The localization choices of Italian family businesses in China: is there an agglomeration effect?

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Abstract

Purpose of the paper: *Based on the socioemotional wealth theory, the objective of this work is to investigate the existence of different motivations influencing the localisation choice of the FBs' investments. We want to explore if FBs agglomerate with other FBs or, more generally, if FBs follow a different pattern rather than NFBs.*

Methodology*: The study was carried out using the mixed method following an exploratory sequential design. The quantitative analysis was conducted starting from a sample of 2,958 FDIs made by Italian FBs and NFBs in China, while the qualitative analysis was carried out by performing an in-depth interview with the Marketing Manager of the Italy-China Foundation and by triangulating the information with written reports.*

Findings*: The results are consistent with the traditional literature that identifies the main drivers of localization choices in the economic-strategic, political and institutional factors. Any different motivations from NFBs due to SEW were not confirmed.*

Research limitations: *A first limitation is that, in the quantitative analysis, we considered only FDIs in China and only by Italian companies. A second limitation is that, again in the quantitative analysis, the measure used to identify and distinguish FBs from NFBs is a dichotomous variable.*

Implications*: From a managerial point of view, what this study implies is that family companies and all the other types locate their FDIs following similar logics and so there is no difference in the strategies of localization that can be traced back to the family or non-family nature.*

Originality of the paper: *to date, very limited knowledge exists about the strategic location choice of FBs and particularly, the agglomeration effect in FBs compared to NFBs.*

Key words: family business; foreign direct investments; localization; agglomeration; China

1. Introduction

Family Businesses (FBs) account for the two thirds of the worldwide economic landscape, generating more than 75% of the GDP in most countries and employing more than 75% of the workforce (FFI, 2017). As regards Europe, FBs can be considered the backbone of the European economy: FBs account for more than 85% of the total firms and for more than 59% of the large enterprises (Corbetta and Quarato, 2016). This data gives a clear perception of the importance of this form of business and justify the great academic interest considering the fast-growing number of studies on FBs and on the related managerial implications and policy issues.

However, despite the great amount of research on FBs and their role in the world economy, many themes remain unexplored on the intersection between internationalization and FBs (de Massis *et al.*, 2018). The extensive research relying on the socioemotional wealth (SEW) perspective (Gomez-Mejia *et al.*, 2007), acknowledges that FBs exhibit distinct motivations and behaviours in relation to their non-family counterparts. Extant research on FBs' internationalization has largely examined the antecedents of international expansion (Pukall and Calabrò, 2014), outlining how family involvement may boost or hinder the internationalization of FBs in comparison with NFBs (e.g. Graves and Thomas, 2008; Sciascia *et al.*, 2013; Bannò *et al.*, 2016). Yet, to date, very limited knowledge exists about the strategic location choice of FBs and particularly, the agglomeration effect in FBs compared to NFBs. While scholars agree that firms locate their activities in agglomerated clusters, as long as they can exploit agglomeration externalities and reduce their costs, no study exists that analyse the characteristic motivation in FBs' agglomeration.

In order to be competitive, the localisation choice of family firms in a big emerging market could be different from NFBs (Bannò and Pisano, 2017). We contend that the distinction between FBs and NFBs, could help explaining the strategic choice of internationalization in terms of Foreign Direct Investment (FDI) localization. The SEW perspective, suggests that FBs adopt internationalisation strategies, which do not harm their socio-emotional endowment (Gomez-Mejia *et al.*, 2007), are more risk averse than NFBs (Fernández and Nieto, 2005) and this increases their reluctance to take part in networks with foreign companies or to explore foreign markets that are considered riskier than the domestic one (Boeker and Karichalil, 2002; Gómez-Mejía *et al.*, 2010). This fear claims that FBs, in addition to seeking an economic-financial performance, aim to create and maintain a socio-emotional wealth by adopting international and location strategic choices different from the NFBs' (Gómez-Mejía *et al.*, 2007; Berrone et al,. 2012; Sciascia *et al.*, 2013).

In this paper we want to explore if FBs' aversion to risk can be mitigated by social ties and the co-location in a foreign Country, for example, with other FBs. Given the depth and reciprocity of these ties, we want to explore if the family recognizes the non-economic benefits they receive from such exchanges, and will thus favour initiatives, that can generate benefits of such reciprocal social exchanges. Based on this perspective, we want to explore if FBs which decide to internationalize will be led to locate their investment following an emotional pattern due to the SEW that characterise such kind of firms.

The exploration is done by referring to FDIs in China by Italian companies, both family and non-family. This choice is due to two different reasons. First, China has always been of great interest for scholars, since many Italian companies have chosen this Country as the destination for their investments (Mariotti and Mutinelli, 2017). Secondly, China appears to be a sufficiently large country to study the existence of agglomeration phenomena.

We adopt a mixed method with an exploratory sequential design, that is an approach that combines both the typical perspective of the qualitative and quantitative approach in order to guarantee a greater understanding of the topic analysed. The in-depth understanding of qualitative research techniques and the combination of quantitative statistical trends create a stronger research methodology than a single approach (Bryman, 2008). The qualitative analysis was conducted through the realization of an in-dept interview with the Marketing Manager of the Italy-China Foundation, while the quantitative analysis is conducted starting from a sample of 2,958 IDEs in China by Italian companies, both FBs and NFBs.

The paper is structured as follows. In the next section, a review of the relevant literature on internationalization, family business and agglomeration is presented. Our explorative analysis is developed accordingly. In the following two sections, the methodology employed and results of the analysis are presented. A discussion of empirical findings and concluding remarks follow.

2. Theoretical framework

2.1 Internationalization strategies and location choice of family business

When dealing with internationalisation, and in order to maintain their SEW, the foreign expansion of FBs has its own peculiarities when compared to other types of business (Gallo and Garcia Pont 1996; Calabrò *et al.*, 2016).

Socioemotional Wealth, taking its origin from the theory of behaviour and, in particular, from the theory of the agency, asserts that companies under the control of a family base their strategic choices on the protection of specific assets/heritages, as the complex of values promoted by the family, and use these values as their main decision-making reference scheme. Gòmez-Mejìa *et al.*, (2007) describe SEW as a stock of values attributable to the authority that family members can exercise indefinitely over the business, the possibility of directly influencing the firm and the complete identification of the family with the company (Sharma and Irving, 2005). In this context, two aspects appear to be particularly relevant: the control and influence of the family over the company as source of emotional satisfaction (Schulze *et al.*, 2001), and the long-term business horizon (Miller *et al.*, 2010).

Because of this desire to preserve the SEW, the internationalisation can be perceived by the family as a threat. In fact, the foreign expansion could require the use of external funding and managers, with the risk of diluting family ownership and transferring decision-making power to third parties (Gòmez-Mejìa *et al.*, 2011). Gómez-Mejía *et al.*, (2007, 2010) found that FBs, in order to not jeopardize their corporate assets, prefer to give up strategic opportunities such as those arising from internationalisation (Anderson and Reeb, 2003). It is precisely the preservation of this heritage that is the basis of the risk-averse attitude that characterizes families in the strategic choices of FDI localization. As explained by Gòmez-Mejìa *et al.*, (2007), when compared to non-family companies, family businesses show a rather cautious attitude towards expansion decisions since family members have much of their wealth inside the company and they cannot easily diversify their portfolio. The result is that they are rather conservative in their strategic choices, including the localisation one, showing an innate aversion to risk (Fernandez and Nieto, 2005) that limits their capacity for change, making them particularly reluctant to invest in high-risk projects (Kellermanns and Eddleston, 2006). SEW could also explain why FBs ignore certain investment opportunities if they feel that these may cause potential losses, variability in performance, or there is a general threat to the stability and security of their assets (Gallo and Sveen 1991; Gòmez-Mejìa *et al.*, 2010; Zellweger *et al.*, 2011).

As such, in order to preserve their SEW, family businesses select the most convenient location for investments and the choice can fall on a Country as close as possible to the one of the family, being perceived as potentially less risky for the business. Although, for many authors, the geographical distance and risk associated are two concepts that are less and less relevant (Autio, 2005; Oviatt and McDougall, 1994), in the case of FBs, they seem to be factors that cannot be underestimated.

Since the affirmation of the studies of the Uppsala School (Johanson and Vahlne, 1977), it has been argued that a company prefers to internationalize by following an incremental process according to which it is better to expand initially to neighbouring countries, therefore presumably more similar to that of origin and, only after and progressively, attempt to expand to dissimilar countries. Even more so, this has also proved to be true for FBs. Banalieva and Eddleston (2011), for example, highlighted how internationalisation plays a leading role among the corporate strategies of the family business allowing it to assert its competitive advantage internationally and the best transmission of knowledge which is at the base of it. For this reason, the FB seeks to use this advantage in the nearest countries, where the reputation and networks created over time are more likely to succeed (Sanchez-Famoso *et al.*, 2015).

2.2 Agglomeration and location of FDIS

Agglomeration has been recognized as one of the main determinants of firm location choices (Chen, 2009). The concept of agglomeration was originally advanced by Alfred Marshall (1920), who states that agglomeration engenders economies that are external to a firm, but internal to a small geographic area. Nowadays there are lots of empirical studies investigating the effect of agglomeration on FDI location choice. As concerns the possibility for the parent firm to benefit from a spillover effect, it's important to remember that investors entering a foreign market face a competitive disadvantage arising from the lack of knowledge of that market (Johanson and Vahlne, 2009). Access to local knowledge, therefore, is a fundamental aspect when designing foreign entry strategies (Tan and Meyer, 2011). The main obstacle to the sharing of local knowledge is its non-codified and tacit nature (Polanyi, 1962; Lord and Ranft, 2000). As such, the capacity to exchange tacit knowledge depends on the quality of the relationship between the involved organizations (Dhanaraj *et al.*, 2004). In the context of an agglomeration, a high level of trust between organizations favours knowledge transfer (Hansen and Løvas; 2004) and enables regular contacts and efficient communication (Pérez-Nordtvedt *et al.*, 2008).

The geographical proximity to other FDIs can be pursued to reach tacit local knowledge and to take advantage of personal connection (Polanyi, 1962). This proximity encourages frequent social and professional interactions among employees of different companies within business and non-business communities (Pouder and St. John, 1996). This is confirmed by the choice of foreign investors to locate their FDIs near other firms in the same industry (i.e. industry FDI agglomeration) or close to other FDI firms characterised by the same country of origin (i.e. country-of-origin FDI agglomeration) (Chang and Park, 2005; Nachum and Wymbs, 2005). This second type of agglomerations tend to encourage the development of inter-firm relationships and, therefore, benefits.

One of the main barriers related to the development of relationships based on trust among foreign and local firms can be identified with the sense of vulnerability, perceived by foreign companies, due to the lack of understanding of the new local context (Tsui-Auch and Möllering, 2010). Inter-firm relationships within a country-of-origin agglomeration help developing such trust (Tan and Meyer, 2011). Such trust is due to the shared socio-cultural backgrounds of the parent companies which have strengthen networks inside the country of origin (Miller *et al.*, 2008). Moreover, relationships among compatriots are supported by social interactions among expatriates. Market entrants particularly benefit from country agglomerations, thanks to the help they provide in acquiring the relevant knowledge of the local context and reduce their liability of *outsidership* (Johanson and Vahlne, 2009). Specifically, this proximity facilitates the acquisition of knowledge about the way to adapt to local environments and institutions, which can be considered as a sensitive step in the entry strategy into new markets. In fact, foreign investors from the same socio-cultural backgrounds have similar business practices and they often face similar processes of adaptation to local environments (Liker *et al.*, 1999). In addition, co-location by country of origin helps foreign investors to gain legitimacy in the host country (Kostova and Zaheer, 1999:75; Tan and Meyer, 2011).

2.3 Explorative analysis development

In the light of these considerations, the research places its roots within the theoretical framework of SEW that recent theoretical advances clarified in distinct elements: the family identity, the binding social ties, the emotional attachment, the family influence and the dynastic succession (Le Breton-Miller and Miller, 2013). In particular, binding social ties (i.e., the second aspect of SEW) extend beyond the boundaries of the family and involve a large number of actors both internal and external to the family (e.g., family members, customers, competitors, other firms) sharing a sense of belonging, stability and commitment to the firm (Berrone *et al.*, 2012). Given the depth and reciprocity of these ties, families recognize the non-economic benefits they receive from such exchanges with third parties, and will thus favour initiatives, that can generate benefits of such precious, reciprocal social exchanges (Brickson, 2007).

We identify such kind of social ties, among others, in the relationships that FBs can establish. FBs may have a relational network that can facilitate their entry to locations even far away and could operate trying to reduce the perceived risk, in order to have better knowledge of the peculiarities reducing the impact of the main factors of difference and risk between the two countries. Of course, this could happen also in the case of NFBs, but we want to explore if social ties can be stronger in effects in the case of FBs. For example, a high level of trust due to emotional engagement with other FBs should reduce a firm's concern that other firms will take advantage of its weaknesses and expropriate its knowledge (Steensma and Lyles, 2000; Tsui-Auch and Möllering, 2010).

In the light of this, the questions we want to explore are as follow:

Is there a gravitational effect generated by the presence of family agglomerations capable of attracting family businesses?

Is it reasonable to expect that family businesses that decide to internationalize will locate their investment in proximity of those made by other FBs, thus encouraging the formation of family businesses agglomerations and the improvement of social ties?

What is the attitude of FBs in localization choice when compared to NFBs?

Are there any peculiarities of FBs when analysing specific sectors?

3. Empirical analysis

3.1 Mixed method approach

The research question was investigated using a mixed-method approach defined by Johnson, Onwuegbuzie and Turner (2007, p. 123) as *the type of research in which a researcher or team of researchers combines elements of qualitative and quantitative research approaches for the broad purpose of breadth and depth of understanding and corroboration.* In other words, mixed methods combine the typical tools of the qualitative approach with those typical of the quantitative one in order to provide a greater understanding of the theme that is intended to be studied (Reilly and Jones III, 2017).

This methodology is very useful in the study of FBs which are particularly complex to analyse because of their nature (Wilson *et al.*, 2014). The complexity of this theme stems, firstly, from the objective pursued within family companies to generate, in addition to a financial value, also a non-financial value due to SEW (Astrachan and Jaskiewicz, 2008; Zellweger and Astrachan, 2008). The mixed approach, using different rational tools and processes makes it possible to better understand these idiosyncrasies (D'Allura and Bannò, 2019).

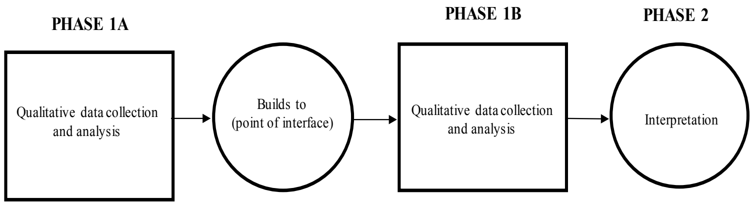
To collect, analyse and interpret both qualitative and quantitative data we can identify four main designs (Creswell, 2014): the converged parallel design, the explanatory sequential drawing, the exploratory sequential drawing, and the embedded drawing.

In this work, the mixed methodological approach of an exploratory sequential design will be used. We adopt this design because we want to confirm the qualitative results with the support of quantitative data. In fact, by first learning from the qualitative data through a deep interview, we collect and analyze the universe of quantitative data of FDIs made by Italian firms. The choice of this design is indicated, because the research problems are qualitative in nature and important variables are not well known and measurable (Picci, 2012).

The exploratory sequential design consists of two consecutive phases and it starts from a qualitative explorative phase so that it is then able to have as many elements as possible (see Figure 1). This design aims to explore the reasons for the lack of knowledge of a certain phenomenon, construct quantitative instruments and assess whether qualitative issues can be generalizable to a population. In the exploratory sequential design, qualitative data are much more important for the analysis and they are used to develop the quantitative phase.

The referred universe is the same in the two phases (i.e. Italian FDIs in China in Phase 1A and Phase 1B, see Figure 1), however data were collected from different sources and from different points of view (i.e. face to face interview in Phase 1A and desk in Phase 1B).

Fig. 1: Exploratory sequential design



Source: our elaboration from Creswell, 2014

In Phase 2 we adopt an interpretation that allows to present qualitative and quantitative results followed by their comments confirming or disconfirming each other's. In the end, to interpret the data, we look for similarities and convergences and try to justify the discrepancies or confirm results from the two phases in order to completely understand the two data sources and to corroborate the results obtained from different methods.

3.2 Phase 1a: qualitative analysis

Phase 1A is based on the qualitative method that goes beyond the measurement of the observable and tries to understand the meaning and beliefs of the underlining actions that are typical for FBs. The research design is a single-case study and the primary source of data was face to face in-depth semi-structured interviews that facilitated a free expression of the informants' ideas. Then the triangulation was possible by multiple data collection methods (i.e. reports and archives) (Campbell and Fiske, 1959; Lee, 2006).

Phase 1A was mainly developed thanks to an interview to the Marketing Manager of the Italy China Foundation who could follow many Italian firms during their settlement in China. The goal of the Foundation, which was found in 2003, *is to open a dialogue between Italy and China from an economic point of view, cultural and scientific, accounting and making the Italian business sector, to which support is provided in institutional and commercial relations with the Chinese counterparts.* Consistent with its mission, the Foundation assists Italians operators by providing targeted advice to individual companies.

The interview was conducted in an exploratory way and, for this reason, the first questions were generic and aimed at investigating the determinants that favour the location of FDIs in China. The respondent argued that the reasons that drive companies to locate their investments in China are primarily attributable to the internal market that China enjoys, which is experiencing a boom in consumption and a change of economic model. Consumption growth is currently supported by the increase of available income and the growth of the lower-middle-class segments (i.e. those with an annual income between 4,000 and 12,000 dollars). This growth is also accompanied by a gradual change in the composition of consumption: expenditure on consumer goods (e.g. foodstuffs) will fall and the consumption of semi-basic goods (e.g. clothing, healthcare, services) will increase. The same will happen for the so-called voluptuous goods, like education, culture, transport and telecommunications. Regarding the change in the economic model, what the Foundation's Head of Marketing highlighted, is the shift from a model based on the growth of investments financed mainly through debt issuance to a model based on internal consumption. All this is driven by the rapid growth of the service sector, which is increasingly becoming the new backbone of the Chinese economy.

The respondent identified the second reason that drives companies to locate their investments in China in the growth of the technological sector and industrial production. The growth is rooted in China's R&D investments, which have steadily increased year-on-year to reach a 2,18% share of GDP in 2018. Looking specifically at the provinces, the municipality of Beijing has an R&D rate on GDP of 6% when the first country in the world, that is Israel, is at 4.3% (calculating that Beijing has twice the inhabitants of Israel). Another province mentioned is Guangdong having an R&D rate on GDP of 4%. This is because the rapid increase in R&S expenditure in recent years is part of China's economic and social development strategy through scientific and technological progress.

No reference was made as concerns the aspects related to SEW, nor to social ties.

Following, a more specific set of questions aiming at identifying the factors that drive companies to invest in one area of China rather than another was asked. The respondent argued that cost differences are extremely important. Despite some areas, such as Chongquing and Chengdu that are growing considerably, the coast remains the most competitive area of the Country and many companies prefer to locate where there are cost advantages and/or where they can be close to their customers. This is coherent with traditional international business findings (see e.g. Dunning, 1993) which identify in the market research, resources and efficiency, the main reasons according to which a company intends to undertake investments outside its country of origin. In particular, the following elements are the main factors of attractiveness of FDI: size of the market, geographical distances and proximity, agglomeration effects (attributable to the state of the infrastructure of the host country, the degree of industrialization and the size of the stock of FDI), labour costs, physical infrastructure, intangible production factors (e.g., research and development), public incentives (e.g., financial incentives, protectionist barriers, exchange rates) and political stability. The cost of labour is particularly crucial for those companies that want to undertake labour-intensive activities in the production of their goods.

Again, no reference was made to aspects connected to SEW, nor to social ties.

Finally, the interview went into specifics and the question if there is an emotional, social and/or family factor that can influence the location choices of FBs leading them to create agglomerations capable of attracting, in turn, other family firms was asked. The answer was quite clear and suggests that, since companies thought exclusively from a business and economic perspective, they located their investments exclusively where there could be a better economic advantage: investment decisions in a foreign country depend on the costs that a company will meet by entering the market of the host country. The respondent argued that in some cases firms prefer production districts where they come into contact with other companies or they can be located near their customers or where their reference market is located. However, the following economic factors contribute the most to the creation of agglomeration effects: the state of the host country's infrastructure, the degree of industrialisation and the measure of the FDIs' stock. Furthermore, it emerged that areas with a high degree of industrial clusters and entrepreneurial culture are source of greater attraction. In addition, from the interview and according to Bannò and Pisano (2017), localization choices are further related to a few industry-specific and country-specific factors. The first factors include barriers to entry and/or exit, the presence of competitors and their degree of concentration, and the presence of companies that comprise a well-organised value chain at the local level in which the entrant can enter with his business. In addition to industry-specific factors there are the so-called country-specific factors which include the presence of a reliable legal system and an institutional system that ensures compliance with the rules, the presence of a reliable financial system, the presence of a system of infrastructure that can be used by the entrant and the presence of an educational system that encourages the formation of a skilled workforce.

It is important to note that no references nor confirmation were made to any emotional aspects nor to social ties. The interview suggests the existence of an agglomeration effect but not due to socio-emotional factors and therefore denied the existence of a family factor capable of influencing the location choices of FBs. The main location drivers remain economic, institutional and political.

Once the results of the qualitative analysis have been identified, the next step is to carry out a triangulation through desk data. As such, we complete the qualitative Phase 1B with the analysis of written Reports from the Italia China Foundation.

Interesting issues emerge from the survey of a sample of Italian companies operating in China conducted by the CeSif (Centro Studi Imprese Italia China Foundation)[1], which highlighted the existence of eleven categories of critical issues related to location choice. Among them, the two most significant are the difficulties that companies face in managing: language and cultural differences and the violation of intellectual property rights. With reference to cultural and linguistic differences, a successful strategy should pay close attention to the choice of management. For this reason, companies that want to build a long-term and prosperous presence in China must invest in management training in order to provide the management with the tools and information necessary to direct the business activity towards a winning and appropriate business model for the host country. A possible alternative to the one described above is the choice of the ownership to hire managers who can already boast a deep knowledge of the local market and sector in which the company intends to operate. All the solutions that emerge for this first issue related to location choice, do not refer to SEW. In other words, the emotional advantage of a network with other FBs cannot overcome this first main problem.

Other influential issues that emerged from the study are the great difficulty in identifying reliable local partners, problems related to bureaucracy, protectionist policies adopted by the Chinese government, the existence of an unclear regulation and the presence of a low-skilled workforce. Again, SEW and/or the social ties with other FBs cannot represent a solution to corruption and human resources management.

3.3 Phase 1b: quantitative analysis

Phase 1B consists in a quantitative analysis based on a sample of 2,958 IDEs which was carried out by 1,565 Italian companies, both family and non-family. These data were collected from Reprint database, which was created in 1986 and is being annually updated. The criteria to identify FDIs were based on principles of economic materiality, rather than being formal and/or legal-administrative in nature. Thus, the FDIs made by financial institutions were not considered (for additional details, see Mariotti and Mutinelli, 2017). In order to analyse the geographical distribution of Italian FDIs in China we have collected, for each investment, the specific geographical localization.

[1] In 2010, the Italy-China Foundation established Centro Studi per Imprese of the Italy-China Foundation (CeSiF), a permanent center for information and statistical-economic updating that aims to carry out and promote studies, statistical analysis, conferences and publications on the Chinese market at the service of the entrepreneurial system.

Family firms represent the other core variable in our investigation. This variable was constructed by data from Aida database (Bureau van Dick) which reports the company name, the family name of each board member and shareholder with the respective ownership share allowing us to identify kinship relations based on family names. We identify family control as the power to appoint to the board of directors. This definition is in line with previous studies, according to which family control can be identified as the fractional equity holding by family founding members or descendants (Bannò and Sgobbi, 2016; Lee, 2006). We define the variable that identify the nature of FBs as a binary variable equal to 1 if a non- listed firm is principally owned by the family or if no less than 20% of a listed firm is owned by the family, and zero otherwise (Littunen and Hyrsky, 2000).

The sample consists of 2,958 FDIs made by 1,565 Italian firms, revealing that some of them have made more than one FDI in China[2]. Among the Italian multinational firms, 994 are FBs (for a total of 1,856 FDIs) and 571 are NFBs (for a total of 1,102 FDIs). The workers employed are around 130,707of which 87,467 are employed in the industrial sector and 43,240 are engaged in commercial and service sectors. The parent companies are both large (40.2%) and small and medium-sized (59.8%)[3] and most of them are in Lombardy (38%) and Emilia Romagna (15.6%). The companies mainly operate in the machinery (29.4%) and industrial plant sector (10.9%).

The majority of FDIs of the sample is located along the east coast of China and in proximity of the main cities (i.e. Hong Kong and Shanghai)[4]. Figure 2 illustrates the geographical distribution of the FDI in the whole sample.

Fig. 2: Map of the FDIs distribution in China in 2018

Source: our elaboration from Reprint and Aida Bureau van Dick

The statistical tool used to analyse and compare the two sub-samples (i.e. FB vs NFB) is the Relative Specialization Index. It is the revealed comparative advantages and it is one of the measures normally used to analyse a country's international specialisation model. The Index is calculated for every single Chinese city that is the destination of FDIs carried out by Italian family and non-family firms. The index aims to check whether, for each City, there is an agglomeration of family or non-family businesses. The following formula will be applied to FDIs carried out by FBs in a specific city:

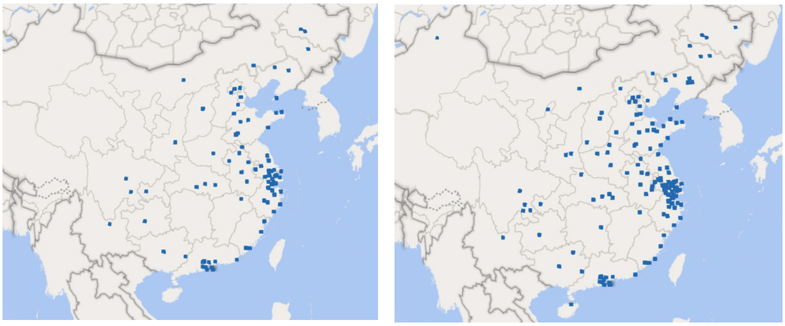
Likewise, the following formula will apply to FDIs carried out by NFBs in a specific city:

If the Index is greater than one, it means that family (or non-family) businesses is are more concentrated in a certain City, resulting in an agglomeration phenomenon based on the family nature of the company. While, if the Index assumes a value less than one means that there is a phenomenon of dispersion of FBs (or NFBs) in a specific city.

$$\frac{[(\text{Total number of FDIs realised by FBs in a generic city}) \div (\text{Total number of FDis realised by FBs in every city included in the sample})]}{[(\text{Total number of FDIs realised by all companies in a generic city}) \div (\text{Total number of FDIs realised in the whole country})]}$$

$$\frac{[(\text{Total number of FDIs realised by NFBs in a generic city}) \div (\text{Total number of FDIs realised by NFBs in every city included in the sample})]}{[(\text{Total number of FDIs realised by all companies in a generic city}) \div (\text{Total number of FDIs realised in the whole country})]}$$

Fig. 3: Maps of Relative Specialization Index for FBs and for NFBs.



Source: our elaboration from Reprint and Aida Bureau van Dick

Once calculated the Index for each Chinese city with reference to both FBs and NFBs, it is possible to represent the results obtained on two maps (Figure 3), one relating to FBs and one to NFBs. Only cities where the Index is greater than 1 are reported. Statistical data for every City is available in Annex 1.

As the SEW effect could be highly influenced by the level of involvement of the family in the business, considered not only in terms of ownership but also in terms of the presence of family members in management positions (Chua, Chrisman & Sharma 1999), the analysis was repeated by changing the classification criterion of family and non-family businesses. We have reclassified the companies of the statistical universe by adopting a dummy variable that assumes a value of 1 if the Board of Directors is composed mainly of members who are part of the Owning Family or if the successor is part of the Board of Directors, 0 otherwise. The new sample consists of 2,779 FDIs made by 1,444 Italian firms and, among them, 547 are FBs (for a total of 1,082 FDIs) and 897 are NFBs (for a total of 1,697 FDIs). Even in this case, the statistical tool used to analyse and compare the two sub-samples (i.e. FB vs NFB) is the Relative Specialization Index which has been calculated for every single Chinese city.

The results obtained were consistent with what had been already found using the selection criterion adopted in the previous analysis (i.e. 1 if a non- listed firm is principally owned by the family or if no less than 20% of a listed firm is owned by the family, and 0 otherwise)[5]. Even in this case the results show the lack of motivation generated by SEW because the majority of FDIs made by companies is located along the east coast of China and in proximity of the main cities.

In order to check the robustness of the results, we further deepen the quantitative analysis considering as sub-sample the companies belonging to the Commerce Sector which is the one prevalent within the starting statistical universe. The new sample consists of 614 FDIs made by 415 Italian firms and, among them, 273 are FBs (for a total of 409 FDIs) and 142 are NFBs (for a total of 205 FDIs). Even in this case the process involved the recalculation of the Relative Specialization Index for every single Chinese city that is the destination of FDIs carried out by Italian family and non-family firms. The results obtained were consistent with what was already found[6].

3.4 Phase 2: interpretation

In Phase 1A the data were arranged into a conceptual order searching for emerging themes. The Marketing Manager of the Italy China Foundation, who has denied the existence of a family effect capable of influencing the localization choices of FBs since companies think exclusively from a business point of view, and written data, confirm this interpretation.

Phase 1B analyses the firms' location choice thanks to Reprint data. Thus, we can track the location, revealing the non-existence of an agglomeration of FBs when compared to NFBs. By analysing the Index of comparative advantage, the results show no differences in gravitational effects generated by SEW. From Figure 2, the majority of FDIs made by companies is located along the east coast of China and in proximity of the main cities. This was also supported by the Marketing Director of the Italy-China Foundation who confirmed the tendency of Italian companies to locate their investments in the south-east regions of China. The reason of this choice is due to the fact that the eastern part of the Country continues to be the most developed despite the recent growth of some regions such as Chengdu and Chongquing.

Summarising, the combination of both qualitative and quantitative data is synergistic because if on the one side qualitative data (i.e. interviews) were necessary for understanding the rationale, on the other side quantitative data revealed and confirmed what had emerged in the qualitative phase (Eisenhardt, 1989). The results achieved through the application of the mixed method suggest that SEW may induce FBs probably in the choice of the foreign Country, but it is not a factor able to influence the micro-localization of the FDI (Dunning, 1993; Bannò and Pisano, 2017).

5 Statistical data and Maps for every City calculated with the new criterion of FBs is available upon request.

6 Statistical data and Maps for every City calculated for the Commercial Sector is available upon request.

4. Conclusion

The area of international management is very much in need of new evidence for FBs. Our results seem to assume importance in the FBs literature panorama and of that focused on the internationalization process. The contribution made to literature by this work is double. First of all, the study investigates a field that has remained unexplored within a macro-topic as the internationalization of FBs and, secondly, the study was carried out using the mixed method which is useful in the study of FBs that are particularly complex due to the peculiarity of their nature (Denison, Lief, and Ward, 2004). The existence of a gravitational effect was investigated adopting an explorative design. Indeed, it has been demonstrated that there aren't motivations due to SEW that would induce FBs to locate their FDIs in a specific area rather than another, for example in the same area with other FBs, resulting in an agglomeration phenomenon.

Our results appear contextually consistent and conflicting with the existing literature.

On the one side the results are consistent with the traditional literature concerning the determinants of localization choices. In fact, we identify in economic factors the main driver of strategic localization choices. On the other side, this is one of the few cases where economic considerations prevail over the emotional aspect. SEW, in location choice and in agglomeration effects, is not verified as a strategic attitude of FBs.

The result of the analysis has implications both in terms of management and public policy and although the results are verified only for China, they aim to be significant regardless of the destination country of the FDIs. From a managerial point of view, what this study implies is that family companies and all the other types locate their FDIs following similar logics and so there is no difference in the strategies of localization that can be traced back to the family or non-family nature.

The research is not immune to limitations and this can provide insights for future research. A first limitation is that, in the quantitative analysis, we considered only FDIs in China and only by Italian companies. Therefore, a possible future development could be to replicate the study considering also other destination Countries and other Countries of origin. A second limitation is that, again in the quantitative analysis, the measure used to identify and distinguish FBs from NFBs is a dichotomous variable. A possible future development could be to consider other measures in order to take care of the FBs' the heterogeneity. Finally, it would have been interesting to propose a questionnaire and/or face to face interviews to some of the companies that had chosen to be located in cities where other Italian companies, family or non-family businesses already operated.

References

ANDERSON R.C., REEB D.M. (2003), "Founding-family ownership and firm performance: Evidences from the SandP 500", *Journal of Finance*, vol. 58, n. 3, pp. 1301-1327.

ASTRACHAN J.H., JASKIEWICZ P. (2008), "Emotional returns and emotional costs in privately held family businesses: Advancing traditional business valuation", *Family Business Review*, vol. 21, n. 2, pp. 139-149.

AUTIO E. (2005), Creative tension: The significance of Ben Oviatt's and Patricia McDougall's article "toward a theory of international new ventures", *Journal of International Business Studies*, vol. 36, n. 1, pp. 9-19.

BANALIEVA E.R., EDDLESTON K.A. (2011), "Home-region focus and performance of family firms: The role of family vs non-family leaders", *Journal of International Business Studies*, vol. 42, n. 8, pp. 1060-1072.

BANNÒ M., POZZA E., TRENTO S. (2016), "La famiglia fa male all'internazionalizzazione dell'impresa? Are family firms more or less internationalized than non family firms", *Sinergie Italian Journal of Management*, vol. 34, n. 100, pp. 133-154

BANNÒ M., PISANO V. (2017), *Le strategie d'internazionalizzazione delle imprese familiari italiane: una verifica empirica*, G. Giappichelli Editore, Torino.

BANNÒ M., SGOBBI F. (2016), "Family business characteristics and the approach to HRM in overseas ventures", *Journal of Small Business Management*, vol. 54, n. 2, pp. 640-658.

BERRONE P., CRUZ C., GÓMEZ-MEJÍA L.R. (2012), "Socioemotional wealth in family firms: Theoretical dimensions, assessment approaches, and agenda for future research", *Family Business Review,* vol. 25, n. 3, pp. 258-279.

BOEKER W., KARICHALIL R. (2002), "Entrepreneurial transitions: Factors influencing founder departure", *Academy of Management Journal,* vol. 45, n. 4, pp. 818-826.

BRICKSON S.L. (2007), "Organizational identity orientation: The genesis of the role of the firm and distinct forms of social value", *Academy of Management Review*, vol. 32, n. 3, pp. 864-888.

BRYMAN A. (2008), "Of methods and methodology", *Qualitative Research in Organizations and Management: An International Journal,* vol. 3, n. 2, pp. 159-168.

CALABRÒ A., BROGI M., TORCHIA M. (2016), "What does really matter in the internationalization of small and medium-sized family businesses?", *Journal of Small Business Management,* vol. 54, n. 2, pp. 679-696.

CAMPBELL D.T., FISKE D.W. (1959), "Convergent and discriminant validation by the multitrait-multimethod matrix", *Psychological bulletin*, vol. 56, n. 2, pp. 81.

CHANG S.J., PARK S. (2005), "Types of firms generating network externalities and MNCs'co-location decisions", *Strategic Management Journal,* vol. 26, n. 7, pp. 595-615.

CHEN Y. (2009), "Agglomeration and location of foreign direct investment: The case of China", *China Economic Review*, vol. 20, n. 3, pp. 549-557.

CHETTY S., CAMPBELL-HUNT C. (2004), "A strategic approach to internazionalization: A traditional versus a 'born global' approach", *Journal of International Marketing*, vol. 12, n. 1, pp. 57-81.

CHUA J.H., CHRISMAN J.J., PRAMODITA S. (1999), "Defining the family business by behaviour", *Entrepreneurship Theory and Practice*, vol. 23, n. 4, pp. 19-39.

CLAESSENS S., DJANKOV S., FAN J.P., LANG L.H. (2002), "Disentangling the incentive and entrenchment effects of large shareholdings", *The Journal of Finance*, vol. 57, n. 6, pp. 2741-2771.

CORBETTA G., QUARATO F. (2016), *L'Osservatorio AUB sulle aziende familiari italiane,* VIII Rapporto, Milano.

CRESWELL J.W. (2014), *A concise introduction to mixed methods research*, Sage, Thousand Oaks, CA.

D'ALLURA G.M., BANNO' M. (2019), *Mixed methods approach for family firm and institutions research: Literature review and suggestion for future research in Family Firms and Institutional Contexts in Business Models, Innovation and Competitive Advantage,* Edited by Giorgia Maria D'Allura, Andrea Colli, and Sanjay Goel.

DE MASSIS A., KOTLAR J., MAZZOLA P., MINOLA T., SCIASCIA S. (2018) "Conflicting selves: Family owners' multiple goals and self-control agency problems in private firms", *Entrepreneurship Theory and Practice,* vol. 42, n. 3, pp. 362-389.

DENISON D., LIEF C., WARD J.L. (2004), "Culture in family-owned enterprises: Recognizing and leveraging unique strenghts", *Family Business Review,* vol. 17, n. 1, pp. 61-70.

DHANARAJ C., LYLES M.A., STEEMA H.K., TIHANYI L. (2004), "Managing tacit and explicit knowledge transfer in IJVs: the role of relational embeddedness and the impact on Performance", *Journal of International Business Studies*, vol. 35, n. 5, pp. 428-442.

DOW D., KARUNARATNA A. (2006), "Developing a multidimensional instrument to measure psychic distance stimuli", *Journal of International Business Studies*, vol. 37, n. 5, pp. 578-602.

DUNNING J.H. (1993), *Multinational enterprise and global economy*, Wokingham, UK: Addison-Wesley.

EISENHARDT K.M. (1989), "Building theories from case study research", *Academy of Management Review*, vol. 14, n. 4, pp. 532-550.

FAMILY FIRM INSTITUTE FFI (2017), Global Data Points, Retrieved from the FFI website: http://www.ffi.org/page/globaldatapoints.

FERNÁNDEZ Z., NIETO M.J. (2005), "Internationalization strategy of small and medium-sized family businesses: Some influential factors", *Family Business Review,* vol. 18, n. 1, pp. 77-89.

GALLO M.A., GARCIA PONT C. (1996), "Important factors in family business internationalization", *Family Business Review*, vol. 9, n. 1, pp. 45-59.

GALLO M.A., SVEEN J. (1991), "Internationalizing the family business: facilitating and restraining factors", *Family Business Review,* vol. 4, n. 2, pp. 181-190.

GÓMEZ-MEJÍA L.R., CRUZ C., BERRONE P., DE CASTRO J. (2011), "The bind that ties: Socioemotional wealth preservation in family firms", *The Academy of Management Annals,* vol. 5, n. 1, pp. 653-707.

GÓMEZ-MEJÍA L.R., HAYNES K.T., NÚÑEZ-NICKEL M., JACOBSON K.J., MOYANO-FUENTES J. (2007), "Socioemotional wealth and business risks in family-controlled firms: Evidence from Spanish olive oil mills", *Administrative Science Quarterly,* vol. 52, n. 1, pp. 106-137.

GÓMEZ-MEJÍA, L.R., MAKRI, M., LARRAZA-KINTANA, M.L. (2010), "Diversification decisions in family-controlled firms", *Journal of Management Studies,* vol. 47, n. 2, pp. 223-252.

GRAVES C., THOMAS J. (2008), "Determinants of the internationalization pathways of family firms: An examination of family influence", *Family Business Review,* vol. 21, n. 2, pp. 151-167.

HANSEN M.T., LØVAS B. (2004), "How do multinational companies leverage technological competencies? Moving from single to interdependent explanations", *Strategic Management Journal,* vol. 25, n. 8-9, pp. 801-822.

JOHANSON J., VAHLNE J.E. (2009), "The Uppsala internationalization model revisited: From liability of foreignness to liability of outsidership", *Journal of International Business Studies*, vol. 40, n. 9, pp. 1411-1431.

JOHANSON J., VAHLNE J.E. (1977), "The internationalization process of the firm - A model of knowledge development and increasing foreign market commitments", *Journal of International Business Studies,* vol. 8, n. 1, pp. 23-32.

JOHNSON R.B., ONWUEGBUZIE A.J., TURNER L.A. (2007), "Toward a definition of mixed methods research", *Journal of Mixed Methods Research*, vol. 1, n. 2, pp. 112-133.

KELLERMANNS F.W., EDDLESTON K.A. (2006), "Corporate entrepreneurship in family firms: A family perspective", *Entrepreneurship Theory and Practice,* vol. 30, n. 6, pp. 809-830.

KOSTOVA T., ZAHEER S. (1999), "Organizational legitimacy under conditions of complexity: The case of the multinational enterprise", *Academy of Management Review,* vol. 24, n. 1, pp. 64-81.

LE BRETON-MILLER I., MILLER D. (2013), "Socioemotional wealth across the family firm life cycle: A commentary on 'Family Business Survival and the Role of Boards'", *Entrepreneurship Theory and Practice*, vol. 37, n. 6, pp. 1391-1397.

LEE J. (2006), "Family firm performance: Further evidence", *Family Business Review,* vol. 19, n. 2, pp. 103-114.

LIKER J., FRUIN M., ADLER P.S. (1999), *Bringing Japanese Management Systems to the U.S.:Transplantation or Transformation?*, in Liker J., Fruin M., Adler P. (Ed.), Remade in America:

LITTUNEN H., HYRSKY K., (2000), "The early entrepreneurial stage in Finnish family and nonfamily firms", *Family Business Review,* vol. 13, n. 1, pp. 41-54.

LORD M.D., RANFT A.L. (2000), "Organizational learning about new international markets: exploring the internal transfer of local market knowledge", *Journal of International Business Studies,* vol. 31, n. 4, pp. 573-589.

MARIOTTI S., MUTINELLI M. (2017), *Italia multinazionale 2017: le partecipazioni italiane all'estero ed estere in Italia,* ICE, Roma.

MARSHALL A. (1920), *Principles of Economics,* 8th ed, London: Macmillan.

MILLER D., LE BRETON-MILLER I., LESTER R.H. (2010), "Family Ownership And Acquisition Behavior In Publicly-Traded Companies", *Strategic Management Journal,* vol. 31, n. 2, pp. 201-223.

MILLER S.R., THOMAS D.E., EDEN L., HITT M. (2008), "Knee deep in the big muddy: The survival of emerging market firms in developed markets", *Management International Review,* vol. 48, n. 6, pp. 645-665.

NACHUM L., WYMBS C. (2005), "Product differentiation, external economies and MNE location Choices: MandAs in global cities", *Journal of International Business Studies,* vol. 36, n. 4, pp. 415-434.

OVIATT B.M., MCDOUGALL P.P. (1994), "Toward a theory of international new ventures", *Journal of International Business Studies,* vol. 25, n. 1, pp. 45-64.

PÉREZ-NORDTVEDT L., KEDIA B.L., DATTA D.K., RASHEED A.A. (2008), "Effectiveness and efficiency of cross-border knowledge transfer: An empirical examination", *Journal of Management Studies,* vol. 45, n. 4, pp. 714-744.

PICCI P. (2012), *Orientamenti emergenti nella ricerca educativa: i metodi misti. Studi sulla Formazione*, Firenze University Press, 191-201.

POLANYI M. (1962), *Personal Knowledge,* Chicago, IL: University of Chicago Press.

POUDER R., ST. JOHN C.H. (1996), "Hot spots and blind spots: Geographical clusters of firms and innovation", *Academy of Management Journal,* vol. 21, n. 4, pp. 1192-1225.

PUKALL T.J., CALABRÒ A. (2014), "The internationalization of family firms a critical review and integrative model", *Family Business Review*, vol. 27, n. 2, pp. 103-125.

REILLY T.M., JONES III R. (2017), "Mixed methodology in family business research: Past accomplishments and perspectives for the future", *Journal of Family Business Strategy,* vol. 8, n. 3, pp. 185-195.

SANCHEZ-FAMOSO V., AKHTER N., ITURRALDE T., CHIRICO F., MASEDA A. (2015), "Is non-family social capital also (or especially) important for family firm performance?", *Human Relations,* vol. 68, n. 11, pp. 1713-1743.

SCHULZE W.S., LUBATKIN M.H., DINO R.N., BUCHHOLTZ A.K. (2001), "Agency relationship in family firms: theory and evidence", *Organization Science*, vol. 12, n. 2, pp. 99-116.

SCIASCIA S., MAZZOLA P., ASTRACHAN J.H., PIEPER T.M. (2013), "Family involvement in the board of directors: Effects on sales internationalization", *Journal of Small Business Management,* vol. 51, n. 1, pp. 83-99.

SHARMA P., IRVING P.G. (2005), "Four bases of family business successor commitment: Antecedents and consequences", *Entrepreneurship Theory and Practice*, vol. 29, n. 1, pp. 13-33.

STEENSMA K., LYLES M.A. (2000), "Explaining IJV survival in a transitional economy through social exchange and knowledge-based perspectives", *Strategic Management Journal*, vol. 21, n. 8, pp. 831-852.

TAN D., MEYER K.E. (2011), "Country-of-Origin and Industry FDI Agglomeration of Foreign Investors in an Emerging Economy", *Journal of International Business Studies,* vol. 42, n. 4, pp. 504-520.

TSUI-AUCH L.S., MÖLLERING G. (2010), "Wary managers: Unfavorable environments, perceived vulnerability, and the development of trust in foreign enterprises in China", *Journal of International Business Studies* vol. 41, n. 6, pp. 1016-1035.

WILSON S.R., WHITMOYER J.G., PIEPER T.M., ASTRACHAN J.H., HAIR J.F., SARSTEDT M. (2014), "Method trends and method needs: Examining methods needed for accelerating the field", J*ournal of Family Business Strategy,* vol. 5, n. 1, pp. 4-14.

ZELLWEGER T.M., ASTRACHAN J.H. (2008), "On the emotional value of owning a firm", *Family Business Review,* vol. 21, n. 4, pp. 347-363.

ZELLWEGER T.M., NASON R.S., NORDQVIST M., BRUSH C.G. (2011), "Why do family firms strive for non-financial goals? An organizational identity perspective", *Entrepreneurship Theory and Practice,* vol. 37, n. 2, pp. 229-248.

Annex 1: Relative Specialization Index calculated for each city

Cities where firms locate their own investments	Number of FDIs carried out by FBs in the city	Number of FDIs carried out by NFBs in the city	Relative Specialization Index calculated on all cities for the FDIs carried out by FBs	Relative Specialization Index calculated on all cities for the FDIs carried out by NFBs
Bengbu	1	0	1,5937	0
Anquing	2	0	1,5937	0
Hefei	2	1	1,0625	0,8947
Maanshan	3	0	1,5937	0
Wuhu	3	0	1,5937	0
Tongling	0	1	0	2,6842
Anhui	11	2	-	-
Beijing	152	134	0,8470	1,2576
Beijing	152	134	-	-
Chongqing	18	3	1,3660	0,3834
Chongqing	18	3	-	-
Fuan	0	1	0	2,6842
Fujian	1	1	0,7968	1,3421
Fuzhou	1	1	0,7968	1,3421
Quanzhou	2	0	1,5937	0
Xiamen	5	1	1,3281	0,4473
Zhangzhou	1	1	0,7968	1,3421
Fujian	10	5	-	-
Dongguan	19	12	0,9768	1,0390
Foshan	28	12	1,1156	0,8052
Guangdong	1	3	0,3984	2,0131
Guangzhou	57	31	1,0323	0,9455
He Yuan	1	0	1,5937	0
Heshan	0	1	0	2,6842
Huizhou	6	3	1,0625	0,8947
Jiangmen	3	3	0,7968	1,3421
Nansha	1	0	1,5937	0
Shantou	1	1	0,7968	1,3421
Shenzhen	50	26	1,0485	0,9182
Shunde	2	0	1,5937	0
Sijiu	1	0	1,5937	0
Taishan City	1	0	1,5937	0
Zahoqing	1	0	1,5937	0
Zengcheng	0	1	0	2,6842
Zhongshan	18	5	1,2472	0,5835
Zhuhai	5	3	0,9960	1,0065
Guangdong	195	296	-	-
Guilin	4	0	1,5937	0
Guangxi	4	0	-	-
Guiyang	0	1	0	2,6842
Guizhou	0	1	-	-
Haikou	1	0	1,5937	0

Hainan	1	0	-	-
Boading	3	0	1,5937	0
Cangzhou	0	2	0	2,6842
Handan	1	0	1,5937	0
Huanghua	1	0	1,5937	0
Langfang	5	0	1,5937	0
Long Hua	0	1	0	2,6842
Luquan	0	1	0	2,6842
Qianan	1	0	1,5937	0
Sanhe	0	1	0	2,6842
Tangshan	1	0	1,5937	0
Zhangjiakou	1	0	1,5937	0
Zhou	1	0	1,5937	0
Zhuozhou	0	1	0	2,6842
Hebei	14	6	-	-
Xing	0	1	0	2,6842
Zhaodong	0	1	0	2,6842
Changlin	1	0	1,5937	0
Harbin	0	4	0	2,6842
Jixian	1	0	1,5937	0
Heilongjiang	2	6	-	-
Luoyang	1	0	1,5937	0
Huixian	1	0	1,5937	
Luohe	0	2	0	2,6842
Zhengzhou	3	0	1,5937	0
Henan	5	2	-	-
Cheung Sha Wan	3	0	1,5937	0
Kowloon	3	0	1,5937	0
Kwun Tong	0	1	0	2,6842
Mongkok	0	1	0	2,6842
Sheung Wan	1	0	1,5937	0
Tsim Sha Tsui	0	1	0	2,6842
Hong Kong	433	278	0,9705	1,0495
Hong Kong	440	281	-	-
Hubei	1	0	1,5937	0
Jingzhou	1	2	0,5312	1,7894
Shiyan	1	0	1,5937	0
Wuhan	9	10	0,7549	1,4127
Xiaogan	1	0	1,5937	0
Hubei	13	12		-
Changsa	4	5	0,7083	1,4912
Hunan	1	1	0,7968	1,3421
Tianmen	0	1	0	2,6842
Zhuzhou	1	0	1,5937	0
Hunan	6	7	-	-
Baoying	1	0	1,5937	0

Changshu	3	0	1,5937	0
Changzhou	7	5	0,9296	1,1184
Dongtai	0	1	0	2,6842
Haimem	1	0	1,5937	0
Jiangsu	4	5	0,7083	1,4912
Jiangyan	2	0	1,5937	0
Jiangyin	6	2	1,1953	0,6710
Jiangyin, Wuxi	1	0	1,5937	0
Jingjiang	1	0	1,5937	0
Jintan	1	0	1,5937	0
Kunshan	13	3	1,2949	0,5032
Lianyungang	2	0	1,5937	0
Nanjing	36	7	1,3343	0,4369
Nantong	2	4	0,5312	1,7894
Nanya	2	0	1,5937	0
Niangsu	0	1	0	2,6842
Qidong	0	1	0	2,6842
Suzhou	62	32	1,0511	0,9137
Taicang	4	2	1,0625	0,8947
Taixiang	1	0	1,5937	0
Tongzhou	1	0	1,5937	0
Wujiang	3	2	0,9562	1,0736
Wujin	1	0	1,5937	0
Wuxi	20	16	0,8854	1,1929
Xuzhou	0	1	0	2,6842
Yancheng	3	1	1,1953	0,6710
Yangzhou	4	1	1,275	0,5368
Yixing	0	2	0	2,6842
Yizheng	2	0	1,5937	0
Zhangjiagang	3	2	0,9562	1,0736
Zhenjiang	2	0	1,5937	0
Jiangsu	188	88	-	-
Jilin	1	3	0,3984	2,0131
Changchun	3	0	1,5937	0
Jilin	4	3	-	-
Benxi	2	0	1,5937	0
Chaoyang	1	0	1,5937	0
Dalian	21	6	1,2395	0,5964
Fuxin	0	1	0	2,6842
Liaoning	1	1	0,7968	1,3421
Liaoyang	1	0	1,5937	0
Shenyang	9	6	0,9562	1,0736
Liaoning	35	14	-	-
Macao	1	0	1,5937	0
Macao	1	0		
Chifeng	0	1	0	2,6842
Baotou	1	1	0,7968	1,3421
Nei Mongol	1	2		

Jiangbei	1	0	1,5937	0
Ningbo	1	0		
Yinchuan	3	0	1,5937	0
Ningxia	1	0	1,5937	0
Ningxia	4	0	-	-
Xi'An	2	0	1,5937	0
Weinan	0	1	0	2,6842
Shaanxi	2	1	-	-
Changyu	1	0	1,5937	0
Dezhou	0	2	0	2,6842
Dongying	1	0	1,5937	0
Jinan	8	1	1,4166	0,2982
Jining	0	1	0	2,6842
Laizhou	1	0	1,5937	0
Linyi	3	0	1,5937	0
Penglai	2	0	1,5937	0
Qingdao	36	14	1,1475	0,7515
Rizhao	1	0	1,5937	0
Shandong	2	1	1,0625	0,8947
Shouguang	1	0	1,5937	0
Weifang	4	0	1,5937	0
Weihai	3	2	0,9562	1,0736
Yantai	22	2	1,4609	0,2236
Yanzhou	0	4	0	2,6842
Zibo	5	2	1,1383	0,7669
Shandong	90	29	-	-
Shanghai	498	293	1,0033	0,9942
Pudongxin	2	0	1,5937	0
Qingpu	2	0	1,5937	0
Shangyu	0	1	0	2,6842
Shanghai	502	294	-	-
Shanxi	3	0	1,5937	0
Taiyuan	0	1	0	2,6842
Xinzhou	1	0	1,5937	0
Shanxi	4	1	-	-
Chengdu	9	9	0,7968	1,3421
Luzhou	1	0	1,5937	0
Sichuan	1	0	1,5937	0
Yibin	1	0	1,5937	0
Zigong	0	2	0	2,6842
Sichuan	12	11	-	-
Tianjin	33	41	0,7107	1,4871
Tianjin	33	41	-	-
Xinjiang	2	0	1,5937	0
Shihezi	2	0	1,5937	0

Xinjiang	4	0	-	-
Yunnan	0	1	0	2,6842
Kumming	0	2	0	2,6842
Yunnan	0	3	-	-
Changxing	1	0	1,5937	
Fuyang	0	1		2,6842
Haining	1	0	1,5937	0
Hangzhou	30	19	0,9757	1,0408
Huzhou	2	1	1,0625	0,8947
Jiashan	0	1	0	2,6842
Jiaxing	11	3	1,2522	0,5751
Jinhua	1	1	0,7968	1,3421
Ningbo	37	16	1,1126	0,8103
Pinghu	0	1	0	2,6842
Shaoxing	3	2	0,9562	1,0736
Shengzhou	1	1	0,7968	1,3421
Taizhou	3	2	0,9562	1,0736
Tongxiang	1	1	0,7968	1,3421
Wenzhou	3	1	1,1953	0,6710
Xiaoshan	1	0	1,5937	0
Yongkang	1	2	0,5312	1,7894
Yuyao City	1	0	1,5937	0
Zhejiang	5	2	1,1383	0,7669
Zhuji	2	0	1,5937	0
Zhejiang	104	54	-	-
Jingdezhen	0	1	0	2,6842
Jiangxi	0	1	-	-

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