Home Country Heterogeneity in the Determinants of China's Inward Foreign Direct Investment

Abstract

This study explores whether the determinants and motivations of China's inward foreign direct investment (FDI) are heterogeneous among the home countries. Employing a structural break framework based on two home country groups categorised by economic development and geographic location, this research found that FDI determinants and motivations are different between the home country groups. Chinese inward FDI from non-OECD developing countries are more likely to be both horizontal and vertical types for efficiency-seeking and market-seeking purposes while FDI from OECD developed countries are more likely to be horizontal market-seeking type. FDI from the European Union (EU) are more likely to be driven by the Chinese large market, while FDI from North America more likely to be stimulated by Chinese low input costs. Like non-OECD country group, FDI from Asia are more likely to be attracted by both Chinese large market and its low costs.

1. INTRODUCTION

As the largest emerging economy, China has been very successful in attracting bulk inflows of FDI since the beginning of the 1980s. FDI has flowed into China from over 150 countries and regions worldwide. Chinese inward FDI stock reached US$317.87 billion by 2005, its share of global FDI stocks increased from 0.2 percent in 1980 to 3.1 percent in 2005 (UNCTD, 2006). China continuously maintained its top position of the FDI Confidence Index in 2007, ranking first among Asian investors as well as all developing economies and second among European and North American investors (KEARNEY, 2007; UNCTD, 2008).

FDI in the Chinese context has been well documented during the last decade (HAYTER and HAN, 1998; LI and LIU, 2005) and a number of previous empirical studies have analysed FDI determinants in China (LIU et al, 1997; SHI, 2001; WANG and SWAIN, 1995; WEI and LIU, 2001; WEI et al, 2005; WEI et al, 1999; ZHANG, 1994; ZHAO, 2003). These studies, however, do not distinguish the FDI determinants between the home countries. In other words, the home countries have been examined without differentiation. This raises the question of whether the identified determinants are equally applicable to the different home countries. BEHRMAN (1972) and DUNNING (1993) suggest that, from the perspective of home countries, FDI determinants can be related to different motivations of investments. NACHUM and ZAHEER (2005) argue that investment motivations can only be analysed meaningfully with respect to a specific context because of the unique attributes of the market and firms from different countries. FDI motivation and determinants thus would vary by the nationality of multinational enterprises (MNEs). ZHENG (2009) points out that FDI determinants and motivations

might be heterogeneous between different home countries due to their different economic development levels and geographical locations. While the world is populated with countries of great contrast both economically and politically, however, no research has attempted to establish the validity of FDI determinants across such a wide spectrum of home countries or to decompose home countries according to their economic development or geographical locations. This distinction is important for both policy and business purposes.

Using a panel data covering twenty-eight home countries over nineteen years, this paper intends to fill the gap by examining the potential heterogeneity of inward FDI determinants and motivations in China from a home country perspective and to provide important recommendations for both policy makers and business practitioners. A structural break framework is employed to categorize the home countries of Chinese inward FDI into two groups: economic development (OECD developed countries and non-OECD developing countries) in one group, and geographical location (Asian, European and North American countries) in the other. Such decomposition will result in better evaluation of, and present further insights on, the impact of home countries differences on FDI determinants in the host country - China. From an economic development perspective, it is important for a FDI host country to devise its policy framework and strategy in accordance with home countries' characteristics from which more FDI to be attracted. The findings from this research will be able to provide a basis of discussion for the Chinese government to design effective FDI policies to attract even more FDI from particular home countries, thus further enable its remarkable economic growth.

The rest of the paper is organised as follows. Section 2 reviews relevant literature and develops hypotheses. Section 3 discusses research methodology. Section 4 presents empirical analysis and the last section summarises the findings and presents key conclusions and policy implications.

2. COUNTRY CHARACTERISTICS, FDI DETERMINANTS AND HYPOTHESES

Based on his OLI eclectic paradigm analysing FDI determinants, DUNNING (1998) points out that the relative attractiveness of FDI locations are determined by investment motivations, which he classifies into four categories: resource-seeking, (horizontal) market-seeking, (vertical) efficiency-seeking and strategic asset-seeking. MAKINO et al. (2002) distinguish FDI into two groups: asset-exploitation and asset-seeking. The former views FDI as the transfer of a firm's proprietary assets across borders and the latter regards FDI as a means to acquire strategic assets available in a host country. NACHUM (2003) categorises FDI in terms of their different strategic investment motivations and input needs: home-exploiting investment and home-augmenting investment. The former is to exploit the firm-specific advantages that they have developed initially in their home country in foreign markets in order to expand their market share (similar to horizontal market-seeking FDI); while the latter is driven by the need of firms to tap into strategic resources in foreign markets in order to access low cost inputs (vertical efficiency-seeking FDI), certain resources (resource-seeking) and assets (asset-seeking).

Previous studies have shown that MNEs from the same country share many common attributes which distinguish them from other MNEs out of different countries (CULEM, 1988; MARIOTTI and PISCITELLO, 1995; GROSSE and TREVINO, 1996; ZAHEER and ZAHEER, 1997; THOMAS and WARING, 1999; McKENDRICK, 2001). It has been assumed that the impact of nationality is unified and all firms are affected by the conditions in their home countries in a similar manner to the same degree (Nachum, 2003). In other words, the pattern of MNEs motivations and strategies would be similar if they are from the same country but dissimilar if they are from different countries in which the countries characteristics are not the same. As mentioned above, FDI motivations and determinants would vary by the nationality of the MNEs as well as different host countries. Some markets (FDI host countries) possessing specific factors are more suitable for achieving certain motivations, and MNEs from particular (home) countries are more likely to be driven by specific motives (NACHUM and ZAHEER, 2005). In short, specific FDI motivations and determinants are affected and shaped by both FDI host and home countries' characteristics including government policies (GASTANAGA, NUGENT and PASHAMOVA, 1998).

As the host country, China presents the largest emerging market in the world with 1.3 billion of population and the fastest economic growth, attracting horizontal market seeking FDI. China's low cost labour force and resources also attract vertical efficiency seeking FDI. In general, China's inward FDI from the outside world are motivated by the prospective benefits such as market access and expansion, cost reduction, efficiency improvement, and risk diversification.

As the characteristics of FDI home countries are different, MNEs from different countries invest in China with different motivations. Due to the different nature of firm-specific competencies possessed by MNEs, the strategic motivations of FDI vary between these countries (NACHUM, 2003). FDI from developing countries are of home-exploiting (market-seeking) and home-augmenting investment (efficiency-seeking, resource-seeking and asset-seeking) and often undertake outward FDI to maximise benefits from their competencies in ethnic networks, knowledge of foreign markets, product designing, and international distribution. LECRAW (1993) and WELLS (1983) suggest that MNEs from developing countries tend to develop small scale, labour intensive and flexible processes and products which are suitable to developing markets in which input characteristics and market demand conditions are similar to those in their home countries. FDI in this case is used primarily to strengthen their price competitiveness by exploiting the low-cost labour force in the host countries (MAKINO et al., 2002). As these countries (especially Asian newly industrialised economies – NIEs) possess limited domestic market, they tend to expand their market through investment into other large developing countries like China. It can be argued that asset-exploitation FDI from developing countries investing in China are of both horizontal and vertical nature for efficiency-seeking as well as market-seeking purposes.

In contrast, MNEs from developed countries invest in developing countries, especially those large emerging countries like China, seek to exploit their ownership advantages derived from their distinctive resources and capabilities (DUNNING, 1993, 1998). These ownership advantages include advanced technology, product and process innovation,

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economy of scale and scope, risk-reduction capacity, management skills and internalisation advantages. Studying multinational banks (MNBs), PETROU (2007) finds that MNBs from developing countries are more likely to follow clients from home while those originated from developed countries tend to enter developing countries for foreign market opportunities due to saturation and constraints at home. We can therefore describe FDI from developed countries investing in large developing markets as horizontal home-exploiting investment for market-seeking purpose.

H1a: China's inward FDI from OECD developed countries are more likely to be motivated by the Chinese large domestic market. In other words, Chinese large market is more important than its low costs to the FDI from OECD developed countries.

The higher the ratio of China's market size to that of OECD countries, the greater the flow of FDI from OECD countries to China.

H1b: China's inward FDI from non-OECD developing countries are more likely to be motivated by both China's large domestic market and its low input costs. Both market size and low input costs are important to FDI from non-OECD developing countries.

The higher the ratio of China's market size to that of non-OECD developing countries, the greater the flow of FDI from these countries to China. The higher the labour cost of developing countries to that of China, the more the flow of FDI from these countries to China. The higher the ratio of China's borrowing cost to that of the developing countries, the greater the flow of FDI from these countries to China.

Research suggests that Asian investors prefer the "near abroad" strategy for their investments and China is the top investment location for them (KEARNEY, 2007). Asian countries possess some 'special factors' for making such investments, such as close geographical proximity, pre-existing kinship, social network and tight culture affinity with China. These special factors provide MNEs from Asian countries with some advantages in exploiting China's low input costs and gaining access to the Chinese domestic market. Facing challenges from their home countries such as appreciated currencies, rising labour and land costs, and environment constraints since the mid-1980s, MNEs of these countries have witnessed an erosion of their comparative advantage, forcing many firms to relocate their productive activities overseas. This is particular serious for those in labour-intensive "sunset" industries such as textiles, garments, electrical goods, metal, plastics, and toys. In doing so, many Asian countries, in particular the NIEs, have become upstream suppliers of intermediate inputs and market channels for China's labour-intensive products, while China is becoming a downstream processing and assembling base for the NIEs, enabling them as a whole to become more competitive producers in the world market. Therefore, as a result of rising costs – the push factors at home and fast growth of the Chinese market and its low input costs – the pull factors in the host country, MNEs from the Asian countries have made bulk investments in China, providing about 70 percent of China's inward FDI (see Appendix 1). Indeed, China has become the largest host country for the outward FDI from these Asian countries.

H2a: China's inward FDI from the Asian region are more likely to be motivated by both the growing Chinese market and its low costs, for market-seeking and efficiency-seeking

purposes. Both Chinese market size and its low costs are important to the FDI from the Asian countries.

The higher the ratio of China's market size to that of the Asian countries, the greater the flow of FDI from these countries to China. The higher the labour cost of the Asian countries to that of China, the more the flow of FDI from these countries to China. The higher the ratio of China's borrowing cost to that of the Asian countries, the greater the flow of FDI from these countries to China.

Given that the European (EU) countries have greater geographic distance from China and enjoy limited growth in their home markets, MNEs from the EU may have different business strategies from those from Asia. SHI (2001) finds that small MNEs invested in China were more interested in Chinese cheap labour, while large MNEs were more interested in penetrating the large Chinese market by exploiting their technological advantage. The average size of an investment from the EU was almost twice that from North America and Asia (HSIAO and HSIAO, 2004). MNEs from the EU, therefore, are more likely to be interested in the Chinese domestic market than its low input costs.

H2b: China's inward FDI from the EU region are more likely to be motivated by the large Chinese market, for market-seeking purpose. Chinese market size is more attractive than its low costs to the FDI from the EU countries.

The higher the ratio of China's market to that of the EU, the greater the flow of FDI from the EU countries to China.

North American countries (the US and Canada) account for a large portion of China's inward FDI, of which 8.4 percent from the US and 0.8 percent from Canada (see Appendix 1). While the US has the largest domestic market in the world, wage level in the US is 10 and even 20 times higher than that in China, although the US workers are 5 times as productive as their Chinese counterparts (BURKE, 2000). The share of Chinese exports from foreign invested enterprises (FIEs) operating in China was 50 percent in 2001. According to BURKE (2000), the US firms build export-oriented production base in China in order to take advantage of China's low-wage labour force to produce intermediate and final products and re-export back to the US market. A 10 percent increase in the level of US direct investment in an industry in China is associated with a 7.3 percent increase in volume of the US imports from China and a 2.1 percent decline in the US exports to China in that industry. He argues that increasing US investment in China worsens the US trade deficit with China.

HANSON et al. (2001) suggest that vertical FDI from the US are more common than horizontal FDI. Similarly, NACHUM and ZAHEER (2005) argue that the US outward FDI in less information-intensive industries are primarily driven by the search for efficiency and low-cost export platforms. HEJAZI and PAULY (2003) find that taking advantage of relatively low labour costs is an important motivation for Canadian MNEs. As mentioned above, the average size of investment from North America including the USA and Canada was smaller comparing to that from the EU. FDI from North America, therefore, are more likely to be interested in China's low input costs than its large domestic market.

H2c: China's inward FDI from North American region are more likely to be motivated by China's low input costs, for efficiency-seeking purpose. Chinese low input costs are more attractive than its market size to the FDI from North American countries.

The higher the labour cost in the North American countries to that in China, the more the flow of FDI from these countries to China. The higher the ratio of borrowing cost in China to that of the North American countries, the greater the flow of FDI from these countries to China.

3. METHODOLOGY

All major home countries of Chinese inward FDI (see Appendix 2 for the home country list)[1] have been included in the panel data set for estimation. This large panel data set, across 28 home countries over 19 years[2], could provide robust and generalised empirical analysis and conclusions. In order to investigate potential heterogeneity among the different country groups within the data, we employ a structural break framework by categorizing all the home countries into two groups – economic development group and geographical location group. The economic development group is further classified into two sub-groups: OECD developed country group and non-OECD developing country group using their OECD and non-OECD membership status. While the geographical location group is further divided into three regions – Asian, European and North American countries based on their geographic locations (see Appendix 2 for the home country categories).

The dependent variable is China's inward (annual realised) FDI from the 28 home countries. The independent variables are composed of predictor variables and control variables. The predictor variables include three market-seeking variables and two efficiency-seeking variables, while the control variables include two bilateral trade variables, two financial variables, two country political risk variables and two distant variables.

Predictor variables

Market-seeking variables: Relative Market Size - RGDPP is the ratio of China to home country GDP per capita; Market Growth - RGGDP is the ratio of China to home country GDP growth and Absolute Market Size - RGDP is the ratio of China to home country GDP. All the three variables are expected to positively influence FDI flows from the home countries to China.

Efficiency-seeking variables: Labour Cost – WAGE is the home country's wage. It is expected to influence China's inward FDI positively. Borrowing Cost – RLEN is the ratio of China's lending interest rate to that of home country, which is expected to have a positive influence on China's inward FDI.

Control variables

Bilateral trade variables: Import and Export – IM and EX are China's import/export from/to home country. Both variables are expected to positively influence FDI flows from the home countries to China.

Financial variables: Exchange Rate - RREER is the real effective exchange rate between China and home country. It is expected to influence China's inward FDI positively. Inflation – INF is the home country's inflation and will have a negative influence on China's inward FDI.

Country political risk variables: Home Country Political Risk - POLI is the home country political risk rating based on 100 points, from Very Low Risk (80 to 100 points) to Very High Risk (zero to 49.5 points), comprising 12 components covering both political and social attributes, i.e., government stability, socioeconomic conditions, investment profile, internal conflict, external conflict, corruption, military in politics, religious tensions, law and order, ethnic tensions, democratic accountability and bureaucracy quality. It is expected to have a positive influence on China's inward FDI. China Political Risk - Time Dummy (TD), 1989-1992 (1989-92=1, otherwise=0) capturing the influence of the Tiananmen Square Incident, is expected to have a negative influence on China's inward FDI.

Distant variables: Culture Distance (proximity) - Culture Dummy (CD) is presented by the percentage of ethnic Chinese population in the home country's total population. The countries in which the Chinese population percentage is higher than 50 percent, i.e., Hong Kong, Macau, and Singapore=1, otherwise=0. It is expected to have a positive influence on China's inward FDI. Geographic Distance – GD, measured between China (capital city Beijing) and home country (capital city), is expected to have a negative influence on China's inward FDI.

Table 1 summarizes all variables and their proxies, the expected signs, theoretical justification and the data sources.

Table 1 here

The following log-linear equation was employed and estimated by the Random Effects statistical model:

$$LFDI=\alpha+\beta_1LRGDPP+\beta_2LRGGDP+\beta_3LRGDP+\beta_4LWAGE+\beta_5LRLEN+\beta_6LIM+\beta_7LEX$$
$$+\beta_8LINF+\beta_9LRREER+\beta_{10}LPOLI+\beta_{11}TD+\beta_{12}CD+\beta_{13}LGD+\varepsilon_{it}$$

4. FINDINGS AND DISCUSSIONS

Appendix 3 reports the descriptive statistics and correlations for all variables used in the estimation. We also conduct the diagnostic statistic of variance inflation factor (VIF) for testing of multi-collinearity. The results of the VIF tests presented by Appendix 4 do not show any evidence of multi-collinearity as no VIF values exceed 30. The empirical results for the home country groups are reported in Table 2.

Table 2 here

The empirical results for the economic development category presented in Column (1) for the OECD developed country group and Column (2) for the non-OECD developing country group. There are similarities and differences between the two groups. Interestingly, the market-seeking variable of LRGDPP is positively significant for both

country groups at the high levels (5% for the OECD developed countries and 1% for the non-OECD developing countries) with the high coefficients of 1.03 and 1.59, respectively, which indicate FDI from the two economic development groups are both highly motivated and attracted by the Chinese huge domestic market. It can be argued that market-seeking is one of the important motives for China's inward FDI from both OECD developed countries and non-OECD developing countries.

However, the results for the two efficiency-seeking variables of LWAGE and LRLEN are different between the two economic development groups. LWAGE and LRLEN are both highly significant at 1% level for the non-OECD group with the high coefficient of 1.58 and 1.80, respectively. But neither LWAGE nor LRLEN is statistical significant for the OECD group. This might indicate that efficiency-seeking is another important motivation for China's inwards FDI from non-OECD developing countries, but, which is not the case for OECD developed countries.

In general, it can be argued that China's inward FDI from the OECD countries are more interested in the Chinese market rather than China's low input costs, while FDI from the non-OECD countries are seeking for both Chinese domestic market and efficiency which support H1a and H1b.

In comparison, it seems that FDI from the OECD countries are more sensitive to the factors of exports, inflation and particularly country political risks than those from non-OECD countries, while the non-OECD countries are more sensitive than the OECD

countries in terms of bilateral trade with China and both cultural and geographical distances.

The results of the two bilateral trade variables for the OECD group, LEX – China's exports to the home countries appears to be one of the important determinants for FDI from the OECD countries to China. The more the exports from China to the home countries, the more the FDI flows from the home countries to China. However, China's imports from the home countries do not play any significant role on FDI flows for the OECD countries. In contrast, bilateral trade both imports and exports between China and non-OECD countries positively influence FDI from the non-OECD countries to China. The more the bilateral trade takes place between the non-OECD countries and China, the more the flow of FDI from these non-OECD countries to China.

The two financial variables, LRREER and LINF, only inflation variable is highly significant but exchange rate variable is insignificant for the OECD countries, which might indicate that the home country inflation level plays an important role in their investment decision making process, while the exchange rate between the home and host countries might not be the major concern for the OECD investors. In the case of non-OECD countries, neither the inflation variable nor the exchange rate variable is significant, which might indicate that the two factors are not important for the non-OECD investors.

The two country political risk variables, both home and host country political risks are important to the OECD investors. The highest coefficient (3.11) on home countries'

political risk indicates that home country political stability will significantly encourage FDI flows from the OECD countries to China. On the other hand, high host country political risk and instability will deter FDI flows into China. In contrast, for the case of the non-OECD countries, neither home country stability nor host country political risk is significant, indicating that country political risks are not a major factor for the investors from the non-OECD developing countries. These contrasted results between the OECD and non-OECD countries might reflect that the investors from developing countries perceive and react towards the political risks in a radically different way from those out of the OECD countries. The results might also be simply caused by the way of political risk measures we employed. As argued by BUCKLEY et al., (2007), the measures of political risk might have shortcomings because the indices are typically calculated from the point of view of firms from developed countries. They further suggest that the indices may need to be recalculated for better capturing the perceptions from firms out of the developing countries.

Finally, the two distant variables, Cultural and Geographical Distances (with the high coefficients of 1.69 and -2.36, respectively) appear to be the two very important determinants for the non-OECD countries, the closer the cultural and geographical distances the home countries to China, the more FDI flows from the home countries to China, vice versa. This result could explain why China's inward FDI from the developing countries are mainly from those with culture and location proximity to China. It is also consistent with the fact that all the developing countries/regions among the top 15 of Chinese inward FDI are Asian countries except Virgin Islands (see Appendix 1). In contrast, geographical distance is not significant in the case of the OECD countries,

although the variable is in the expected sign. The result might indicate that geographical distance is not an important issue for OECD investors to invest into China, which is also consistent with the fact showed in Appendix 1 – the OECD developed countries among top 15 are from different continents worldwide including the North America (US and Canada), Australia and Western Europe (the UK, Germany, France and Netherlands).

Column (3), (4) and (5) present interesting results allowing us to identify the variety among the three geographic location groups (Asia, EU and North America). Similar to the non-OECD group, both market-seeking and efficiency-seeking predictors are significant for the Asian country group, which indicate that FDI from Asian countries are both market and efficiency seeking hence supporting H2a. In the case of EU country group, all three market-seeking variables are significant but both efficiency-seeking variables are insignificant, which indicates that FDI from EU are more likely for market-seeking rather than efficiency-seeking purpose, which supports H2b. In contrast, both efficiency-seeking variables are significant but all market-seeking variables are insignificant for the North American group, which might indicate that FDI from the North American countries are more likely efficiency-seeking rather than market-seeking motivated, hence supporting H2c.

The market size variables of LRGDPP and LRGGDP are statistical significant for the Asian group. Especially the LRGDPP variable is significant at the high level of 1% with a high coefficient (1.62), a 1% increase in RGDPP would raise FDI inflows by 1.62%. This result indicates that FDI from the Asian region are attracted by Chinese large market. Interestingly, both efficiency-seeking variables are both significant as well at the high

level. A1% increase in LWAGE and LRLEN would lead to a 1.07% and 1.35% increase in FDI, respectively. It could be argued that, FDI from the Asian countries are not only motivated by Chinese large market for market-seeking purpose but also Chinese low input costs for efficiency-seeking purpose.

All three market size variables are positively significant for EU country group, which might indicate that FDI from the EU countries are motivated by the large Chinese domestic market and its rapidly growth because their own domestic markets and market growth are limited due to the size of their population. However, both cost efficiency variables, i.e., labour and borrowing costs, are insignificant. Unlike the Asian countries, the EU countries have the greatest geographic distance from China and limited domestic markets, therefore the large Chinese market might be more important and attractive than its cheap costs to the EU investors.

In contrast, both cost efficiency variables are significant at the high level but all market size variables are insignificant for the North American country group. This result indicates that Chinese cheap costs are much more important than its large market to the North American investors. The home countries' labour cost is the most concern for the regional investors, a 1% increase in the labour cost of the home countries will increase FDI outflow from the countries to China by 11.27%. FDI from the North American countries are more likely for efficiency-seeking rather than market-seeking purpose.

The Asian country group seems sensitive to bilateral trade (both imports and exports) with China. The more bilateral trade between these countries and China, the more FDI

from these countries into China, hence FDI and trade are complementary. The Asian group is also sensitive to the relative exchange rate (LRREER). This result, to some extent, could explain why some Asian countries had to devaluate their currencies during the 1997-1998 Asian Financial Crisis after China had devaluated its currency in 1994. Similar to the non-OECD group, the Asian group are very sensitive to both cultural and geographic distances. As mentioned earlier, a bulk amount of China's FDI from the developing countries are mainly originated from those East and Southeast Asian countries with culture and location proximity to China.

Like the OECD countries, the two trade variables, only export variable is significant while import variable is insignificant for both EU and North American countries. This result indicates that export and FDI complement rather than substitute to one another, the more exports from China to the EU and North American countries, the more FDI flows from the countries to China.

The geographical distance variable is statistical significant with the highest coefficient (-2.81) for the EU countries, which indicate that the geographical distance is the most concern for FDI from the EU countries to China. However, in the case of North American, the variable of geographical distance is insignificant, which might indicate that the variable is not important for North American investors to invest into China. These results are consistent with our findings obtained above that FDI from the EU region are motivated by Chinese huge domestic market for market-seeking purpose while FDI from North American region are attracted by China's low input costs for efficiency-seeking purpose. Because of the geographic distance concern, MNEs from the EU would produce

and sell their products locally in China rather than re-export the products back to their home countries. Unlike the EU group, the geographic distance is not a big concern for FDI from North American region, they could exploit China as an export-oriented production base and re-export the products produced in China back and sell in their home countries.

5. CONLUSIONS AND IMPLICATIONS

The empirical results suggest that the determinants and motivations of China's inward FDI are heterogeneous between different home country groups. From an economic development perspective, we found that both Chinese market size and its efficient costs are important to the investors from the developing countries, who are seeking both the Chinese domestic market (horizontal FDI) and efficiency (vertical FDI). In contrast, market size is more important for those originated from the developed countries - they are more interested in the Chinese market than its cheap costs. In other words, horizontal FDI from the developed countries are more common than vertical FDI in China in general. From a geographic location perspective, investors from the Asian countries are both market-seeking and efficiency-seeking, interested in both the Chinese huge market and its low costs. On the other hand, the EU investors are more interested in the Chinese market while those from North America are more interested in Chinese cheap resources especially its cheap labour.

The benefit of differentiating FDI determinants across home countries is a clearer understanding of which factors are more important in attracting FDI from a particular

home country. Hence, an important contribution of this paper is that determinants of FDI are contextual and country specific. Our argument is that the determinants can be assessed only when they are put in the specific country context. Prior to this research, determinants of FDI were normally examined in general terms without discriminating the varied circumstances. This paper thus has furthered the academic discussion on this subject. For any host country, FDI determinants can vary between developed and developing home countries from different continents. This demands the termination of generating universal list of FDI determinants. Instead, FDI flows from different home countries at different stages of market/economy maturation relative to the host country can be decided by different set of factors. Future research should investigate the potential heterogeneity on FDI determinants over even longer time spans.

The policy implications from this research are that a host country government needs to depart from the traditional universal FDI policy framework and it should also devise and pursue different strategies and policies to different FDI home countries in terms of their attributes. By doing so, more FDI could be expected and attracted from the different home countries worldwide to the host country. As a FDI hotspot, China has accumulated rich experiences of dealing with inward FDI from different types of home countries. To improve its policy effectiveness, the Chinese government needs to adjust its FDI strategies and policies to the different home countries accordingly for attracting more FDI from the whole world. China can also provide experiences for other emerging countries such as India and Brazil to develop more effective policies in order to attract larger volume of FDI from different categories of home countries in terms of their economic development and geographic locations. The implication for business practitioners and

investors from a particular home country, is to clarify and understand both host and home

countries' characteristics and specific FDI determinants attached to the countries, adjust

their investment strategies and decisions accordingly.

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[1] Taiwan and Virgin Islands are not included because of the data availability problems.
[2] From 1984 to 2002, the data is now available up to 2005.

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Table 1 Determinants and motivations of Chinese inward FDI by home country

Variable	Proxy	Sign	Theoretical justification	Predictor or Control Variable	Data source
FDI (dependent variable)	LFDI: Annual realised FDI				*Almanac of China's foreign Economic Relations and Trade*
Market size (I) – relative market size	LRGDPP: ratio of GDP per capita of China to home country	+	Market seeking	Predictor	*World Development Indicators*
Market size (II) – market growth	LRGGDP: ratio of growth rate of China to home country	+	Market seeking	Predictor	*World Development Indicators*
Market size (III) – absolute market size	LRGDP: ratio of GDP of China to home country	+	Market seeking	Predictor	*World Development Indicators*
Labour cost	LWAGE: home country wage level	+	Efficiency seeking	Predictor	*Yearbook of Labour Statistics*
Borrowing cost	LRLEN: ratio of lending interest rate of China to home country	+	Efficiency seeking	Predictor	*International Financial Statistics Yearbook*
Imports	LIM: China's imports from the home country	+	Trade intensity	Control	*Almanac of China's Foreign Economic Relations and Trade*
Exports	LEX: China's exports to the home country	+	Trade intensity	Control	*Almanac of China's Foreign Economic Relations and Trade*
Exchange rate	LRREER: Real effective exchange rate between China and home country	+	Financial factor	Control	*International Financial Statistics Yearbook*
Inflation rate	LINF: Home country annual inflation rate	-	Financial factor	Control	*International Financial Statistics Yearbook*
Home country political risk	LPOLI: Home country's political risk rating (higher rating indicates lower risk)	+	Institutional factor	Control	*International Country Risk Guide*
China Political risk	TD 89-92: Tiananmen Square Incident influence	-	Institutional factor	Control	1989-92=1, otherwise=0
Cultural distance (proximity)	CD: = 1 when percentage of ethnic Chinese in home country population is >50%	+	Transaction costs	Control	Hong Kong, Macau, and Singapore=1, otherwise=0
Geographic distance	LGD: Geographic distance between China and home country (capital)	-	Transaction costs	Control	www.wcrl.ars.usda.gov/cec/java/capitals.htm

Table 2 Determinants and motivations of China's inward FDI by home country

	OECD (1) H1a	Non-OECD (2) H1b	Asian (3) H2a	European (4) H2b	American (5) H2c
LRGDPP	1.03	1.59	1.62	0.86	-0.32
	(0.42)**	(0.29)***	(0.27)***	(0.45)*	(1.93)
LRGGDP	0.09	0.23	0.22	0.21	-0.04
	(0.07)	(0.15)	(0.12)*	(0.09)**	(0.09)
LRGDP	0.34	0.09	0.04	0.38	-0.42
	(0.18)*	(0.18)	(0.14)	(0.21)*	(0.64)
LWAGE	0.45	1.58	1.07	0.45	11.27
	(0.37)	(0.39)***	(0.25)***	(0.36)	(3.49)***
LRLEN	0.12	1.80	1.35	0.48	1.35
	(0.23)	(0.42)***	(0.33)***	(0.31)	(0.30)***
LIM	0.06	0.59	0.54	-0.00	-0.08
	(0.15)	(0.19)***	(0.17)***	(0.17)	(0.42)
LEX	0.87	0.68	0.88	0.94	1.52
	(0.15)***	(0.27)**	(0.21)***	(0.15)***	(0.50)***
LRREER	-0.29	0.19	0.40	0.50	0.60
	(0.28)	(0.13)	(0.09)***	(0.51)	(0.42)
LINF	-0.27	0.02	0.17	-0.23	-0.10
	(0.10)***	(0.13)	(0.11)	(0.14)	(0.17)
LPOLI	3.11	1.04	1.09	2.30	2.69
	(1.59)**	(1.03)	(0.80)	(1.97)	(2.12)
TD	-0.41	-0.35	-0.28	-0.35	0.19
	(0.18)**	(0.26)	(0.24)	(0.27)	(0.18)
CD		1.69	2.53		
		(0.77)**	(0.62)***		
LGD	-0.04	-2.36	-1.05	-2.81	
	(0.26)	(0.75)***	(0.27)***	(1.47)*	
NT	293	104	123	209	33
Adj R^2	0.9190	0.8020	0.8811	0.8809	0.8716

Notes: 1. Standard errors are in parentheses.
2. ***, ** and * indicate that the coefficient is significant at the 1%, 5% and 10% levels, respectively.

Appendix 1 Top 15 countries of China's inward FDI 1992-2004

US$ billion

Countries	Rank	Amount	%
Hong Kong	1	227.46	42.4
United States	2	45.33	8.4
Japan	3	43.56	8.1
Taiwan	4	38.76	7.2
Virgin Islands	5	36.75	6.8
South Korea	6	25.94	4.8
Singapore	7	25.26	4.7
UK	8	11.89	2.2
Germany	9	9.51	1.8
France	10	6.39	1.2
Netherlands	11	5.81	1.1
Macau	12	5.54	1.0
Canada	13	4.47	0.8
Malaysia	14	3.89	0.7
Australia	15	3.47	0.6
Total of above 15	-	494.01	92.0
Total of the world	-	537.08	100.0

Source: Zheng (2009)

Appendix 2 Home country list

Country	Economic category	Geographic category
1. Australia	OECD	Australia
2. Austria	OECD	EU
3. Belgium	OECD	EU
4. Canada	OECD	North American
5. Hong Kong	Non-OECD	Asian
6. Macao	Non-OECD	Asian
7. Denmark	OECD	EU
8. Finland	OECD	EU
9. France	OECD	EU
10. Germany	OECD	EU
11. Indonesia	Non-OECD	Asian
12. Ireland	OECD	EU
13. Italy	OECD	EU
14. Japan	OECD	Asian
15. South Korea	OECD	Asian
16. Kuwait	Non-OECD	Asian
17. Malaysia	Non-OECD	Asian
18. Netherlands	OECD	EU
19. New Zealand	OECD	Australia
20. Norway	OECD	EU
21. Philippines	Non-OECD	Asian
22. Singapore	Non-OECD	Asian
23. Spain	OECD	EU
24. Sweden	OECD	EU
25. Switzerland	OECD	EU
26. Thailand	Non-OECD	Asian
27. UK	OECD	EU
28. US	OECD	North American

Appendix 3 Descriptive Statistics and Correlations

	Mean	S. D.	Min	Max	lfdi	lrgdpp	lrggdp	lrgdp	lwage	lrlend	lim	lex	lrreer	linfl	lpoli	td	cd
lfdi	8.58	2.56	0.28	14.52													
lrgdpp	-3.26	1.07	-4.79	0.25	-0.03												
lrggdp	1.07	0.99	-1.96	5.94	0.01	-0.27											
lrgdp	0.8	1.56	-3.1	5.1	-0.24	0.38	-0.22										
lwage	7.16	0.86	5.06	8.55	0.04	-0.78	0.39	-0.40									
lrlend	-0.11	0.42	-1.61	1.33	0.29	-0.36	-0.03	-0.02	0.33								
lim	11.34	1.73	2.16	15.37	0.76	0.00	0.01	-0.51	0.06	0.16							
lex	11.25	1.76	6.86	15.63	0.85	0.06	-0.07	-0.37	-0.03	0.23	0.88						
lrreer	0.14	1.46	-4.59	6.58	-0.03	-0.36	-0.01	0.16	0.08	0.18	-0.26	-0.14					
linflation	1.15	0.89	-3.09	4.32	-0.23	0.19	-0.15	0.16	-0.36	-0.41	-0.24	-0.21	-0.04				
lpoli	4.34	0.17	3.52	4.57	0.12	-0.70	0.26	-0.26	0.74	0.38	0.09	0.00	0.10	-0.37			
td	0.21	0.4	0	1	-0.24	-0.06	-0.13	-0.05	-0.07	-0.11	-0.08	-0.09	-0.04	0.20	-0.16		
cd	0.11	0.3	0	1	0.29	-0.09	-0.21	0.40	-0.28	0.19	0.08	0.26	0.23	0.14	-0.15	0.07	
ldistance	8.16	0.6	6.38	8.84	-0.26	-0.34	0.26	-0.32	0.53	-0.04	-0.16	-0.27	-0.02	-0.21	0.43	-0.06	-0.50

Appendix 4 Results of VIF Tests

Variable	VIF	1/VIF
lrgdpp	13.62	0.07
lwage	8.2	0.12
lex	7.16	0.13
lim	6.22	0.16
lrgdp	5.79	0.17
cd	5.59	0.18
lpoli	3.99	0.25
ldistance	2.06	0.48
lrreer	1.83	0.54
lrlend	1.72	0.58
linflation	1.56	0.64
lrggdp	1.3	0.77
td	1.25	0.79
Mean VIF	4.64	