement excessively intrusive practices. The Commission can intervene by means of notifications, opinions, sharing of experiences and best practices.

On contrary, there is still a considerable lack in the definition of procedural standards on topic such as confidentiality, disclosure, and deadlines. Observers still consider them as too vague and unclear, this is likely to cause a lack in predictability, a necessary element when it comes to the closing of economic transactions.

Another problem is that companies are the unique object of the procedure and have to comply and follow set requirement standards i.e information sharing (art 9 para 4) but they are not part of the procedure which is on the contrary mainly implemented by single governments.

An assessment of the FDI screening mechanism from a business perspective:

As to now, it appears that the business community hasn't made a stand against the new procedure on investment screening. This is mainly because, despite being FDI extremely beneficial for national economies in the sense that it facilitates free capital movement, provides employment and spurs innovation, some FDI need to be monitored and scrutinized especially if those happen in key national industries.

This is one of the reasons why the business community has generally welcomed the implementation of the new procedure. Over more, before the new mechanism was brought into light, 15 Member States already had their own FDI screening mechanisms which, nevertheless, were widely diverging in the provisions contained (). It is also worth reminding that the Commission provides the coordination outlet but that the final decision on investments remains in the hands of member states. The new coordinative mechanism hence doesn't appear to be too protectionist, also due to the vagueness of some concepts contained like the threat to "national security" and "public order", the two main risks which might trigger the state scrutiny and intervention within a proposed transaction.

When talking about public interest, there is not consented definition of it under the EU law. Also reverting to the CEJU jurisprudence can't be of much use either since "*the*

*normative definitions established for the internal market do not necessarily apply vis a' vis third states".*¹⁸²

The fallacy and legal uncertainty which could result from the new procedure is thus not beneficial to the business environment which, in turn requires deep transparency and legal certainty.

Another important issue deriving from the new procedures, is represented by the potential delays on the conclusion of relevant transactions. For this reason, some EU companies started questioning the distortions which could potentially arise from the abuse of the cooperation mechanism. In fact, it still does not appear clear how, according to art. 6 of the Regulation, the Commission will agree upon a “duly justified” opinion, and which specifically are the information to be disclosed by the company for the EU legislative body to provide comments. Business associations know from experience that when new procedures at the Union level enable the Commission to intervene in trade, also for information only, this is likely to create new bureaucratic hurdles and slow down business activities.

In short, the business community supports the EU’s intentions of providing the bloc with a new screening tool but, at the same time, is still doubtful about the efficacy of the procedures to be applied.

Thereby, there is still hope among the business community that the EU will make the procedure clearer and assure EU companies more legal security in investment, which process should be facilitated rather than restricted and overly scrutinized. Also, circumstances in which investment should be judged as “against public interest” should be better defined, since “public order”, now, still does not represent a precise criterion of assessment.

¹⁸² Wernicke S.F., *“Investment Screening: The Return of Protectionism? A Business Perspective”* “YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)”, Springer (2020).

New assessment criteria introduced by the new EU mechanism for investment screening

The introduction of the new investment screening mechanism has facilitated the creation of a common platform within the Union through which member states can easily report the Commission whether an acquisition is being screened by national authorities¹⁸³.

This represents a landmark in the EU investment policy because grants the Commission with the power of accessing relevant information. In this view, both the Commission and Member States have the possibility to require additional information to the involved companies whenever a transaction is being screened.

According to the information collected, both the Commission and other Member states can issue comments and opinions. In the end the final decision on the transaction remains in the end of the national government but the EU regulation states clearly that the concerned country must duly take in account the opinion issued by the Commission.

Nevertheless, it is still unclear what will be the consequences for a member state which fails in giving notice to the Commission about the screening of a specific investment.

The Commission has created a specific unit within the Directorate General for Trade which will oversee the flow of information constituting the basis for the Commission to be able to issue comments. At the end of May 2021, already 18 Member states notified the Commission of their screening mechanism. Some Member states like Greece, Sweden still haven't set an ad-hoc procedure for screening on external investments. The Commission expects all the Member states to provide themselves with the needed regulations on the topic.

Some states were already equipped with FDI screening norms before 2020 and just amended and reinforced existing legislation expanding the sectors in which the screening on investment is required. Among these we can find Germany and Italy.

¹⁸³ Duchatel, Mathieu. "The New Landscape of Investment Screening in Europe." Institut Montaigne. Institut Montaigne, September 1, 2021. <https://www.institutmontaigne.org/en/blog/new-landscape-investment-screening-europe>.

Despite not all EU countries share the same provisions in the field of investment risk assessment, the coordinative tool has had the merit of increasing the consciousness towards the subject among member states.

The opinion to member states issued by the Commission has to remain confidential but, leaking concerning the attempted takeover of 70% of the Milan-based Lpe S.p.A by a Chinese company can tell us something about the new position taken by the Union with respect to the new investment screening trends. The Italian company produces epitaxy reactors for the semiconductor industry and is thereby considered as operating in critical national infrastructure. The attention brewed around the news makes us perceive a specific focus on the sheltering of EU's critical technology and know-how towards which European countries seem to have become more vigilant.

FDI screening procedures of Germany, Italy and Spain

After having provided a general background on the new EU investment screening policy, I think it is useful to dive into some EU countries' investment mechanisms.

I decided to focus the research just on Germany, Italy and Spain for specific reasons.

First, Germany seems to be a good example in my view given the fact that it results to be as the main receptor of Chinese investments among EU countries.

I also decided to have a better understanding of Italy and Spain's investment screening procedures because during my graduation internship at the Dutch China innovation intelligence company Datenna, I have been given the task to explore business development opportunities in these two countries. To do so, I had to specifically research the two countries' regulations in the context of external investment screening. For this reason, I decided to include them among the relevant country cases here displayed.

2.1.1 Germany's investment screening law

By the end of 2018, Germany tightened the applicable regulatory framework for the scrutiny of foreign investment. The modifications regarded the extension of investment sectors to be subject to the screening and the lowering of the thresholds to trigger the screening mechanism procedures.

The law has been amended also more recently, with the latest developments on 17 July 2020 in an attempt to align national regulations on the matter with the new EU Screening Regulation.

Throughout the new modifications, the German government widened the pool of sectors to be open for investment review. Before 2020, the screening procedure was implemented just when a foreign direct investment could threaten Germany's public security and order. Now, a "probably impairment" of the public security and order of the Federal Republic of Germany or another EU member state is enough for the German Ministry for Economic Affairs and Energy (Bundesministerium für Wirtschaft und Energie or BmWi) to investigate an acquisition¹⁸⁴.

Generally speaking, Germany overall provides an open and positive investment environment to foreign firms¹⁸⁵. According to UNCTAD World Investment Prospects Survey, Germany is the most attractive business location in continental EU.

German legal environment is transparent, and its regulations comply with international standards. Over more, both domestic and foreign investors are treated equally and enjoy the same incentives in terms of investment. Important to note, Germany has one of the most efficient networks of bilateral investment treaties in the world¹⁸⁶.

Nevertheless, recently the German government has adopted a stricter approach toward Chinese investors activities in the country.

¹⁸⁴ Dr. Markus J. Friedl, LL.M. "Germany's Foreign Investment Regime." Pinsent Masons. Pinsent Masons, November 26, 2020. <https://www.pinsentmasons.com/out-law/guides/germanys-foreign-investment-regime>.

¹⁸⁵ Stroppe P. "Foreign Investment Screening in Germany and France" "YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)", Springer (2020).

¹⁸⁶ Ibid.

Within the German body of law, the screening mechanism on foreign investments is centered on the German Foreign Trade and Payments Act (AWG) and the German Foreign Trade and Payments Ordinance. The procedure to be followed in the assessment of a foreign investment stems from the Administrative Procedure Act and the remedies to be taken in this respect are regulated by the Code of Administrative Court Procedure. The investment review tasks are in the hands of the Federal Ministry of Economics and Energy which has the power to veto the acquisition of German companies and block asset deals within German entities by third countries. The screening mechanism differs regarding the economic sector in which the target local company operates into. Rules on the investment review follow specific criteria and thresholds when the company is operating in the military sector and IT technology¹⁸⁷.

Instead, other rules apply when the screening procedure concerns all other companies.

On December 2018, the German government has implemented important amendments to the AWV, among which of important mention is the lowering of the threshold for the screening of foreign direct investments. In fact, from that date investments into the military and encryption sector and within companies managing critical infrastructures, the screening mechanism will be implemented already when 10% of the voting rights of a local companies are to be acquired¹⁸⁸.

As mentioned, in Germany there is a sector-specific and a cross-sector investment control.

In the first case, if a foreign company acquires 10% of the stake of a German firm operating in the IT, military equipment and weapon production sectors, the government has legitimate reasons to start the screening process over the transaction.

In the second scenario, two thresholds are set. In the case in which a third country not belonging to the EU/EEA tries to acquire at least 10% of the voting rights within a local firm operating in critical industries, a screening of the investment could be initiated.

The following are the sectors to be considered as linked to critical infrastructure.

¹⁸⁷ Dr. Markus J. Friedl, LL.M. "Germany's Foreign Investment Regime." Pinsent Masons. Pinsent Masons, November 26, 2020. <https://www.pinsentmasons.com/out-law/guides/germanys-foreign-investment-regime>.

¹⁸⁸ Stropffe P. "Foreign Investment Screening in Germany and France" "YSEC Yearbook of Socio-Economic Constitutions 2020, a Common European Law on Investment Screening (CELIS)", Springer (2020).

- Telecommunications
- Energy
- Information technology
- Health
- Water
- Nutrition
- Finance and insurance
- Cloud computing services

Sectors which are particularly relevant and sensitive at a security level are, among others:

- Media services (broadcasting, tele media, print products)
- Development and modification of software for the industry-specific operation of critical infrastructures within the meaning of the Act on the Federal Office for Information Security

The governmental screening still remains possible when 25% of the voting rights within a company are to be acquired by a foreign investor even if the target doesn't operate into the mentioned sectors.

2.1.2 The Spanish FDI investment mechanism:

Spanish screening mechanism on investment is longeval and revolves around a main regulation embodied by the Real Decreto 664 of 23 April 1999 which defines the main rules on Inbound Foreign Investments and regulates Spanish investments abroad. Previous regulations were focused on the “administrative exchange control regime” and did not really comply with the liberalization of foreign investment which was brought about by the Treaty on the European Union. Thereby, the main result of the Decreto was to confer a more liberalized approach to the national investment screening regulation.

How does the procedure work?

The screening on a specific investment is initiated with a declaration of the investment, falling under the meaning of article 3 of the regulation, to be presented to the Ministry of Economy and Finance. According to article 4, the declaration must be made after the acquisition has been concluded by the two parties by the foreign investor (the party which is not a resident in Spain). An exception to this principle is the case in which the investment comes from a tax heaven. In such case the declaration must be made before the investment. The screening mechanism has the objective of monitoring and control inbound direct investments and guarantee that said investments do not affect the country's public order, public health, and safety. In this respect, following the provisions contained in Article 10 (2), when an acquisition has the potential of threatening the Country's public safety gives the Council of ministers the power to decide on the blocking of said transaction¹⁸⁹.

Peculiar is the case of investments in sectors which are linked to national defense which always require the authorization by the Council of Ministers, at the proposal of the Minister of Defense and following a report from the Board of Foreign Investments.

On 17 March 2020, Spain introduced the Royal Decree-Law 8/2020 through which the national investment mechanism has become stricter. The criteria on investment review have been reinforced in order to align Spanish law on screening with EU FDI evaluation framework.

Alike the German law, the new amendment gives the power to the government to block foreign investments when involving the acquisition of 10% or more of the voting rights within a company in the defense, energy, audio-visual and telecommunication sectors. With the latest review of the law, also critical infrastructures, technology and dual use goods production have been enshrined in the regulation.

Despite the new amendment had the merit of introducing a more stringent investment evaluation process in the country, we are still able to spot relevant acquisitions in sectors which are deemed to be "sensitive". Eminent examples are the acquisitions of the nuclear plant designer companies Empresarios Agrupados and Ghesa by China

¹⁸⁹ "Spain - Fdi Screening Practical Q&A OVERVIEW." ATICA European Association of Trade + Investment Controls and Compliance Attorneys, January 7, 2021. <https://www.at-ica.com/spain-fdi-screening-overview/>.

Energy Engineering Group Planning & Engineering and the takeover of Grupo Puentes by China Road and Bridge on the 26 of June 2020¹⁹⁰.

Both companies' business scope can be regarded as relevant and crucial for the country's economy. Despite that the Chinese acquirers succeeded in the conclusion of the transactions. Important to mention, the two Chinese investors display a relevant portion of state influence which could have made a proper evaluation on the investment even more plausible.

2.1.3 The Italian Golden Powers:

Along with other countries throughout Europe, with the new framework on investment screening also Italy introduced new ad-hoc rules to grant the national government with more extensive powers on inbound foreign investments.

The first application of the special powers for the blocking of the takeover of a national firm has been seen on the 23rd March 2021, when Prime minister Mario Draghi made use of the Golden powers to stop the acquisition of 70% of the Milan-based LPE S.p.A by the Chinese Shenzhen Investment Holdings¹⁹¹.

To better understand the decision, which brewed much attention worldwide, it is useful to provide a general background on the Italian Foreign direct investment screening regulations.

The special powers granted to the Italian government in the field of FDI are also known as the "Golden powers" and are about the specific authority granted to the state to block investments coming from third countries and which are deemed to constitute a threat to national security.

The investment screening mechanism has been introduced with the issuing of Decreto Legge 21/2012 which for the first time introduced the special powers to limit inbound investments happening in sectors like the energy, transport, and communication.

¹⁹⁰ "The Acquisition of Empresarios AGRUPADOS and Ghesa." Datenna. Accessed September 24, 2021. <https://www.datenna.com/the-acquisition-of-empresarios-agrupados-and-ghesa/>.

¹⁹¹ Cugini M. "The Italian 'Golden Power': Increasing Concerns towards External Investments." Datenna. Accessed September 24, 2021. <https://www.datenna.com/2021/07/29/the-italian-golden-power-increasing-concerns-towards-external-investments/>.

In 2020 the law has been expanded further in order to align the country with indications issued at the Union level. The amendment has been brought forward with the issuing of the “Liquidity Decree” which has had the merit to enlarge the scope on which the toolbox on fdi screening can be applied.

The Italian law on Golden Powers gives the state the power to veto takeover and block equity participation in firms operating into sectors that are considered as particularly critical and sensitive for national interests.

This is due to the fact that acquisitions in these fields are considered as a potential ground of expropriation of the national strategic assets. Among those sensitive sectors we can see 5g technology and artificial intelligence. We can see a prompt application of these powers already on the 25 of march 2021 when prime minister Mario Draghi prevented the conclusion of a supply contract which sought to provide the Italian firm Linkem with Huawei and Zte’s 5G infrastructures¹⁹².

Another eminent example of the application of the reinforced framework on Foreign Direct Investments is the stopped acquisition of LPE S.p.A by the Chinese Shenzhen Investment Holding.

The transaction at stake was considered threatening for two main reasons. The first lays in the fact that the target company, despite being relatively small in size, produces epitaxial reactors, it is thereby considered important in the national high-end technology manufacturing field. The second reason which might brew concern around the acquisition is the fact that the acquirer is part of a big state-owned company conglomerate, namely Shum Yip Group Co. Ltd which is directly controlled by the Shenzhen Municipal State-owned Assets Supervision and Administration Commission.

Despite the prompt application, by observing the Foreign Direct Investment Radar built by the Dutch company Datenna¹⁹³, we can spot relevant transactions in sectors which could be equally considered as crucial, as the biotechnology one.

¹⁹² “Draghi Stoppa ANCORA IL 5G Cinese. Golden Power Su Huawei e Zte.” Formiche.net, April 8, 2021. <https://formiche.net/2021/04/golden-power-accordo-linked-huawei-zte/>.

¹⁹³ “China Economic Intelligence.” Datenna. Accessed September 24, 2021. <https://www.datenna.com/>.

All the possible criticism notwithstanding, in the light of recent episodes we can consider the Italian Golden Powers as a flexible toolbox able to extensively shelter the national economy from the risk of strategic assets appropriation and to grant national security.

The EU coordinative framework has had indeed the merit to put the subject under a spotlight in times in which the Covid 2019 pandemic has left many Member States' companies hungry for external investments.

Given the fact that most European countries have just recently equipped themselves with more stringent regulations on FDI screening, we still have to wait to assess the efficiency of the discussed toolboxes.

2.2 New EU Regulation on distortions caused by foreign subsidies

Another important regulation at the EU level is represented by the new Law tackling Distortive Foreign Subsidies. The new norm has been published on the 5th May 2021 and followed the adoption a related White Paper in June 2020 which opened a consultation process with the stakeholders¹⁹⁴.

The new measures have the main objective of filling the gap in regulation concerning the scrutiny of subsidies granted by non-EU government to companies aiming to invest into the European Single Market. The law is shaped to prevent that such subsidies cause distortions and lead to imbalances to the level-playing field and unfair competition. The tackled subsidies can appear in the form of zero-interest loans, cheap financing, State guarantees, tax exemptions and direct financial grants.

The new norm gives the Commission the power to crack-down on market distorting state subsidies deriving from third countries. Following this rationale, it will be easier for the Union to protect the internal economy from unfair competition deriving from foreign capital inflow. In this sense, one of the main threats is constituted by Beijing also due to the influence exercised by Chinese firms engaging in M&A activities within EU's borders.

¹⁹⁴ "Press Corner." European Commission - European Commission, May 5, 2021. https://ec.europa.eu/commission/presscorner/detail/en/ip_21_1982.

The rationale behind the issuing of the regulation at stake is well summarized by Margrethe Vestager's words:

“Openness of the single market is our biggest asset. But openness requires fairness. For more than 60 years, we’ve had a system of state aid control to prevent subsidy races between our member states. And today we are adopting a proposal to also tackle distorting subsidies granted by non-EU countries. It is all the more important to ensure a level playing field in these challenging times, to support the recovery of the EU economy”¹⁹⁵.

The application of the new measures will grant the Commission to hold an harder stance towards Foreign Direct Investments by giving it the special power to investigate over state-backed subsidies granted to non-EU companies investing into Europe. In fact, the state influence and financial aid directed toward the facilitation of such transactions is detrimental to the level playing field and can bring about market distortive practices threatening the Union's Strategic Autonomy.

The new measures will be implemented through the application of two notification-based tools and one general market investigation tool.

Regarding the first two, the EU Commission will be able to scrutinize and investigate over acquisition of local companies which generate a profit of minimum €500 million euro in Europe and procurement contracts worth at least €250 million¹⁹⁶. The other tool will enable the commission to initiate ad hoc investigation also over smaller concentrations and procurement.

If the Commission finds any evidence of unfair competition behaviours, it has the power to stop the transaction and require structural payments with the objective of restoring competition and shelter sensitive industries.

As far as Sino-EU bilateral investment activities are concerned, one of the most eminent examples of alleged unfair trade practices which froze bilateral trade relations, is represented by the solar panel dispute which happened in 2012.

¹⁹⁵ Bradsher, Keith. “China Tightens Controls on Overseas Use of Its Currency.” The New York Times. The New York Times, November 29, 2016. <https://www.nytimes.com/2016/11/29/business/economy/china-tightens-controls-on-overseas-use-of-its-currency.html>.

¹⁹⁶ Cugini M., “The EU Tackling DISTORTIVE Foreign Subsidies.” Datenna, May 12, 2021. <https://www.datenna.com/2021/05/12/the-eu-tackling-distortive-foreign-subsidies/>.

In fact, in 2012 many European companies operating in the photovoltaic panels manufacturing sector accused Chinese companies of illicit trade practices, namely dumping and state-backed illegal subsidies.

The tension derived from the dispute seriously compromised the two economies' relations and, within Europe, started brewing scepticism around Chinese cross-border investment activities.

The main reason which led the involved European companies to file the complaint at the Commission was lined to the export-stimulating policies which accompanied the Chinese government medium and long term plan for Renewable Energy Development¹⁹⁷. This, coupled with a burgeoning EU renewable energy market, resulted in a notable flow of solar panels coming from China and exported in EU. Figures show that, in less than six years, China was able to capture 80% of the European solar panel market. The situation allegedly led forty European companies operating in the sector to insolvency and brought Europe and China to the brink of a trade war.

The solar panel dispute experience could have constituted a precedent for the drafting of the freshly proposed regulation targeting financial aids granted by public authorities to third countries' companies seeking to engage in economic activities within the EU Single Market.

2.3 The Sino-EU Comprehensive Agreement on Investment

Another key document which content can inform this investigation of the investment relations between China and Europe is indeed the EU-China Comprehensive Agreement on Investments (CAI). In fact, negotiations were concluded on December

¹⁹⁷ Xinyu G., Bo J., Bin L., Kai Y., Hongguang Z., Boyuan F., "Study on Renewable Energy Development and Policy in China", Energy Procedia, Volume 5, 2011, Pages 1284-1290. Published on: 30 April 2011.

30, 2020 and made EU stakeholders hope for more transparent practices and a better level-playing field in investment conditions¹⁹⁸.

The agreement was mainly aimed at reaching a common understanding on investment between China and Europe. Over more, the document grants European companies an easier access and legal security within Chinese market.

It is important to mention that at present further negotiations and development on the comprehensive agreement have been put at halt with some members of the European Parliament voting against the ratification of an investment accord with China on May 2021. This decision can mainly be perceived as in retaliation for the decision from China to sanction some European human rights advocates. In fact, some members of the parliament opposed the agreement on investment in the light of alleged human rights infringement within China and, in March 2021 the EU, along with the UK, USA and Canada, placed sanctions on alleged human rights violations against the Uyghur population in Xinjiang region.

Thereby China replied by sanctioning some European think tanks, scholars and European Parliament members¹⁹⁹.

Another reason which might have led to the suspension of negotiations is the lack of support of the recently elected US president Joe Biden, which expressed his unease towards the envisioned investment deal between the EU and China²⁰⁰.

All these tensions notwithstanding, the agreement could be still developed further in future and there are still reasons to be believed that negotiations will be reopened.

In the European vision, the drafting of this far-reaching investment agreement does not bring about a mere accord which could ease the European business into China, it can

¹⁹⁸ Godement, François. "Wins and Losses in the EU-China Investment Agreement (CAI)." Institut Montaigne, January 2021. Available at: <https://www.google.com/search?q=cai%2Binstitute%2Bmontaigne&aq=chrome..69i57j33i160l4.4628j0j7&sourceid=chrome&ie=UTF-8>.

¹⁹⁹ Chipman Koty, Alexander. "European Parliament Votes to Freeze the EU-CHINA Comprehensive Agreement on Investment." China Briefing News, May 27, 2021. <https://www.china-briefing.com/news/european-parliament-votes-to-freeze-the-eu-china-comprehensive-agreement-on-investment/>.

²⁰⁰ Bermingham, Finbarr. "EU-China Investment Deal on Hold as MEPS Vote to Halt Talks." South China Morning Post, May 20, 2021. <https://www.scmp.com/news/china/diplomacy/article/3134258/eu-china-investment-deal-hold-meps-vote-halt-talks>.

also be considered as a political act, through which the Union wishes to advance the bloc's norms and values and assess the appropriacy of the business partner's legal system.

In this sense, it is important to make some mentions to China's current political background and authoritarian drive *which has never been so thorough*²⁰¹ since 1978. The effects of this shift can already be spotted, from the issuance of Hong Kong's security law to Xinjiang's current situation or even to a more and more consolidated personality cult which has been further cemented throughout the constitutional amendment of 2018, which introduces the wording "Communist Party of China" into the Constitution's main body.

From a national economy angle, the agreement comes at times in which China was the only country, except from Taiwan, which could score a GDP growth of 2.3% and which could register notable success in the containment of the pandemic in 2020 if compared to other nations worldwide.

Also, the Covid 19 crisis has enormously increased the demand for Chinese goods, especially in terms of electronic devices. At the same time, China's imports are decreasing. This mostly at the expenses of Europe, which exports towards China only increased by 2.3 in 2020 while in the US, exports towards China grew by 9.8%²⁰².

The CAI document mainly revolves around three main principles which are, namely, market access, level-playing field and sustainable development.

Throughout seven years of extensive negotiations, a 4th crucial point was also discussed and brought to the table, namely investment protection. Unfortunately, since 2014, no breakthroughs had been made in that respect. Thereby by the end of 2020, EU decision makers had to choose between *"accepting the proposed liberalization and market access opportunities or postpone the negotiations of the investment protection to*

²⁰¹ Godement, François. "Wins and Losses in the EU-China Investment Agreement (CAI)." Institut Montaigne, January 2021. Available at: <https://www.google.com/search?q=cai%2Binstitute%2Bmontaigne&aq=chrome..69i57j33i160l4.4628j0j7&sourceid=chrome&ie=UTF-8>.

²⁰² Ibid.

*later*²⁰³. In the end EU stakeholders decided to renounce temporarily to investment protection and to accept the two proposed opportunities.

Market access:

In the context of market access, the CAI includes a list of manufacturing sectors which are now open to foreign investment in China. The “positive list” now includes sectors spanning from agriculture processing, wearing apparel.

Also, regarding the automotive sector there have been important breakthroughs. Throughout relaxations of China’s negative list for foreign investment (published since 2014 for Special Investment Zones and then extended to the whole country) foreign investors will be able to settle wholly foreign owned enterprises (WFOE) in the sector in China starting from 2022, even though, as mentioned in previous sections, relevant market conditions still remain valid. In fact, foreign access in the automotive manufacturing field in China is still restricted. For example, electric car plants - except in the case of an investment exceeding USD 1 billion - is limited to provinces in which where quotas for electric car production have already been exceeded. This means, in other terms, that the access in the automotive sector is still relevantly hindered for foreign start-ups and SMEs with a clear privilege is still granted to Chinese companies.

The sensitive lift on past limitation in the sector followed concessions made to BMW and Tesla in 2019, accords through which the two multinationals could fully own the plants established in China to produce their vehicles. This relaxation on market entry has then been extended to all foreign investors with the issuing of the latest version of the Negative list (2020).

It happened also before that China had granted concessions to a single relevant actor and then generalized them to other parties. An example of this can be found in the case of the liberalization of financial services which was first discussed with the US throughout the Phase One US-China trade agreement. After the bilateral accord, caps

²⁰³ Ibid.

on foreign ownership of securities and investment fund management companies and had been generalized to all companies wishing to invest in the sector in 2020²⁰⁴.

Other items for which foreign investment will then be permitted are: long term leasing of land, digital consulting services, research and development services (with the exclusion of stem cells and genome research, social sciences and humanities), company level market research, personnel firms, and, most importantly, many telecoms and digital services- except for end user internet access²⁰⁵.

In the services sector, another major achievement is constituted by the right to create wholly-owned private clinics in eight cities, and more generally "human health services". The relaxation on ownership ceilings and restrictions had been already announced in March 2019 by Prime minister Li Keqiang.

On the other end, China doesn't obtain meaningful market access into Europe.

This is also due to the fact that restrictions imposed within the Single market weren't as strict as Chinese ones. This is not surprising, since the main objective of the agreement was to "rebalance EU economic relationship with China".

Nevertheless, being sure that investment opportunities with China will remain open is of uttermost importance in times in which China is trying to be more self-sufficient and is trying to decouple its economy with the strategy of "dual circulation".

Level-Playing field

Apart from market access, in the CAI document we can repeatedly see mentions to the level-playing field. In Brussels' own words, *"in addition to rules against the forced transfer of technologies, CAI will also be the first agreement to deliver on obligations*

²⁰⁴ Ibid.

²⁰⁵ Wong, Dorcas. "China Releases 2020 Negative List for Market Access." China Briefing News, December 25, 2020. <https://www.china-briefing.com/news/china-2020-negative-list-market-access/>.

*for the behavior of state-owned enterprises, comprehensive rules for transparency on subsidies and commitments related to sustainable development*²⁰⁶.

EU regulators claim to have brought China to sign its “*most ambitious agreement ever concluded with a third country*”²⁰⁷.

This is formally true but to assess its efficiency we still should wait. This precaution come mainly from past experiences in which China has shown a certain reluctance towards commitment regarding non-binding or non-sanctioned, or non-precisely defined commitments. An eminent example is the one of China’s accession protocols to the WTO in 2001. Within the latter, China already committed to transparency on activities economic involving subsidies and state enterprises.

Within the current CAI framework three areas can constitute relevant improvements. One is mirrored by the “binding and ratcheting” clause which doesn’t allow China “to reverse its concessions and obligates it to mutualize later concessions to another partner”. It can be regarded as converging with the Most Favored Nation (MFN) rule.

In terms of technology transfer, there seem not to be improvements from the US-China Phase One trade deal.

Sustainable development

Sustainable development represents the third pillar of the agreement. It specifically includes *provisions on labour, climate, corporate social responsibility (CSR)*²⁰⁸. The rationale about including those principles within the document is also about not softening norms and rules with respect to sustainable development just to attract investments.

²⁰⁶ Godement, François. “Wins and Losses in the EU-China Investment Agreement (CAI).” Institut Montaigne, January 2021. Available at: <https://www.google.com/search?q=cai%2Binstitute%2Bmontaigne&oq=cai%2Binstitute%2Bmontaigne&aqs=chrome..69i57j33i160l4.4628j0j7&sourceid=chrome&ie=UTF-8>.

²⁰⁷ Ibid.

²⁰⁸ Ibid.

With the conclusion of negotiations on a common and comprehensive agreement on investment, China has also taken international commitments such as “*making sustained and continuous efforts*” to recognize and implement ILO conventions on forced labour.

It is not clear what to expect from such open-end commitment in which no deadline is set. It is indeed true that with the CAI China, at least, has engaged on conversation on the topic. The main problem regarding the 3rd pillar of the agreement is that its implementation is by no mean granted by any provision and its enforcement principles is still to be defined.

Enforcement and Dispute resolution:

After having analyzed the main achievement from an EU perspective, it is also useful to point out at the agreement main envisioned shortcomings.

At first glance, the CAI reflects agreements which were previously concluded between the EU and other Asian countries like Japan, Korea and Vietnam.

European observers point out that one of the shortcomings deriving from the agreement can be a lack of investment protection, in fact in the document text no related section has been drafted even if it would be relevant in this context.

This also happened in the case of EU and Japan FTA which had a delayed investment protection chapter.

The main reason for this is the decision issued by the European Court of Justice (ECJ), which ruled that investment protection is a shared EU and member states competence.

Over more, the ECJ has ruled that traditional investor-to-state dispute settlement is not possible in this case. In fact, a legal process that opposes an EU citizen with a state that does not implement the rule of law is not possible. Nevertheless, the ECJ promotes an International Court System which is already operational in FTAs with Singapore and Vietnam even though the two still haven't been ratified by all the EU Member states.

On the other end China is disinclined to accept international legal processes and basically accepted the WTO dispute resolution.

At present, trade agreements are not as enforceable as legal norms. In the context of trade agreements, sanctions are unclear and trade behaviors are subject to bilateral arbitration. This is even more a pressing concern with China which has committed to making “continued and sustained efforts” to ratify conventions on labor, environment and sustainable development, this without setting a specific timeframe or implementation criteria.

For investment issues that do not fall under sustainable development, in order to implement dispute resolution, arbitration recourse to WTO and remedies a complex mechanism has been set.

The latter revolves around state-to-state dispute resolution, similar to the process carried out by the WTO.

For this purpose, arbitration panels of experts are established along with fixed deadlines and a complaint process. If the decisions issued by the panel are not followed by due remedies enacted by the target of the complaint, the complainant may in turn decide to suspend other concessions under the CAI, in relation to the damaged caused by the other party.

Another shortcoming to be mentioned is that this path for dispute resolution and enforcement does not apply to items falling under sustainable development, such as corporate social responsibility, environment, and labor. These items are subject to a different arbitration and consultation mechanism, but which does not include sanctions or enforcement mechanism.

A political solution has been obtained among EU negotiators regarding service investment disputes and to implement a clearer resolution process for disputes regarding sustainable development. To this end working groups will meet twice a year at the commissioner for Trade and minister of commerce level twice a year and there will be a high-level dialogue requiring the presence of a vice-president of the Commission and a Chinese vice-premier.

At present these are embodied by Valdis Dombrovskis and Liu He.

Conclusion

Within the Commission opinions are split between who argues that a trade agreement has no power to change China's system, and thereby neutralize asymmetries in investment activities, and those who argue that the agreement is the best that Europe could obtain in this short timeframe.

In fact, EU aims at making use of other legislative tools, to balance the level playing field with China and promote EU values and principles in trade.

In exchange, it is possible to say that China has already made, or committed to make, sectoral openings on investment, in what is a continuing process of investment liberalization²⁰⁹.

²⁰⁹ Ibid.

Chapter Three:

Empirical study on acquisition motives:

3.1 Introduction

After having broadly discussed the topic of Chinese acquisitions into the European Union and having provided a description of the current legislative tools and norms put forward by the European Union to tackle the subject, I would like to analyse further the motives which drive Chinese companies to acquire in Europe. Throughout the findings, I would like to assess to what extent Chinese companies are driven by the will of acquiring European know-how when entering Europe. The main goal is to assess whether Chinese companies are mainly interested into market access or they specifically takeover companies to acquire a particular technology to transfer back to China after the investment.

Technology transfer and the absorption of know-how are hard to investigate. As I mentioned throughout the first chapter, know-how expropriation is considered as one of the main concerns when evaluating an acquisition proposed by a third country actor. This is even more true in the case of China, which opening-up and economic growth, throughout the years have thrived also thanks to the import of Western know how. Technology transfer is a relevant element of contention when discussing Sino-EU investment relations. This is also the reason why it is broadly mentioned in the Comprehensive Agreement on Investment between China and EU and it is also included among the articles enshrined within the new Chinese Foreign Investment Law (FIL).

Unfortunately, it is hard to determine to what extent the perceived threat of technology transfer is a real risk and to what extent the subject is merely put forward by western governments to fuel the narrative of the “yellow peril” and concerns towards Chinese sheer economy.

As mentioned in the previous chapters, technology transfer is something that happens throughout time, is not immediate, and it is mainly brought about through tacit accord between the two parties. Over more, in many cases, foreign investors are eager to transfer their knowledge to business partners to grant themselves with access to a foreign market. Technology transfer is then beneficial also to EU entrepreneurs, at least in the short term, and is often just seen as a legitimate performance requirement.

Data on technology transfer are hard to be found. Thanks to my experience as an intern at Datenna(), I had the chance to discuss the topic with experts in the field and conduct myself data-driven research on the topic.

Datenna is a Dutch company *based in Eindhoven which delivers extensive intelligence platforms on industry and innovation in China*²¹⁰.

Thanks to their ever-expanding datasets and pipelines, users can solve information imbalances when dealing with acquisitions coming from China. Besides providing its customers with software for economic and innovation intelligence, Datenna is always engaged in data-driven research on the topic of investment relations between China and Europe in order to closely follow acquisitions trends and always be able to provide the platforms' users with comprehensive and unbiased information on the topic²¹¹.

I had the chance to enter the organisation as a China Industry Analyst and I got the opportunity to experience first-hand the difficulty of assessing the potential threats risk hidden behind a Chinese acquisition in Europe.

It is throughout this experience as an intern that I decided how to shape my master's degree thesis and decided to carry out empirical research on patent data in order to better investigate the alleged threat of technology transfer deriving from M&As of European companies.

²¹⁰ "China Economic Intelligence." Datenna. Accessed September 27, 2021. <https://www.datenna.com/>.

²¹¹ Ibid.

3.2 Methodology:

In this section I will explain how I envision to conduct the presented research.

Firstly, I will make use of Datenna's radar on Chinese investments into Europe (FDI radar) which includes and tracks more than 750 acquisitions from China into the bloc. The radar also includes information about the transaction value, the acquired stake and the State influence within the acquiring company.

Based on the list of the Chinese acquirers to be found within the platform, I will collect a sample of 50 European companies acquired by a Chinese investor. Through the data on patents available on Espacenet.com²¹², I will then analyse what kind of inventions the considered companies filed patents for. Since Datenna's FDI radar tracks acquisitions starting from 2010, I will just consider transactions carried out from that date.

I will now briefly show how I will use the Espacenet platform to collect data on patents. Espacenet is a free online service provided by the European Patent Office²¹³ in order for subject to file applications for patents. Thanks to this platform I will have the possibility to have access to millions of patents documents.

I will then start by conducting a qualitative investigation of the target companies' patents. By collecting data on the target's IP rights I will be able to assess what kind of technology and know-how has been transferred through the acquisition.

Another information that I will include in the study refers to the main IPC group, namely the main type of patents that the acquirer files, so to understand what type of technologies and field the company focuses on.

The IPC is the acronym for "International Patent Classification", which is a "*hierarchical classification system through which is possible to categorize patent documents into groups (patent applications, specifications of granted patents, utility models, etc.) according to the technical fields they belong to*"²¹⁴.

²¹² Espacenet. Accessed September 28, 2021. <https://worldwide.espacenet.com/patent/search>.

²¹³ Office, European Patent. "Home." EPO. Accessed September 28, 2021. <https://www.epo.org/>.

²¹⁴ International patent classification: Frequently asked questions. Accessed September 28, 2021. <https://www.wipo.int/classifications/ipc/en/faq/>.

The IPC system was conceived through the Strasbourg Agreement which was first adopted in 1971 and, at the beginning, it was just signed by 15 states and officially entered into force in 1975.

In particular, the IPC is used by patent offices in order to classify patent applications and retrieve them easily. Through this universal and comprehensive system, whoever can easily search for specific patent documents and related information. Nowadays, the IPC is used by more than 100 countries worldwide and can thus be considered as the “lingua franca” of the patent classification.

Through this information I will consequently be able to know what kind of technology the Chinese actor aimed to acquire through acquisition, if after the takeover the acquired company is still active in the Research and Development field and thereby still files patents to protect its inventions into Europe.

The first letter contained in the IPC code is indicative of the sector the invention belongs to²¹⁵:

- **A - HUMAN NECESSITIES**
- **B - PERFORMING OPERATIONS; TRANSPORTING**
- **C - CHEMISTRY; METALLURGY**
- **D - TEXTILES; PAPER**
- **E - FIXED CONSTRUCTIONS**
- **F - MECHANICAL ENGINEERING; LIGHTING; HEATING; WEAPONS; BLASTING**
- **G - PHYSICS**
- **H - ELECTRICITY**

Another parameter that I will take into consideration for my research, is changes in EBIT (Earnings Before Interests and Taxes) values within the acquired companies. I will consider the target financial data starting from the date of acquisition and then its evolution one and two years after the completed transaction. If the income remains stable or grows, I will assume that the Chinese party has taken over the EU company

²¹⁵ International patent classification: Frequently asked questions. Accessed September 28, 2021. <https://www.wipo.int/classifications/ipc/en/faq/>.

for market purposes. Whereas, if it shrinks or the companies goes bankrupt or dissolved, I will then assume that the main purpose of the acquisition was asset extraction. I decided to use this indicator because data on the Earnings before taxes is mainly available for all the companies considered. The source employed to retrieve such information is the platform ORBIS, developed by Bureau van Dijk and which *collects information about 360 million companies worldwide*²¹⁶. Being able to access such extensive dataset allows me to assess the financial health of the target companies after the acquisition occurred.

Furthermore, through an analysis of the nature of patents filed by the target I will be able to make a qualitative assessment of the technology involved in acquisitions. To conclude, through observation of the EU targets' financial data I will then formulate conclusions on the extent to which the Chinese investor purely sought market entry through the takeover. The financial information contained in the research will entail Earnings Before Taxes and Interest (EBIT), solvency ratios (calculated on total assets) and value of production, in order to investigate the acquired companies' state of business after acquisition and elaborate assumptions about M&As motives.

3.3 Conclusion:

Out of the sample of the 54 companies here analysed, 32 are still active, with a positive balance and economic profits. The remaining 22 companies score either a negative balance or have been dissolved. In particular, 15 show a negative balance whereas the remaining 7 have either been dissolved, are in the midst of liquidation proceedings or went bankrupt. Among the latter, two of them were already acquired insolvent (2, 44).

Therefore, the in the sample here represented, 59.3% companies are still operative and continue to produce value even after the acquisition occurred, 27,7% of them are still active but show negative earnings before taxes and interests (EBIT). The remaining 13%

²¹⁶ Author: Bureau van Dijk. "" Note: Corporate author. URL: <https://orbis.bvdinfo.com/> Accessed September 28, 2021.

is represented by those companies which went bankrupt after the takeover by the foreign party.

If we analyse further in the latter case, out of the 7 companies which are now bankrupt or have been dissolved, 4 of them show low state influence, 2 of them display medium state influence and the remaining one has high state influence.

Overall, within the sample of companies, 23 of the transactions at stake are characterized by high state influence, whereas 25 of them display low state influence. The remaining part is made up by 6 companies which show medium state influence.

It is important to mention that the degree of the state's presence in the considered transactions can be influenced by the industries taken into consideration. For this research, just industrial sectors such as Health, Pharmaceuticals and Biotechnology, Transport & infrastructure, Electronics & Electrical Equipment, Chemicals. Metals & Basic Materials, Aviation, Information & Communications Technology (ICT) and Energy have been taken into consideration.

Another interesting indicator to take into account is the solvency ratio of the companies. Solvency ratio is a good indicator of a company's financial stability and ability to cover its long-term debt. The solvency ratio is an important parameter for an investor to better understand whether a company will be able to meet its obligations with its resources, and thereby assess its financial health. In this case the solvency ratio is calculated based on the company's assets. It indicates, in percentage terms, what portion of long-term obligations the company can cover with its assets.

For the analysis presented in this chapter, regardless of the industry in which the companies operate, I will consider a gearing ratio of more than 20% as an indicator of good financial health.

From the sample here analysed, among the companies which are not bankrupt or dissolved (47), 33 of them show a solvency ratio higher than 20%. The remaining 14 display a solvency ratio of less than 20%. Out of the 33, 21 have a high state influence. 6 out of the 14 display a high state influence. Among the other 7 companies, two show high state influence. State influence is well distributed between the categories within necessarily indicating higher debt when a SOE is involved in the acquisition.

Another important situation to monitor regards the companies displaying an EBIT value which is negative either before acquisition or after acquisition. As we can see from the tables, 21 out of 54 companies display a negative EBIT value before or after the change in ownership.

If we have a closer look, 14 of the considered companies already had a negative EBIT value on date of acquisition.

Two of them worsened their financial situation in the following years. These companies are Stjernberg Automation, SOLIBRO GMBH. The first one, already had an EBIT value of -308.613 USD in 2017 when it was acquired by the Chinese Tus Holding. The same value reached -1.285.796 in 2019, when it went bankrupt. The second one already had an EBIT of -9.098.000 USD when acquired in 2012 and worsened its situation. It is now under liquidation proceedings.

Instead, four are the companies which didn't show a negative value for EBIT before acquisition and which then worsened substantially their economic performance. The first is the company Evolut Service S.r.l. It didn't have a negative value of earnings before interest and taxes. It became negative two years after acquisition, when it shows an EBIT of -7.011.915 USD. Also, its solvency ratio is well below 20%, being 0.43% in 2019 and 2.19% in 2020. The other company is NIMAK GmbH (4). When the German company was acquired in 2018, it had an EBIT of 2.097.000 USD whereas the year after, surprisingly, it displays an EBIT of -2.019.000 USD. At the same time, its value of production decreased by 1.45% in the same period. The solvency ratio increases to 83.50% after acquisition and the asset value remains stable. Therefore, the worsening of financial situation is not to be explained by the issuing of new debt or capital erosion.

The third example of a company which EBIT became negative after acquisition is displayed by INLINE HYDRAULIK GMBH (40) which displays an EBIT of 342.000 USD on the date of acquisition which becomes negative (-186.000) one year later. Despite that, the value of production is still growing even after the acquisition. In this case, from the financial statement, there is no evidence of a meaningful variation in the asset pool.

The last case is represented by the company ROMACO PHARMATECHNIK GMBH which displays an EBIT of 1.129.000 USD on date of acquisition, but which becomes

-2.249.000 USD two years after. The value is consistent with a huge drop in the value of production. In fact, the company experiences a drop of 90.1% in the value of production from 2017, when it has been acquired, to 2019.

11 of the companies are acquired with a negative value of EBIT which becomes positive one or two year after acquisition. These values are in line with their value of production which grows accordingly signalling an overall better economic performance after the takeover.

Out of the 21 companies which display a negative EBIT value before or after acquisition, there are 4 companies which showcase anomalies in their financial performance. Below, I will dive deeper in those cases.

The first case is represented by the company GIMATIC S.r.l (8) which has an EBIT of -4,651,006 USD two years after acquisition. Despite that, the value of production is increasing in 2016 from 26,418,193 to 39,127,522 USD one year after.

By evaluating other financial indicators, it is possible to see that the company in the years has almost quadrupled its assets: from 89,243,018 USD in 2016 to 371,293,002 in 2020. Accordingly, the solvency ratio is high (62.07% in 2016 and 93.88% in 2020). Despite that, we can notice also that the return on assets becomes negative in the same years showing a worse management of the resources.

What can this situation tell us? The company has considerably increased its assets after acquisition, but it hasn't been able to increase the EBIT value at the end of the fiscal year. Despite that, the value of production grows steadily. It is hard to make assumptions under these circumstances. Nevertheless, a reason for the earnings value to be negative could be that the acquirer decided to transfer the economic result to another entity at the end of the fiscal year. This could be done in an attempt of avoiding income tax by transferring assets abroad to an offshore company or trust.

The second example is constituted by the company PERMASTEELISA SPA (9), which EBIT is already negative on the date of acquisition and decreases even further two years after, reaching -459.085 USD. Despite that, the value of production increases from 1,378,535 USD in 2017 to 1,603,329 USD in 2018. In this case though, the assets also decrease between the years: from 152.324.000 USD in 2017 to 111.039.000 USD in 2020. Even the solvency ratio is well below 20% (11.04% in 2020).

The third case is represented by the company MAVILOR (43) which is acquired with a negative EBIT (-96.560) but which becomes positive after one year (568.363). Despite the improved value, the value of production decreases: from 11.170.368 USD in 2019 to 9.223.275 USD in 2020. The solvency ratio also decreases from 45.22% to 39.56% in the same years.

The return of assets of the company, already low on date of acquisition, becomes negative in 2020 (-14.90%). This can be an indicator of poor management of the entity's assets related to the change in ownership.

The last anomaly is represented by the experience of the company ORKA SP Z.O.O (26) which is acquired with an EBIT of -66.642 USD. Nevertheless, the EBIT grows to -33.779 USD one year after. At the same time the value of production is decreasing in the considered years: from 1.016.862 USD in 2016 to 929.595 USD for the year after. Despite that, the following years the value of production remains stable whereas the EBIT remains negative (-4.257 USD in 2020). This could indicate a transfer of Earnings to a foreign entity as in the case of GIMATIC S.r.l.

Overall, evidence show that most target companies remain active and display a stable (18) or substantial increase (13) in the value of production. Therefore, it is possible to say that most of the investors do not engage in M&As activities in Europe with the sole objective of acquiring know-how. In fact, the flourishing of the business even after acquisition displays that analysed companies might also be driven by other motives like, for instance, market entry.

It is true that many of the transactions here considered involve state influence to some extent (23 transactions show high state influence and 11 show medium state influence) and this might be linked to the fact that SOEs generally dispose of more abundant financial resources and are facilitated in cross-border M&As. This fact could trigger some doubts about neutrality in terms of competition.

When taking the value of production into account, a substantial part of the sample (13) worsened or, at least, hasn't improved its performance. On the contrary, 13 of them display a considerably higher value in production if compared to pre-acquisition levels. For this reason, it is not possible to assume that the main driver for acquisition is merely know-how absorption. Even if the complete takeover of an entity automatically

involves the incorporation of IP rights among all other the assets, it is not necessarily true that the acquirer solely engages in the purchase for this reason.

Among the companies which experienced a decrease in value of production of more than 5%, 8 of them are active in the Machinery sector, 2 of them operate in the aviation sector, one in the Electronics & electronic equipment field, one in the Automotive and transportation sector, one in the Transport & infrastructure sector and the remaining one in the Chemicals, Metals & Basic Materials. The 14 companies considered, all together had patents portfolios including a total of 18718 patents.

In conclusion, the fact that many of the companies in the sample are still active and financially healthy proves us that the new investment has not affected the production of value, it has in turn helped the business in many cases. It is indeed true that Chinese acquisition into Europe can genuinely be led by a desire of market penetration and can, in many cases, stimulate the competitiveness of European manufacturers in several industries. Over more, Chinese investment sometimes have the merit of repaying European companies R&D processes, as acquirers often pay premium prices to have access to local developed technologies. This can contribute to interconnected technology ecosystems.

At the same time, these results do not automatically imply that technology transfer is not a risk or that it should be underestimated as a phenomenon. In fact, as mentioned in the previous chapters, it still constitutes a threat to European companies' competitiveness worldwide. The fact that Chinese companies can have access to cutting-edge technology throughout the interactions with European companies means that those investors could in the future start mastering the considered know-how and outperform their European peers in the future. The erosion of the competitive advantage embodied by European technology constitutes a heated subject of discussion. The subject is even more delicate when the know-how absorption happens by the hand of companies linked to the central government and is accompanied by a lack of transparency. In the sample of companies considered in the last chapter, 53.7% of the acquirer entail some degree of state influence. This is totally consistent with China's peculiar institutional context in which ad-hoc policies are adopted by the central government to support SOEs' cross border M&As of strategic targets overseas. Preferential policies include special loans from the state-owned non-commercial banks

like the Export-Import Bank of China.²¹⁷ European companies might not enjoy the same financial support when deciding to invest into China and this alters the level playing field in bilateral economic relations.

Over more, from the study conducted in the last chapter it is visible that 14 companies, after being acquired, experience an erosion of the value of production by more than 5%. This fact makes us wonder whether the takeover was underpinned by a will of gaining a portion of a new market or simply because of the appeal constituted by foreign technology. As mentioned before, technology transfer is hard to prove and these finding can just help observers make assumptions on the matter.

Nevertheless, if technology transfer cannot actively be avoided in those kind of investment relations, European institutions can still be aware of other factors concerning the takeovers, like unfair competition deriving from state-backed subsidies or links to defence and military sector. Hence, European member states should be able to set up efficient investment screening procedures. These measures must enable them to analyse the transaction thoroughly without affecting the free movement of capital principle which has proven to be beneficial to the internal market since its creation.

4. Conclusion:

Chinese M&As activities in Europe have steadily surged in the past decade despite hitting their 13-year low in 2020²¹⁸ due to the global pandemic.

Despite the halt in transactions, European policy makers just recently started to take concrete steps to adopt legislative tools to better regulate inbound direct investment into the continent.

²¹⁷ Tan, Hui, and Qi Ai. "China's Outward Mergers and Acquisitions in the 21st CENTURY: Motivations, Progress and the Role of the Chinese Government." University of Northampton's Research Explorer. Emerald, January 1, 1970. <https://pure.northampton.ac.uk/en/publications/chinas-outward-mergers-and-acquisitions-in-the-21st-century-motiv>.

²¹⁸ Agatha Kratz "Chinese FDI in Europe: 2020 Update." Merics, June 16, 2021. <https://merics.org/en/report/chinese-fdi-europe-2020-update>.

Even if it is true that Chinese inbound investments just total a part of all foreign investments into Europe (U.S total investment value in EU in 2020 scored US\$3.66 billion), European institutions are particularly concerned about the distortion that those economic activities could potentially bring to the market.

In particular, the main concerns regard the different market logics followed by the acquirer back in China and the threat of know-how absorption that an acquisition could entail. The latter constitutes a heated area of contention since the acquirer, after having obtained and mastered the relevant technology, could then start representing a threat to EU companies' competitiveness worldwide.

It is important to note that technology transfer can happen in many ways other than through M&As. A relevant example is the establishment of a joint venture in China with a local actor. In that respect, there are still some fields for which foreign investment is still hindered. Sometimes joint ventures are a specific requirement for foreign entrepreneurs aiming at becoming suppliers of certain components into China. An eminent example is constituted by the joint venture constituted in 2012 between the aviation company SAFRAN and Comac to work on the wiring system of the C919 narrow body²¹⁹. The French-based SAFRAN holds 49% of the shares within the joint venture, while COMAC (Commercial Aircraft Corporation of China) holds the remaining 51%.

The C919 is a single-aisle aircraft and is for 85% built through the supply of components provided by foreign suppliers. With the C919 COMAC aims at acquiring the Chinese market share of Airbus and Boeing in China.

My research aims at acting as a magnifying lens into the topic providing a guideline of the most relevant factors to consider when dealing with Chinese investors and display some of the main European regulations and trade policies which tackle the subject.

Especially through the third chapter, readers can have a glance into actual M&As transactions which took place in the last decade and which involve the takeover of a local company by a Chinese acquirer. Through the sample of the acquisitions considered, it has been possible to draw some conclusions about the motives driving

²¹⁹ Toh, Mavis. "Comac, Safran Form Joint Venture for C919's Wiring Systems." Flight Global. Flight Global, December 27, 2019. <https://www.flightglobal.com/comac-safran-form-joint-venture-for-c919s-wiring-systems/105892.article>.

Chinese direct outbound investments into the bloc by assessing the financial situation of the target company after the change in the ownership structure.

The analysis also comprehends the measurement of Chinese's state influence into the proposed transactions and information about the IP portfolio of the target, to better evaluate the technology transferred through acquisition.

Amongst the findings, we can see that a relevant part of the target companies scores a negative EBIT after the acquisition and some of them (8) went bankrupt or were dissolved afterwards. Nevertheless, the other companies considered (33) are still active and operative suggesting a desire from the Chinese party to penetrate the market rather than merely target the acquired company's assets.

With my research I thus envision to enrich existing studies and provide a different angle for future analysis of the phenomenon enabling at the same time an unbiased view into the subject.

Further research may entail an evaluation of the changes into the management of the target companies after acquisition combined with financial data and economic results of the entity.

The subject of Chinese direct investment into EU is ever evolving and it will be interesting to observe how it will transform in the future after Covid 2019 shock for international supply chain and the stated goal by the CCP of building China into a self-sufficient powerhouse in the next five-year term.

On the other hand, the increasing awareness among European institutions about the subject and the pressing need to establish a better level-playing field while restoring the competitive neutrality in investment relations with China, is also an important element which will undoubtedly define the size and number of future M&As activities.

Indeed, the new EU framework for investment screening will have a relevant impact and transform single member states' bilateral investment relations with foreign actors. Throughout this research I tried also to dive into the tech-transfer threat. The total takeover of EU companies this will automatically entail the acquisition of the target's total assets and thereby also all its IP portfolio. It is arguable then that in such circumstances tech-transfer automatically happens. In my view the discussion should then revolve around the extent to which such acquisitions are just geared towards know-

how absorption or are also driven by other motives. This is partially visible through an extensive analysis of the company's financial health and state of business of the target after the takeover, as proposed through the third chapter of this research.

Qualitative analysis of the target IP rights:

	Target	Acquirer	Number of patents on date of acquisition	Main IPC group	Industry
1.	Thyssenkrupp	Wuhan Iron and Steel Corporation (WICO)	9910	B62D1	Machinery
2.	KTB Tumorforschungsgesellschaft	Chinaequity Investment	161	A61P35	Health. Pharmaceuticals and Biotechnology
3.	Axiogenesis	Donghai securities	161	C12N5	Health. Pharmaceuticals and Biotechnology
4.	NIMAK GMBH	Jiangsu Hagong Intelligent Robot	82	B23K11	Machinery
5.	STJERNBERG AUTOMATION	Tus Holding	3	B29C64/209	Machinery
6.	LISAPHARMA SPA	Shandong Sito Bio-technology	120	A61K31	Health. Pharmaceuticals and Biotechnology
7.	CLIVET SPA	Midea Group	3	F24F3/00	Machinery
8.	GIMATIC SRL	AGIC Capital	18	F15B	Machinery
9.	PERMASTEELISA SPA	Grandland Holdings	11	F24F	Machinery
10.	MASTERWOOD SPA	KDT Machinery	18	B23Q1	Machinery
11.	BASSOE TECHNOLOGY AB	China International Marine Containers Group	3	B63B35	Machinery
12.	Floranova Ltd	ChemChina	18	B23Q1	Agriculture and food

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	Target	Acquirer	Number of patents on date of acquisition	Main IPC group	Industry
13.	Avancis Gmbh	CNBM International Corporation	24	H01L31	Energy
14.	Beneq Oy	SRI intellectual technology	792	C23C16	Electronics & electrical equipment
15.	Anteryon BV	Suzhou Jinfang Optoelectronics	12	G02B7/02	Information and Communication Technology (ITC)
16.	AXILONE Plastique	CITIC	76	A45D40	Consumer products & services
17.	Corima International Machinery	Suzhou SLAC Precision Equipment	17	C25D13	Machinery
18.	SOLIBRO GMBH	Hanenergy Holding Group Ltd.	24	H01L31	Energy
19.	RMG MESSTECHNIK GMBH	Dalian Energas Gas-System	21	F16K17	Energy
20.	BREAS MEDICAL AB	Fosun Pharma	128	A61P35	Health, pharmaceuticals, and Biotechnology
21.	COTESA GMBH	Advanced Technology & Materials	39	B29C70	Aviation
22.	InflaRx	Staidson (Beijing) Biopharmaceuticals	46	A61K31	Health, pharmaceuticals, and Biotechnology
23.	Promethean World	NetDragon	50	G06F3	Information & Communications Technology (ICT)
24.	Progman	Goldon Software	61	G06F3	Information & Communications Technology (ICT)

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	Target	Acquirer	Number of patents on date of acquisition	Main IPC group	Industry
25.	Renonorden	Urbaser	n/a	n/a	Waste management services
26.	ORKA SP. Z O.O	Jiangsu Lantian Aerospace Industrial Park	65	A01N43	Aviation
27.	CAV AEROSPACE LIMITED	Shaanxi Ligeance Mineral Resources	150	C08L77	Aviation
28.	Polskie Zakłady Lotnicze	Jiangsu Lantian Aerospace Industrial Park Management	5	B21D22	Aviation
29.	M-Tec Mathis Technik	Zoomilion Heavy Industry Science and Technology	77	B28C5	Machinery
30.	SCHIESS WERKZEUG-MASCHINENFABRIK GMBH	Shandong Guochuang Wind Energy Equipment	N/A	N/A	Machinery
31.	CARL CLOOS SCHWEISS-TECHNIK GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG	Nanjing Estun Automation Technology	18	B23K9	Machinery
32.	OERLIKON NEUMAG – CARDING BUSINESS	Jiangsu Jinsheng Industry	10	D02G1	Machinery
33.	ROMACO PHARMATECHNIK GMBH	Truking Technology	111	B30B11/08	Transport & Infrastructure
34.	EVOLUT SERVICE S.R.L.	EFFORT intelligent equipment	n/a	n/a	Machinery
35.	Magex S.R.L	Hangzhou Zhongya Kechuang Investment	7	G07F11	Machinery

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	Target	Acquirer	Number of patents on date of acquisition	Main IPC group	Industry
36.	MAKA SYSTEMS GMBH	CSG Smart Science and Technology	43	A61K47	Machinery
37.	BROETJE-AUTOMATION GMBH	Shanghai Electric Group	112	B21J15	Machinery
38.	PUTZMEISTER HOLDING GMBH	Sany Heavy. CITIC	30	E04G21	Machinery
39.	VERMES MICRODISPENSING GMBH	Chazhou Three-Circle Group	62	B05C5	Machinery
40.	INLINE HYDRAULIK GMBH	Jiangsu Hengli Highpressure Oil Cylinder	21	H04L12	Machinery
41.	SEPURA LIMITED	Hytera Communications	97	H04Q7	Electronics & Electrical Equipment
42.	ESAOTE S.P.A	Beijing Wandong Medical Technology	656	A61B8	Electronics & Electrical Equipment
43.	MAVILOR MOTORS SA ()	Guanzhou Haozhi Industrial	n/a	n/a	Electronics & Electrical Equipment
44.	SOLUTRONIC AG		n/a	n/a	Electronics & Electrical Equipment
45.	SALCOMP MANUFACTURING OY	Lingyi itech	9	H02M3	Electronics & Electrical Equipment
46.	FERRETTI SPA	Shandong Heavy Industry Group	2	G10K11/178	Transport & Infrastructure
47.	Emarc	Baosteel Group	26	A01N43	Chemicals. Metals & Basic Materials

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	Target	Acquirer	Number of patents on date of acquisition	Main IPC group	Industry
48.	Elix Polymers SLU	SinoChem	516	A61K31	Chemicals, Metals & Basic Materials
49.	CHEMATUR TECHNOLOGIES AB	Wanhua Chemical	25	B01J19	Chemicals, Metals & Basic Materials
50.	GRUPO ALDESA	CRCC International Investment Group	12	G08B5/38	Transport & Infrastructure
51.	PIRELLI & C. SPA	ChemChina	8562	B29D30/00	Automotive & Transportation Equipment
52.	EKORNES AS	QUMEI HOME FURNISHINGS GROUP COMPANY LIMITED	407	A47C1/032	Consumer products & services
53.	SILVER CROSS NURSERIES LIMITED	Fosun International Limited	20	A01H5	Consumer products & services
54.	SCHOLZ HOLDING GMBH	Chiho Renewable International Holding Limited	11	B07B9/00	Chemicals, Metals & Basic Materials

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Evaluation of financial performance after acquisition:

	TARGET	DATE OF ACQUISITION	EBIT ON DATE OF ACQUISITION	EBIT ONE YEAR AFTER ACQUISITION	EBIT TWO YEARS AFTER ACQUISITION	LATEST DATA ON EBIT AVAILABLE	STATE INFLUENCE IN THE TRANSACTION
1.	Thyssenkrupp	2014	2.930.581	2.879.171	2.728.864	Active	High
2.	KTB Tumorforschungsgesellschaft	2015	n/a	n/a	n/a	Active but under insolvency proceedings	Low
3.	Axiogenesis		n/a	n/a		In liquidation	Low
4.	NIMAK GMBH	2018	2.097	-2.019	N.A	Active	Low
5.	STJERNBERG AUTOMATION		-308.613 (2018)	-1.285.796 (2019)	N.A	Bankruptcy	High
6.	LISAPHARMA SPA	2019	-7.224.390	-4.868.126	N.A	Active	Low
7.	CLIVET SPA	2016	430.033	-1.110.815	394.573	Active	Low
8.	GIMATIC SRL	2016	2.618.860	2.238.390	-2.985.573	Active	Low
9.	PERMASTEELISA SPA	2017	-31.845	-27.206	-459.085	Active	Low
10.	MASTERWOOD SPA	2018	459.263	-1.857.411	-958.302	Active	Low
11.	BASSOE TECHNOLOGY AB	2013	1.504.873	2.346.121	266.207	Active	High
12.	Floranova Ltd	2018	1.161.521	7.982.332	n/a	Active	High

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	TARGET	DATE OF ACQUISITION	EBIT ON DATE OF ACQUISITION	EBIT ONE YEAR AFTER ACQUISITION	EBIT TWO YEARS AFTER ACQUISITION	LATEST DATA ON EBIT AVAILABLE	STATE INFLUENCE IN THE TRANSACTION
13.	Avancis Gmbh	2014	n/a	n/a	n/a	Dissolved	High
14.	Beneq Oy	2018	-4.175.151	-6.160.140	-3.811.077	Active	High
15.	Anteryon BV	2019	995.122	n/a	n/a	Active	High
16.	AXILONE Plastique	2017	28.538.629	19.479.177	48.143.627	Active	High
17.	Corima International Machinery	2016	122.027	106.909	130.742	Active	Low
18.	SOLIBRO GMBH	2012	-9.098.000	2.734.000	-31.601.000	In liquidation	Low
19.	RMG MESSTECHNIK GMBH	2017	455.000	127.000	3.386.000	Active	Medium
20.	BREAS MEDICAL AB	2017	-1.340	-8.151	-9.140	Active	High
21.	COTESA GMBH	2018	n/a	n/a	n/a	Active	Low
22.	InflaRx GMBH	2016	n/a	n/a	n/a	Active	Medium
23.	Promethean World	2015	-52.122.868	-36.898.617	1.172.799	Active	Low
24.	Progman	2014	765.581	484.933	419.458	Active	Low

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	TARGET	DATE OF ACQUISITION	EBIT ON DATE OF ACQUISITION	EBIT ONE YEAR AFTER ACQUISITION	EBIT TWO YEARS AFTER ACQUISITION	LATEST DATA ON EBIT AVAILABLE	STATE INFLUENCE IN THE TRANSACTION
25.	Renonorden	2018	6.771.000	4.250.000	5.357.000	Bankruptcy	Low
26.	ORKA SP. Z O.O.	2016	n/a	-66.642	-33.779	Active	Low
27.	CAV AEROSPACE LIMITED	2017	n/a	n/a	n/a	Dissolved	Medium
28.	Polskie Zakłady Lotnicze	2016	33.600.000	22.379.000	28.695.000	Active	High
29.	M-Tec Mathis Technik	2013	-141	n/a	668	Active	Medium
30.	SCHIESS WERKZEUG-MASCHINENFABRIK GMBH	2019	n/a	n/a	n/a	Active	Low
31.	CARL CLOOS SCHWEISS-TECHNIK GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG	2019	17.205	n/a	n/a	Active	High
32.	OERLIKON NEUMAG – CARDING BUSINESS	2011	-1.630.421	-397.109	-1.353.148	Active	Medium
33.	ROMACO PHARMATECHNIK GMBH	2017	1.129.000	3.736.000	-2.249.000	Active	Low
34.	EVOLUT SERVICE S.R.L.	2016	214.881	-7.011.915	-2.933.963	Active	High
35.	Magex S.R.L.	2018	-448.633	64.881	691.710	Active	High

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	TARGET	DATE OF ACQUISITION	EBIT ON DATE OF ACQUISITION	EBIT ONE YEAR AFTER ACQUISITION	EBIT TWO YEARS AFTER ACQUISITION	LATEST DATA ON EBIT AVAILABLE	STATE INFLUENCE IN THE TRANSACTION
36.	MAKA SYSTEMS GMBH	2018	n/a	-3.168.000	n/a	Active	Low
37.	BROETJE-AUTOMATION GMBH	2016	6.107.000	-17.843.000	317.000	Active	Low
38.	PUTZMEISTER HOLDING GMBH	2012	29.752.000	11.678.000	28.651.000	Active	High
39.	VERMES MICRODISPENSING GMBH	2017	11.853.000	6.277.000	4.050.000	Active	Medium
40.	INLINE HYDRAULIK GMBH	2015	342.000	-186.000	-626.000	Active	High
41.	SEPURA LIMITED	2017	-19.012.039	1.559.007	14.253.885	Active	High
42.	ESAOTE S.P.A.	2018	-101.081.796	-2.347.906	13.112.783	Active	Low
43.	MAVILOR	2019	-96.560	-568.363	n/a	Active	Low
44.	SOLUTRONIC AG	2014				In liquidation	Low
45.	SALCOMP MANUFACTURING OY	2019	1.025.664	n/a	n/a	Active	Low
46.	FERRETTI SPA	2012	-48.433.853	-96.981.068	-54.870.062	Active	High
47.	Emarc	2017	-4.864.745	-777.432	367.103	Active	High

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	TARGET	DATE OF ACQUISITION	EBIT ON DATE OF ACQUISITION	EBIT ONE YEAR AFTER ACQUISITION	EBIT TWO YEARS AFTER ACQUISITION	LATEST DATA ON EBIT AVAILABLE	STATE INFLUENCE IN THE TRANSACTION
48.	Elix Polymers SLU	2019	8.268	n/a	n/a	Active	High
49.	CHEMATUR TECHNOLOGIES AB	2019	537.137	84.994.744	n/a	Active	Low
50.	GRUPO ALDESA	2019	14.002	50.964	n/a	n/a	Active (50.964)
51.	PIRELLI & C. SPA	2015	-85.778.000	278.208.000	364.729.000	Active	High
52.	SILVER CROSS NURSERIES LIMITED	2015	-257,851	4,705,515	n/a	Active	High
53.	EKORNES AS	2018	33.020.483	29.137.130	n/a	Active	Low
54.	SCHOLZ HOLDING GMBH	2016	-396.373.000	-4.441.000	1.429.000	Active	High

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Analysis on solvency ratio:

	TARGET	SOLVENCY RATIO 2018	SOLVENCY RATIO 2019	SOLVENCY RATIO 2020	Trend
1.	Thyssenkrupp	9.30%	6.09%	27.88%	> than 20%
2.	KTB Tumorforschungsgesellschaft	Insolvent			
3.	Axiogenesis (NCAR-DIA AG now)	In liquidation			
4.	NIMAK GMBH	80.59%	83.50%	n/a	< than 20%
5.	STJERNBERG AUTOMATION	Bankrupt			
6.	LISAPHARMA SPA	30.38%	7.78%	10.31%	< than 20%
7.	CLIVET SPA	35.33%	33.93%	34.36%	> than 20%
8.	GIMATIC SRL	86.84%	94.99%	n/a	> than 20%
9.	PERMASTEELISA SPA	9.77%	10.58%	11.04%	< than 20%
10.	MASTERWOOD SPA	21.65%	16.23%	11.81%	< than 20%
11.	BASSOE TECHNOLOGY AB	1.80%	1.99%	n/a	< than 20%
12.	Floranova Ltd	43.98%	60.53%	n/a	> than 20%
13.	Avancis GmbH	50.44%	40.09%	37.80%	> than 20%

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	TARGET	SOLVENCY RATIO 2018	SOLVENCY RATIO 2019	SOLVENCY RATIO 2020	Trend
14.	Beneq Oy	13.22%	29.32%	25.82%	> than 20%
15.	Anteryon BV	14.15%	19.08%	n/a	< than 20%
16.	AXILONE Plastique	33.78%	40.23%	50.02%	> than 20%
17.	Corima International Machinery	1.07%	2.47%	4.56%	< than 20%
18.	SOLIBRO GMBH	In liquidation			
19.	RMG MESSTECH- NIK GMBH	10.44%	60.39%	65.59%	> than 20%
20.	BREAS MEDICAL AB	97.31%	98.05%	n/a	> than 20%
21.	COTESA GMBH	49.98%	64.62%	n/a	> than 20%
22.	InflaRx GMBH	85.38%	76.63%	n/a	>than 20%
23.	Promethean World	-12.09%	-5.11%	n/a	< than 20%
24.	Progman	10.72%	5.43%	17.98%	< than 20%
25.	Renonorden ASA	11.12%	15.79%	19.93%	< than 20%
26.	ORKA SP. Z O.O.	88.46%	89.23%	89.06%	> than 20%

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	TARGET	SOLVENCY RATIO 2018	SOLVENCY RATIO 2019	SOLVENCY RATIO 2020	Trend
27.	CAV AEROSPACE LIMITED	Dissolved			
28.	Polskie Zakłady Lotnicze	75.81%	68.36%	69.03%	> than 20%
29.	M-Tec Mathis Technik	51.93%	53.85%	n/a	> than 20%
30.	SCHIESS WERKZEUG-MASCHINENFABRIK GMBH	100%	78.14%	n/a	> than 20%
31.	CARL CLOOS SCHWEISS-TECHNIK GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG	49.47%	52.25%	n/a	> than 20%
32.	OERLIKON NEUMAG – CARDING BUSINESS	11.81%	18.75%	14.63%	< than 20%
33.	ROMACO PHARMATECHNIK GMBH	24.83%	22.64%	n/a	> than 20%
34.	EVOLUT SERVICE S.R.L.	4.45%	0.43%	2.16%	< than 20%
35.	Magex S.R.L	19.12%	17.16%	36.16%	> than 20%
36.	MAKA SYSTEMS GMBH	0.00%	33.13%	n/a	> than 20%
37.	BROETJE-AUTOMATION GMBH	2.51%	8.46%	n/a	< than 20%
38.	PUTZMEISTER HOLDING GMBH	57.31%	57.69%	n/a	> than 20%

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	TARGET	SOLVENCY RATIO 2018	SOLVENCY RATIO 2019	SOLVENCY RATIO 2020	Trend
39.	VERMES MI-CRODISPENSING GMBH	62.39%	92.82%	n/a	> than 20%
40.	INLINE HYDRAULIK GMBH	27.21%	27.46%	29.89%	> than 20%
41.	SEPURA LIMITED	28.87%	30.91%	n/a	> than 20%
42.	ESAOTE S.P.A.	24.93%	25.28%	25.85%	> than 20%
43.	MAVILOR MOTORS SA	46.91%	45.22%	39.56%	> than 20%
44.	SOLUTRONIC AG	In liquidation			
45.	SALCOMP	8.87%	8.59%	n/a	< than 20%
46.	FERRETTI SPA	15.63%	45.49%	n/a	> than 20%
47.	Emarc	28.51%	33.73%	n/a	> than 20%
48.	Elix Polymers SLU	55.02%	20.05%	n/a	> than 20%
49.	CHEMATUR TECHNOLOGIES AB	84.90%	74.25%	84.91%	> than 20%
50.	GRUPO ALDESA	3.13%	4.41%	16.97%	< than 20%
51.	PIRELLI & C. SPA	34.92%	34.78%	33.08%	> than 20%

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	TARGET	SOLVENCY RATIO 2018	SOLVENCY RATIO 2019	SOLVENCY RATIO 2020	Trend
52.	SILVER CROSS NURSERIES LIMITED	64.49%	50.90%	n/a	> than 20%
53.	EKORNES AS	32.11%	36.10%	n/a	> than 20%
54.	SCHOLZ HOLDING GMBH	28.27%	29.09%	n/a	> than 20%

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Evaluation of value of production:

	TARGET	DATE OF ACQUISITION	VALUE OF PRODUCTION ON DATE OF ACQUISITION	VALUE OF PRODUCTION ONE YEAR AFTER ACQUISITION	% VARIATION
1.	Thyssenkrupp	2014	52,589,393	48,242,361	- 8.27%
2.	KTB Tumorforschungsgesellschaft	2015	Insolvent (acquired insolvent)		
3.	Axiogenesis AG	2016	In liquidation (Insolvent from 2019)		
4.	NIMAK GMBH	2018	73,079,000	72,023,000	-1.45%
5.	STJERNBERG AUTOMATION	2017	2,705,409	2,481,856	-8.26%
6.	LISAPHARMA SPA	2019	16,224,800	18,158,022	+ 11.91%
7.	CLIVET SPA	2016	112,814,193	126,000,946	+11.7%
8.	GIMATIC SRL	2016	26,418,193	39,127,522	+48%
9.	PERMASTEELISA SPA	2017	1,378,535	1,603,329	+16,3%
10.	MASTERWOOD SPA	2018	28,572,569	22,231,095	-22,2%
11.	BASSOE TECHNOLOGY AB	2013	20,745,821	15,210,428	-26,7%
12.	Floranova Ltd	2018	1,161,521	7,982,332	+ 587%

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	TARGET	DATE OF ACQUISITION	VALUE OF PRODUCTION ON DATE OF ACQUISITION	VALUE OF PRODUCTION ONE YEAR AFTER ACQUISITION	% VARIATION
13.	Avancis Gmbh	2014	n/a	n/a	
14.	Beneq Oy	2018	28,453,593	31,656,620	+11,26%
15.	Anteryon BV	2019	n/a	n/a	
16.	AXILONE Plastique	2017	81,398,477	84,302,664	+3,6%
17.	Corima International Machinery	2016	2,872,370	12,322,332	+429%
18.	SOLIBRO GMBH	2012	52,311,000	58,909,000	+12,6%
19.	RMG MESSTECHNIK GMBH	2017	30,568,000	34,297,000	+12,20%
20.	BREAS MEDICAL AB	2017	n/a	n/a	
21.	COTESA GMBH	2018	58,630,000	48,353,000	-17,53%
22.	InflaRx GMBH	2016	n/a	n/a	
23.	Promethean World	2015	158,742,607	185,136,479	+16,6%
24.	Progman	2014	11,325,440	11,107,316	+2,03%

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	TARGET	DATE OF ACQUISITION	VALUE OF PRODUCTION ON DATE OF ACQUISITION	VALUE OF PRODUCTION ONE YEAR AFTER ACQUISITION	% VARIATION
25.	Renonorden S.A	2018	78,451,000	69,017,000	-12%
26.	ORKA SP. Z O.O.	2016	1,016,862	929,595	-8.6%
27.	CAV AEROSPACE LIMITED	2015	Dissolved (2019)		
28.	Polskie Zakłady Lotnicze	2016	141,750,000	180,075,000	+27%
29.	M-Tec Mathis Technik	2013	42,894,000	38,154,000	-11%
30.	SCHIESS WERKZEUGMASCHINENFABRIK GMBH	2019	n/a	n/a	
31.	CARL CLOOS SCHWEISSTECHNIK GESELLSCHAFT MIT BESCHRAENKTER HAFTUNG	2019	174,321,000	24,56,000	-86%
32.	OERLIKON NEUMAG – CARDING BUSINESS	2011	24,604,306	25,320,119	+3%
33.	ROMACO PHARMATECHNIK GMBH	2017	49,112,000	4,873,000	+ 90.1%
34.	EVOLUT SERVICE S.R.L.	2016	16,796,988	25,389,051	+51.1%
35.	Magex S.R.L	2018	3,131,411	5,283,895	+69%
36.	MAKA SYSTEMS GMBH	2018	n/a	n/a	

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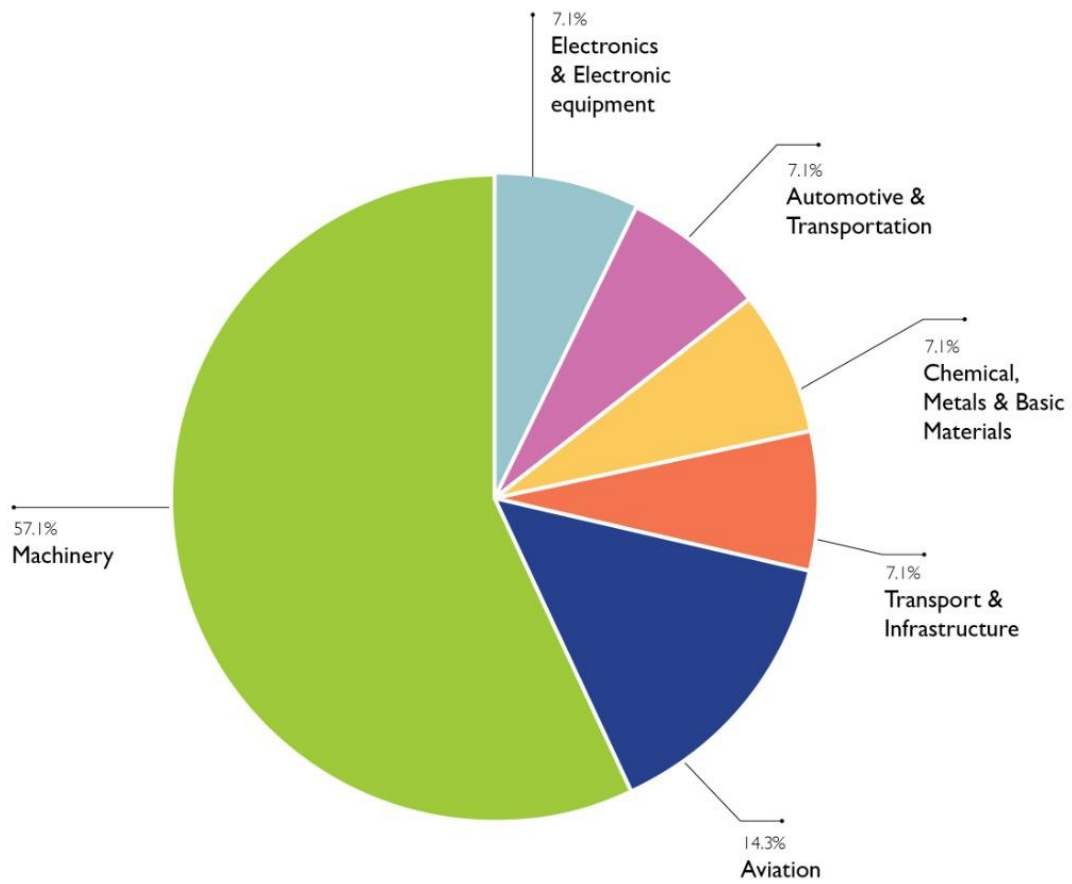
	TARGET	DATE OF ACQUISITION	VALUE OF PRODUCTION ON DATE OF ACQUISITION	VALUE OF PRODUCTION ONE YEAR AFTER ACQUISITION	% VARIATION
37.	BROETJE-AUTOMATION GMBH	2016	26,490,000	122,457,000	+362.27%
38.	PUTZMEISTER HOLDING GMBH	2012	936,906,000	927,298,000	-1.3%
39.	VERMES MICRODISPENSING GMBH	2017	n/a	n/a	
40.	INLINE HYDRAULIK GMBH	2015	12,515,000	12,394,000	+1%
41.	SEPURA LIMITED	2017	68,191,215	107,252,810	+56.3%
42.	ESAOTE S.P.A.	2018	266,060,349	271,340,384	+1.98%
43.	MAVILOR MOTORS SA	2019	11,170,368	9,223,275	-7.5%
44.	SOLUTRONIC AG	2014	In liquidation (acquired insolvent)		
45.	SALCOMP	2019	336,854,816	n/a	+265,77%
46.	FERRETTI SPA	2012	151,145,181	552,850,836	-1,25%
47.	Emarc S.P.A	2017	170,366,178	168,421,595 stabile	
48.	Elix Polymers SLU	2019	209,479,000	n/a	

Data retrieved from: Bureau van Dijk. " Note: Corporate author. URL: <https://orbis.bvdinfo.com/> " Accessed September 28, 2021

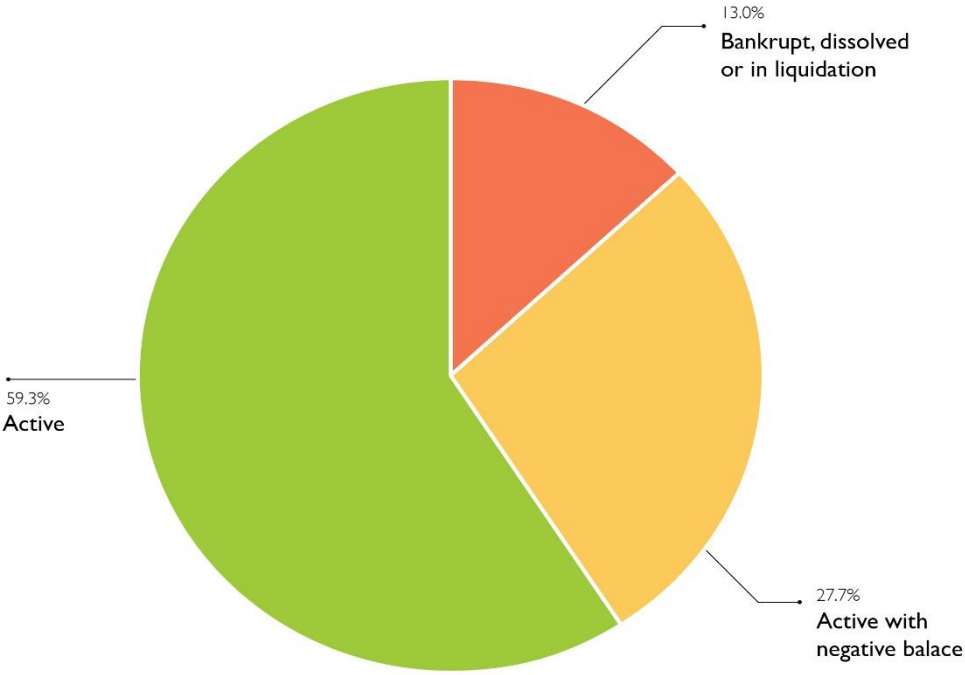
	TARGET	DATE OF ACQUISITION	VALUE OF PRODUCTION ON DATE OF ACQUISITION	VALUE OF PRODUCTION ONE YEAR AFTER ACQUISITION	% VARIATION
49.	CHEMATUR TECHNOLOGIES AB	2019	16,328,863	109,054,691	+567,86%
50.	GRUPO ALDESA	2019	906,913,000	531,542,000	41.4%
51.	PIRELLI & C. SPA	2015	7,052,890,000	6,595,656,000	-6.5%
52.	SILVER CROSS NURSERIES LIMITED	2015	n/a	n/a	
53.	EKORNES AS	2018	26,342,117	26,925,740	+2.2%
54.	SCHOLZ HOLDING GMBH	2016	537,492,000	8,403,000	+98.44%

Data retrieved from: Bureau van Dijk. " Note: Corporate author. URL: <https://orbis.bvdinfo.com/> " Accessed September 28, 2021

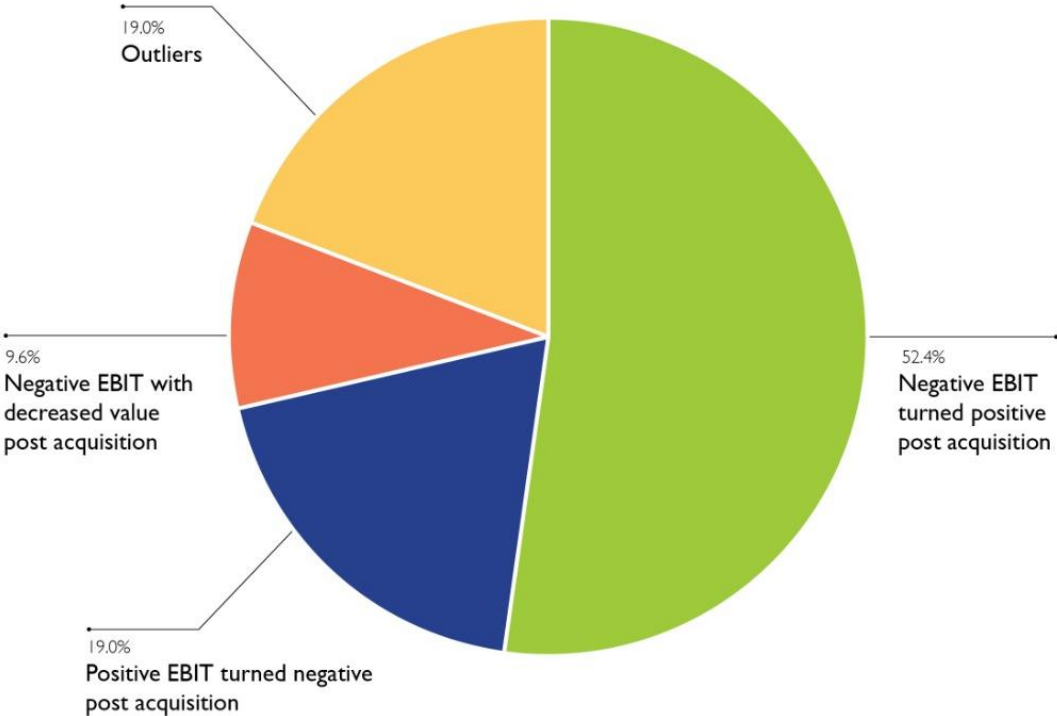
Companies experiencing a decrease in value of production post acquisition



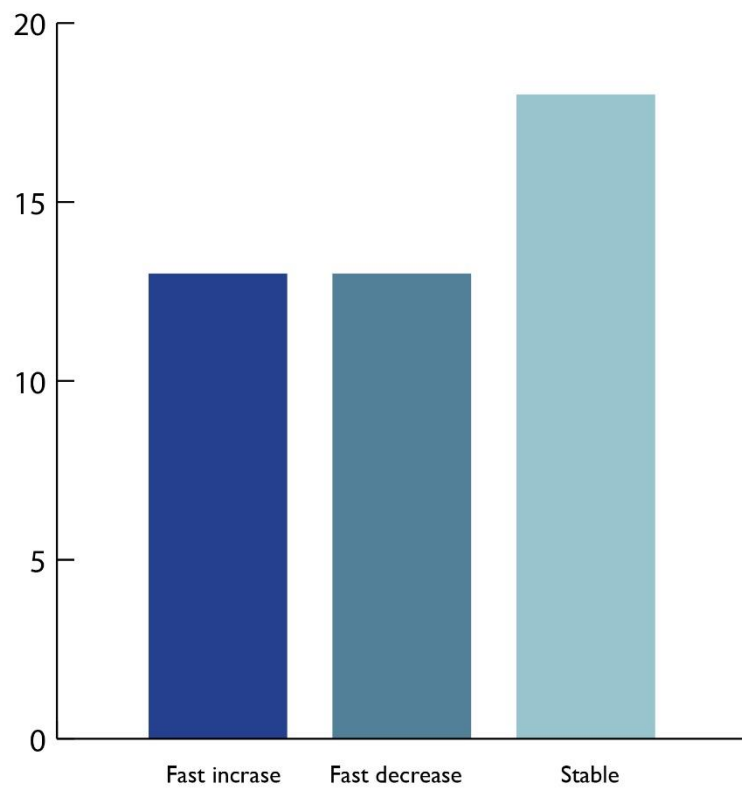
State of business post acquisition



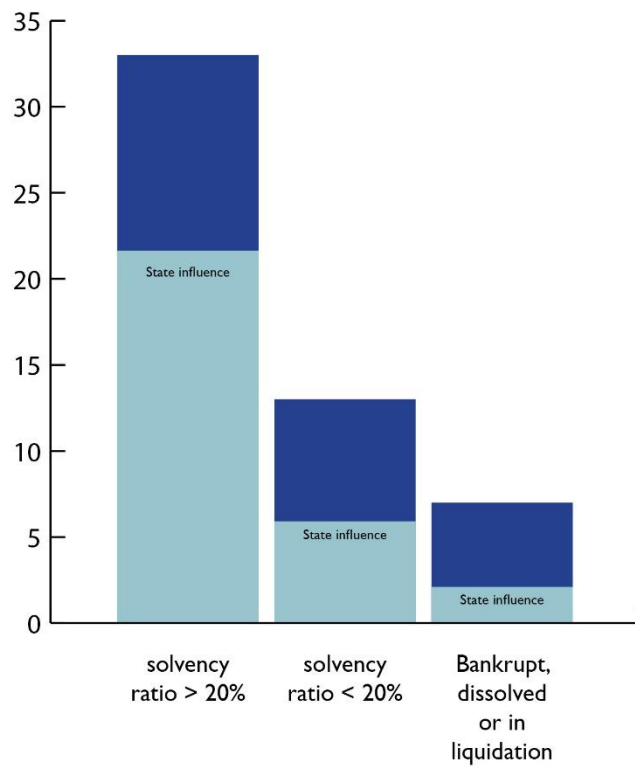
EBIT variation



Value of production post acquisition



Solvency ratios



Degree of state influence

