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# Foreign Direct Investment with Chinese Characteristics: A Middle Path Between Ownership-Location-Internalization Model and Linkage-Leverage-Learning Model

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**Abstract:** The majority of multinational enterprises (MNEs) traditionally originate from developed countries. In the last ten years, however, there has been dramatic growth in foreign direct investment (FDI) from China. It is a comparatively new phenomenon that challenges the classic FDI theories. In this paper, we review the pros and cons of two important theories, known as the Ownership-Location-Internalization (OLI) model and Linkage-Leverage-Learning (LLL) model, and use the statistical data and company case studies from China to test the plausibility of these two models. We believe that neither of them suits totally: the OLI model is quite useful for understanding FDI from China to developing economies, while the LLL model is more powerful for explaining the FDI to developed economies. We argue that the companies from China attain a very advantageous position as intermediates in the global economy. They may catch up with the first movers if they integrate OLI-led and LLL-led FDI within one firm. This combination can bring together the most advanced knowledge acquired in developed economies with the knowledge about adaptation needs and the needs for cost reduction in production as expressed in developing economies. It may also accelerate the knowledge transfer globally. We thus fill a gap in research into the geographical pattern of Chinese FDI and offer a deeper understanding of the internationalization of Chinese MNEs and revolving knowledge transfer.

**Keywords:** outward FDI; Ownership-Location-Internalization model; Linkage-Leverage-Learning model; China

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## 1 Introduction

Since entering the World Trade Organization (WTO), China has shown dramatic growth in outward foreign direct investment (FDI). It became the fifth largest source of FDI in 2010 (UNCTAD, 2011). Besides the large amount, FDI from China has two distinctive characteristics compared with FDI from developed countries. Firstly, a large number of multinational enterprises (MNEs) which are active in FDI lack competitive advantages in technology and management. Moreover, these MNEs invest on a relatively large scale not only in developing, but also in developed economies, which share little similarity as host countries (Liu and Tian, 2008). It is a comparatively new phenomenon that has great influence in the global economy and it also challenges the classic theories which are based on the observation of MNEs from developed economies (Child and Rodrigues, 2005).

To date, the existing research on China′s outward FDI

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has paid more attention to the Chinese investment in developed economies (Deng, 2009). Liu and Tian (2008) carried out 20 surveys to examine the patterns of and the motives for Chinese enterprises investing in the United Kingdom. Klossek *et al.* (2012) presented insights from 31 semi-structured face-to-face interviews with employees belonging to seven Chinese MNEs and stakeholders in Germany to draw conclusions about Chinese MNEs′ establishment modes and strategies. There is also some research about FDI to Africa (Kaplinsky and Morris, 2009) or to East and Southeast Asia (Kang and Jiang, 2012). According to these studies, the FDI in developed economies mainly seeks strategic assets, while that in developing economies mostly goes after the natural resources and low labor costs. Besides motivation, these two kinds of FDI have different industrial and functional compositions as well (Sutherland, 2009). Functional composition includes manufacturing facilities, R&D and distribution. However, these studies only collect a small number of samples and there are few descriptions about the general spatial image of FDI from China or about the comparison and contrast between FDI from China to these two different kinds of host countries because of limited access to data (Schueler-Zhou and Schueler, 2009).

Hence, this paper intends to use case studies to investigate the general image of FDI from China based on the comparison between China′s outward FDI to developed economies and China′s outward FDI to developing economies. Two issues will be addressed: 1) Do Chinese MNEs have different motives when investing in developed economies and in developing economies? 2) What is the logic of Chinese MNEs carrying out direct investment in other countries and regions?

In this paper, the terms country/economy refer to territories or areas; the designations employed and the presentation of the material do not imply the expression of any opinion concerning the legal status of any country, territory, city or area or of its authorities, or concerning the delimitation of its frontiers or boundaries. The major country/economy groupings follow the classification of the UNCTAD. Developed countries/economies: the member countries of the Organisation for Economic Co-operation and Development (OECD) (other than Chile, Mexico, the Republic of Korea and Turkey), plus the new EU member countries which are not OECD members (Bulgaria, Cyprus, Latvia, Lithuania, Malta and Romania), plus Andorra, Bermuda, Liechtenstein, Monaco and San Marino. Developing countries/economies: in general all economies not specified above. For statistical purposes, the data for China refers the data from the mainland of China, exclude those for Hong Kong, Macao and Taiwan.

## 2 Theoretical Framework

### 2.1 Modified Ownership-Location-Internalization (OLI) Model

In order to answer questions how and why Chinese MNEs invest abroad, we need to review the related FDI theories. The mainstream perspective in international business, based on the experience of MNEs from developed economies, assumes that companies will internationalize on the basis of a definable competitive advantage that allows them to secure enough return to cover the additional costs and risks associated with operating abroad (Buckley and Ghauri, 1999). The eclectic paradigm developed by Dunning draws together elements of previous theories to identify OLI advantages that motivate internationalization (Dunning and Lundan, 2008). However, there are so many differences between FDI from developing economies and FDI from developed ones that the mainstream theory is only partly suitable. The OLI model has been modified by pointing out the unique or distinctive advantages and motives accrued by MNEs from developing economies (Table 1). Firstly, several authors discovered some comparative ownership advantages of MNEs from developing economies (Dunning *et al.*, 2008). Initially, these companies have mainly country-specific advantages stemming from access to home country resources or special cultures such as social networks and relationships.

**Table 1** Differences between original and modified OLI models

| Criterion | OLI model | Modified OLI model |
|---|---|---|
| Ownership advantages | Firm-specific advantages, superior proprietary resources or managerial capabilities | Initially mainly country-specific advantages, later becoming more firm-specific advantages |
| Internalization advantages | Asset exploiting | Asset exploiting and asset augmentation |
| Location advantages | Access & use of local natural or labor resources and markets | Access & use of local resources, markets, capabilities & institutions |

Based on these country-specific advantages, MNEs from developing economies may become specialized among value chains and attain firm-specific advantages such as techniques in special niches and management (UNCTAD, 2007). Secondly, the internationalization strategies of MNEs are not only asset exploiting but also asset augmenting. Asset augmenting means that MNEs venture into international markets in order to acquire strategically created assets such as technology, brands, distribution networks, R&D facilities and managerial competences to offset their shortcomings (Kuemmerle, 1999). Therefore, the locations with the strategic assets, such as the USA, the EU and Japan, are also attractive destinations for FDI from developing economies.

The modified OLI model can, to some extent, explain why companies from developing economies carry out cross-border business, and it is also a good framework for comparing these MNEs with traditional ones. However, this framework is still a comparatively static observation, comparing one point in time with another (Mathews, 2006a). It gives the impression that there is no inter-connection between its various constituent parts (Dunning, 1993). It also ignores the improvement of MNEs in the process of internationalization.

There have only been few surveys evaluating the application of the modified OLI model in China. In 2005, the Foreign Investment Advisory Service carried out interviews with 150 Chinese MNEs regarding their motivations, drivers and competencies. It reveals that a focus on production process is the main advantage source for Chinese MNEs. It also suggests a powerful motivation for strategic asset seeked by Chinese MNEs, especially in industries in which they face intense competitive pressures (UNCTAD, 2007). It is a pity that the survey ignores the comparison between FDI to developed economies and that to developing economies.

### 2.2 Linkage-Leverage-Learning (LLL) Model

Latecomer theory attempts to answer the question how latecomer firms challenge established positions in the global economy (Mathews, 2006a). The theory is guided by the idea of turning the disadvantage of latecomers into a source of advantages. It is also highly related to knowledge absorption theory, which argues that technologically backward companies can substantially upgrade their knowledge base through active knowledge absorption and learning (Humphrey and Schmitz, 2002). Latecomer theory is effective in explaining the catching-up of Asian companies in the 1990s, and also contributes to the theoretical development of the FDI from this area. Among all the models, the LLL model is one of the most plausible.

According to LLL, there are three steps for knowledge acquisition of latecomer firms: linkage, leverage and learning. 1) Globalization multiplies the opportunities for latecomers to link up with the existing network, to draw themselves into circuits of exchange and sources of advantage. 2) Access to new knowledge is turned into leverage opportunities as soon as this new resource is strategically used to upgrade and diversify the recipient company's product portfolio. 3) The success of the recipient firm depends on the integration of the newly acquired knowledge into the company′s existing knowledge portfolio, i.e. on learning. Through learning, the company increases its technological capabilities and thus accesses new opportunities for repeated linkage, leverage and learning in other, higher value-added market segments (Mathews, 2002; 2006a; 2006b).

Latecomers will attach the highest importance to ensuring that national firms become global players through an emphasis on outward FDI as well as on inward FDI. While inward FDI can be used to promote linkages within the domestic economy, outward FDI is a way of building linkages with the global economy (Mathews, 2006a). Accordingly, outward FDI is undertaken by latecomer firms to facilitate technological access due to the fact that they are constrained by assimilation capabilities and policy distortion in their home countries.

The LLL model describes successfully how a company enhances its control over essential resources. It contributes in two important ways to the understanding of latecomers′ internationalization. The first is active knowledge absorption, which emphasizes the activity of technology-seeking latecomer firms. The model argues that companies lagging behind technologically can substantially upgrade their knowledge base through active knowledge absorption (Humphrey and Schmitz, 2002). Secondly, it discovers that learning represents the capability of latecomers to capture, control and use the resources via active knowledge absorption.

### 2.3 Comparison between modified Ownership-Location-Internalization (OLI) Model and Linkage-Leverage-Learning (LLL) Model

There are more differences than similarities between the LLL model and the modified OLI model (Table 2).

Firstly, the LLL model stems from a resource-based view with the fundamental assumption that the competitive advantage of a firm lies primarily in the application of the bundle of valuable resources at the firm′s disposal (Wernerfelt, 1984), while the OLI model belongs to asset theory, which assumes that competitive advantage stems from ownership. Secondly, the OLI model also assumes that hierarchy and market are two main kinds of activities of MNEs. For new MNEs, there is the third choice in addition to hierarchy and market: network. The extent to which these new forms of organization present a fundamental challenge to the OLI model has been the subject of recent debate (Narula, 2006). In contrast, the LLL model was developed quite late and incorporates the global network into its framework. Thirdly, the LLL model stresses the key role of knowledge absorption and learning in the process of catching up for latecomer companies. It shares similarity with modified points of the OLI model, but we are not sure whether the LLL model overestimates the power of knowledge absorption. The notion that the internationalization of latecomer firms is motivated by achieving knowledge absorption is still uncertain. Last but not least, the LLL model describes the cumulative development process of firms, while the modified OLI model remains a static observation.

China has been very active in both inward and outward FDI in the last twenty years. Some work has been done to track the relationship between inward FDI, knowledge absorption and catching-up in China (Buckley *et al*., 2004; Liefner *et al*., 2012). As FDI from China is a relatively new phenomenon and more advanced in the sense that it entails a commitment to manage and organize operations located outside China (Child and Rodrigues, 2005), only few empirical studies have been carried out. We will thus use the case studies from China later to check the fitting parts of the modified OLI and LLL models, as mentioned in Table 2, and then attempt to derive an explanation for FDI from China.

We have also noticed that a lot of other theoretical and empirical work has been done to renew the FDI theories, such as from the institutional perspective (Li and Meyer, 2009) and the social network and cultural perspective (Yeung, 1999). However, these theories attempt to explain how and why MNEs from developing economies engaged in outward FDI earlier than traditional companies. Each theory focuses on special factors. As this paper concentrates only on how and why China invests overseas, we will not discuss these theories in detail.

## 3 Methods and Materials

### 3.1 Methods: Case studies and location quotient analysis

A case study is a useful method when the area of research is relatively unknown and the researcher is engaged in theory-building types of research (Ghauri, 2005). In this article, we will use this method to test the validity of the OLI and LLL models and to understand the general logic of Chinese companies when investing globally. Sany Group (Sany for short) was chosen because it is a private manufacturer founded in 1989 with an internationalizing history of only ten years. As a typical Chinese MNE, it provides a new example of rapid internationalization (Mathews, 2006a).

Location quotient (LQ) analysis is a fundamental and useful tool for determining economic structural differences across space. This method will be used here for

**Table 2** Comparison between OLI and LLL frameworks

| Criterion | Modified OLI | LLL |
|---|---|---|
| Resources utilized | Proprietary resources | Resources accessed through linkage with external firms |
| Geographic scope | Locations established as part of vertically integrated whole | Locations tapped as part of international network |
| Make or buy? | Bias towards operations internalized across national borders | Bias towards operations created through external linkage |
| Learning | Not part of OLI framework | Learning through repetition of linkage and leverage |
| Process of internationalization: | Not part of OLI framework | Proceeds incrementally through linkage |
| Driving paradigm | Transaction cost economics | Capturing of latecomer advantages |
| Time frame | Comparative static observations, comparing one point in time with another | Cumulative development process |

Source: Mathews, 2006a

geographical analysis. It is calculated as shown below (Haggett, 1965):

$$LQ_{ij} = \frac{X_{i,j} / X_j}{X_i / X} \quad (1)$$

where $LQ_{ij}$ is China′s outward FDI to location $j$ in industry $i$; $X_{i,j}$ is FDI stock value from China to location $j$ in industry $i$; $X_j$ is total FDI stock value from China to location $j$; $X_i$ is total FDI stock value from China in industry $i$; $X$ is total FDI stock value from China.

When $LQ_{ij} < 1$, it means China′s outward FDI to location $j$ in industry $i$ is at a less than average level, and vice versa. In this paper, location quotient analysis is used to determine the industrial specialization of China′s outward FDI across space.

### 3.2 Materials: Personal observation and offical database

Case studies involve data collection from multiple sources (Ghauri, 2005). The main information about Sany in section 4.1 was taken from personal observation, such as a verbal report by the vice general manager of a German subsidiary in Dusseldorf in 2011 and a face-to-face interview with the PR (public relation) manager of the German subsidiary in 2010. Additional information was also collected from gray literature, such as corporate reports, website and working papers.

In the statistical analysis part (sections 4.2 and 4.3), two databases are used. One is the Statistical Bulletin of China′s Outbound Direct Investment 2009 (MOFCOM *et al*., 2010), which released the industrial distribution of FDI from the mainland of China to some important economies such as the EU, the USA, Special Administrative Region of China, Hong Kong and the Association of Southeast Asian Nations (ASEAN). These databases will be used to illustrate the general geographical distribution of FDI from China. The other is the Survey on Current Conditions and Intention of Outbound Investment by Chinese Enterprises (SCCIOICE) in 2010, which is a questionnaire survey conducted by the China Council for the Promotion of International Trade (CCPIT) in collaboration with the European Commission′s Directorate-General for Trade and UNCTAD (CCPIT, 2010). It uses the data from the questionnaire survey from December 2009 to March 2010. The total of 3000 Chinese firms with experience in import and export activities were contacted for the survey, and 1377 firms returned the filled-in questionnaires, 344 of which had carried out overseas investment. The completed questionnaires include those from enterprises in nearly 30 provinces in China and cover various sectors such as agriculture, manufacturing, construction and financial intermediaries, thus providing good industrial and regional representativeness. The objective of SCCIOICE 2010 is to collect in-depth information about the intentions and problems concerning the overseas investment of Chinese enterprises. We will use some of the results to show the functional distribution and motivation of FDI from China. The two reports are written in both Chinese and English. However, detailed information about outward FDI to developed and developing economies separately can only be found in the Chinese version. Both two official databases are very valuable, because FDI from China is a comparatively new phenomenon, the related statistics, rules and regulations have only been in existence since 2003.

## 4 Results

In this section, we will firstly discuss the geographical distribution of Sany, as an example of a Chinese MNE, in order to explore the international motivation and dynamics. Secondly, we use the official statistic data to analyze the geographical, industrial and functional compositions of FDI from China. Thirdly, we compare the different motivation between FDI to developed economies and FDI to developing economies, to test whether the Sany case indeed reflects a new reality of business strategy of Chinese MNEs.

### 4.1 Spatial structure of a Chinese company: Sany

Sany had 27 domestic and 30 overseas branches in 2009 (Fig. 1). Sany′s manufacturing bases are mainly in China. Changsha acts not only as the company headquarters, but also as one of the most important manufacturing bases, because it holds location advantages with low-cost and convenient transportation. The industrial parks in Shanghai, Beijing, Shenyang and Kunshan have a manufacturing function as well as R&D ability.

Outside China, the sales and service offices are scattered widely, with Hong Kong being the most important distribution and sourcing center. Sales and service offices are typical market-seeking investments, most of which are located in developing economies. In these

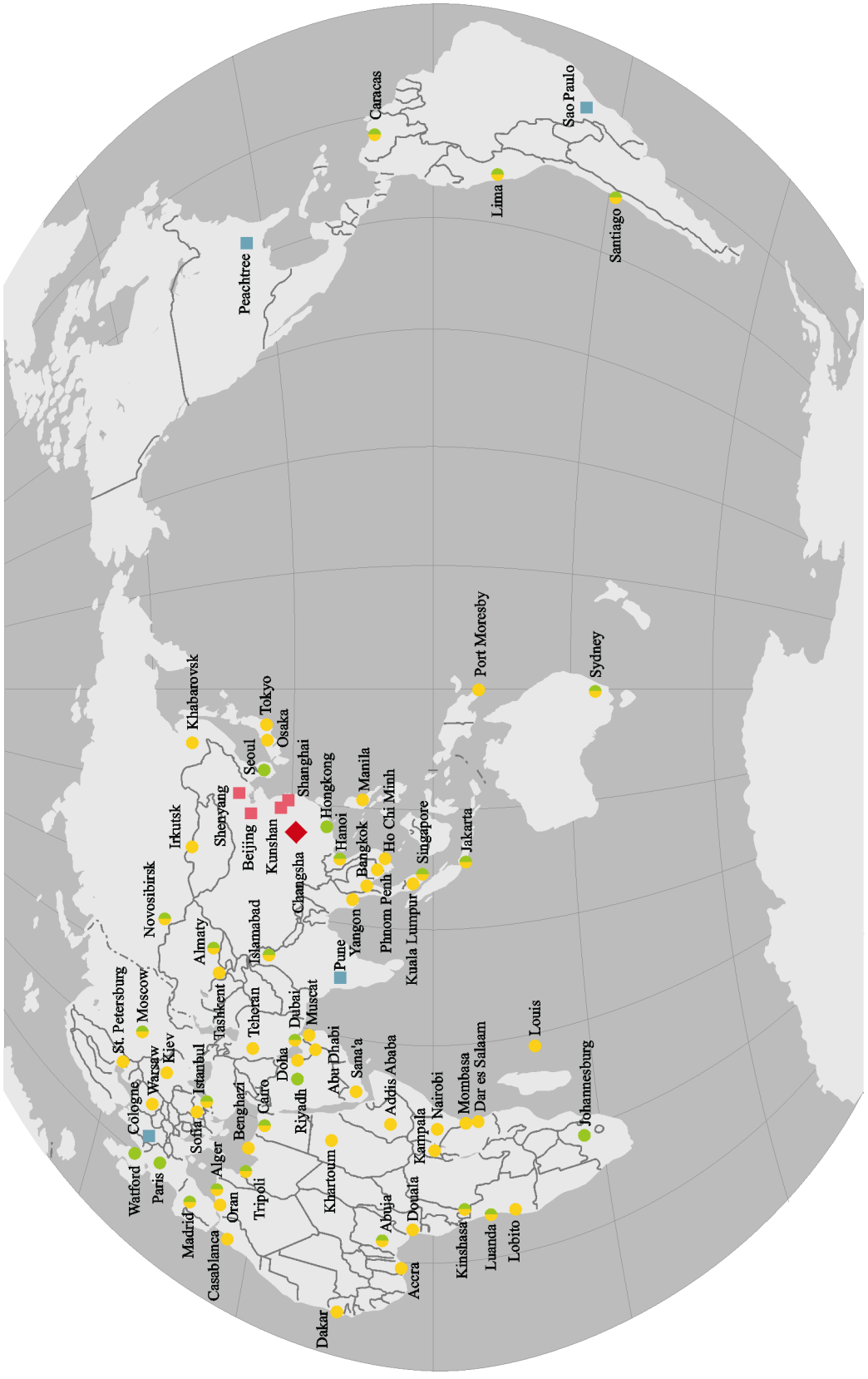


**Fig. 1** Spatial distribution of Sany branches (Hub: branch has R&D, manufacturing, sales and service function. Source: Base map refers to world map (Scale 1 : $10^8$) from National Administration of Surveying, Mapping and Geoinformation, P. R. China)

economies, competition is not as intensive as in developed economies. What is more, Sany branches prefer capital in all host economies, which shows their limited knowledge or experience concerning the host countries. Hong Kong is chosen for these advantages of efficient access to international markets and global information, and also transportation convenience with the mainland of China.

Sany has four important regional hubs in the world, located in the USA, Germany, India and Brazil. Each hub has R&D, manufacturing, sales and service functions. However, there are some differences between the subsidiaries in developing and developed economies. Take the Indian and German branches as examples: the Indian branch was established in 2002, and Sany India now has a regional R&D center which is active in developing products suited to local needs and solving application-related issues using the suggestions of major customers. It also owns the biggest overseas manufacturing plant at Maharashtra Industrial Development Corporation Chakan, Pune. Sany Germany was established in 2008, 6 years later than the Indian branch. It invested $1 \times 10^8$ Euro to build an R&D center and a manufacturing base. This location is a global R&D center which hires local skilled and experienced engineers to design new products. It then sends the finished blueprint back to China and produces the components there. Finally, all the components are transported to Germany again and assembled there. The products receive the ′Made in Germany′ brand and are sold on the European market. Sany India thus has a regional R&D center and strong manufacturing ability, while Sany Germany has a global R&D. These functional preferences match the location advantages in India and Germany.

In short, Sany puts its main factory bases in China, its global R&D centers in developed economies as LLL-led investment, its distribution centers in large and important cities, and its sales and service offices all over the world (mainly in developing economies) as OLI-led investment. Neither the OLI nor the LLL model alone can explain the Sany′s behavior. The combination of LLL-led and OLI-led investment allows Sany to combine the most latest knowledge acquired in developed markets with the knowledge about adaption needs and the needs for cost reduction in production as expressed in developing economies. With this strategy, Sany can function as a short-cut to transferring knowledge from developed economies to developing economies. This will not only provide companies such as Sany with dynamically evolving business opportunities, but may also shorten the time span that innovative companies in developed economies need to exploit their ideas economically (Fig. 2). Besides Sany, several other successful Chinese MNEs also show similar geographical patterns, such as Huawei (Ernst, 2006; Fan, 2011) and Haier (Li, 2007).

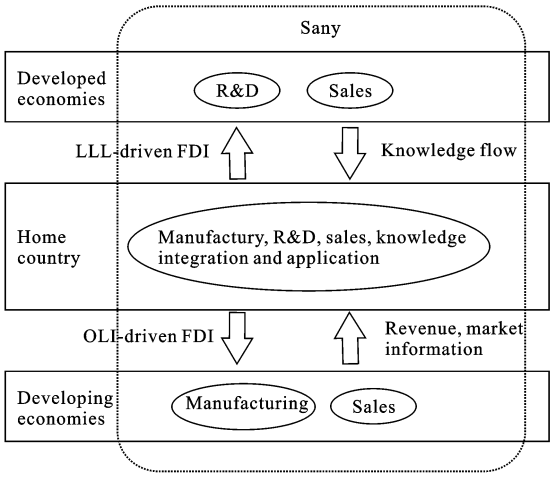


**Fig. 2** Sany′s strategic approach to foreign investment

### 4.2 Similarities and differences between China′s outward FDI to developed and to developing economies

Figure 3 shows the growth of FDI from China as a result of reform and the opening policy of 1978. There are clearly three stages in terms of the changes of outward FDI flow. In the first stage, the annual amount of outward FDI flow was below $1 \times 10^9$ US dollars (USD). It surged to $4 \times 10^9$ USD in 1992 and fluctuated around this figure after that. Since 2005, the outbound flow has been more than $1 \times 10^{10}$ USD each year, which is the third stage for Chinese outward FDI.

When examining the spatial distribution of China′s FDI in the last period (Table 3), it is obvious that the portion of developed economies as host countries has grown in the last five years, amounting to 15.8% with a total value of $1.09 \times 10^{10}$ USD in 2010. The amount of FDI flow to developed economies in 2010 alone was twice that of the total flow in 2004. The developing economies attract a comparatively large ratio of FDI

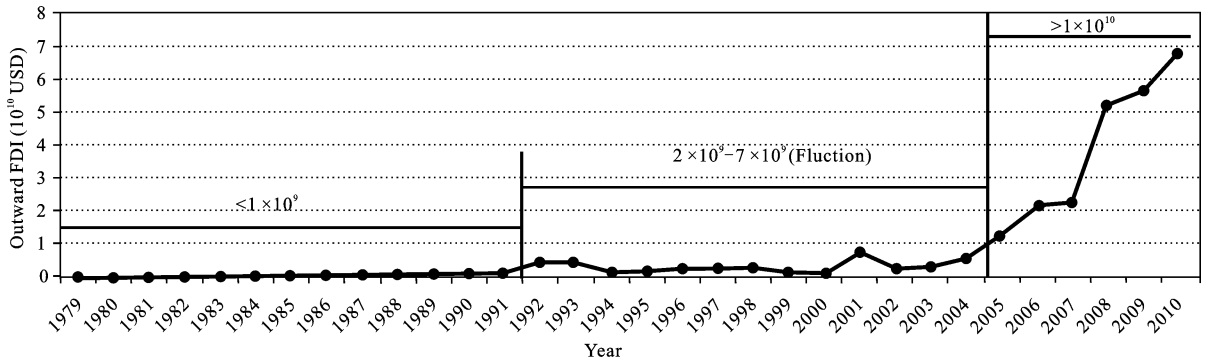


**Fig. 3** Growth of Chinese outward FDI from 1979 to 2010 (UNCTAD, 2011)

from China. Among them, Hong Kong, as the gateway to the mainland of China, is the most important destination due to its convenient connection with the mainland of China and its mature financial market and business service standards. Legend Holding Ltd, for example, which holds a 25% share of Lenovo Group Limited and is active in the acquisition of the PC department of IBM, is registered and listed in Hong Kong. Although there is round-tripping FDI between China, Hong Kong and tax havens such as the British Virgin Islands and the Cayman Islands (UNCTAD, 2004), the share has decreased since China entered the WTO and canceled the special treatment and incentives given to foreign investors (Table 3). If these three regions′ share of outward FDI is subtracted, half of the remaining FDI goes to developed economies while the other half goes to developing ones. They are all valued as important destinations by Chinese MNEs.

In order to discover the location preference of China′s industries, we have taken four host economies – the USA, Russia, the EU and ASEAN, which represent a developed country, a developing country, a developed region and a developing region respectively. The four regions are all important destinations for China′s FDI. We have illustrated the location differences alone, shown in Table 4. The scientific research, service & geo-survey and IT industries are very prominent in the USA, while scientific research, service & geo-survey also show a preference for the EU. This means that there is more knowledge-intensive FDI to developed econo-

**Table 3** Geographical distribution of China′s FDI flows from 2005 to 2010

| Destination | 2005 | | 2006 | | 2007 | |
|---|---|---|---|---|---|---|
| | Amount ($10^9$USD) | Percent (%) | Amount ($10^9$USD) | Percent (%) | Amount ($10^9$USD) | Percent (%) |
| Total | 12.3 | – | 17.6* | – | 26.5* | – |
| To developed economies | 0.7 | 6.0 | 0.6 | 3.3 | 2.7 | 10.4 |
| To developing economies | 11.5 | 94.0 | 17.1 | 96.7 | 23.8 | 89.6 |
| To Hong Kong | 0.3 | 27.9 | 6.9 | 39.3 | 13.7 | 51.8 |
| To British Virgin and Cayman Islands | 6.4 | 52.1 | 8.4 | 47.5 | 4.5 | 16.9 |
| Destination | 2008 | | 2009 | | 2010 | |
| | Amount ($10^9$USD) | Percent (%) | Amount ($10^9$USD) | Percent (%) | Amount ($10^9$USD) | Percent (%) |
| Total | 55.9* | – | 56.5 | – | 68.8 | – |
| To developed economies | 2.8 | 5.0 | 7.0 | 12.5 | 10.9 | 15.8 |
| To developing economies | 53.1 | 95.0 | 49.5 | 87.5 | 58.0 | 84.2 |
| To Hong Kong | 38.6 | 69.1 | 35.6 | 63.0 | 38.5 | 56.0 |
| To British Virgin and Cayman Islands | 3.6 | 6.5 | 7.0 | 12.3 | 9.6 | 14.0 |

Note: The data with * of China′s FDI flow (total) are different from the data in Fig. 3, because they are from different sources. UNCTAD records the total FDI flow data from China from 1979 to 2010 (Fig. 3), while data from MOFCOM (Table 3) are more detailed including the amounts of FDI in every host country but only from 2003 to 2010.

Source: MOFCOM *et al*., 2011

mies. At the same time, capital and labor-intensive industries favor developing economies. For example, the LQ index of real estate in Russia and the power industry in ASEAN is above 10, and the LQ index of construction in Russia and ASEAN is high as well.

**Table 4** Industrial location quotient (LQ) index in EU, USA, Russia and ASEAN

| | EU | USA | Russia | ASEAN |
|---|---|---|---|---|
| Scientific research, service & geo-survey | 1.45 | 5.73 | 0.34 | 1.20 |
| Information Technology (IT) | * | 4.37 | * | * |
| Real estate | 0.64 | 0.64 | 14.76 | 0.28 |
| Construction | 1.01 | 1.08 | 2.30 | 5.11 |
| Power and other utilities | * | * | * | 21.14 |
| Agriculture, forestry, husbandry, fishery | 3.76 | 1.09 | 29.80 | 4.36 |

Note: * means that the outward FDI stock amount is too small to be listed.
Source: MOFCOM *et al*., 2010

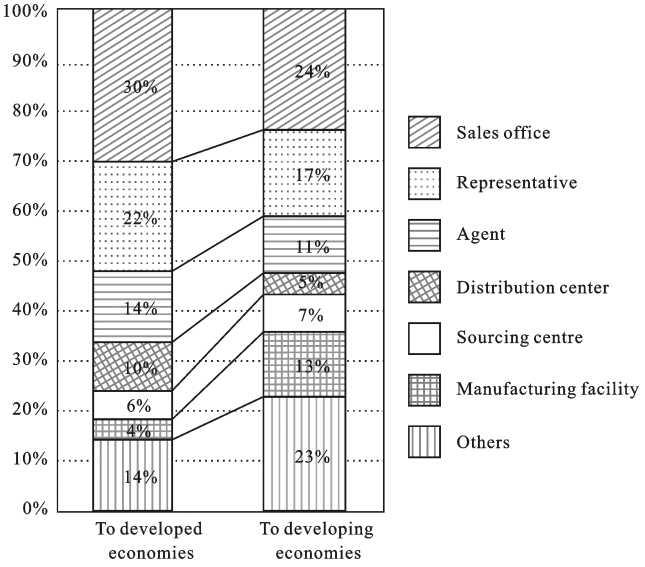


**Fig. 4** Functional composition of Chinese overseas branches in 2009. Source: CCPIT, 2010

The information about functional composition can only be drawn from the SCCIOICE 2010 (CCPIT, 2010). In general, the sales function, including sales offices and distribution centers, is the most important function. Representatives and agents also make up a significant part. What is more, there are two differences between the branches in developed and in developing economies. For one thing, distribution centers, which have an important sales function, are more important in developed economies. Manufacturing facilities in developing economies are also more significant. To put it simply, a larger number of branches in developed economies act in a market function, while a larger number of branches in developing economies act in a manufacturing function (Fig. 4).

### 4.3 Diversified motivations of China′s outward FDI to developed and developing economies

In this section, we will use the results from SCCIOICE 2010 (CCPIT, 2010) to explain the motivations of Chinese MNE activities (Fig. 5). Of the respondent enterprises that have engaged in overseas investment, 205 enterprises are involved in the cooperation with product sales, 62 enterprises are involved in the cooperation with resources, and 63 enterprises are involved in the cooperation with technical introduction. The total of 60% of enterprises hire less than 200 employees and two-thirds of them invest less than $5 \times 10^6$ USD abroad. The respondent enterprises share similar scales in terms of the number of employees and investment. These are the three categories currently attracting the most overseas investment from Chinese enterprises. The great advance of sales cooperation is consistent with the industrial and functional composition of Chinese overseas branches, as demonstrated in the previous section, which proves again that the overseas investment of Chinese enterprises aims mainly to exploit overseas markets. Capital equity cooperation, however, which gives Chinese companies little or no managerial rights, is not an interesting choice for them. Figure 5 also reveals two structural differences. In terms of resource exploitation cooperation, the enterprises which engaged in overseas investment in developing economies account for 22%, while the proportion for developed economies is only 10%; in terms of technical introduction cooperation, the enterprises to have engaged in overseas investment in developing economies account for 11%, while the proportion for developed economies is 21%, indicating that Chinese enterprises have prioritized the exploitation of local resources in their investment in developing economies, while focusing more on introducing advanced technologies in their investment in developed economies.

Table 5 lists the important factors of host countries that influence overseas investment. Market potential and natural resources are very important overall. The other factors vary according to destination regions. Two factors, i.e., access to advanced technology and R&D and

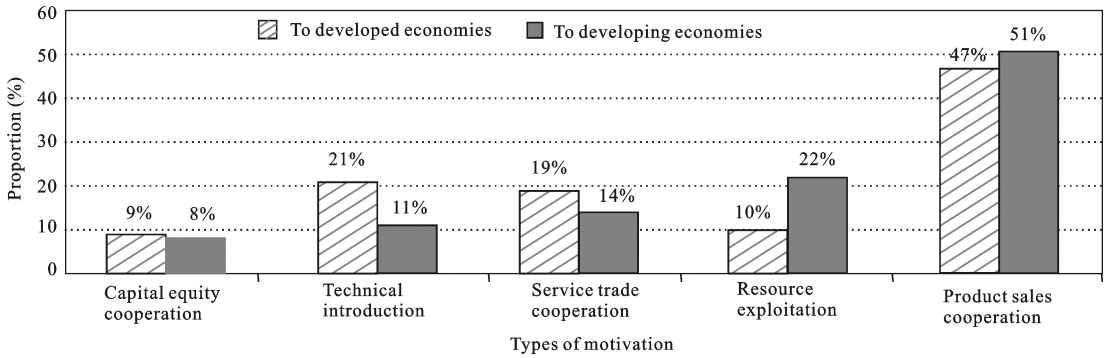


**Fig. 5** Motivation structure of China′s FDI to developed and developing economies (source: CCPIT, 2010)

**Table 5** Important pull factors of host countries

| | Developed economies | Developing economies |
|---|---|---|
| Important | Market potential | Market potential |
| | Access to advanced technology and R&D | Access to natural resources |
| | Acquisition of established brands | Access to low-cost labor |
| | Access to natural resources | |
| Not relevant | Access to international management practices | Access to skilled labor resources |
| | Avoiding transport costs and host preferential investment policies | Access to advanced technology and R&D |
| | | Acquisition of established brands |

Source: CCPIT, 2010

acquisition of established brands, are important influencing factors for Chinese overseas branches in developed economies. These companies are eager to establish better presences and to shed the negative image of ′Made in China′. What is more, access to low-cost labor is only an important factor in developing economies.

All in all, the basic pattern and intention of FDI from China shows great similarity with the individual firm Sany. Market seeking is the most important motivation, with the sales office function being an important functional choice for Chinese companies. This proves that the importance of asset augmenting in the modified OLI model and the key role of knowledge in LLL are exaggerated. Asset exploitation is still the most important reason for Chinese overseas business, perhaps because Chinese products have their cost advantages on the global scale. Efficiency seeking is comparatively important in developing economies, and strategic asset seeking is essential in developed economies in particular. These are the reasons why more R&D industries and related functions go to developed regions, while manufacturing, construction industries and related functions go to developing regions. This also proves the point in the LLL model about the reasons why developed economies are also important destinations for China′s outward FDI.

## 5 Discussion

The modified OLI model and the LLL model can not alone explain the phenomenon and motivation of China′s FDI. They each have their own pros and cons. The modified OLI model attempts to form a theory which can match both to MNEs from developed economies and to MNEs from developing economies, but which ignores some important characteristics of MNEs from developing economies as latecomers, such as learning and step-by-step internationalization. From the case study of Sany, we can see that it is more suitable for investment in developing economies. In contrast, the LLL model is more meaningful when dealing with investment in developed economies. However, the LLL model puts too much focus on the learning purpose and foreign MNEs as sources of knowledge, without the analysis on the impact of various sources in host countries (Table 6).

The mismatch between the OLI model, the LLL model and the Chinese situation is mainly caused by the empirical basis of the two models. The OLI model stems from the observation of American MNEs, which focus

**Table 6** Suitable application of modified OLI and LLL frameworks

| Criterion | Preference | Content | Certification of Sany |
|---|---|---|---|
| Resources utilized | Modified OLI | Mainly country-specific, later becoming more firm-specific | Action of branches in developing economies |
| Make or buy? | Modified OLI | Bias towards operations internalized across national borders | Action of branches in developing economies |
| Geographic scope | Modified OLI | Locations established as part of vertically integrated whole | Action of branches in developing economies |
| | LLL | Locations tapped as part of international network | Action of branches in developed economies |
| Learning | LLL | Learning achieved through repetition of linkage and leverage | Action of branches in developed economies |
| Process of internationalization | LLL | Proceeds incrementally through linkage | Action of branches in developed economies |
| Driving paradigm | LLL | Capturing of latecomer advantages | Action of branches in developed economies |
| Time frame | LLL | Cumulative development process | Action of branches in developed economies |

on the global advantages with technical and managerial experience from domestic markets, while the LLL model is based on the empirical studies on MNEs from Korea and Taiwan of China, which are actively engaged in global value chains to supply American MNEs and therefore to enter the global market. Hence, technical upgrading to meet the demands of American MNEs is essential. However, China is different: it has a large and booming domestic market which offers the Chinese MNEs experience through exploring the similar market in developing economies, but it does not have the required technology to support the MNEs in exploring the developed market. Since China is becoming a more important source of FDI globally and the importance of outward FDI for the economic development in China is growing as well, a new model based on China′s experience is an important issue in the field of economic geography.

The Sany is used here to prove that OLI-led and LLL-led behavior is not only found statistically in China′s outward FDI pattern, the combination of OLI-led and LLL-led behavior is rather rooted in the strategy of Chinese MNEs. It reflects the business approach that is currently the most promising for some Chinese MNEs: firms can maintain large-scale and low-cost manufacturing operations at home while exploring the developing market, which shares similarities with the Chinese market, and absorbing the knowledge in developed economies to realize sustainable development. To support MNEs in becoming global champions, four policies are suggested: encouraging Chinese MNEs to seek knowledge of international markets which would accelerate their technical and managerial ability in a short period; encouraging indigenous innovation inside China and inside the firms which is necessary for integrating and internalizing the newest knowledge acquired in developed economies and developing the new products suitable for domestic and foreign markets due to their low cost and high quality; building more transparent business institutions with international standards, which is a necessary condition for nurturing leading global MNEs; building a better image for China and Chinese firms and overcoming the liability from the bias against ′Made in China′.

## 6 Conclusions

Our empirical study has thus also discovered firstly that it may be more meaningful to discuss the difference in approaches towards FDI at the firm level rather than at the country level; secondly, that destination and motivation combine for FDI, with the motivation of FDI being affected by the attributes of host countries; and thirdly, that Chinese companies may accelerate the technology transfer from developed economies to developing economies. Some Chinese MNEs have now become large enterprises, but are still not strong enough because they can not control the advanced techniques in the highest value-added niches. The question whether they will become top MNEs and challenge the existing global networks can not be answered by these two models, since learning does not guarantee innovation automatically. It will be an interesting topic for discussion in the future.

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