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Abstract

The paper highlights the major role played by foreign direct investment/ FDI flows in two ways – inflows or outflows – for Chinese firms by securing strategic assets to enhance their competitive advantage. The underlying rationale of the acquisition of such assets through FDI is specific to China. Therefore, we scrutinize the characteristics and determinants of FDI in its two dimensions.

Keywords: FDI, strategic assets, Chinese firms
JEL Classification: F23, L52, O33

INTRODUCTION [1]

The rise of Chinese firms in world rankings has been amazing since the beginning of the millennium whereas they have become major investors abroad. From now on, the incumbent multinational companies/ MNCs have to reckon with these new competitors. The world can anymore be viewed as a 'Triad' but as a multipolar and complex configuration endowed with numerous networks, whose, among others, Chinese firms are an integral part.

Here, we are trying to explain the tremendous growth of Chinese firms without referring to the standard micro approach of the growth theory because China has many idiosyncrasies, and we advance that the role played by foreign direct invest investment/ FDI flows and the support of the State requires a specific approach. Hence, we emphasize the pivotal role played

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by FDI – both flows received and issued by China – in such expansion. In particular, we highlight the critical vehicle FDI represented for Chinese firms to acquire or augment their resources and capabilities, at home and abroad, in order to boost their competitive edge. Of course, FDI was not the only channel for Chinese firms to get required assets inasmuch as Sino-foreign partnerships and diverse agreements were also used, among others modalities, whatever they were operated inside China or abroad. If the acquisition of strategic assets is not the exclusive motive for FDI outflows, we will show that they play a key role, especially in industrial countries.

The actual experience of the Chinese economy is probably unique in its magnitude and dynamic. What is also atypical, at least to such a level, is the extensive role played by Chinese authorities – through diverse channels – to support the growth of domestic firms, to facilitate the transfers of technology and know-how from foreign investors, and to promote the investments abroad to strengthen Chinese competitive advantage and performance.

The linking of the growth of Chinese firms, which is basically a micro issue, to aggregated data of FDI was motivated by the need to get a better understanding of their behavior in a rapidly changing environment. Further, this approach was completed by data compilation in the last section devoted to outward FDI flows due to its novelty and size. Last, we combined genuine data as turnovers or the amounts of investment, with qualitative data such as the modalities of investment.

The paper is structured as follows:

First, we explore the underlying forces and the meaning of the quest for strategic assets by Chinese firms.

Second, we show, through the FDI flows China received since its opening to the rest of the world in late 1970s, the channels that gave Chinese firms the opportunity to acquire skills and expertise, as well as the government endorsement to facilitate their implementation.

Third, we consider the investments made by Chinese firms towards industrialized countries and more specifically towards Europe since the beginning of the millennium in order to get and/ or augment strategic assets. And we provide illustrations from compiled data.

1. THE SEARCH FOR STRATEGIC ASSETS : AN ANALYTICAL PERSPECTIVE

In the management literature, strategic assets as a whole – i.e. R-D qualifications, managerial capabilities, organizational skills, marketing expertise, brands or reputation – are viewed as the core of the competitive advantage of firms. This is particularly visible in a growing number of sectors where competition is not only founded on prices but growingly on other factors, e.g. the differentiation of goods or services sold.

Strategic assets are not homogeneous as each component has particular characteristics and determinants: what they have in common is that they allow to operationalizing the competitive advantage of the firm and, for a large part, require to be protected through stringent intellectual property rights.

Strategic assets are obtained either through own cumulative experiences or through external modalities, i.e. the set-up of joint-ventures or the takeover of firms or subdivisions. The former is a long-lasting process and is often coupled with the search of strategic assets outside the company to move up the value chain. The latter is time-saving but requires firms to have substantial absorptive and learning capabilities.

The literature on multinational companies, from the pioneering work of Hymer (1960) to Dunning (1977, 1988, 1995), Porter (1990), Caves (1996) or Buckley and Casson (1998), has stressed the pre-requirement for firms aiming at setting up units overseas to detain relative ownership-specific advantage. However, this constraint has recently been lessened to take into consideration globalization that allows firms from emerging or developing economies to accelerate their internalization move (Mathews 2006). Indeed, the multifaceted globalization has extended and facilitated the ways firms can acquire critical assets.

When considering literature on development in general along with the impacts of FDI flows on developing host countries, scholars have evolved from a critical point of view, and in some case, rather a political stance, to a more accommodating view. Further, multilateral institutions such as the World Bank, IMF or the OECD have systematically advocated the coming of foreign companies in developing countries, stressing the numerous clear-cut impacts, such as capital infusion, new jobs and skills, and technologies along with more efficient manufacturing skills and managerial capabilities.

The notion of ‘reverse FDI’ is sometimes used to characterize the investments made by firms from emerging economies within developed countries. Two main motives are put forward: first, strategic asset-seeking along with the research of proximity with centres of excellence to improve their capabilities along the value chain; second, the access to new markets (Luo &

Tung, 2007). It is sometimes underlined that emerging investors go abroad to overcome their own disadvantages, such as the lack of technology or management know-how (Moon & Roehl, 2001). Similarly, Filippov and Saebi (2008) pinpoint the capacity of Chinese firms to convert their 'competitive disadvantage' (no brand, no fame, no efficient distribution networks and lack of organizational capabilities) into competitive advantage, and therefore to offset the incumbency advantages on the part of large MNCs.

However, one must keep in mind that FDI is a learning process which requires to following successive stages, especially for the investors from emerging countries at the beginning of their internationalization path (Cantwell 1990). The experience accumulated by a firm is a major determinant to invest abroad, and the hierarchy and the combination of its motives generally evolve over time through different steps (Di Minin, Zhang & Gammeltoft, 2012).

In a first step, Chinese firms realized that they could not rely solely on their domestic forces and partnerships with foreign companies to develop and upgrade their existing products and activities. So, they made the decision to invest abroad in order to bridge the technological gap and also to become more familiar with the sophisticated standards of Western countries.

In a second step, they exploited in China the technologies acquired abroad, and tried gradually to go beyond imitation and promote indigenous innovation before mastering advanced technologies. By doing so, they got an edge on their competitors, whether domestic or foreigners. Such process is in phase with the two-stage theory proposed by Bin and Tao (1997) for the newcomers with, first, an 'experience phase' and second, a 'get the profits stage'. During the former, the firms invest abroad to make use of the host country's advance technological resources and tap specific assets allowing them to gain experience and improve capabilities. During the latter, the investors become more mature and experienced. They also increased efficiency to reap economies of scale and make profits: so, they enter the 'get the profits stage'. A similar approach is analyzed by Wang and Fu (2009) while considering the investments made by emerging investors in industrialized countries. They highlight two categories of FDI: one, 'learning-oriented', and the other, 'competitive strategy-based' aimed to reach a leading position in the home country or at the international level.

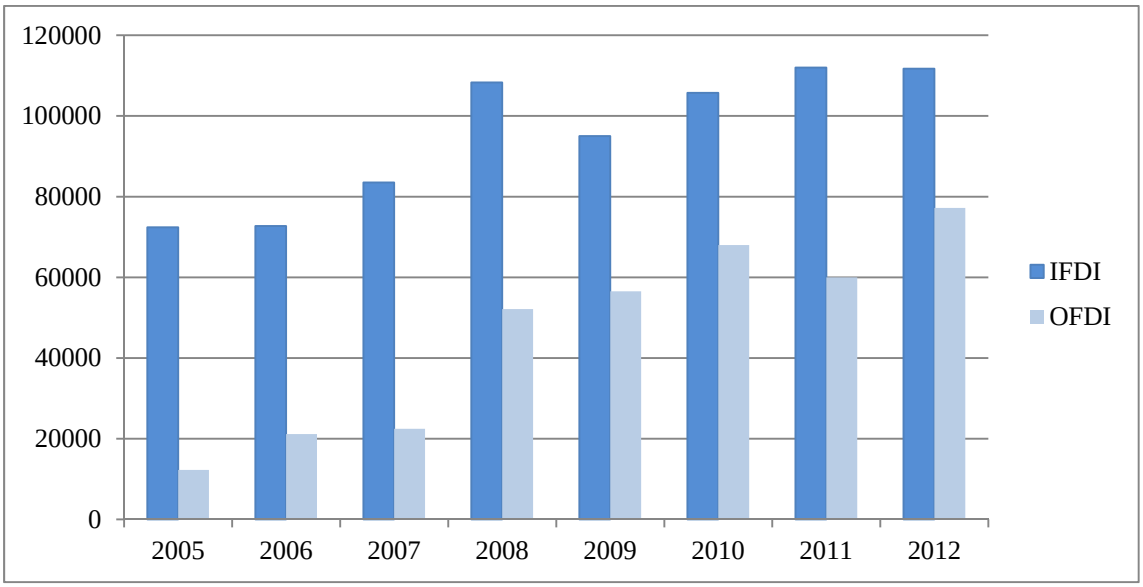
The case of China is particularly interesting to analyze as its own experience saddles the contributions of the two dimensions of FDI – inward and outward – in its quest for strategic assets. Indeed, FDI has been instrumental to the catching-up of Chinese companies. They have benefited both to their direct (partnerships and joint-ventures) and indirect contacts (spill overs) with foreign firms in China, and to their investments abroad, especially in

industrialized countries, through mergers-and-acquisitions or even *Greenfield* investments (R&D facilities or production units).

If the process as a whole was unbalanced in the 1980s-90s with large inward FDI flows and small amount of outward FDI flows, the picture changed in the 2000s with OFDI flows sharply increasing, before becoming more and more balanced after the global financial crisis, while, in parallel, the scope of the determinants of OFDI was enlarged.

The ratio OFDI / IFDI jumped from 17 percent in 2005 to 70 percent in 2012. According to the Chinese authorities, it is expected to be close to 100 percent by 2015-2020 (Figure 1).

Figure 1. Chinese FDI Inflows and Outflows, 2005-2012 (Millions of dollars)



Source: Balance of Payments of China, 2005-2012

To be sure, the role played by the Chinese authorities for the stimulation of FDI and technology transfers from foreign firms, and their support to facilitate Chinese investments abroad has been, and remains central.

Recently, the quest for strategic assets has become a major concern of public officials: it is linked to the willingness to foster the innovative capability of Chinese companies. Indeed, if Chinese companies excel in price ultra-competition strategies (Zeng & Williamson, 2007), it is not a sustainable strategy at a corporate level when sectors are getting mature and when time comes to make profit. In this respect, the orientation of the national economy towards a more knowledge-intensive economy put a focus on strategic assets as R&D expenditures, innovation skills or patents (OECD 2007).

Last, Chinese firms are both the beneficiaries of competences or strategic assets, and involved in the quest of strategic assets. In this case, different strategies are at play, mirroring the real nature of their ownership. On the one hand, State-backed enterprises, particularly core State-Owned Enterprises (SOEs), except from the natural resources' sectors, which have largely benefited from inward FDI flows after China adopted a more liberal regime for FDI in 1992, are now chasing strategic assets overseas to keep increasing their competitive advantage. On the other hand, private enterprises, which access to strategic assets through inward FDI have been hampered due to the national specific context during the 1990s (Huang 2003), are now trying to catch-up by accelerating their presence abroad. The rationale is double: first, to lift their competitive advantage on international markets; second, to reinforce their strength on the internal market which presence is vital for their global reach. As a result, strategic assets are growingly targeted in developed countries in a context where incumbent multinationals or local companies are selling assets due to financial distress or restructuring necessities (Deng 2009).

2. INWARD FDI: A TRADITIONAL LEARNING CHANNEL FOR CHINESE FIRMS

The acquisition of strategic assets by China and Chinese firms is not the only contribution of inward FDI, but we find it at distinct periods, except at the very beginning in the 1980s (Table 1).

Table 1. Contribution of FDI to the Chinese economy and domestic firms

Period and Context	FDI contribution to the Chinese economy and domestic firms
1980s: Opening **Permitting FDI** Very beginning of FDI in Special Economic Zones (test, FDI seen in a cautious way)	**Capital** **Support to the development of China** **Support to international trade** / foreign currency reserves **Basic know-how and staff training**
1990s: Take-off, restructuration of SOEs, more liberal preferential treatment for foreign firms FDI become significant A way to foster and accelerate the catch-up of the Chinese economy Sino-foreign JVs and partnerships encouraged Deal "Technology transfers/ Access to the vast potential of China consumer market" Many incentives to FDI up to 1996	**Technologies, know-how and capabilities** **Employment and staff training** **Productivity and efficiency improvement** **Growth opportunities** **International integration of the Chinese economy** (support to exports, foreign currency reserves)
2010s: The second largest economy worldwide **More selectivity on FDI** Selective FDI (quality investments favoured), in phase with Chinese governmental priorities and self-sufficiency: priority sectors and areas (*Go West* policy) Incentives for high-level technology transfers and creation of R&D centres by foreign firms Deal "Technology transfers/ Access to Chinese market" increasingly prevailing	**Strategic assets augmenting**: technologies, know-how, capabilities, productivity improvement, etc. **New top of the range activities in China** (that Chinese firms don't yet master) **International integration of the Chinese economy** (global supply chains…)

Source: Compilations by the authors

2.1. The acquisition of strategic assets

Besides substantial 'round-tripping investments' [2], the first genuine FDI flows received by China following the opening of its economy were made by ethnic small-and-medium enterprises from closed countries, i.e. Hong Kong and Taiwan. They operated assembly lines in labour-intensive industries (textile-clothing, household appliances), and were localized in tax-favoured Special Economic Zones where they benefited, for exports, from extensive open regulations and the exemption from duties on imported inputs (Huang 2003). As a result, spill over effects were not significant.

The global landscape that emerged in the second half of the 1990s changed the international division of labor and encouraged large conventional MNCs to increase the fragmentation of

[2] By establishing an affiliate in Hong Kong they get the status of 'foreign-invested enterprise' when they make investments back in mainland China.

their activities worldwide [3]. As a result, a new business environment came out, involving an unprecedented expansion of productive network relations, as well as a major change of the strategic context of knowledge's ownership (Sturgeon 2001), whether through transmission or dissemination (Saliola & Zanfei, 2009). Within this context, the firms from industrialized countries, traditionally well-endowed in advanced knowledge and know-how, have been conducted, both passively and actively, to disseminate parts of their knowledge. Chinese firms have largely taken advantage of this trend while China ranks among the top host country for FDI flows since 1993 It is the Southern country that has received the most technological capabilities through FDI and cross-border contacts established with foreign firms (Luo 2004; Miesing, Kriger, & Slough, 2007; UNCTAD 2010).

Institutions such as the World Bank or the IMF have considered the FDI inflows as a main driving force behind the Chinese 'economic miracle' (World Bank 1997; Tsen & Zebregs, 2002), as much as numerous scholars (Lardy 1992, 1995; Naughton 1996; Lemoine 2000; among others).

The diffusion of knowledge from foreign MNCs to Chinese firms

Multinational companies are recognized as being critical vehicles for the creation and the dissemination of technological knowledge and expertise through their various partnerships and investments with the local firms of the countries where they operate.

The 'Linkage, Leverage, and Learning' framework stressed by Mathews (2006) fit particularly well the experience of Chinese firms. Thanks to their 'Linkage' through FDI or partnership with foreign firms, the latecomer Chinese firms have got the possibility to acquire knowledge, to compensate their limited resources, and to receive 'Leverage'. Repeated over and over, these sequences of 'Linkage' and 'Leverage' have enhanced the capabilities of Chinese firms through a path of somehow industrial 'Learning'. Furthermore, most scholars juxtapose this theory with the one of Dunning to characterise Chinese FDI abroad.

Chinese firms have shown a great ability to absorb, assimilate and apply for commercial purposes the technologies they acquired through their foreign contacts. They also resorted to copies and imitations, and exploited the inner workings of reverse engineering prior to innovate by themselves (Bell & Pavitt, 1995). Although the art of copying is part of the

[3] Back then, many multinationals have developed their operations of outsourcing, subcontracting agreements, partnerships, in developing countries such as China in order to get lower production costs.

Chinese civilization (*Shanzhai* culture [4]), foreign investors have great difficulties accepting it: all the face-to-face meetings [5] we made in China mentioned this fact as the main problem they encountered in China and the increased competition it resulted for them since the 2010s. However, Chinese firms do not hide from having recourse to copying: they use it to recall that there is some ability to intelligently imitate the others, and that it is a behavior prevailing since the dawn of time. Before them, the US companies did the same at the end of the 19th century, as well as the Japanese firms in the 1970s-80s, or the Korean firms in the 1980s-90s. Shenkar (2012) reminds that: "firms such as Apple, Microsoft, Visa, Wal-Mart and McDonald's have also copied and improved concepts".

To sum up, China has demonstrated the efficacy of what may be called a 'FDI-led industrial take-off' strategy (Ozawa 2011).

From Chinese assimilation of foreign technologies to indigenous innovations

Chinese firms have been particularly clever to develop a business model combining low prices, mass consumption, reduced margins and innovation (Zeng & Williamson, 2007). Undeniably, they have successfully managed to improve the borrowed foreign innovations and started to make 'native' innovations or 're-innovations' (Lazonick 2004).

At the beginning, they adapted foreign technologies to their environment, culture and purchasing power of their consumers. By doing so, they have contributed to "create new products" – i.e. goods responding to new needs, involving new production methods and implying undeniable performances in terms of value for money (Lall & Albaladejo, 2003). Also, they carried out experiments to support the development of their products: generally, they rapidly test the products on their huge market, before incorporate customer's feedback and improve them.

While the innovations of the MNCs, particularly from OECD countries, rather concern 'high-end' products with high prices, a peculiar feature of Chinese firms is to target 'low-end' segments in novel ways, implying in many regards a new paradigm of innovation (Zheng & Williamson, 2007). If one can talk about innovation here, according to the criteria of Schumpeter, it is due to the fact that the new products fit the demand of new consumers – i.e. social groups who could not afford to buy similar items before.

[4] Literally, it means 'mountain stronghold', i.e. the mountain stockades of bandits that is far away from official oversight. Nowadays, it relates to a counterfeiting subculture.

[5] Realized in Beijing, Chengdu and Wuhan, in the second half of 2011.

For Mathews (2006) a country or a firm arriving late on the road of the industrial development has nevertheless a potential advantage: that consists of direct access to advanced technologies, and of the capability to absorb them faster and at a lower cost than the very firms that first developed them.

Last, we can notice that the acceleration of technological progress was not problematic for these newcomers, but rather gave them the opportunity to assert in new sectors, such as Information and Communication Technology, for instance.

2.2. The major role played by the Chinese government to facilitate technology and know-how transfers from foreign firms

The capacity of governments to stimulate growth and to create an appropriate environment on which firms can construct their specific advantage is well documented (Porter 1990). Indeed, the technology transfers from first-world MNCs, have been possible thanks to the significant advantages China was able to provide them, namely, low-cost production, cheap sourcing options, or access to a large potential of an internal consumer market (Saliola & Zanfei, 2009). And the economic or political fragmented nature of it was more advantageous for foreign companies than for domestic firms, particularly small or medium companies, which faced huge transaction costs on factors or products markets.

On the whole, the Chinese priorities have evolved over time with a framework quite conducive to innovation which included different steps successively aimed to: catching-up, to get autonomy, to move upmarket and to step into world top enterprises (e.g. *Fortune Global 500*) [6].

A catching-up drive in the 1980s-1990s

In the aftermath of the Reform and Opening up of the Chinese economy put in motion in 1978 by Deng Xiaoping, the priorities of the officials have been to promote the development of the national economy, and to address the shortage of capital (domestic savings and foreign exchange reserves), and of technology.

A relevant industrial policy was implemented and planned by targeting priority sectors for the national development and the restructuration of the whole State sector launched in the second half of the 1990s. The obligation for foreign companies to set a joint-venture with local

[6] It is the case in the automotive industry where Chinese authorities have explicitly put a target of 40 % for 2015 for the domestic market share of Chinese companies.

companies was used on a large extent to promote the transfer of knowledge and managerial capabilities (Buckley *et alii*, 2004). At the same time, different measures have been planned, aimed to improve the educational system, the innovation national system, and the industry. The improvement of Chinese human capital was intended to benefit to the domestic firms and also to boost the attraction of foreign investors (Box 1).

Box 1. **Main priorities of the Chinese government in the 1980s-1990s**

Education and R&D
- Significant efforts devoted to educational and research infrastructures
- Role of science and technology highlighted in the national development
- A specific plan (1994) to support 100 R&D private centres, in partnership with universities [7]
- Incentives and subsidies to buy foreign patents
Industry
- Restructuration of SOEs
- Priority sectors
- Stimulate the collaboration of enterprises from the same industry, and the standardization of the inputs
- Support to 'national champions' (subsidies, soft loans, etc.)
- Public investments in the industry
Infrastructure
- Significant efforts to develop transport infrastructures (by air, rail and road)

Source: Compilations by the authors

By early-mid 1990s, Chinese authorities have capitalized on the comparative advantages of the Chinese economy – low labor cost and emergence of a large internal market – to exercise a bargaining power and stimulate FDI flows [8], and to increase the requirements to get appropriate technologies from foreign firms.

FDI authorizations to foreign companies have started to be conditioned to substantial technology transfers towards Chinese firms, mostly State-backed enterprises. That was supposed to be a 'win-win' scheme for foreign firms where each deal was managed in the following terms: 'your technology against an access to our large potential market'.

[7] Legend (computers, future Lenovo) was created by 11 researchers from the Chinese Academy of Social Sciences. Founder (computers, since restructured company) was established around the Institute for Computer Science, Social Informatics and Telecommunications. Zoomlion (mechanical engineering) has been created from Changsha Construction Machinery Research, a research institution specialized in mechanical, etc.

[8] From the 1980s, Special Economic Zones were established on the coastal front in order to attract foreign investors with many incentives: a very attractive taxation, an unprecedented administrative flexibility, and big facilities to export. Soon, foreign investors have begun to invest massively in China, attracted by these new opportunities together with low Chinese labor costs. This policy has encountered quite positive results and since 1984-85 has been intensified and extended to news areas (coastal cities, Shanghai, Beijing, etc.).

Foreign companies have, willy-nilly, agreed to play according to the rules set up because of the promising Chinese market. By devoting an irreversible opening of the country, China's accession to the WTO in 2001 marked a new milestone for foreign companies willing to enter or expand activity in China.

More selectivity for inward FDI since 2002 to 2008, more autonomy after

The increase selectivity of Chinese authorities towards FDI flows was accompanied by the rapid development of the national economy and the intent of foreign firms to have a presence on the Chinese market 'at any cost'.

With the passing years, Chinese authorities have taken advantage of their favorable position to raise their requirements. As a consequence, they have fostered Sino-foreign partnerships and the upstream technology transfers by foreign MNCs, as well as the set-up of R&D facilities in China. They have also instilled competition between foreign firms to pick up the most 'cooperative' of them.

Even if the global financial crisis of 2008 hit severely the Chinese economy through its exports and induced a swift reaction by Chinese authorities (Box 3), it also provided an opportunity to lift up the preconditions while the traditional industrial markets of the foreign investors were collapsing, in very contrast with the resilient Chinese market.

The solicitation of the Chinese government for technology and know-how transfers from foreign companies willing to invest in China has been coupled with other requests related first, to their localization and incentives to fit with the 'Go West' policy [9], and second, to their activities that had henceforth to match the priorities of Chinese authorities, put forward in the 12th Five-Year Plan (2011-2015) [10] – i.e. new energy, environmental protection, high-tech/software, agriculture, new materials, etc.

It became also imperative for the Chinese authorities to do away with the 'low cost and poor quality' era. If they had such idea in mind during the past years, they were not able to achieve it. Actually, the global financial crisis was somehow timely by providing them the opportunity either to rebalance the economic growth – from an export-driven regime to a more domestic consumption-driven one – or to switch from 'the factory of the world' to 'the laboratory of the

[9] Set up in 2000, its goal was to help the western part of China to catch up with the coastal regions which greatly benefited from the Opening up of the economy and the Reforms of 1978. The pillar of this policy was twofold: first, the construction of infrastructure (e.g. transport, hydropower plants); second, the attractiveness of foreign companies.

[10] For example, the French automobile company PSA had to switch to the production of electric vehicles to have its second joint-venture authorized in 2011.

world' along with from the 'made in China' to the 'designed in China'. As a result, Chinese firms were urged to climb in range or to increase their share in the global value chains.

Box 2. **Main priorities of the Chinese government since 2002**

Economy
- To install a sustainable and robust economy
- To encourage Chinese firms to embrace a global view, and to compete with incumbent multinational companies
- To support the 'national champions'
- To build a full-fledged, high-performing national innovation system. The goal of the Medium to Long-Term Strategic Plan for the Development of Science and Technology (2006) was to make China an 'innovation-oriented' society by the year 2020, and one of the world's leading 'innovation economy'. The plan also emphasized the need to develop capabilities for 'home-grown innovation'
- To stimulate 'high-end' products
- To pursue the *Go West policy* for a more balanced growth at a regional level
- To pursue the *Go abroad policy*: to improve the quality and the brand image of Chinese products, to get natural resources, new markets and new technologies

Following the global financial crisis
- The stimulus package of January 2009: economy refocused on domestic consumption
- The 12th Five-Year Plan: quality growth, welfare, accelerated development of innovation and 'high-tech' activities
- Chinese market for Chinese firms when possible
- New activities (environment, software, finance, etc.)
- Increasing wages
- Emerging of a consumer society

Infrastructures
- Expansion of the number ok kilometers of highways: from 0 km en 1990, 10,000 km at the beginning of 2000, 40,000 km at the end of 2005 to 85,000 km at the end of 2011
- Expansion of the railway network: 120,000 km by 2015 (including 16,000 km of high-speed railways)

Source: Compilations by the authors

3. OUTWARD FDI: A GROWING QUEST FOR STRATEGIC ASSETS

The motives of Chinese firms when they invest abroad are diverse, and evolve over time according to the context (international and domestic). They fit the common taxonomies of FDI motives, and, among others, that of Dunning (1988, 1995, 2001), that is: resource-seeking, strategic asset-seeking (or augmenting), market-seeking and efficiency-seeking. However, we find occasionally some different hierarchies, priorities and mix of motives – when compared to those of the MNCs from industrialized countries – due to a specific background, especially at the beginning of their international expansion, and in the frame of a dynamic process of particular importance in the case of the rapid growth of the Chinese economy (Table 2).

We focus here on the quest for strategic assets by Chinese firms abroad through outward FDI, because it held an important place since the beginning of the millennium within FDI flows towards industrialized countries, as such, or combined with others motives. Such a quest corresponds either to their needs or to the shortages of the Chinese economy (Deng 2007). Obviously, it is a new strategy as this motive was rare for the incumbent MNCs which generally had ownership-specific advantages before investing abroad.

The search for strategic assets often goes hand-in-hand with the access to markets, particularly in Europe or in the United States.

The motives of Chinese outward FDI have evolved from its very beginning in the 1980s (Table 2). First, they reflected the needs of the national economy driven by a buoyant manufacturing sector, which basic needs in natural resources have escalated and diversified, and therefore could not be satisfied by local supply [11]. Second, they reflected the growing distinctiveness of Chinese companies according to their ownership, with quasi pure private companies and hybrid companies expanding along with large State-backed companies. Indeed, if private Chinese companies are on a large extent more market seekers, Chinese State-backed enterprises are generally more attracted by countries with large endowment in natural resources. Since 2002, the motives mirror more and more the will of the Chinese authorities to not only have 'national champions' but definitively world-class enterprises. Actually, the rationale goes beyond pure economics as Chinese authorities increasingly use OFDI flows – which are planned to reach 150 Billions of dollars a year in 2015 – to bolster China influence around the world.

The quest for strategic assets includes to set up or to pick up in particular locations suitable facilities – R&D centres, production and distribution facilities – which help to improve the efficiency and the competitiveness of Chinese companies. Further, by dispersing design and production globally Chinese firms are following genuine global strategies (Andreff 2013).

[11] However, this motive is still central: indeed, reliable supplies of oil and gas are part of the 'core interests' of the current China development and foreign policy.

Table 2. Contribution of OFDI to the Chinese economy and domestic firms

Period and Context	OFDI contributions to the Chinese economy
1980s: Opening OFDI almost non-existent	**Access to natural resources** *(mainly in developing countries)*
1990s: Take-off, restructuration of SOEs OFDI almost non existent	**Access to natural resources**
2000s: **Booming economy** Chinese firms assert themselves, SOEs lead the way 1st significant OFDI flows (*Go abroad* policy, access to WTO)	**Access to natural resources** **Access to strategic assets** *(mainly in industrialized countries)* that can't obtain through IFDI: new technology, brands, skills, patents, IP rights; to be the best in China **Access to new markets and sale networks** (mainly in industrialized countries): to support exports, to circumvent trade barriers
2010: Second world economy Chinese firms are increasingly qualified and mature, aggressive and ambitious OFDI encouraged and always more diversified Normalisation of Chinese OFDI	**Access to natural resources** (*developing countries)* **Access to strategic assets** *(industrialized countries*) to always go up in range, to be the best in the world: more **asset-augmenting** than asset-seeking (high-end goods and own brands) **Access to new markets** ***(****industrialized & developing countries)* **to circumvent trade barriers** (rising protectionism against China) **More efficiency** – higher margins, lowest operational costs – *(industrialized & developing countries)*

Source: Compilations by the authors

FDI flows received by China were generally not sufficient to meet the demand of the local firms in expertise and technologies for different reasons. First, due to significant knowledge exposure, foreign firms were often reluctant to transfer their superior technologies in China (Nolan 2001; Guan *et alii* 2006); interestingly, Ozawa (1991) advised Japanese firms not to transfer in their foreign affiliates up-to-date technologies. This general recommendation was exacerbated in the case of China due to fledging intellectual property rights, not to mention extended copying practices (*Shanzhai* culture). Second, the fact that Chinese authorities have continuously favored public companies as recipient of technology and know-how transfers from foreign companies encouraged private companies to go abroad to find better opportunities for their development.

Therefore, from the beginning of the millennium, numerous Chinese companies made the decision to invest overseas. They could afford to make such investments thanks to the process of technology accumulation following the FDI flows previously received (Lall 1983), money in hand, and also the support of the Chinese government – 'Go abroad' policy (1999), and the recommendations of the 12th Five-Year Plan (2011-2015) encouraging OFDI and cross-borders mergers-and-acquisitions [12]. However, in some sectors they were pulled out due to crowded markets and cut-throat competition: for example, there are currently 170 automotive manufacturers in China.

Indeed, the experience Chinese companies had across Europe since the beginning of the millennium has evolved a little.

During the 2002-2007 period, Chinese firms were quite newcomers and lacked experience. They chased strategic assets in order to compensate weaknesses at home, to close their technology gap with Western firms and to get international recognition. In particular, Chinese firms wanted to improve their capabilities in response to the exacerbated competition that prevails in the domestic market. Since 2008-2009, in the wake of the global financial crisis, new priorities have been set to end the paradigm of 'low and poor quality products', and to improve the share of China in the global value chains. This trend has even been reinforced since 2011-2012 although we lack set-back and compelling evidence. What is new is that Chinese investors start to search for profit. They are also more interested by the European market in order to get strategic assets, as regulations and political context are viewed as less stringent than in the United States (Rosen & Hanemann, 2009).

In parallel, Chinese companies continue to take advantage of the numerous technology and know-how transfers from the MNCs, which have intensified in China since 2009.

3.1. The acquisition of strategic assets in Europe by Chinese firms through M&As

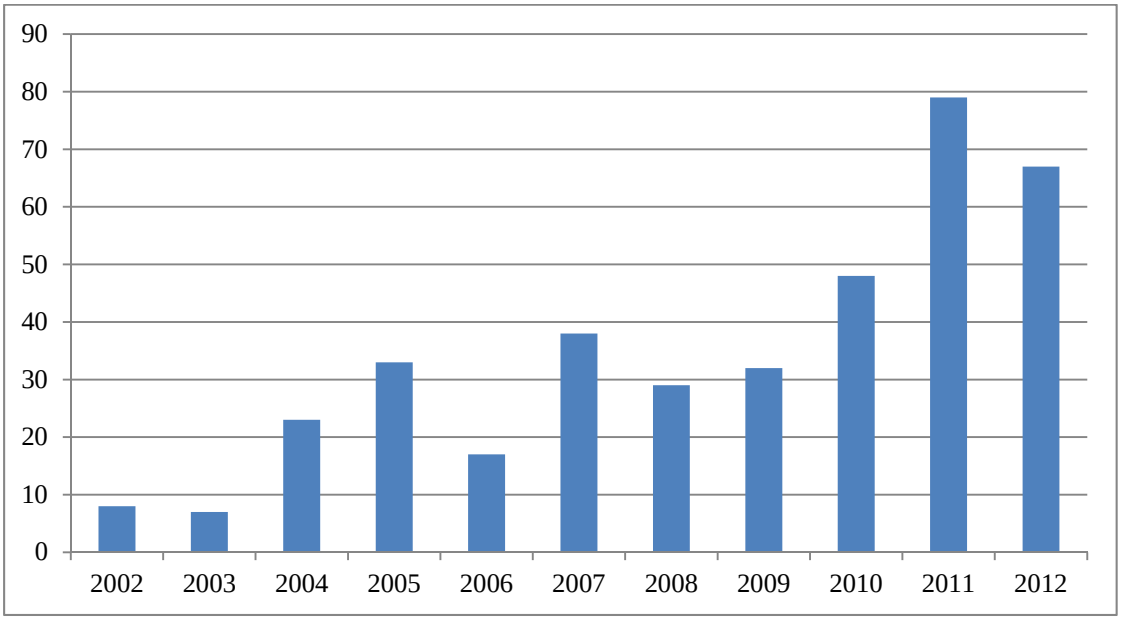
At the beginning of the millennium, Chinese investments in industrialized countries were quite unusual, even if some European acquisitions of old flagships and premium brands struck the public opinion and the media as the buyers were newcomers (Madsen & Servais, 1997). This was the case for TCL which bought the French companies Thomson TV and Alcatel Mobile, and the German Schneider TV in 2003-2004, for Weichai Shandong buying Ferretti

[12] In October 2004, two influential government bodies, the National Development and Restructuring Committee, and the Export-Import Bank issued a circular to especially promote cross-borders M&As that could enhance the competitiveness of Chinese firms (Deng 2009).

yachts (Italy) in 2004, or China Bluestar acquiring the French Adisseo (animal nutrition) and Rhodia Silicone (silicone) in 2005, or Fibers Worldwide in the United Kingdom in 2006.

Cross-borders M&As are often viewed as a short-cut to enhance the global reputation of the purchaser, to improve its capacities and skills, and to accelerate its learning process (Luo and Tung, 2007). During the last years, many Chinese firms have acquired, totally or partially, an increasing number of European firms with plants, top of the range technologies and premium brands. Often, these acquisitions gave them access to R&D facilities: that was the case for the acquisitions made by China BlueStar. These units have generally been maintained or even reinforced over time to take advantage of their accumulated expertise through codified and tacit knowledge, and also extensive scientific networking.

Figure 2. Number of European acquisitions made by Chinese firms in manufacturing, 2002-2012



Source: Calculations by the authors from *Thomson One* [13]

Since 2002, approximately 400 Chinese M&As [14] involving production or/and R&D facilities have been listed in Europe (Figure 2).

The Figure 2 shows that these M&As are on an ascendant trend with a contraction in 2006 following a need to take a break and also resulting to some failures (TCL, for example),

[13] Commercial dataset on M&A deals worldwide from Thomson Reuters.

[14] From Mainland and Hong Kong.

another shrinkage occurred in 2008 due to the global financial crisis and the resulting uncertain expectations and environment. However, the trend took a new orientation in 2009 as more of the half of the analyzed M&As have been made since then.

Overall, the increasing number of Chinese M&As in Europe can be explained by the evolution of Chinese firms and their access to abundant supply of capital – particularly State-backed companies – in a context of economic crisis which provides opportunities to acquire financial distress European companies or subdivisions.

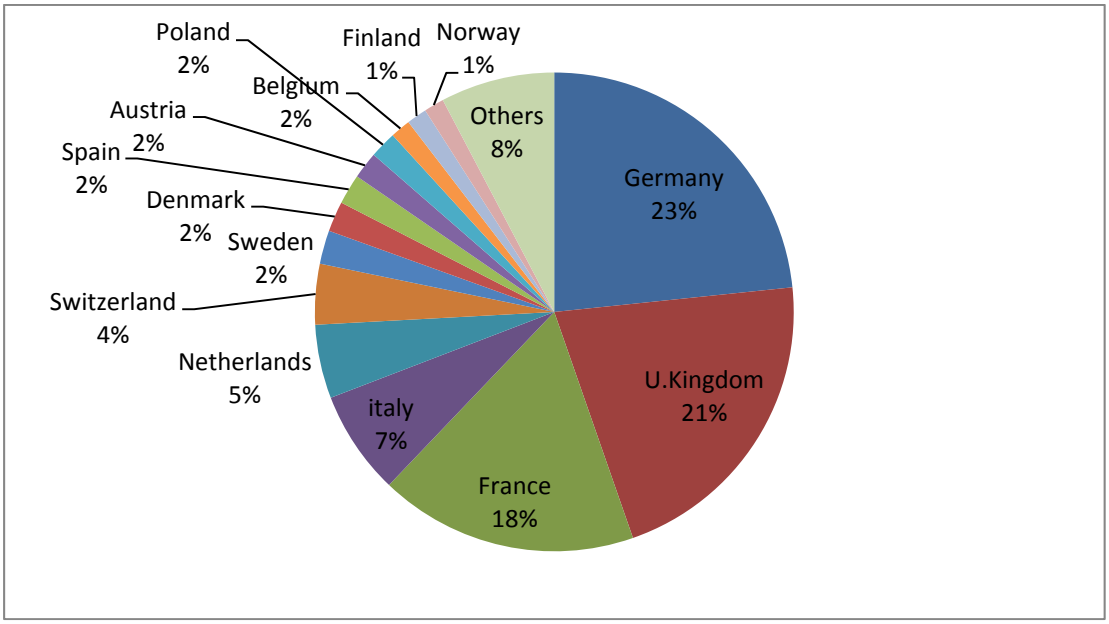
Interestingly, the acquisitions made by Chinese firms in Europe often follow former partnerships as it is illustrated by the following examples: China BlueStar for Rhodia Silicone (France), Chalkis for Conserves de Provence (France), Shengyang Machine for Schiess (Germany), Zoomlion for CIFA (Italy), Haitian for Zhafir Plastics (Germany), Sany Heavy for Putzmeister (Germany), YGM for Aquascutum (UK), or Lenovo for Medion (Germany), among others.

It appears clearly that a previous partnership with a European firm is a privileged vehicle to rapidly gaining a foothold in Europe. That also minimizes the risks of failure resulting from the 'psychic distance' and an unknown target company. This characteristic may explain why Chinese companies are commonly viewed as more risks-tolerant when compared with companies from other origin.

Main host countries and activities for Chinese M&As in Europe

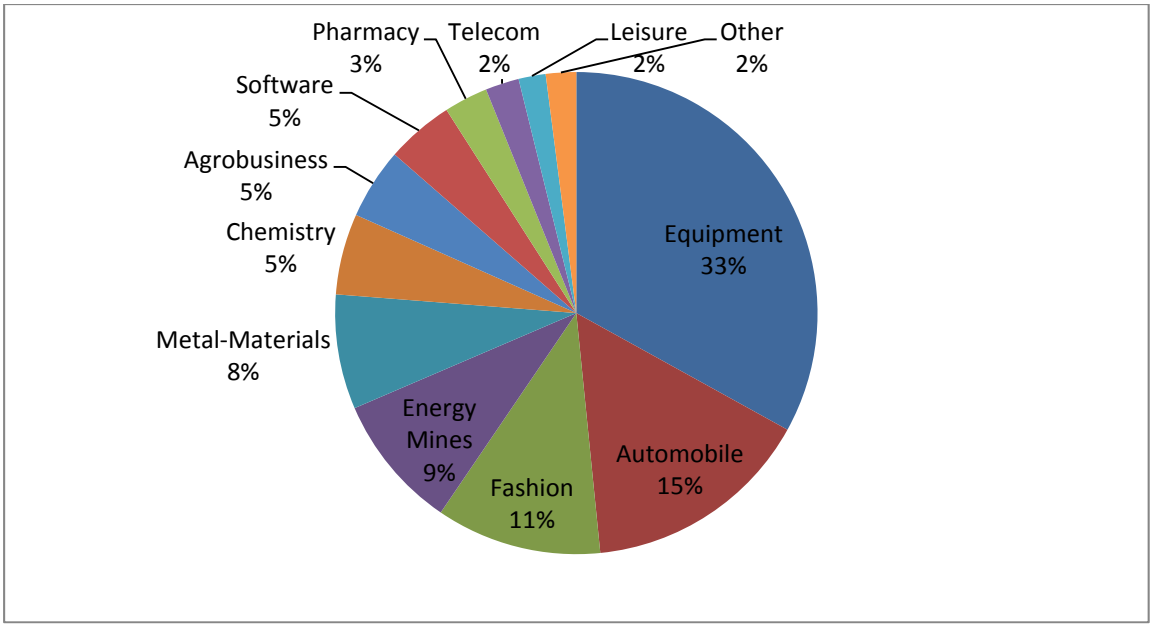
Without surprise, the largest European economies according to their size – Germany, United Kingdom, France and Italy – are the main host countries for Chinese M&As in Europe (Figure 3). The relative importance of the Netherlands can be explained by the localization of numerous holding companies due to a favorable tax treatment. This geographical breakdown is in line with the two main motives of Chinese investors in Europe: to have access to large markets (Buckley *et alii*, 2007), and to pick up specific assets in different activities or localizations: manufacturing in Germany, services in the United Kingdom, design in Italy, or luxury brands in France (Hay, Milelli & Shi, 2011).

Figure 3. Main host countries for Chinese M&As in Europe, 2002-2012



Source: Calculations by the authors from *Thomson One*

Figure 4. Main activities for Chinese M&As in Europe, 2002-2012



Source: Calculations by the authors from *Thomson One*

The sector of equipment as a whole is predominant with nearly half of the deals made since 2009. The rationale of these acquisitions is to facilitate and expand the access to markets overseas on one side, and to tap strategic assets on the other (Figure 4).

The automotive sector comes behind with half of the deals made since 2010. Likewise, the rationale is to pick up strategic assets with different strategies when taking into consideration auto-parts maker such as Johnson Electric, when acquiring Saia Burgess (Switzerland) on the one hand, or lead contractors such as Geely, when acquiring Volvo, on the other. Whereas the former is reinforcing its presence both at home and overseas, the latter brings back home the strategic assets to differentiate in a very crowded market.

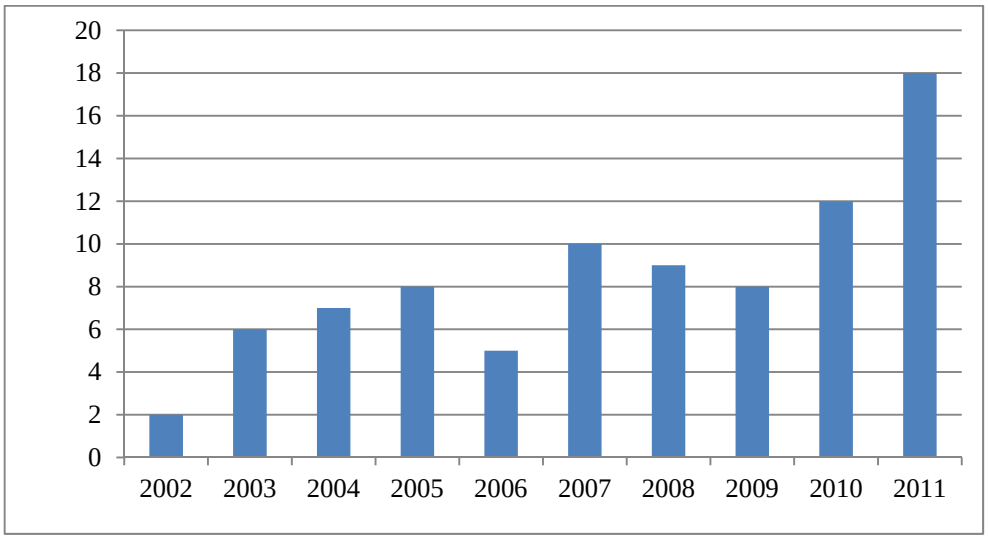
The acquisitions made in the fashion sector, essentially clothing, are generally older, but involve companies willing to integrate upward (design) and/ or downward (marketing skills) competences. By doing so, they search to grab a largest share of the value-added and more profits.

3.2 The acquisition of strategic assets in Europe by Chinese firms through the creation of R&D facilities

Since 2002, a growing number of Chinese companies got strategic assets in Europe through the set-up of R&D facilities, combined or not with a productive activity. This move was driven by Chinese firms willing to upgrade their products and improve competitiveness while rubbing shoulders with qualified personnel or initiating collaborations with Chinese research staff.

We listed about 100 creations of R&D centres in Europe for the 2002-2011 periods. Half of them have been created since 2008 and one third since 2010, with a record number of investments in 2011 (Figure 5).

Figure 5. The number of creation of R&D centres in Europe by Chinese firms, 2002-2011



Source: Calculations by the authors from *fDi Market* [15]

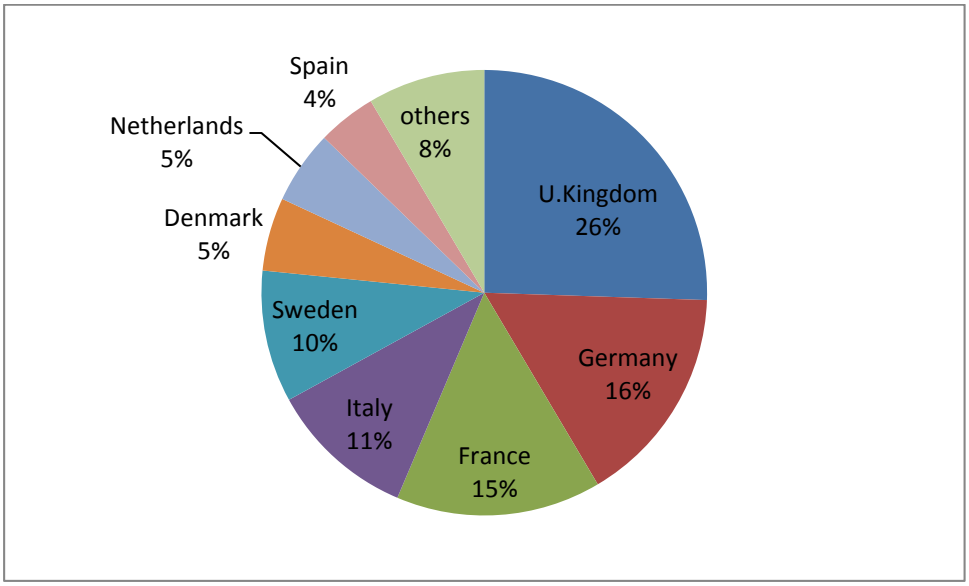
Main host European countries and activities for the set-up of R&D facilities by Chinese firms

The location choices for the set-up of R&D facilities are particularly appropriate to identify the attractiveness of a particular country.

The number of European countries for the establishment of R&D facilities by Chinese companies is expanding, even if five countries are coming up and reinforcing. The result was expected for four countries – United Kingdom, Germany, France and Italy – as there are the largest European countries, having, a priori, more opportunities in terms of localization, diversity of research domains, or qualified human resources (Figure 6). However, the United Kingdom is well ahead because of the quality of its academic institutions, the extensive networking between companies, be nationals or foreigners, and research bodies, and last but not least, the practice of English language. The attractiveness of Sweden is unexpected at first. Actually, it is due to a mix of factors: the presence of numerous scientific parks in dedicated fields (Kista Park in telecom), government policy openly supporting foreign R&D facilities, and a pool of qualified human resources.

[15] Commercial dataset on *greenfields* investments realized worldwide from Financial Times.

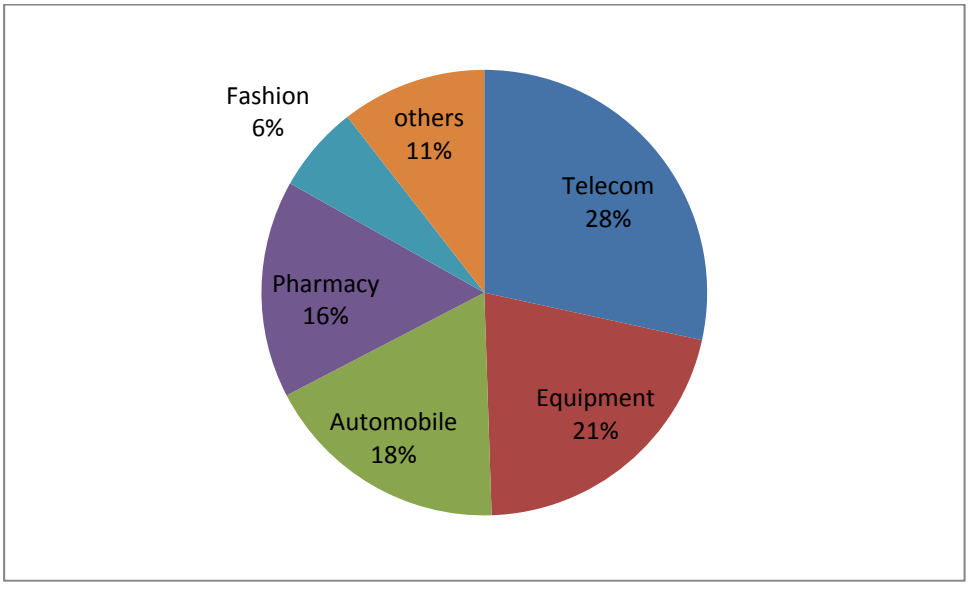
Figure 6. Main European countries for R&D facilities established by Chinese firms, 2002-2011



Source: Calculations by the authors from *fDi Market*

The preferred activities for the creation of R&D facilities in Europe concern the following sectors: telecommunications, equipment, automotive industry and pharmacy (Figure 7).

Figure 7. Main activities for R&D facilities established by Chinese firms in Europe, 2002-2011



Source: Calculations by the authors from proprietary data base

The primacy of the telecom sector is due to the presence of the two main Chinese companies from the equipment telecom sub-sector, Huawei and ZTE, which have already together around twenty R&D facilities across Europe.
Equipment also holds a significant share due to the dynamism of Chinese companies such as Haitian (injection molding machines), Haier (consumer electronics), Hisense (consumer electronics), Sany Heavy (construction machinery) or Xuzhou Construction Machinery Group (construction machinery), among others.

The best use of the European advantages

For the set-up of their R&D activities Chinese firms generally choose countries or areas endowed with the required resources, such as plenty of scientific connections, talented people or open-minded policies. For instance, Huawei and ZTE set-up their Swedish R&D facilities in the phone-mobile cluster created around Ericsson headquarters in Kista (Stockholm), Beijing ROSE set up its R&D centre in the Hoechst pharmaceutical industrial park (Frankfurt), Jac Anhui and Chang'an have created their first R&D centres abroad in Torino, the Fiat stronghold, and Chinamex established R&D facilities in Wigan (UK), an illustrious heart in the United Kingdom for the traditional cotton and textile industry.
All these investments are seen by Chinese companies as opportunities to create synergies and to found new technical partners across Europe, and, at the end, to expand their business, both in China and overseas.

CONCLUSION

The investments received and issued by China allowed its firms to get strategic assets they need for their development, resulting in increased market shares and overall sales either on domestic market or world markets.
If inflows FDI were the main channel for the acquisition of strategic assets up to the 1990s, outflows FDI – essentially towards developed economies – have been combined with them since the 2000s. The context of crisis in industrialized countries prevailing since the end of 2008 has still stimulated FDI in both directions for China. And contrary to the 'Investment Development Path' proposed and revisited by Dunning and Narula (1998), there is enough factors at play for both trends, with Chinese firms continuing to put a high priority on the acquisition of strategic assets in the coming years. However, such a focus combined with a

high level of competition may hamper for the coming years the diffusion of the required know-how and technologies within the Chinese economy, which have still plenty of inefficient sectors or firms.

Furthermore, motives of Chinese firms when they invest abroad are increasingly closer to those of incumbent MNCs except, to some extent, the importance of the quest for strategic assets. Indeed, they are still lacking specific assets – e.g. superior technology, world-class brands or international managerial capabilities – but they can rely on a large surplus of domestic savings and foreign exchange reserves to reduce the gap.

Chinese authorities are playing a leading role: indeed, they still have a heavy hand on economic policies, particular through the Five-year plans, State-backed enterprises, Sovereign Wealth Fund or policy banks. They put priority on national development and favor their domestic firms when possible, particularly in strategic sectors (defense, telecommunications, etc.). That may explain why, paradoxically, the FDI's regime for inflows is getting increasingly regulated despite the acceptance of the obligations to the WTO in 2001.

As the Chinese economy and Chinese firms are developing and maturing, both aspects of FDI are getting interrelated, particularly through the acquisition of strategic assets. Likewise, FDI is growingly intertwined with the Chinese system of innovation. Indeed, the increase of R&D expenditures at firm level and the implementation of new public institutions for research by the Chinese authorities since 2006-2007 had two distinct effects on FDI flows. On the one hand, they stimulated FDI outflows and contributed to increase the capacity of Chinese firms, to better identify their technological needs, and to absorb innovations made outside. On the other, they encouraged FDI inflows, attracted by a pool of qualified engineers and scientists and the government endorsement, especially for very new research fields reflecting the challenging issues of the sustainability of the Chinese economy for the coming years.

There are other effects that go beyond the economic domain, particularly in the political or geopolitical fields. Interestingly, the experience of China in opening up its economy in the late 1970s and the resulting investments made by foreign companies which contributed to its development is now put forward by the Chinese authorities when talking with African governments about the Chinese presence in Africa and its effects on African host economies.

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