Dragon meets bull: the determinants of Chinese outward foreign direct investment in Spain

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Abstract: This study examines the characteristics and motivations of Chinese investors in Spain. First, we track Chinese investments by merging different sources and ends with a firm-level dataset that allow us to draw a more realistic picture of Chinese outward foreign direct investment in Spain. Second, we gather qualitative information thanks to a unique and detailed questionnaire to check systematically the different hypothesis regarding FDI determinants. Third, the interactions among these factors are studied using multiple correspondence analysis. Results confirm that Chinese investment in Spain mainly aims at supporting Chinese exports with a special interest in accessing third country markets outside the European Union. Respondents also validate the asset-seeking hypothesis, underlining a special interest in acquiring recognised brands or making their brands known, improving quality of their products and accessing new technologies. Chinese economic environment acts as an outstanding push factor, regardless the intrinsic motivations of the firms to invest abroad.

Keywords: asset seeking; China; Spain; market seeking; outward FDI; multiple correspondence analysis; MCA.

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1 Introduction

Chinese outward foreign direct investment (OFDI) has increased dramatically during the last decade. In 2015, China ranked the third amongst the largest investors worldwide, behind the USA and Japan (UNCTAD, 2016). As part of this phenomenon, Chinese FDI in Europe, and especially in Spain, has registered an exponential growth. This trend is expected to continue since the Chinese government has consolidated the 'go global' policy, and enact new ones, like the Manufacturing 2025 plan or the One Belt and One Road initiative, in which Chinese multinationals (MNEs) expansion are central (Huang, 2016; Luo et al., 2010; Wuttke, 2017). Moreover, recent bilateral meetings between China and Spain demonstrate that both countries are going towards deeper collaboration and economic relationship (El País, 2011; Expansión, 2014; La Vanguardia, 2017).

Given the novelty of the subject and scarcity of the data, the determinants and implications of Chinese OFDI has been understudied (see Berning and Holtbrügge, 2012, for review). The scant empirical studies of the determinants of Chinese OFDI are substantiated by macro-level data, descriptive statistics or case studies. These studies highlight the role of market and asset-seeking motivations for Chinese OFDI in OECD and European countries.[1] When it comes to Spain, studies on Chinese OFDI are rather few. Exceptions are the descriptive works of Goy-Yamamoto and Navarro (2008), Santacana and Wang (2008), Sáez (2010) and Quer Ramón et al. (2015). More recently, Quer Ramón et al. (2017) analyse the determinants of Chinese MNEs entry mode in Spain; the study reports that M&As tend to be asset seeking and favoured by low economic growth in Spain in line with the fire sale hypothesis. ESADE (2014, 2015) stand out as the first studies based on primary data. The results of two questionnaires answered by Chinese firms located in Spain indicate that these investments are driven by market seeking considerations. Finally, Carril-Caccia and Milgram Baleix (2016) focus on specific sectors to draw some profiles of Chinese investors.

This paper extends the previous empirical evidence by looking in depth into the characteristics and motivations of Chinese investors in Spain. First, we track Chinese investments by merging different sources and ends up identifying more Chinese projects than other previous datasets. These firm-level data allow us to draw a more realistic picture of Chinese OFDI in Spain. In particular, this is, to the best of our knowledge, the first attempt to quantify the relevance of Chinese investments entering into Spain through transit countries. This may imply that Governments' official statistics are underestimating the importance of Chinese OFDI in Europe.

Second, we gather qualitative information thanks to a unique and detailed questionnaire that allows us to go one-step further in the analysis of Chinese investors' motivations. Questions were designed to check systematically the different hypothesis of the eclectic view of FDI determinants à la Vernon-Dunning and the hypotheses that the recent phenomenon of OFDI from emerging countries have brought about. The gathered primary data allows to assess the determinants of Chinese OFDI in detail, rather than referring to broad motivations of investments. Third, we apply *multiple correspondence analysis* (MCA) to the gathered data to detect complementarities and similarities among the different motivations.

Results confirm that Chinese investment in Spain mainly aims at supporting Chinese exports with a special interest in accessing third country markets outside the European Union (EU). Respondents also validate the asset-seeking hypothesis, underlining a special interest in acquiring recognised brands or making their brands known, improving quality of their products and accessing new technologies. More surprisingly, Chinese investors are also stimulated by efficiency gains, in some cases related with high-qualified workforce. Interestingly, the survey gauges the role played by the Chinese economic environment that seems to act as an outstanding push factor, regardless the intrinsic motivations of the firms to invest abroad. These results have sounding consequences for Spain. To the extent that Spain shares its trade policy with other EU countries, most considerations might well be extrapolated to them.

This article is organised as follows. In Section 2, we summarise the FDI determinants according to the theoretical literature that served as a basis for building our questionnaire. In Section 3, we describe the Chinese OFDI in Spain and the methodology used is available in Section 4. In Section 5, we analyse the results obtained from our questionnaire. Finally, in Section 6, we conclude by summarising our findings and suggesting directions for future research.

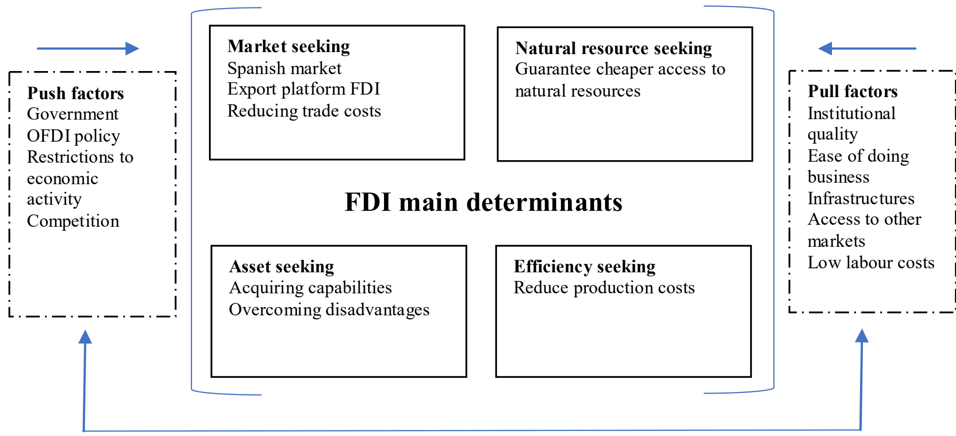
2 The determinants of Chinese OFDI in Europe and Spain

A growing strand of literature points out that existing MNEs theory has to be tailored in order to address the internationalisation of emerging countries multinationals (EMNEs). In this regard, several particularities of Chinese OFDI have to be highlighted. Figure 1 illustrates the conceptual framework of the FDI determinants considered in this study. As showed, the intrinsic (micro) motivations for FDI are not independent from the (macro) factors, which push firms to invest abroad or attract them into the host country.

2.1 The conventional theory revisited

According to Dunning (1993), FDI motivated by *market seeking* aims at entering new markets or at improving the presence of the company in an existing one. In this way, market-seeking motivations are closely linked with *horizontal FDI*, which serves to evade tariffs, anti-dumping measures and other variable costs related to trade (Horstmann and Markusen, 1987). On top of that, certain Chinese exports have faced increasingly anti-dumping measures from the EU. In addition, the Ekholm et al. (2007) and Krautheim (2013) have underlined two types of strategy, namely export-supporting and platform FDI, that would be complementary with trade, and therefore is expected to be positively attracted by transport infrastructure to access other markets (Buckley and Casson. 2009).

Figure 1 Conceptual framework of FDI determinants (see online version for colours)



Source: Authors' own elaboration based on the literature review

Resource-seeking FDI aims to gain access to natural resources and/or assets (Dunning, 1993). Natural resource seeking targets the guarantee of cheaper access to natural resources. Concerning this determinant, the literature suggests that Chinese MNEs might be less sensible to low quality of institutions that developed countries´ MNEs (e.g., Amighini et al., 2013b; Buckley et al., 2007; Yang et al., 2017). Although much attention has been paid to Chinese MNEs' search for natural resources, we do not expect this determinant to be relevant in the case of Spain since it does not stand at an abundant natural resource country.

In the conventional view of FDI, firms invest abroad because they have a firm specific advantage (Hymer, 1976; Dunning, 1988). *Asset-seeking FDI* intends to improve the ownership advantages of the investing firm by accessing complementary and useful resources and new capabilities (Dunning, 1993, 2001). Although this kind of FDI can take place from both emerging and developed firms, their objective may differ from one case to another. Developed-country MNEs attempt to acquire assets that are complementary to theirs, and expand their ownership advantages. In contrast, the internationalisation of EMNEs is motivated by overcoming existing disadvantages, rather than exploiting existing resources or advantages (Amal et al., 2013; Child and Rodrigues, 2005; Luo and Tung, 2007). In addition, MNEs usually invest abroad to exploit their asset motives, while EMNEs are more likely to engage in FDI driven by asset exploration considerations (Jormanainen and Koveshnikov, 2012). For the Chinese case, Amighini et al. (2013b) note that asset-seeking FDI tends to be directed to developed countries. According to some literatures (Amal et al. 2013; Child and Rodrigues, 2005; Deng, 2009; Jormanainen and Koveshnikov, 2012), some of the limited ownership advantages that EMNEs seek to improve are quality of products, technology, highly qualified labour skills, acquiring recognised brands, improving brand recognition and poor management. In addition, EMNEs subsidiaries in developed countries also serve as listening ports to the latest consumer and technological trends (Zhao et al., 2010).

According to Buckley et al. (2007), *efficiency-seeking FDI* mainly aims to access lower labour cost locations. When it comes to this motivation, it has to be taken into account that labour costs in China, for both low and highly qualified workers, have been increasing in recent years (Cai, 2012; Lemoine, 2013), even if they clearly remain below developed countries´ average. We posit that due to the reduction of the salary differential between China and Spain, highly qualified Spanish workers may have become more attractive to Chinese firms. In this way, contracting high-qualified labour for a relatively low cost might well be an incentive for Chinese OFDI.

2.2 *Influence of home and host countries' institutions and economic and cultural environments*

The theory on FDI determinants emphasises the positive role played by the *quality of the host country's institutions* in attracting FDI, since a favourable context is expected to reduce the costs and risks of investment and may contribute to firms' performance (Dunning, 1993). Several authors (Amighini et al., 2013a; Buckley et al., 2007; Kolstad and Wiig, 2012), Li and Liang (2012) and Yang et al., (2017) test this hypothesis by using different proxies for the quality of institutions like indicators of political stability, property rights and rule of law and the conclusions they reached are mixed. Moreover, Bayraktar (2013) argues that the 'easiness of doing business', measured by indexes from the World Bank, are relevant determinants of FDI. For the Spanish case, we ask respondents to value: easiness of starting a business, credit availability and investor protection.

FDI theory generally fits private enterprises' incentives. However, state-owned enterprises (SOEs) represent a significant share of Chinese OFDI, which appear to be driven by different motivations (Amighini et al., 2013b; Deng, 2013; Du and Zhang, 2018; Luo et al., 2017). Besides, *home country government policy* appears to play an important role in fostering EMNEs' internationalisation process (Buckley et al., 2007; Gallagher and Irwin, 2014; Luo et al., 2010). In fact, Chinese government has recently included OFDI as one of the pillars of two new policies: China Manufacturing 2025 and One Belt and One Road Initiative (Huang, 2016; Wuttke, 2017). These policies foster Chinese OFDI, which seeks to acquire new technologies and natural resources, and to foster the market penetration of their exports. Du and Zhang (2018) demonstrate that the One Belt and One Road Initiative had a positive effect on M&As towards the host countries, which the policy refers to.

In turn, a non-friendly *environment in the home country* may act as a push factor for their domestic firms where FDI provides a way of escaping domestic institutional restrictions (Child and Rodrigues, 2005; Deng, 2009; Luo and Tung, 2007). Related to this, Chinese OFDI is particularly driven into tax haven countries. On average, at the world level, 30% of FDI is directed towards this type of countries (Haberly and Wójcik, 2015) against 66% in the Chinese case (Buckley et al., 2015; Luo et al., 2017). Buckley et al. (2015) and Davies (2012) suggest that Chinese OFDI does not only use this strategy for tax planning activities, but also to escape government control; besides, Chinese OFDI pursue better access to finance and higher institutional quality than the ones provided by their home country. We expect the importance of these home country's push factors to be highly correlated with how Chinese firms perceive Spanish institutions. We believe that firms escaping from a hostile environment are more likely to give greater importance to the quality of institutions in the host country.

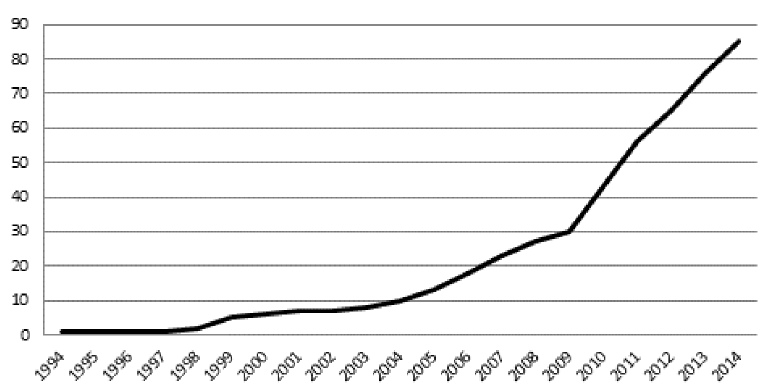
Another characteristic of emerging economies is that they are still undergoing significant liberalisation policies, facing high rates of economic growth and structural changes in their industries (Luo and Tung, 2007). These drastic changes imply that domestic firms face higher *competitive pressures in the home market* (UNCTAD, 2006), needing to adapt quickly to this changing environment and to relax their dependence on their home market. Therefore, we hypothesise that Chinese firms' internationalisation has partly been pushed by this phenomena: firms invest abroad to diversify the markets they operate in and to acquire new capabilities useful to survive the surge of competition at home.

3 Chinese OFDI in Spain

Since there is no comprehensive database of Chinese OFDI publicly available, we built a firm level database in order to provide a comprehensive view of Chinese OFDI in Spain. We gathered information concerning 96 firms located in Spain with capital from China or Hong Kong.[2] These firms have been identified using the Spanish firm database SABI (Bureau Van Dijk), ESADE (2014) report, the Ministry of Foreign Commerce of China, the Global Asia website and several news websites.[3]

Chinese FDI in Europe has registered an exponential growth, from US $487 million in 2003 to US $53'161 millions in 2013 (MOFCOM, 2014). A similar exponential growth took place in Spain during the same period. According to the Spanish Ministry of Economy and Competitiveness, China evolved from having an insignificant role investing in Spain to occupying the 11th position in the ranking of inward FDI stock in Spain in 2014. Moreover, during 2013 and 2014, China was the ninth most relevant investor and the sixth in 2015. According to our dataset (see Figure 2), the number of Chinese firms in Spain started to increase constantly from 2003 onwards, and at a faster rate during the period 2010–2014. A similar trend is displayed by Spanish official statistics. MOFCOM statistics also emphasise a rapid increase during 2009–2012 but report a decrease of its stock in 2013.

Figure 2 Number of firms with Chinese participation located in Spain



Source: Own calculation from the database elaborated by the authors

Discrepancies between official statistics and our database may be explained by the methodology we use to identify Chinese investors. Unlike previous empirical works on this subject, our dataset includes investments realised by Chinese investors through transit countries.[4] According to available information,[5] 40% of Chinese investors have invested through a tax heaven country, being Hong Kong the main one (26%). Additionally, we find that a significant share of Chinese firms in Spain entered through another European country (19%).

Due to the role played by tax haven countries in international capital flows, the distribution of Chinese OFDI is far from being comprehensible at first sight. According to MOFCOM statistics, Hong Kong holds 84% of the total FDI stock in Asia in 2013; Cayman Islands and Virgin Islands together hold 88% of the stock in Latin America and Luxembourg hold 20% of the stock in Europe. The majority of these flows do not materialise in real investments – Chinese firms only use these countries as transit countries to later invest in third countries or bring these investments back to China (Davies, 2012; Ramasamy et al., 2012; Sutherland and Ning, 2011). According to Luo et al. (2017) and Sutherland and Anderson (2015), this phenomenon may have biased previous findings.

Regarding the mode of entrance, our database indicates that 43.8% of the recorded FDIs were carried out through greenfield investment and 42.7% through M&A.[6] In addition, the majority are private investors (58.3%) followed by SOEs (31%) while companies with mixed ownership account for 10.7%. Most of them display healthy balance accounts: in 2014, 63.8% of these firms registered positive benefits. Most of these firms are small firms in terms of employment. However, approximately 74.6% of these companies surpassed a sales' volume of one million Euros and for 9.9% of them sales overpass 100 million Euros. In terms of employment, Chinese FDI hires approximately 10,300 persons[7] in 2014, that is, a non-negligible contribution to employment. At the regional level, Chinese firms are concentrated in Catalonia (40%) and Madrid (38.9%). Chinese firms are present in the following sectors: wholesale and retail trade (41.7%), other services (20.8%), manufacturing (17.7%), transport and related activities (9.4%), energy production (9.4%) and fishing and agriculture (1%).

4 Methodology

4.1 Methodology and characteristics of the sample

In order to shed light on the motivations of Chinese firms' investment, we created a questionnaire[8] with 91 items conducted by telephone on behalf a specialised company. This company contacted the 96 firms identified in the firm-level database described in the previous section. Firms were asked to value the importance of each hypothesis rated on a five-point Likert-type scale (where 0 is not importance and 4 very important).

First, we independently analyse the average and the mode of each item of the questionnaire, and consider a motivation or activity to be relevant whenever its average value is above 2, and its mode presents a high value. Second, we apply *MCA*. MCA is a technique which allows to reduce the dimensionality of a set of data through the creation of indexes which account for a large share of the data available. This technique is particularly appropriate for ordered categorical variables in which the difference between categories is prone to be not lineal. For instance, in our case, the 'distance' between valuing the importance of an investment motivation 0 or 1 is likely to differ from the one between 3 or 4. In this way, MCA allows us to analyse the latent relationship between different categorical variables and to obtain an index that summarises them (Abdi and Valentin, 2007; Booysen et al., 2008; Kohn, 2012). By applying MCA, the objective is to detect complementarities and similarities among the different FDI motivations and, pull and push factors. Following the FDI theory previously described, we construct nine indexes: market seeking, trade, access to other markets, quality, asset seeking, efficiency seeking, Spanish institutions, ease of doing business, and Chinese environment (see Table 1).

4.2 Sample

Among the 96 firms contacted, 31 firms answered the questionnaire partially or completely.[9] To test whether our analysis suffers from a non-response bias, we follow Whitehead et al. (1993) and estimate the following probit model:

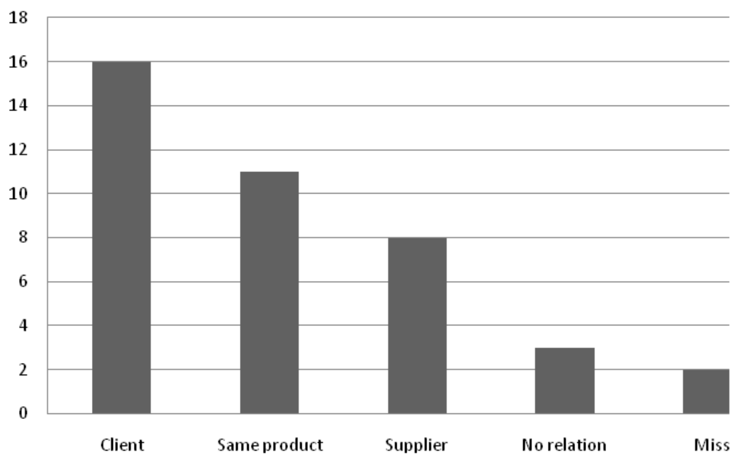
$$\begin{aligned} Answer_j = \alpha_j &+ Wholesale_j + Manufacturing_j + OtherServices_j + Transport_j \\ &+ noMADCAT_j + Catalonia_j + InvestemntYear_j + Greenfield_j \\ &+ CNdirect_j + Private_j + Age_j + FirmSize_j + \varepsilon_j \end{aligned}$$

where $Answer_j$ is a dummy which takes value 1 if firm j answered the questionnaire and 0 if not. $Wholesale_j$, $Manufacturing_j$, $OtherServices_j$ and $Transport_j$ are dummies for the sector of activity of the firm (wholesale and retail trade, manufacturing, other services, or transport and related activities). $noMADCAT_j$ is a dummy which takes value 1 if the firms are not located in either Madrid or Catalonia, and $Catalonia_j$ a dummy indicating if the firm is located in Catalonia. Then, to take into account the characteristics of the investment, we include the year of investment ($InvestmentYear_j$), dummies for greenfield investments ($Greenfield_j$), private companies ($Private_j$) and investments made without using a transit country ($CNdirect_j$). In addition, we control for the age and size of the Chinese subsidiary in Spain[10] (Age_j, $FirmSize_j$). Finally, ε_j stands for the error term.

Results from the probit model are reported in Table 2. Due to different data availability for each independent variable, we first restrict the model to the variables available for the whole sample (column 1). In a second step, we add independent variables which result in a smaller sample (columns 2 and 3). As it can be gathered, none of the independent variables have a significant impact on the likelihood of answering the questionnaire. Overall the model has no explanatory power,[11] suggesting that the sample of firms answering the questionnaire does not suffer from any self-selection bias.

As far as the characteristics of the respondents are concerned, most of the firms that participated in the questionnaire invested through M&A (68.0%). Among the ten gathered greenfield investments, three consist in investments realised jointly with another firm. As regards ownership of the investing Chinese firm, the majority are wholly private (58.1%) while SOE and mixed ownership represent 16.1% and 22.6%,[12] respectively. The respondents invested between 1999 and 2014, with most of the investments belonging to the period 2009–2014 (77.4%). Following the NACE 2, two-digits classification the main recipient sectors are: wholesale trade, except motor vehicles and motorcycles (25.8%), legal and accounting services (9.7%), manufacture of fabricated metal products (9.7%), manufacture of chemicals and chemical products (6.5%), and warehousing and support activities for transportation (6.5%). Most of these firms are small firms (71%) and medium firms (16.2%) while only 6.5% are large firms.[13] Finally, Figure 3 illustrates the relation between subsidiaries and parent companies.[14] Most affiliates are clients of the parent company, which goes in accordance with the fact that most of them operate in the wholesale sector and are aimed at supporting exports of the matrix. Notwithstanding, a considerable share of the affiliates supply the parent company and/or sell the same product.

Figure 3 Relation with the parent company



Source: Own calculation from the database elaborated by the authors

Table 1 MCA variables and main statistics

Indexes	*Variables*	*Obs.*	*Principal inertia (%)*	*Mean*	*Std. dev.*	*Min*	*Max*
Chinese environment	Reduce the risk associated with the economic activity of the company; institutional restrictions on parent firm's activity in the home country; competition from other companies in the home country; fiscal incentives from the origin country	29	39.03	2.80	0.99	1.00	4.42
Ease of doing business	Ease of starting up a company; ease of access to finance; investor protection	29	58.81	2.22	1.02	1.00	3.65
Spanish institutions	Political stability; private property protection; legal framework	29	43.31	2.91	1.01	1.00	4.03
Efficiency seeking	Produce goods/services in a more efficient way; increase of wage costs in China; produce products in Spain to export them to China; low wage costs and high qualification in Spain; low wage costs in Spain	29	32.26	2.03	1.20	1.00	5.97

Source: Authors' calculations from original questionnaire

Table 1 MCA variables and main statistics (continued)

Indexes	*Variables*	*Obs.*	*Principal inertia (%)*	*Mean*	*Std. dev.*	*Min*	*Max*
Asset seeking	Acquire a recognised brand; to access qualified workforce; for access to new technologies; acquire management techniques; make the company's brand known in Spain/Europe	29	35.5	4.03	1.00	1.00	4.98
Quality	To adapt to the European norms for quality; to adapt to the Spanish norms for quality; to increase the quality of the firm's products	29	54.93	3.61	1.01	1.00	4.18
Access to other markets	Ease of access to markets outside the European Union from Spain; exports; transport infrastructure for access to other markets; to access markets outside Europe	31	45.06	3.33	0.97	1	4.85
Trade	To avoid tariff barriers set by the European Union; to avoid anti-dumping measures of the European Union; reduce export costs	29	32.54	2.33	1.01	1.00	4.28
Market seeking	Merchandising; marketing; customer service	30	55.54	2.84	1.02	1.00	3.65

Source: Authors' calculations from original questionnaire

Table 2 Selection bias test

$Answer_j$	(1)	(2)	(3)
$Wholesale_j$	0.036	–0.016	–0.178
	(0.94)	(0.98)	(0.75)
$Manufacturing_j$	0.088	–0.143	–0.058
	(0.87)	(0.81)	(0.94)
$OtherServices_j$	0.041	–0.065	–0.031
	(0.94)	(0.91)	(0.96)
$Transport_j$	0.440	0.389	0.355
	(0.46)	(0.58)	(0.64)
$noMADCAT_j$	0.150	0.248	0.173
	(0.69)	(0.54)	(0.72)
$Catalonia_j$	–0.122	–0.166	–0.436
	(0.69)	(0.64)	(0.30)

Notes: *p*-values in parentheses.

Table 2 Selection bias test (continued)

Answer$_j$	*(1)*	*(2)*	*(3)*
InvestmentYear$_j$		0.006	0.007
		(0.88)	(0.90)
Greenfield$_j$		–0.274	–0.443
		(0.45)	(0.32)
CNdirect$_j$		–0.231	–0.408
		(0.48)	(0.30)
Private$_j$			–0.018
			(0.96)
Age$_j$			–0.034
			(0.16)
FirmSize$_j$			–0.153
			(0.62)
Observations	96	82	67
Pseudo R^2	0.011	0.032	0.076
Prob > Chi^2	0.970	0.946	0.873

Notes: *p*-values in parentheses.

5 Determinants of Chinese OFDI in Spain

In this section, we explore the motivations of Chinese firms to invest in Spain differentiating the reasons owing to the intrinsic characteristics of the company and its strategy (microeconomic motivations), from the incentives related with the host or home countries environment. The results of the first set of answers are reported in Table 3 while the opinions concerning the role of institutional and economic environment as pull and push factors are displayed in Table 4.

5.1 Intrinsic motivations of Chinese firms

The overall picture of the results indicates that market-seeking and asset-seeking are the most important drivers of Chinese investments in Spain. Access to other markets also notably justifies these capital flows. In contrast, efficiency seeking and avoiding trade costs have a lower weight in Chinese investors' decisions.

Asset seeking appears as the most popular motivation among Chinese firms. In particular, Chinese firms are mainly concerned by acquiring a recognised brand and by making the company's brand known in Spain or Europe. Accessing a qualified workforce and new technologies also seem to play a dominant role in their decision to invest in Spain. As suggested by previous literature, Chinese firms seek to overcome their technical disabilities and to improve their brand awareness. Additionally, they seem to be particularly interested in specifically adapting their products to European consumers' standards. Respondents are not so much concerned by pure market seeking motivations but quality seeking motivations. In this line, the surveyed firms give greater meaning to the adaptation to European and Spanish norms and to increase the quality of the firm's products among the different categories of market seeking. This result is in harmony with the reported by Carril-Caccia and Milgram Baleix (2016), which indicate that merchandising and service production are the most salient activities made by Chinese firms in Spain. The results lend strong support to the hypothesis that investments in Spain meet the Chinese firms' need to upgrade the quality of their products through better technology, qualified labour and adaptation to European standards.

Table 3 Investment's motivations of the Chinese firms

	Determinants	*Obs.*	*Mean*	*Std. dev.*	*Mode (frequency)*
Acquire a recognised brand	Asset seeking	29	3.31	1.07	4 (17)
To adapt to the European norms for quality	Market seeking, access to other markets and quality	28	2.96	1.29	4 (13)
Make the company's brand known in Spain/Europe	Market seeking and asset seeking	29	2.83	1.51	4 (15)
To access to markets outside Europe	Access to other markets	29	2.76	1.38	4 (11)
To access qualified workforce	Asset seeking	29	2.72	1.41	4 (12)
Merchandising	Market seeking	30	2.63	1.54	4 (13)
To adapt the Spanish norms for quality	Market seeking and quality	29	2.62	1.4	3 (11)
To increase the quality of the firm's products	Quality	29	2.62	1.47	4 (12)
Produce services	Market seeking	30	2.6	1.69	4 (15)
To access to new technologies	Asset seeking	29	2.55	1.5	4 (12)
Produce goods/services in a more efficient way	Efficiency seeking	29	2.48	1.5	4 (10)
Marketing	Market seeking	30	2.17	1.56	4 (8)
Acquire management techniques	Asset seeking	28	2.14	1.46	3 (7)
Costumer service	Market seeking	30	2	1.72	0 (10)
To avoid tariff barriers set by the European Union	Trade	27	1.78	1.67	0 (11)
Reduce export costs	Trade	28	1.68	1.49	0 (9)
To avoid anti-dumping measures from the European Union	Trade	28	1.5	1.6	0 (13)
Increase of wage costs in China	Efficiency seeking	26	1.38	1.33	0 (9)
Produce products in Spain to export them to China	Efficiency seeking	28	1.07	1.41	0 (15)

Note: Ordered from the most important motivations to the least one according to the average.

Source: Authors' calculations from original questionnaire

Table 4 Institutional and economical pull and push factors

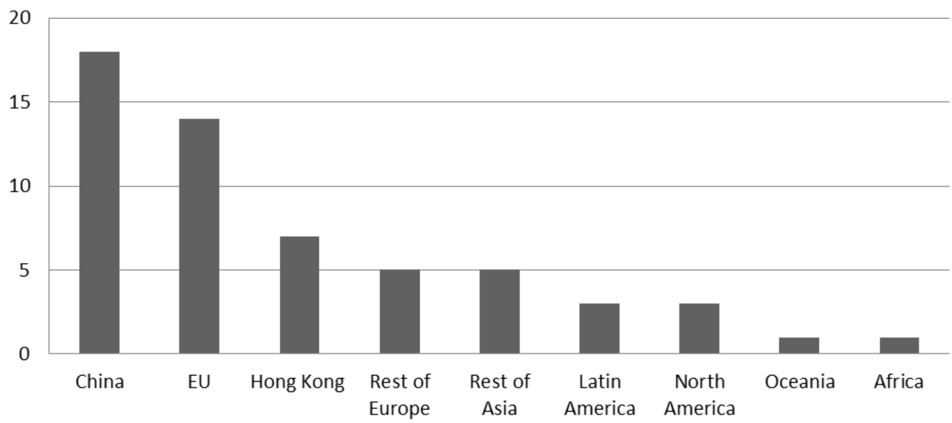
	Determinants	*Obs.*	*Mean*	*Std. dev.*	*Mode (frequency)*
Ease of access to markets outside the European Union from Spain	Access to other markets	28	2.54	1.62	4 (11)
Competition from other companies in the home country	Home competition	29	2.41	1.30	3 (10)
Private property protection	Host institutions	28	2.14	1.48	0, 2 and 3 (7)
Reduce the risk associated with the economic activity of the company	Home competition	27	2.11	1.31	2 (9)
Legal framework	Host institutions	29	2.00	1.31	3 (9)
Political stability	Host institutions	29	1.86	1.27	2 (10)
Transport infrastructure for access to other markets	Access to other markets	28	1.86	1.41	2 (10)
Low wage costs and high qualification in Spain	Efficiency seeking	29	1.76	1.38	0 (8)
Institutional restrictions on parent firm's activity in the home country	Home institutions	28	1.50	1.58	0 (12)
Low wage costs in Spain	Efficiency seeking	29	1.41	1.35	0 (11)
Fiscal incentives from the origin country	Home institutions	26	1.35	1.23	0 (10)
Investor protection	Ease of doing business	29	1.34	1.42	0 (11)
Ease of access to finance	Ease of doing business	29	1.21	1.21	0 (13)
Ease of starting up a company	Ease of doing business	29	1.17	1.17	0 (13)

Note: Ordered from the most important motivations to the least one according to the average.

Source: Authors' calculations from original questionnaire

An important feature to keep in mind when analysing the results is that a great part of Chinese affiliates' activity in Spain is related to the export activities of the matrix. Figure 4 illustrates the relevance of China and Hong Kong as the origin of the imports made by the subsidiary, confirming that the investee supports exports from the parent company and that OFDI may contribute to Chinese export expansion. In addition, the gathered data indicate that most firms are clients of the parent company and are concentrated in the wholesale and retail sectors. Turning to the surveyed firms, China is the main supplier for 67% of the surveyed firms (Figure 6) while the destination of their exports is quite heterogeneous (Figures 5 and 7). Actually, 'access to markets outside Europe' is among the motivations reaching highest scores in Table 3, and the 'ease of access to markets outside the EU from Spain' is rated as the most interesting characteristic of the Spanish market (Table 4).

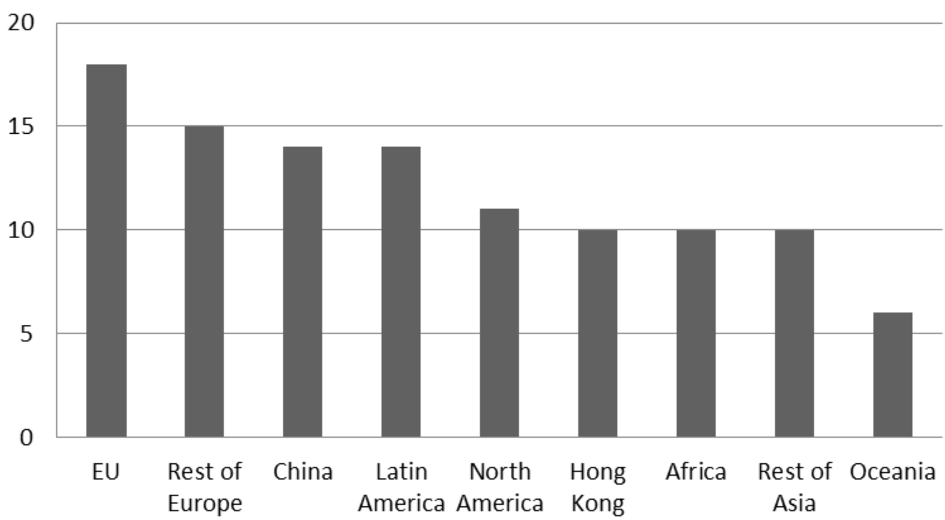
Figure 4 Imports



Notes: Based on multiple-choice questions with more than one possible answer. The firm had to indicate the origin of its imports and the destination of its exports.

Source: Data from authors' survey

Figure 5 Exports



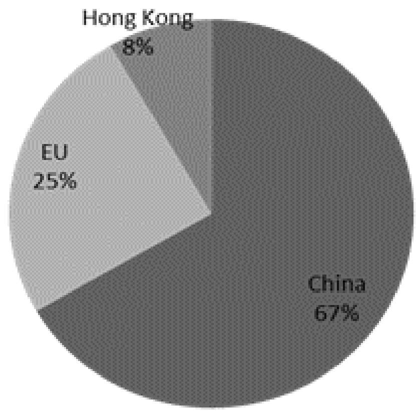
Notes: Based on multiple-choice questions with more than one possible answer. The firm had to indicate the origin of its imports and the destination of its exports.

Source: Data from authors' survey

Therefore, Chinese investors are expected to worry about trade barriers. Surprisingly, results of the survey indicate that most firms are not concerned at all by avoiding tariffs or anti-dumping measures, and neither by reducing export costs. This seems to be in contradiction with the fact that respondents testify that Chinese OFDI is frequently carried out in order to support exports, or with a view to accessing markets outside

Europe. One plausible explanation of why they do not care about export trade costs could be that EU trade policy does not really constitute a major barrier for Chinese exports.

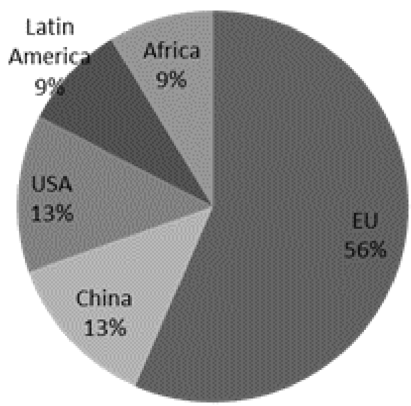
Figure 6 Main import countries



Note: The firm had to indicate the main origin of its imports and main destination of its exports.

Source: Data from authors' survey

Figure 7 Main export countries



Note: The firm had to indicate the main origin of its imports and main destination of its exports.

Source: Data from authors' survey

A less plausible hypothesis in case of EMNEs is that they invest abroad to improve their efficiency. As expected, Chinese investments in Spain are less motivated by efficiency gains than by the aforementioned aspects. Nevertheless, the results show an important heterogeneity among the surveyed firms: almost 25% of the surveyed firms attribute a high value (3 or 4) to 'increase of wage costs in China' and 'low wage costs in Spain', and 34.5% to 'low wage costs and high qualification in Spain'. It appears that firms seeking to improve their efficiency also have motivations related to overpass ownership disadvantages,[15] which sounds coherent. This might well indicate that Chinese firms aim to access capabilities that are cheaper and more abundant in Spain than in China, as firms from developed countries do when investing into developing countries: both try to take advantage of production factors which are scarce in their home market. This may be good news for Spain since this could be an excellent opportunity for the unemployed high-qualified Spanish workers to get a job.

5.2 Pull and push factors from China and Spain

According to the survey, both the Spanish and Chinese environment matter to Chinese investors. But overall, what they run after first and foremost when locating in Spain, is to access easily to markets outside the EU. However, 'Transport infrastructure for access to other markets' is poorly valued on average. Together with previous results, these findings suggest that Chinese investors are interested in more intangible assets such as knowledge of the Latin American markets and consolidated distribution channels that would complement their own capacities to boost their exports.

Turning to the aspects of Spanish institutions that make a difference in the Chinese investors' way of thinking, respondents point out property rights protection, legal framework and political stability among the most attractive characteristics of Spain for their investment. Since these are basic characteristics of quality institutions which are quite common to all developed countries, this result only confirms that Chine investors are aware of these advantages and that Spain successfully diffuse the information regarding these aspects. More interestingly, Chinese firms value quite badly the aspects related with the ease of doing business in Spain. This clearly points out a room for improvement for Spanish policies. Spanish authorities could make Spain more attractive to potential investors by improving investor protection, access to finance and procedures for starting up a company.

As far as the Chinese institutional framework is concerned, it does not significantly influence the decision to invest in Spain: government's support to Chinese firms' internationalisation and restrictions on its economic activity in China are not well valued as push factors. In contrast, the economic environment that firms face at home does play an important role in their decision to invest abroad. Chinese OFDI is in part a reaction to competition in their domestic market that they perceive as stronger and Chinese firms consider the diversification through FDI as a way to reduce their risk of failure.

5.3 Multiple correspondence analysis

The correlation matrix of the MCA indexes adds further insight into the relationships between the Chinese FDI determinants (Table 5). Market seeking appears as an independent motivation, since it is probably the most common motivations in wholesales, which is, at the same time, the most frequent economic activity developed by Chinese firms in Spain. Remaining indexes are highly correlated between them confirming that motivations are fully dependent among each other. In particular, the strong correlation between the quality and asset seeking indexes is worth highlighting. Yet, this result provides a validation of our prior conjecture. Upgrading quality is the motivation shaping the overall strategy of Chinese investors in Spain. Lack of quality is considered as the main disadvantage to be overcome through access to recognised brand, qualified workforce, and to a lesser extent new technologies or managerial skills.

Table 5 MCA indexes correlation matrix

	Market seeking	*Trade*	*Access to other markets*	*Quality*	*Asset seeking*	*Efficiency seeking*	*Spanish institutions*	*Ease of doing business*	*Chinese environment*
Market seeking	1								
Trade	0.258	1							
Access to other markets	−0.121	0.381**	1						
Quality	0.109	0.453**	0.321*	1					
Asset seeking	0.243	0.185	0.073	0.503***	1				
Efficiency seeking	0.149	0.301	0.011	0.215	0.272	1			
Spanish institutions	−0.066	0.527***	0.772***	0.446**	0.02	−0.084	1		
Ease of doing business	0.201	0.586***	0.573***	0.492***	0.17	−0.012	0.692***	1	
Chinese environment	0.195	0.534***	0.43**	0.398**	0.447**	0.33*	0.472***	0.489***	1

Source: Authors' calculations from original questionnaire

Also of particular meaning is the high correlation of the Chinese environment index with all the other indexes except market seeking. This points out how the Chinese framework enhance the urge of Chinese firms to internationalise regardless their intrinsic motivations. These results support the hypothesis that Chinese firms are adopting strategies to improve their products and accessing new markets in response to the intensification of competition in the home market. These aspects may be a lesser concern for firms who focus on investing in services aiming to support their exports.

In contrast, the Spanish context is not linked to any specific motivations at the firm level but with the Chinese environment, indicating that it is positively valued in comparison with the home context, but not in the light of the firm-specific motivations. Sounded exceptions are the firms concerned with trade barriers and access to other markets for whom, Spanish institutions quality appear to be of great relevance. Actually, the more a firm is concerned with trade costs, the more likely it is to exploit Spain's commercial connections with other countries. This finding may suggest that Chinese firms may use some European locations as a platform to re-export to other countries where European products are granted better access than Chinese ones.

6 Conclusions

By combining different sources, we build an original dataset of firms established in Spain with Chinese participation. Thanks to this unique dataset, we are able to draw a more realistic picture of Chinese OFDI in Spain. This analysis is completed by a survey of Chinese affiliates in Spain to assess directly the motivations of Chinese OFDI. Thirty-one firms out of the 96 firms with Chinese capital answered the questionnaire. Despite the high rate of responses, the sample remains small; this prevents us from realising a rich statistical analysis. Another potential limitation of this study is that the qualitative information is collected from Chinese affiliates managers, so we cannot ensure that their answers are completely representatives of the investor company's opinions. If anything, the present work provides a unique overview of the determinants for Chinese OFDI by disentangling in detail the determinants of Chinese OFDI specific to the firm and the motivations related to the Chinese and developed countries´ environment, in particular Spain.

The methodology used to identify Chinese investments in Spain yields information overlooked by other studies. Only 50% of the recorded investments come directly from Mainland China, while 26% transit through Hong Kong and 19% enter through another European country. As pointed by Sutherland and Anderson (2015), this issue deserves further research and should be accounted for. Apart from that, this new evidence reinforces the view that governments' official statistics are probably underestimating the importance of Chinese OFDI in Europe. Unfortunately, our dataset does not allow us to study whether there are differences in the FDI motivations between those firms that use transit countries and those who do not. This limitation is an invitation to conduct future research on this issue.

Results from the survey confirm some previous findings in the literature and provide a new insight into Chinese OFDI motives and the relationship among the different factors. The most important motivations mentioned by the respondents of our study are in line with an eclectic view of FDI determinants à la Vernon-Dunning. They indicate that

Chinese firms invest in Spain in order to cope with their ownership disadvantage, which clearly relate with the quality of their products or the lack of well-known brands. Moreover, Chinese OFDI clearly aims at supporting exports not only to the Spanish market but also to markets outside Europe. In this line, trade costs do not appear to concern Chinese investors unanimously but matter for those firms with export platform strategy.

Broadly speaking, the amount of Chinese investments in Spain remains small but already relevant as it involves approximately 10,000 jobs, and it is increasing at a fast rate. Our results suggest that, as long as the competition in the Chinese market increases, more Chinese firms will be pushed out to invest abroad. The analysis also highlights that the way of doing business in Spain is perceived as uneasy, or not considered as a specific advantage of the Spain location. These are important elements to include in the agenda of Spanish institutions. Indeed, Chinese OFDI could represent great opportunities for Spanish recovery since Chinese investment seeks qualified jobs and new technologies. Public policies could provide precise information to potential investors concerning these aspects and promote the image of Spain as a source of skilled workforce and fruitful environment for R&D.

Finally, another axis of possible improvement consists in promoting the Spanish market as a good platform to export to other regions, such as Spanish-speaking countries in Latin America or neighbour countries in North Africa. However, Spain will not reap much benefit from these FDI if it serves as a simple warehouse for Chinese goods. Conversely, Spain could obtain huge value added by offering professional services in transport, business, and consulting to Chinese firms based on its own experience as exporter. Most of these considerations could undeniably be extrapolated to other European countries sharing common features with Spain.

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Notes

1 For results refereeing to the OECD countries see Amighini et al. (2013a, 2013b), Buckley et al. (2007), Cheung and Qian (2009), Kolstad and Wiig (2012), Li and Liang (2012) and Lien et al. (2012). For the case of Europe see Blomkvist and Drogendijk (2016), Brown (2012), Clegg and Voss (2011), Di Minin et al. (2012), Hanemann and Rosen (2012), Nicolas (2009) and Rios-Morales and Brennan (2010). Then, the country level studies are: France (Nicolas, 2010), Germany (Klossek et al., 2012; Schüler-Zhou and Schüller, 2013), Italy (Gattai, 2012; Pietrobelli et al., 2011), Spain (ESADE, 2014; Sáez, 2010) and the UK (Burghart and Rossi, 2009; Liu and Tian, 2008).

2 We also take into consideration firms from Hong Kong because it serves as a platform to Chinese firms in order to invest abroad (Buckley et al., 2015; Sutherland and Anderson, 2015). However, all recorded investments come from Mainland China.

3 From the initially gathered firms, we eliminated those that were not suitable for our study: those that have invested through Hong Kong but are not Chinese companies, those we could not clearly ascertain to be originally from China or Hong Kong, those that have invested in the past but no longer have activities in Spain, and those that have gone bankrupt. This was mainly done by visiting each firm's website and/or any other reliable source.

4 In order to identify the origin of investors, we use the information provided by SABI concerning ownership. The database indicates the countries of origin of the subsidiary's

shareholder and of the parent company. If the indicated countries are different, this means that the parent company used the country of origin of the subsidiary's shareholder as a transit country. We select data of all firms whose parent company are from Mainland China while the subsidiary shareholder might come from Cayman Islands, Luxemburg or Hong Kong.

5 We only have information for 81% of the total sample.

6 The mode of entry of the remaining 13.5% firms is unknown.

7 Employment and financial data is only available for 70% of the firms.

8 Questionnaire available in the Appendix.

9 The questionnaire was answered by directors and managers mainly from accounting and financial departments.

10 $FirmSize_j$ is a categorical variable which takes the value 1 if the firm is small (less than 49 workers), 2 if it is medium (between 50 and 249 workers) and 3 if it is large (more than 250 workers).

11 As reported in Table 2, the likelihood ratio chi-square test (Chi^2) accepts the null hypothesis suggesting that all coefficients in the model are equal to zero.

12 The remaining 3.2% refers to missing data.

13 The remaining 6.3% refers to missing data.

14 In this case the firm could choose more than one option. For example, it is possible for a firm to indicate that is client and supplier from the parent company.

15 The item 'produce goods/services in a more efficient way' is significantly correlated with the following investment motivations: 'to increase the quality of the firm's products', 'to access new technologies', 'to access a qualified workforce' and with the following coefficients of correlation, respectively, $r = 0.46$, $r = 0.53$ and $r = 0.47$

Appendix

Questionnaire

Each question is valued from 0 to 4.

Investment's motivations of the parent company

Indicate the importance of each one

1 Access to natural resources

2 To adapt to the quality norms from the Spanish market

3 To adapt to the quality norms from the European market

4 To avoid tariff barriers set by the European Union on the parent company's products

5 To avoid anti-dumping measures from the European Union to the parent company's products

6 To access to markets outside Europe

7 To increase the quality of the firm's products

8 To access to new technologies

9 To access qualified workforce

10 Produce goods/services in a more efficient way

11 Institutional restrictions on parent's firm activity in the home country

12 Competition from other companies in the home country

13 Increase of wage costs in China

14 Acquire a recognised brand

15 Make the company's brand known in Spain/Europe

16 Previous investment relations with the investee

17 Reduce export costs

18 Produce products in Spain to export them to China

19 Acquire management techniques

20 Fiscal incentives from the origin country

21 Reduce the risk associated with the economic activity of the company

Indicate to what extent you consider the following characteristics of the Spanish market as a pull factor for this investment

Indicate the importance of each characteristic

22 Lower taxes than other alternative countries where the same investment could had been realised

23 Economic situation in Spain

24 The investment represented an opportunity due to the low price of the acquired assets

25 Low wage costs and high qualification in Spain

26 Low wage costs in Spain

27 Quality of infrastructures in Spain

28 Presence of the Chinese community in Spain

29 Easiness to open a company

30 Easiness to access to finance

31 Investor protection

32 Legal framework

33 Political stability

34 Legal framework from the labour market

35 Easiness to access to markets outside the European Union from Spain

36 Private property protection

37 Spanish fiscal incentives for foreign investment

38 Transport infrastructure to access to other markets

Investee's motivations to accept the investment from the parent company

Only answer if the investment consisted in the acquisition of an existing company

39 Financial restrictions

40 Increase in capital

41 Strategic alliance

42 Previous commercial relations between the parent company and the subsidiary

43 Economic problems

44 Starting a common project

45 Diversify the export markets

46 Diversify the import markets

47 Previous investment relations with the parent company

Information about the firm in Spain

48 Name of the firm (new firm or investee)

49 Economic activity (new firm or investee)

50 Location (city)

51 Name and position in the firm

52 Contact telephone

53 Investment type made by the parent company

Choose the correct one

Greenfield investment (investment in a complete new firm)

Merger or acquisition of an existing firm

Does not know/does not answer

Other:

54 In case of a complete new investment (greenfield investment). Has the parent company invested jointly with another company?

Yes

No

Does not know/does not answer

55 In case of a merger or acquisition of a previously existing firm:

Name of the investee or acquired firm (in case of being different from the current name)

56 Origin of the capital of the company that received the investment (before the investment)

Public

Private

Mix (public and private)

Other:

57 Year in which the investment/acquisition took place

58 Amount of the investment (in Euros)

59 Indicate the percentage of the capital invested, by the parent company, in the acquired/investee or created firm

Activity of the firm (investee or new)

Indicate the importance that each of these activities have for the firm located in Spain (investee/new)

60 Products production

61 Services production

62 Exports

63 Imports

64 Marketing

65 Customer service

66 Merchandising

67 Research and Development (R&D)

68 Product design

69 Other activity that the company carries out that you consider important

70 In relation with the relationship with the 'parent company', the firm (new or investee) is:

Choose the correct options

Client of the parent company

Supplier of the parent company

Same product that the parent company (produces and sells the same products as the parent company does)

Has no relation

Does not know/does not answer

71 Does the firm contract Chinese workers?

The investee or new firm

Yes

No

Does not know/does not answer

Exports and imports from the firm (investee or new)

Answer in case that the investee or new firm does export and or import

72 Exports, indicate destinations

Indicate all the destinations to which the firms exports

Africa

European Union

Rest of Europe

China (without Hong Kong)

Hong Kong

Rest of Asia

Latin America

North America

Oceania

73 Indicate the main destination of firm's exports

74 Indicate the percentage exports represents in the total sales of the firm

75 Imports, indicate the origin

Indicate all the zones from which the firm imports

Africa

European Union

Rest of Europe

China (without Hong Kong)

Hong Kong

Rest of Asia

Latin America

North America

Oceania

76 Indicate the main country from where the company imports

77 Indicate the percentage imports represents in the company's purchases

Sources of finance

Indicate the importance that each of the following sources of finance has for the firm in Spain

78 Finance from the parent company

79 Chinese Government

80 Spanish financial system

(Banks and cajas de ahorro)

81 Capital from a company situated in a different country than China

82 Relatives (family)

83 Friends/acquaintances

Data from the parent company

84 Name of the parent company

85 Capital origin from the parent company

Country of origin

86 Province of origin of the parent company

87 Contact details of the parent company

Name of contact, e-mail and/or telephone number

88 Has the parent company received authorisation from the Chinese government to invest in Spain?

In case that the investment comes from a firm originally from China

Yes

No

Does not know/does not answer

89 Main economic activity of the parent company

Example: exports of agricultural products

90 Origin of the parent company's capital

Public

Private

Mix (public and private)

Other:

91 Has the parent company invested (or is currently investing) in other countries?

Yes

No

Does not know/does not answer