National Formal Institutions, Regional Informal Institutions and Foreign Entry Mode Decision: Evidence from China

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ABSTRACT

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Shu Qu

This dissertation reports the results from an empirical research of factors that influence and moderate the foreign entry mode decision from institutional perspective. To explain the considerably uneven proportions of joint venture and wholly-owned subsidiary in different regions in emerging countries such as China, this study focuses on national formal institution (national regulation) and specific regional informal institutions (regional corruption and regional ethnicity), and explores the moderation effect of regional informal institutions on the relationship between the national formal institution and the entry mode decision. The results of this study show that regional informal institutions not only directly influence the entry mode choice, but also moderate the relationship between the national formal institutions and the foreign entry mode choice.

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INTRODUCTION

Researchers who study international entry modes will notice two specific issues in China. Firstly, in the past two decades, there was an apparent trend that the Multinational Enterprise (MNE)'s entry mode in China has changed from the joint venture (JV) to the wholly owned subsidiary (WOS). In 1997, 21,001 new Foreign Direct Investment (FDI) projects were set up in China and 9,602 of them were WOS, counting for 45.7%. In 2000, 59.8% of total 26,140 new FDI projects this year in China were WOS. In 2006, the ratio increased to 72.7% in 41,473 FDI projects. In 2012, this number further reached 81.7% in 24,925 FDI projects (China Statistical Yearbook, 1996-2013). Besides, the ratio of WOS in new FDI projects considerably varies from one region to another. In some provinces, like Guangdong, the ratio of WOS in new FDI projects in a certain year has even reached 92.0% (Guangdong Statistical Yearbook, 2011). In other provinces, like Shandong, this ratio in the same year was only 67.8% (Shandong Statistical Yearbook, 2011).

Regulatory domain of institutions includes laws and rules, which construct the stability and order for organizational, industry and other social actions (North 1990, Williamson 1975, Yiu and Makino, 2002). Examples of regulative restrictions include restriction on equity modes, harsh tax policies, and some discriminative regulations on MNEs from the governments in host countries. A number of studies have explained that foreign MNEs are more likely to form a wholly owned subsidiary when a host country has a low degree of regulative restrictions (Yiu & Makino, 2002; Mayer *et al*, 2009; Brouthers, 2013). This understanding can well explain the aforementioned trend of the MNE's entry mode changes from JV to WOS: Since 1990s China has gradually relaxed a series of regulative polices, including the legal restrictions that limit the equity stakes of foreign investors and that forbid foreign investors to enter certain industries (Ministry of Commerce of the PRC, Department of Foreign Investment Administration). As the degree of regulative restrictions has decreased, the choice of WOS mode has been encouraged.

However, previous studies cannot fully explain the considerably uneven WOS ratios in

different regions within the country. And these uneven WOS ratios have existed regardless of the changes in the degree of the regulatory restrictions. In fact, some mid-western provinces with low ratio of WOS in FDI projects are the very provinces with less regulative restrictions and a more friendly investment environment constructed by the central government to encourage foreign investment. Thus, my research question is the following: what explains the uneven WOS ratios in different regions within China? What specific regional factors affect the regulatory influence on the entry mode choice between JV and WOS?

This study adopts the institutional theory to explore above research questions. Institutional theory examines a firm's reaction under formal and informal institutions such as rules, norms, and values (Meyer and Nguyen, 2005). To explore the elements that influence the entry mode choice of MNEs, this study includes two levels of variables: national-level formal institutions and regional/sub-national-level informal institutions. On the first level, I include national regulation restrictiveness as a variable. On the second level, I include regional corruption and regional ethnic link to foreign investors as variables.

Thus far in the extant literature, scholars have reported interaction effects of formal and informal institutions (e.g., Peng *et al*, 2009; Peng and Heath, 1996). In some situations, informal institutions may play a larger role than formal institutions when investors are seeking certainty, guidance, legitimacy and rewards (Peng *et al*, 2009). Building on this line of work, this study proposes a moderating effect of regional informal institutions on the relationship between national formal institutions and the entry mode choice. In this paper, I first examine how the national regulation restrictiveness, regional corruption and regional ethnic link to foreigners respectively affect the entry mode choice of MNEs. After that, I specifically examine how regional corruption and regional ethnic link moderate the relationship between national regulation restrictiveness and the entry mode choice.

Though there are many studies about the institutional influence in China, the majority of them focus solely on either formal (regulative) domain of institutions such as market-supporting

policy (Meyer *et al*, 2009), or informal (normative/cognitive) domain such as interpersonal network "Guanxi" (Su, 2001). Few studies have considered interaction effects of formal (regulative) and informal (normative/cognitive) institutions in China, especially the light of the entry mode choice of MNEs. Therefore, in this study, I will explore potential moderating effects of regional informal (normative/cognitive) institutions on the effect of the national formal (regulative) institutions on the entry mode choice.

This study conducts the empirical test in the context of China. China remains one of the preeminent recipients of inward foreign direct investment among developing countries (Davies, 2012). And as one of the leading emerging countries, China has many features in common with other emerging countries. The results of this paper therefore would not only be meaningful to foreign MNEs and policy makers in China, but they will also be generalizable to other emerging country contexts.

In the following parts, this study will first review the previous studies of entry mode under the institutional perspective, and then proceed to the theoretical background and provide a set of hypotheses of this study. After that, I will elaborate the empirical research and results. At the end of this paper, I will discuss the implications, conclusions, contributions and limitations of this study, and provide directions for future research.

1. LITRERATURE REVIEW

1.1 Joint Venture and Wholly Owned Subsidiary

The MNE's entry modes can be divided into non-equity and equity modes. Non-equity modes include export and contractual agreements such as licensing and alliances. Equity modes include equity joint ventures and wholly owned subsidiary. According to the percentage of equity ownership, JV can be further categorized into minority JV, 50% share JV and majority JV. According to the type of attainment, WOS can be categorized into Greenfield, acquisition and others (Pan and Tse, 2000; Haishun Sun, 1999).

According to the study of Sun (1999), in China, there are three modes for foreign MNEs to enter the Chinese market: equity joint venture, contractual joint venture and wholly owned subsidiary. The three types of enterprises are different in terms of legal form, capital and risk involvement, and management structure. An equity joint venture represents "a new limited liability company created by foreign and Chinese partners with equity and management shared in a negotiated proportion". A contractual joint venture represents "an arrangement whereby Chinese and foreign partners cooperate in some joint projects or activities according to the terms and conditions stipulated in a venture contract" (Haishun Sun, 1999). The contractual joint venture mode in China appears less and less after 2000. This paper uses JV to represent equity joint venture only, and use WOS to represent wholly foreign-owned subsidiary including Greenfield and acquisition.

1.2 Entry Mode Choice under Institutional Theory

Institutional theory explains the foreign entry mode choice as the result of complying the "rules of the game" in a foreign market environment (Brouthers and Hennart, 2007). The domain of institutional theory includes formal institutions and informal institutions. Formal institutions are related to regulations, laws and rules, whereas informal institutions concern norms, cultures and ethics (North, 1990). Institutions can also be divided into regulative, normative and cognitive pillars (Scott, 1995). Formal institution is equivalent to regulative domain, and informal institutions are equivalent to normative and cognitive domains (Peng *et al*, 2009).

Brouthers and Hennart (2007) separate the entry mode studies under the *institutional perspective* into two periods of time: in an earlier period of time, researchers focused on the institutional risks and uncertainties in host countries that might influence the MNE's entry mode choice (e.g., Brouthers *et al*, 2002; Delios & Beamish, 1999). The risks and uncertainties include government policy, microeconomic, host country industry structure, and so on. However, these factors were highlighted without a clear theoretical basis (Brouthers and Hennart, 2007). In a

more recent period, researchers have started to explore the environmental factors that MNE should consider in entry mode decision within the three pillars of regulative, normative and cognitive institutions (e.g., Meyer and Nguyen, 2005; Yiu and Makino, 2002).

Dikova and Witteloostuijn (2007) concentrate on how formal regulative institutions affect the MNE's entry mode choice in transition economies. They believe that a level of institutional advancement – the regulative institutions that are able to keep market-economy rules – would moderate the influence of firm-level predictors such as technological intensity on the entry mode choice. Particularly, a greater institutional advancement has a positive moderating effect on the tendency of MNEs to choose JV as the entry mode, because in an advanced institutional environment, the sufficient external safeguarding ensures the protection of "locally created, firm-specific" knowledge. Hence, MNEs face less necessity to choose a full control ownership to protect intellectual property (Dikova and Witteloostuijn, 2007). Despite the fact that their empirical results did not observe this moderating effect, the inconsistency of Dikova and Witteloostuijn's study with other studies is that they regard a strong regulative institution as a mechanism that ensures the market-economy rules to keep functioning. While other studies discuss a strong regulative institution, they focus more on regulations that inhibit or limit the MNE's investment (e.g. Yiu and Makino, 2002; Puck *et al*, 2009).

Xu and Shenkar (2002) discuss how the institutions influence the entry mode choice from the perspective of institutional distance between host country and home country. They indicate that when the regulative distance is large, MNEs prefer to choose a JV to reduce the risk of conflicts, since MNEs need to adapt to the rules that conflict with those in home country.

Uhlenbruck, Rodriguez, Doh and Eden (2006) focus on the impact of corruption on the entry mode choice. They find that MNEs will adopt their entry modes to cope with corruption as an informal institution in the foreign country. According to Rodriguez (2005), corruption has two dimensions: arbitrariness of corruption is related to the ambiguity of corruption transactions, and pervasiveness of corruption is related to the likelihood of encountering corruption. The findings

reported by Uhlenbruck *et al* (2006) indicate that when the arbitrariness is high, MNEs prefer JV as the entry mode into the corrupt countries. This is because a local partner can reduce the unpredictability of corruption with an access to local network as well as an increase of local legitimacy (Uhlenbruck *et al*, 2006).

Others studies further examine the relationship of entry mode and subsidiary performance/survival through institutional distance perspective. Gaur and Lu (2007) indicate that regulative distance causes less unfamiliarity for foreign firms compared to normative distance, because the latter is embedded in social environment and more difficult to recognize. When the regulative distance is larger in the foreign market compared with normative distance, MNEs is less relying on local partners to overcome unfamiliarity. In this case, MNEs should adopt WOS to reduce the relational hazard with local partners including dispute settlement and lack of trust, and consequently increase the survival rate (Gaur and Lu, 2007).

Previous studies have discussed how formal and informal institutional factors influence the foreign entry mode decision from regulative, normative and cognitive dimensions. Previous studies have also examined the moderating effect of institutional factors on the relationship between entry mode and firm-level factors such as international experience and technological intensity. However, only a few studies have discussed the interaction effects between the different pillars of institutional factors (e.g. Peng *et al*, 2009; Peng and Heath, 1996). In particular, few studies have examined the moderating effect of informal institutions on the relationship between formal institutions and the entry mode choice, which this paper is trying to explore.

2. THEORETICAL BACKGROUND

International entry mode choice is one of the most researched fields in international management literature (Canabal, 2008). Four popular entry mode theories include transaction cost analysis, eclectic paradigm, resource-based view, and institutional theory. Transaction cost theory regards the ownership structure as a decision to minimizing the transaction cost caused by

entering and operating in a foreign market (Hennart, 1991). Eclectic paradigm, also called OLI paradigm, can be regarded as an integration of various strands of international business theories. It believes that entry mode choice is based on three factors: ownership (control, costs, and benefits of inter-firm relationships), location (resource availability), and internalization (reducing transaction and coordination costs) (Dunning, 1988). Resource-based view (RBV) focuses on the sustainable competitive advantage gained from resources that are valuable, rare and inimitable (Barney, 1991). The entry mode choice is decided by the way MNEs transfer and share these resources. Institutional theory examines how firms react in an institutional context defined by certain formal and informal institutions such as rules, norms, and values (e.g. Meyer and Nguyen, 2005). And the entry mode choice is the result of such reaction under the institutional context of the foreign market.

The specific economic, political and cultural factors of China make the institution theory more applicable, compared with the other theories. Firstly, China is a country with a long period of planned economy in the past. In the 2014 Index of Economic Freedom, China was assigned into the "Mostly Unfree" tier, the economic freedom ranking 137 among 165 countries and areas. The regulative institutions are much stronger than most western countries. Besides, China is a country with regions and provinces that vary a lot in terms of nature resources, location importance, degree of openness, degree of development and stability, local culture, etc. It makes the formal and informal institutions in one region considerably different from another. Thirdly, China is a country with typical oriental culture, which results in a cognitive institutional environment different from those under western context. These specific regulative, normative and cognitive institution factors act as a strong influence on the MNE's entry mode decision in Chinese market.

2.1 Formal Institutions

Formal institutions refer to the "explicit and enforceable" rights, rules, and laws. Formal

institutions include legal, economic and regulatory domains (Berry *et al*, 2010; Salomon & Wu, 2012). The legal domain of formal institutions is related to laws and rules to improve the investment environment and protect the investor's private property, such as intellectual property rights protection and contract enforcement law, or to restrict the investment activities, such as environmental protection law in the chemical industry. The legal domain that improves the investment environment may increase the likelihood of MNEs' choosing WOS over JV as it reduces the investment uncertainty (Puck *et al*, 2009; Deng, 2001).

The economic domain of formal institutions is related to a degree of marketization. Existing studies have verified that the stronger the market-supporting institutions in an emerging economy, the less likely MNEs are to choose joint venture as entry mode (Meyer *et al*, 2009; Meyer & Nguyen, 2005). This is because in the market with a low degree of marketization, it is difficult for foreign firms to get local resources through market transaction, which inhibits a Greenfield entry mode (Meyer *et al*, 2009). Besides, with a low degree of marketization, the resources of local firms tend to be gained through nonmarket forms of transaction and thus difficult to evaluate, which makes acquisitions challenging for MNEs (Tong *et al*, 2008). Hence, it is likely for MNEs to choose JV as opposed to Greenfield or acquisition.

The regulatory domain of formal institutions is related to statutory restrictions on FDI. It concerns "formal systems of rules and enforcement mechanisms sanctioned by the state" (Child and Tsai, 2005). The Organization for Economic Co-operation and Development (OECD) designed the FDI Regulatory Restrictiveness Index based on four dimensions: foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel, and operational restrictions such as restrictions on branching and on capital repatriation or on land ownership. Previous studies have indicated that the more restrictive the regulation is in a host country, the more likely the multinational enterprises will choose JV over WOS (Yiu and Makino, 2002). This is because regulatory constraints are more levied on foreign enterprises rather than local firms. Compared with operating by foreign enterprises alone,

forming a joint venture with local partners will receive less unfavorable regulation (Yiu and Makino, 2002). Moreover, previous studies further indicate that the perceived complexity of governmental regulations for foreign firms is negatively associated with the likelihood of converting a JV into a WOS after the initial entry mode choice (Puck *et al*, 2009). This is because similar to the reason discussed above, the more complex and unstable the regulations are, the more important to have a local partner in the long term to reduce the potential negative impact on foreign enterprises.

China's FDI regulation is made and released by Ministry of Commerce of the People's Republic of China, effective to the whole country. In China, the formal institutional transition from central planning to market competition are so pervasive that China together with other similar countries like Russia and Poland is simply labeled as transition economies (Peng, 2000). The Chinese government had long encouraged equity joint ventures as an entry mode and discouraged mergers and acquisitions before 2003, which results in joint venture being the dominant foreign entry strategy for a long period (Xia, Tan & Tan, 2008). Before 2003, the Chinese government preferred JV mode because it believed that JV is an efficient way to absorb foreign capital, technology and management experience while it also ensured the substantial control power of government. Before 2003, establishing WOS was allowed only in particular industries, and the approve process was very long and strict (Wang, Wee, and Koh, 1999; Deng, 2001). In 2003 China issued the Provisional Regulations on mergers and acquisitions of Domestic Enterprises by Foreign Investors. It reflects an important change in foreign direct investment policies that Chinese government begins to encourage MNEs to make mergers and acquisitions (Law, 2003; Peng, 2006; Xia, Tan & Tan, 2008). Since JV mode provides a limited degree of control over the local operation, reduces the investor's flexibility to change the arrangement (Meyer and Nguyen, 2005) and increases the cost associated with the dispute settlement and lack of trust among partners (Gaur and Lu, 2007), after the regulation was relaxed, MNEs pushed into China with the WOS entry mode (Meyer and Nguyen, 2005). The changes in

country-level formal institutions significantly influence the MNE's entry mode choice. The relaxed country-level regulatory restrictiveness decreased the MNE's demand of a local partner to overcome restriction difficulties.

The impact of formal institutions on entry mode choice not only exists at the national level but also at the regional level. An example of regional formal institution is the development zone/special economic zone. Making advantage of outstanding traffic location is one motivation for building development zones, and most development zones are located close to ports or railway hubs (Mohiuddin *et al*, 2014). Since FDI brings quick economic benefits, another motivation for local government to build development zones is to attract foreign investment projects as a way to outperform in inter-province competence (Wang, 2000; Zhang, 2011). Development zones usually have better local infrastructures, more simplified bureaucratic procedures, and offer privileges in land use and taxation to foreign investors (Wang, 2000). This leads to a difference in regional formal institutions and MNEs are likely to entry through WOS when there are less regulation barriers. There is also a study indicating that as the result of "development zone fever", local governments and jurisdictions have set up too much development zones, and many of them are underused, some even never received any investment (Zhang, 2011). Despite this phenomenon, the favorable regulatory institutions in regional development zones generally attract FDI projects and increase the likelihood for MNEs to enter through WOS mode.

2.2 Informal Institutions

Informal institutions include social norms, beliefs, values, sanctions, taboos, customs, traditions, and codes of conduct (Salomon & Wu, 2012). Referring to the framework of North in 1990 and Scott in 1995, informal institutions are equivalent to normative and cognitive domains. The normative pillar represents the social obligation, and the cognitive pillar represents a taken-for-granted basis (Peng *et al*, 2009). More specifically, the normative pillar defines the

"legitimate means through which socially valued ends can be pursued". The cognitive pillar refers to the "embedded beliefs and values that are imposed upon, or internalized, by actors in society" (Child & Tsai, 2005).

Previous studies have pointed out that regional informal institutions are important factors in the MNE's entry decisions such as the choice of location city and the entry mode (e.g. Meyer and Nguyen, 2005; Peng and Luo, 2000). The example of regional normative institution is the number of state-owned enterprises in a sub-national region in the study of Meyer and Nguyen (2005). The more state-owned enterprises (SOE) dominate a sub-national region, the less likely MNEs will choose Greenfield as the entry mode. This is because when SOEs dominate the economy they also control access to local resources and old-style business networks, which inhibits the Greenfield entry mode (Meyer and Nguyen, 2005). One example of cognitive institution is the perceived power distance to access local authorities (Khanna and Palepu, 2000). Since local partners provide potential shortcuts to access authorities through interpersonal network, the more difficult to get access to the local authorities, the more a local partner is needed to deal with them in order to get necessary resources. Another example is the perceived degree of relying on interpersonal network (guanxi) in doing business (Wang, 2000). The essence of guanxi is that it "facilitates decisions between parties by emphasizing reciprocal relationships, creating a decision short cut within relationship that builds up mutual affinities, some of which is rational, and some purely affective" (Puffer *et al*, 2010). Since it is difficult for foreign firms to get access to local interpersonal network in short term, the resource they can gain is limited compared with local firms. Hence, the more relying on regional interpersonal network in doing business, the more a local partner is needed to get necessary resources.

Formal domains such as laws, rules and policies may change immediately after they are announced because of the enforcement mechanisms sanctioned by the state. And it may lead to corresponding informal institution change gradually in the long run. Kim, Kim and Hoskisson (2010) separate the institutional change in emerging economies into two stages: an early

institutional frictions stage and a later institutional convergence stage. In the institutional friction stage, the coexistence of newly introduced institutions and existing institutions leads to inconsistencies, frictions and even tensions among formal institutions and between formal and informal institutions, which will be reconfigured and eventually be convergent in the next stage. The institution friction stage may last for a certain period of time. In a short run, changes in formal institutions in the friction stage of institutional change may not automatically lead to the changes in informal institutions (Kim, Kim and Hoskisson, 2010).

When the formal and informal institutions combined together govern firm behavior, "in situations where formal constraints are unclear or fail, informal constraints will play a larger role in reducing uncertainty, providing guidance, and conferring legitimacy and rewards to managers and firms" (Peng *et al*, 2009). In particular, previous studies have also argued that in emerging countries during the transitional periods of formal institutional change, informal institutions will become more important. This is because the old formal institutions are no longer operational while new formal institutions are not yet fully established, thus informal institutions such as norms and conventions will play a dominant role during the transitional periods (Peng and Heath, 1996)**.**

In the following section, this paper will introduce two specific regional informal institution variables including regional corruption (in normative dimension) and regional ethnic link to foreign investors (in cognitive dimension), and will discuss the impact of these factors on the entry mode choice, as well as the moderation effect on the relationship between country-level regulatory restrictiveness and the entry mode choice.

3. THEORY DEVELOPMENT AND HYPOTHESES

3.1 National Regulation Restrictiveness

As discussed above, previous studies have indicated that the more restrictive the regulatory domain is in the host country, the more likely the multinational enterprises will choose a JV over

a WOS (e.g., Yiu and Makino, 2002; Brouthers, 2013). This is because when MNEs enter a foreign market with restrictive regulations that they have never encountered, they must adapt to these rules, even when these rules conflict with those in home country (Xu and Shenkar, 2002). The unfamiliarity with the rules and a lack of experiences to deal with them both raise the cost in the adaptation process. Thus, a local partner is helpful for an MNE to adapt to the new regulatory environment at the beginning stage. Besides, since regulatory constraints are more levied on foreign enterprises than on local firms, compared with the operation by foreign enterprises alone, forming a joint venture with local partners will receive less unfavorable regulations (Yiu and Makino, 2002). Overall, with a restrictive regulatory environment for foreign investors, investment obstacles such as foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners and other operational restrictions will considerably increase the necessity of local partners to attain resources and convenience in doing business. Accordingly, this study hypothesizes:

H1: The likelihood of an MNE choosing WOS as the entry mode is negatively associated with a level of national regulation restrictiveness in the host country.

3.2 Regional Corruption

Corruption is an important informal institutional factor. Previous studies have discussed the effect of host-country corruption on the MNE's entry mode choice (Doh *et al*, 2003; Eden & Miller, 2004; Rodriguez *et al*, 2005). The government corruption can cause a series of direct or indirect cost including bribe, efforts to avoid extortion, bureaucratic delay, weak infrastructure, etc. (Doh *et al*, 2003). Generally, since a local partner could bring access to local networks and reduce the uncertainty in corruption, MNEs prefer to choose the JV mode with a high level of corruption in the foreign market (Doh *et al*, 2003). Rodriguez et al. (2005) separated the general concept of corruption into two independent dimensions: pervasiveness and arbitrariness. Pervasiveness is defined as the average likelihood of encountering corruption for a firm in its

normal interactions with state officials. It reflects the degree to which a firm is obliged to address corrupt behavior. In situations where the corruption is highly pervasive, the corrupt payments are regular, predictable, and typically effective. Arbitrariness is defined as the inherent degree of ambiguity associated with corrupt transactions. When corruption is highly arbitrary, transactions with government officials are companied by a consistent uncertainty in terms of the size, target, and number of corrupt payments necessary to obtain an approval (Rodriguez *et al*, 2005). In terms of the entry mode choice, their study argued that pervasive corruption does not encourage taking on a local partner because a local partner can neither reduce the required bribes nor increase the MNE subunit's external legitimacy. A local partner becomes valuable only when arbitrariness of corruption is high. In this case, the local partner acts as a method for reducing the unpredictability of corruption (Rodriguez *et al*, 2005; Eden & Miller, 2004).

The study of Rodriguez et al (2005) provides a framework for several other studies about corruption. Previous studies assigned different countries into four cells: "High Pervasiveness and Low Arbitrariness" such as Argentina and Nigeria, "Low Pervasiveness and High Arbitrariness" such as Malaysia and Poland, "Low Pervasiveness and Low Arbitrariness" such as South Korea and Chile, and "High Pervasiveness and High Arbitrariness" such as Russia and India. In most studies, China was assigned into the quadrant of "High Pervasiveness and Low Arbitrariness"(Lee & Kenny Oh, 2007; Doh, Rodriguez *et al*, 2003). As discussed above, since local partners play a minor role to reduce the pervasiveness of corruption, a high degree of pervasiveness results in a higher likelihood for MNEs to choose the WOS entry mode in China.

However, studies also indicated that the positive relationship between the pervasiveness of corruption and equity entry via a wholly owned subsidiary is weakened as the arbitrariness of corruption increases (Rodriguez *et al*, 2005). Besides, as both dimensions of corruption increase, the MNE should rely more heavily on local firms for insider knowledge and legitimacy (Eden & Miller, 2004). In the light of this statement, though MNEs are generally prefer to choose a WOS entry mode in China considering the corruption issue, when regional corruption arbitrariness

increases, MNEs in this region tend to choose a JV entry mode.

As an illegal and invisible activity, corruption is an extremely difficult variable to measure. And almost no previous study can precisely separate and measure the pervasiveness vs. arbitrariness dimensions of corruption. Generally, the corruption seriousness measured by the ratio of civil servant put on record can reflect more arbitrariness dimensions of corruption than pervasiveness dimensions, because the Discipline Inspection Commission mainly take notice on those severe and unusual corruption cases that "cross the line" in a given degree of pervasiveness. Thus, I include the regional corruption seriousness in this study to represent the regional corruption arbitrariness.

H2: The likelihood of an MNE choosing WOS as the entry mode is negatively associated with a level of regional corruption seriousness.

The sub-national level corruption arbitrariness will also affect the relationship between the national level regulatory restrictiveness and entry mode choice. Foreign investors have to negotiate with local authorities over business licenses, real estate, access to public utilities, and, in some cases, tax incentives and subsidies. Since it is local authorities that actually implement policies set at the central level, the degree of implementation may vary from one region to another (Meyer and Nguyen, 2005). If the regional corruption is considerably arbitrary, even when the national formal regulation of FDI becomes less restrictive, MNEs will still encounter unpredictable and uncertain problems facing regional governments. These problems inhibit or limit MNEs to get benefits from the released national formal regulations. In this case, the MNEs that could have chosen WOS as entry mode may turn to looking for a local partner to reduce the unpredictability of corruption in order to redeem the benefit of the released regulation more smoothly. In this way, the high degree of regional corruption arbitrariness acts as a negative moderator of the relationship between less restrictive formal regulation and WOS entry mode. In the opposite case, if the national formal regulation of FDI becomes increasingly restrictive when

the regional corruption is very arbitrary, it becomes even more important to bribe local government departments to get necessary official resource and support to enhance the survival chance, as some regional governments of a large emerging economy are often "heavily involved in and have considerable power over regional FDI-related policies" (Ma & Delios, 2010). In this case, the likelihood of choosing JV entry mode as a result of tightened regulation is enhanced since a local partner will help the MNE better deal with the regional arbitrary corruption.

H3: As a level of the regional corruption seriousness increases, the negative effect of national regulation restrictiveness on the likelihood of an MNE choosing WOS as the entry mode becomes stronger.

3.3 Regional Ethnic Link to Foreign Investors

Ethnic link refers to the associations between people in the origin country and the people of the same ethnic group living outside of the origin country. These associations may be based on kinship, dialect and sub-national region of origin (Tong, 2005). In this paper, ethnic link is a concept closely associated with cultural distance, which in the case of entry modes refers to the distance between a firm's home and host country (Canabal & White, 2008). Ethnic link involves both normative and cognitive domains. Ethnic link has a cognitive aspect as culture as "the collective programming of the mind that distinguishes the members of one category of people from those of another category" (Hofstede & Bond, 1988). Ethnic link also has a normative aspect because society's values and attitudes are part of a culture's characteristics (Eden & Miller, 2004). Ethnic link and consequent cultural link is an important dimension that has been discussed in previous studies about entry mode choice, and the majority of the studies discovered that the cultural distance is negatively associated with the likelihood of an MNE choosing WOS (e.g., Brouthers & Brouthers, 2001; Kogut & Singh, 1988; Yiu & Makino, 2002; Puck *et al*, 2009). This is because a large cultural distance between home and host countries increases uncertainties associated with different languages, communication style, managing process, local employee

commitment and so forth, and a local partner is helpful to reduce these uncertainties.

Since ethnic link and consequent cultural link refers to the "collective programming of the mind which distinguishes the members of one category of people from those of another" (Hofstede & Bond, 1988), they not only exists on the level of two countries, but also exists on the level of home country and a subnational region. A close ethnic link and consequent cultural link between a subnational region and the MNE's home country may come from historical ties/historical relations as a result of once being colonized or occupied by the MNE's home country and having maintaining particular ties (Ma, Tong & Fitza, 2013). Such historical ties may lead to the rise of country-of-origin agglomeration, which can reduce foreign firms' search and assessment costs of business activities, facilitate information flow, make the ongoing operations more efficient, improve the legitimacy of the foreign subsidiary, and enhance the social relations (Tan & Meyer, 2011; Ghemawat, 2001; Jones & Khanna, 2006; Ma *et al*, 2013; Rauch, 1999). The close ethnic link may also be associated with close geographic and linguistic distances. They can reduce the difficulty and costs of verbal communication between the MNE parent company and its subsidiaries. And this may consequently further influence the likelihood of "successful transfer of home-grown cognitive frames or mental models" (Ghemawat, 2001; Ma *et al*, 2013). The close ethnic link may as well come from the historical and current emigration/immigration between the region and the MNE's home country in single or double way. The emigration/immigration will build a business and social network between the two places that promotes international trade and investment through helping businesses overcome informal barriers (Rauch, 1999; Gao, 2003). An empirical study indicated that in a particular country, 1% point increase in the share of ethnic Chinese population leads to a 3.7% or higher increase in cumulative FDI in China (Gao, 2003). No matter what causes a close regional ethnic link to the foreign investor, they all help to reduce the uncertainties associated with culture distance, reduce the degree of dependence on local partners, and thus increase the likelihood of a WOS entry mode.

One example is the ethnic link between the southeast coastal overseas-Chinese-hometown provinces of China and the Southeast Asia countries. Overseas Chinese, i.e. the ethnic Chinese, indicate the people who have Chinese ancestry and live outside the mainland of People's Republic of China and Taiwan, including Huaqiao (Chinese citizens residing abroad), Huaren (naturalized citizens of Chinese descent), and Huayi (the descendants of Chinese parents)(Poston *et al*, 1990). Their emigration history can be traced back to Qin Dynasty (221-207 BC), when many Chinese traders began doing business in Southeast Asia. There are approximately 37 million overseas Chinese living in 136 countries circa 1990. About 88 percent of them reside in 32 Asian countries including Thailand, Malaysia, Singapore, Indonesia and the Philippines (Poston *et al*, 1990). Most of them emigrated from Guangdong and Fujian Province. Consequently, the dialects used in these two provinces including Hakka, Teochew and Cantonese are widely used in these Southeast Asia countries. In these Asian countries, ethnic Chinese business firms are very prosperous. Companies owned by ethnic Chinese in Singapore, Malaysia, Thailand, Indonesia, and the Philippines account for about 70% of the private business sector in those countries. In Indonesia, ethnic Chinese control 160 of the 200 largest enterprises. In Thailand, ethnic Chinese control 90% of the manufacturing industry and 50% of the service industry (Weidenbaum & Hughes, 1996). The capital accumulation and business expansion stimulated these overseas Chinese to invest in China mainland for the benefit of cheap labor cost and material cost. Especially, they focused their FDI in Guangdong and Fujian Province, the place they can not only get the labor and raw material resources, but also avoid some normative and cognitive barriers as they share the similar culture and language. Ethnic Chinese also form large-scale formal overseas Chinese associations to establish connection and strength network between members and their ancestral hometowns in China, i.e., mainly Guangdong and Fujian Province (Gao, 2003). Since the ethnic and cultural links are huge, these FDI projects are more likely to form a WOS. In fact, Guangdong has always been one of the provinces with highest WOS ratio, even during the period when Chinese government encouraged the JV and

discouraged the WOS entry mode.

From the organizational legitimacy perspective, the regional ethnic link to foreign investors is helpful for MNEs to reduce entry barriers, gain local legitimacy and reduce the dependence on local partners. The institutional factors influence the legitimation process by which "the environment builds its perceptions of the organization" (Kostova and Zaheer, 1999). The study of Kostova and Zaheer (1999) has indicated that the greater the institutional distance, the more difficult for MNEs to understand and meet the legitimacy requirements in the host country. Furthermore, compared with the legitimacy in regulative domain, the legitimacy in normative and cognitive domain is more difficult for MNEs to acquire. This is because the legitimacy in regulatory domain includes formalized laws, rules and regulations, which can be easily and correctly interpreted. But legitimacy in normative and cognitive domains is more implicit, and thus hard for MNEs to interpret and keep consistent with it (Kostova and Zaheer, 1999). In the light of this statement, since the regional ethnic link to foreign investors reduces the cognitive and normative distances, it becomes easier for foreign investors to gain the local legitimacy without the assistant from local partners.

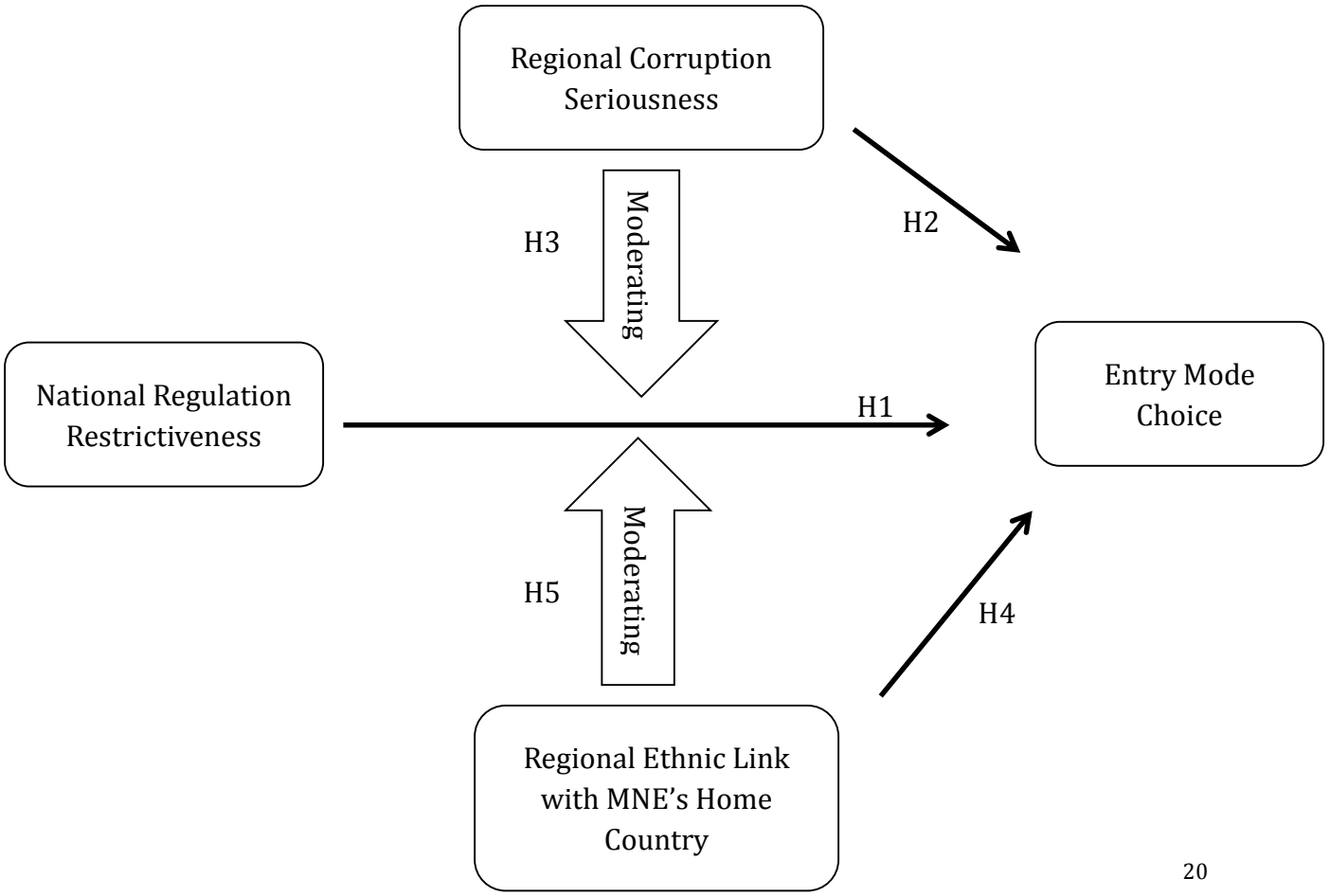
H4: The likelihood of an MNE choosing WOS as the entry mode is positively associated with the level of ethnic link between the host sub-national region and the investor's home country.

The regional ethnic link to foreign investors also interacts with the national formal regulatory restrictiveness. As previous studies have pointed out, "guanxi", the interpersonal networks may serve as informal substitutes for formal institutional support (Peng & Heath, 1996). Managers usually build good interpersonal relationship to rely on networks and alliances to get resources and grow their business (Peng & Luo, 2000; Ren, Au, & Birtch, 2009). If the regional ethnic link to the foreign investors is very strong, the investors can get preference from local authority as the result of a closer "guanxi" compared with that of investors from different ethnic

and culture background. And it is also easier for investors from similar ethnic and culture background to build corporation partner relationship with local firms as a way to attain resources. To sum up, even when the country-level regulation is restrictive, the networks based on common ethnic and cultural bond (and even family or kinship bond for some ethnic Chinese investors) may still provide an efficient way for these ethnic Chinese investors to obtain information, raise capital, reduce labor cost, and enforce contracts (Wang, 2010). In this way, regional ethnic link to investors weakens the effect of country-level regulatory restrictiveness on the entry mode choice.

H5: As the ethnic link between the host sub-national region and the investor's home country increases, the negative effect of national regulation restrictiveness on the likelihood of an MNE choosing WOS as the entry mode becomes weaker.

Figure 1: The research model that I have proposed so far



4. RESEARCH METHODOLOGY

4.1 Sample

This study collected 134 samples from the *Invest in China* website (www.fdi.gov.cn). This official guidance website for foreign direct investment in China is hosted by the Ministry of Commerce. The data service of this website provides the information of a FDI project including the company name, address, entry mode, operation duration, aggregate investment, registered capital, business scope, registration approved date, and operation status. The home country information in this study is collected from the individual company's official website.

The entry year of these companies is from 1997 to 2011. I take the first-level (province-level) of administration as the subnational region for this study. The sample covers 28 out of 31 province-level regions (22 provinces, 5 autonomous regions and 4 centrally-administered municipalities) in China mainland. Samples in the three most inland provinces Xinjiang, Tibet and Qinghai are not found for the lack of information. Also, I didn't collect samples from two special administrative regions Hong Kong and Macau, neither form Taiwan area, because these areas are classified as foreign investors (the PRC Wholly Foreign-owned Enterprise Law, 1986). The sample covers 19 out of 39 industry sectors in the category of Organization for Economic Co-operation and Development (OECD). Home countries of these companies cover 23 countries mainly in Asia, Europe and North America.

4.2 Measures

4.2.1 Dependent Variable

The dependent variable is a dummy variable of the entry mode. Code 0 represents joint venture entry mode and code 1 represents wholly owned subsidiary. The definition of WOS has been a controversial issue. In previous studies researchers used 100%, 95% or 80% equity ownership as the cutoff point to differentiate between a WOS and a JV (Yiu & Makino, 2002). In

China, according to the Law of the People's Republic of China on Foreign-capital Enterprises, foreign wholly owned subsidiary indicates the enterprise whose equity (except the land) are 100% from foreign investors. In this study, in accordance with this distinction, WOS means enterprise that foreign investor owns 100% equity, and JV means enterprise whose equity are from both foreign and Chinese investors regardless the size of equity share each side owns.

4.2.2 Independent Variables and Moderating Variables

4.2.2.1 National Regulation Restrictiveness

The national regulation restrictiveness information was collected from the Organization for Economic Co-operation and Development (OECD) database. The OECD FDI Regulatory Restrictiveness Index (FDI Index) measures statutory restrictions on foreign direct investment in 58 countries, including all OECD and G20 countries, and covers 22 sectors. The FDI Index gauges the restrictiveness of a country's FDI rules by looking at the four main types of restrictions on FDI: foreign equity limitations, screening or approval mechanisms, restrictions on the employment of foreigners as key personnel, and operational restrictions such as restrictions on branching and on capital repatriation or on land ownership (Cited from www.oecd.org). The higher the index number is, the more restrictive the national regulation is in a certain industry at a certain time.

Each sample was assigned into one of the 22 industry sectors of OECD. And I use the OECD FDI Index of that sector of the registration year of the company to measure the national regulation restrictiveness. Since the FDI Index is currently available for only 7 years of 1997, 2003, 2006, 2010, 2011, 2012, and 2013, for a company whose registration date falls in the gap, this study assumes that the FDI index keep in line with the one of last available year. For example, I used the FDI index of 2003 to measure that of a company registered in 2004 since the data was not refreshed in the later year.

4.2.2.2 Regional Corruption Seriousness

The data of regional corruption seriousness in this study was collected from the study of Nie (2014). Nie uses the number of civil servants put on record due to corruption out of 10,000 ones in different provinces of China from 1999 to 2007 as the indictor of regional corruption seriousness. Similar method can be found in the study by Glaeser and Saks (2006). They used the ratio of convicted corrupt civil servant in total civil servants in a certain state to measure the regional corruption seriousness in the United States.

From Nie's research, the most corrupt regions are some South East coastal provinces and some mid-western provinces, such as Fujian, Zhejiang and Guizhou. In the most developed regions like Beijing, Shanghai and Guangdong, though the valuable resource in these investment focus places brings more potential chances for bribery, since the legal domain in these regions is also well developed to improve the business environment, enforce the contract fulfillment and protect the investor's private property, overall, the corruption seriousness in these regions is below the average. By contrast, in some secondary tier regions, the economy is also rapidly growing, while the legal environment remains to be improved, which leads to a higher degree of regional corruption seriousness. The results and explanation in Nie's research keep in line with the real situation in China. Hence, to measure the regional corruption seriousness, I adopt his measurement and data, i.e., the number of civil servants out of 10,000 that were put on record due to corruption in each region.

To test the moderating impact of the regional corruption on the national regulative restrictiveness, this study also includes a cross term of national regulative restrictiveness and the regional corruption in the regression, i.e., the cross term of FDI Index and the number of civil servants out of 10,000 that were put on record due to corruption in each region.

4.2.2.3 Regional Ethnic Link to Foreign Investors

As discussed in above section, there are various degrees of ethnic link to foreign investors in

different sub-national regions influencing the entry mode choice. For example, in the southeast coastal provinces of China, the ethnic link to foreign investors is stronger because of historical and geography reasons. In this study, I picked up six southeast coastal provinces of China, namely Guangdong, Fujian, Jiangsu, Zhejiang, Shanghai, Hainan as the regions with stronger ethnic link to Hong Kong, Macau, Taiwan and Southeast Asia countries. I use the ten countries in Association of Southeast Asian Nations as the scope of Southeast Asia countries, namely Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma) and Vietnam.

A set of ordinal variables was created to represent different degrees of ethnic link. Code 2 means strong ethnic link, representing the link between six southeast coastal provinces and Hong Kong, Macau and Taiwan. Code 1 means medium ethnic link, representing the link between six southeast coastal provinces and Southeast Asia countries. It also represents the link between inland provinces and Hong Kong, Macau and Taiwan. Code 0 means weak ethnic link, representing the rest cases. (See Table 1)

To test the moderating impact of the regional ethnic link on the national regulative restrictiveness, this study also includes a cross term of FDI Index and ethnic link ordinal variable in the regression.

4.2.3 Control Variables

4.2.3.1 Subsidiary Size

The effect of affiliate size on the entry mode choice is complicated. If the size of foreign investment is large, foreign firms may choose a JV as the entry mode to “disperse financial risks”, but if the size of foreign investment is small, MNEs may still choose a JV as the entry mode to “achieve minimum economic efficient scale” (Yiu & Makino, 2002). So far, the effect of affiliate size on entry-mode choice remains unclear from existing studies. Some researches suggested that foreign investors are more likely to choose lower equity ownership of their affiliates when the

capital size of the operation is high (Gatignon & Anderson 1988; Shan 1991). Other findings indicated that foreign investors are likely to choose a full ownership or a higher equity share in their affiliates with a large capital size of the affiliate (Zhao and Zhu, 1998; Mutinelli and Piscitello, 1998). Also, some studies found that the size of affiliate is independent of foreign investors' preference for a particular entry mode (Luo, 2001; Erdener Kaynak *et al*, 2007). To avoid the potential effect of affiliate size on the entry mode choice, I take it as a control variable.

Some studies used the relative size of subsidiary to parent as the measurement (Yiu & Makino, 2002). Some studies used the logarithm of the amount of total investment in US dollars (Kaynak *et al*, 2007). Other studies used the number of employees in the subsidiary as a measure of subsidiary size (Puck *et al*, 2009). In this study, I used the registered capital of subsidiary in 10 million US dollars as the agent of affiliate size, which represents the subsidiary size at the entry stage when entry mode is contemporaneously decided.

4.2.3.2 Subsidiary Type

Establishing different types of affiliate requires varying degree of resource commitment, and involves varying degrees of risks and uncertainties. So the type of subsidiary may influence the entry mode choice. Previous studies have indicated that the more relying on local resources to grow firm, the more likely MNEs are to enter an emerging economy by joint venture, and this effect becomes stronger when requiring intangible assets compared to tangible assets because the intangible assets are more difficult to acquire through market transactions (Meyer *et al*, 2009; Johanson & Vahlne, 1977). Hence, I separate the MNEs according to manufacture industry and non-manufacture industry (i.e., service industry) as a control variable. MNEs in manufacture industry mainly need tangible assets such as real estate, machinery equipment and raw material, and MNEs in service industry mainly need intangible assets such as brand, client and talent.

The samples were first categorized according to the 22 industries in OECD category. Then the 22 industries were separated into two general types: manufacture (primary and secondary

industries) and non-manufacture (tertiary industry). Manufacture includes the following industries: agriculture & forestry, agriculture, forestry, fisheries, mining & quarrying (including oil extract), manufacturing, food and other, oil refinery and chemicals, "metals, machinery and other minerals", "electric, electronics and other instruments", transport equipment, electricity, electricity generation, electricity distribution, and construction. Non-manufacture includes the rest industries: distribution, wholesale, retail, transports, surface, maritime, air, hotel & restaurants, media, radio & TV broadcasting, other media, communications, fixed telecoms, mobile telecoms, financial services, banking, insurance, other finance, business services, legal, accounting & audit, architectural, engineering, and real estate investment. This study uses dummy variable to represent these two types: code 1 means manufacture and code 0 means non-manufacture.

4.3 Analysis

This study used the binary logistic regression model to test the hypotheses. Binary logistic analysis is designed to estimating the probability of an event occurring and has been adopted in 52% studies of entry mode choice (Canabal & White, 2008). The binary logistic model is appropriate when the dependent variable is binary and there are qualitative and quantitative independent variables in the regression, which particularly fits the situation of this study (Hair *et al*, 1995; Norusis 1994; Kaynak *et al*, 2007).

This study examined five sets of logistic regression analyses. Model 1 only includes the two control variables (size and subsidiary type). Model 2 includes three independent variables (FDI regulation index, ethnic link and regional corruption) and control variables (size and subsidiary type). Then I inserted the interaction term of FDI regulation index and regional corruption in model 3, and inserted the interaction term of FDI regulation index and ethnic link in model 4 to test the moderating effect. Model 5 is the full model that includes three independent variables, two control variables and two interaction terms. Hierarchical regression analyses were conducted

to examine whether the inclusion of moderator would significantly increase the explanatory power of the model. Table 2, 3, 4 and 5 present the distribution of JV and WOS in terms of entry year, industry, home country and sub-national/province-level regions. Table 6 provides the descriptive statistic of variables. Table 7 provides the correlation matrix of variables in this study. Table 8 provides the summary of the results of the logistic regression analyses from model 1 to model 5. (See Table 2-8)

The elevated correlation of some variables is expected, for example, the correlation between FDI Regulation Index and Entry Year. Since China has experienced the transition from planned economy to market-oriented economy, the degree of openness has increased a lot as time passed by. The later the foreign companies entered Chinese market, the fewer regulative barriers they faced. The correlation between FDI Regulation Index and Industry Type is also expected. Overall, the regulation of foreign companies in the tertiary industries is more restrictive than those in the primary industries. And the regulation of foreign companies in the secondary industries is the least restrictive. This is partly because China needs to introduce advanced science and technology to upgrade the current labor-intensive manufacturing industrial structure. It is also because many tertiary industries like finance, media, air, maritime and transport are crucial to economic and political safety and stableness. And China government is still very cautious of the FDI on these industries.

5. RESULTS

The maximum likelihood estimates of the parameters were obtained by employing SPSS statistic software. The explanatory power of the model is assessed using model chi-square statistics. Large chi-square values and small P values indicate good fit. From model 1 to model 4, the chi-square values have a significant increase, which indicates the addition of interaction terms improves the model. The increase of both Cox & Snell R Square and Nagelkerke R Square also confirmed this. Moreover, model 3 has a larger chi-square than that of model 2, which means the

interaction of regional ethnic link and FDI regulation index has more contribution to the model compared with the interaction of regional corruption and FDI regulation index. In fact, the chi-square of model 2 almost remains the same as in model 1, suggesting the interaction of regional corruption and FDI regulation index has little impact on the model. Overall, the result suggested that moderating effect of regional informal institutions on national formal institutions explains a significant part of the entry mode decision.

Turning to the hypotheses testing, the result generally supported all hypotheses except the hypothesis 3. For hypothesis 1, the coefficients of FDI Regulation Index in all four models are all significantly negative, which is consistent as predicted. This result supports that the likelihood of MNEs choosing WOS entry mode is negatively related to the level of national regulation restrictiveness in the host country. For hypothesis 2, the coefficients of Regional Corruption in all four models are also all significantly negative and consistent as predicted. This supports that the likelihood of a WOS entry mode is negatively related to the level of regional corruption arbitrariness. For hypothesis 4, the coefficients of Regional Ethnic Link in all four models are all significantly positive, which is consistent as predicted and suggest that the likelihood of a WOS entry mode is positively related to the ethnic link between the host sub-national region and the investor's home country.

Turning to the moderating effect, the result only supports that when the regional ethnic link is strong, the negative effect of national regulative restrictiveness on the entry mode of WOS will decreases (hypothesis 5) (See Figure 2). Consistent as predicted, the coefficients of FDI Index _ Ethnicity in model 3 and model 4 are all significantly positive at $p < 0.05$ levels. But hypothesis 3 was not verified. Though the coefficients of FDI Index _ Corruption in model 2 and model 4 are negative as predicted, it is not significant. Thus the negative relationship between national regulation restrictiveness and the WOS entry mode has no significant change when the regional corruption arbitrariness increases. This unexpected result may due to the limitation of the data or the sample, and I will discuss about it in the next section.

6. DISCUSSION

6.1 Conclusions and Implications

As raised in the beginning, the research question of this paper is to explore what explains the uneven WOS ratios across different regions of China and what specific regional factors affect the regulatory influence on an MNE's entry mode choice between JV and WOS. As discussed above, this question has not been fully explained solely by existing studies from an institutional perspective. The empirical results have shown that regional informal factors, particularly the level of regional corruption and regional ethnic link to foreign investors, explain the variation of entry mode choices in different regions and moderate the national formal regulatory influence on them.

The theoretical implication of this paper is that it highlights the importance of regulation restrictiveness, government corruption and ethnic link on entry mode choice. As shown in the empirical results, the sign of regulation is significantly negative, indicating that a restrictive foreign investment regulation of a country is the main factor discouraging an MNE's choice of WOS. Besides, the empirical results also confirm that at a regional level, the government corruption in host regions and the ethnic link between the MNE's home country and the host regions can both affect the MNE's entry mode choice. The significant results show that a high degree of regional corruption leads to the preference of JV, while a high degree of ethnic link between the MNE's home country and host region increase the likelihood of its choosing the WOS mode. The results also confirm that a strong ethnic link can moderate the national regulative effect, weakening its negative influence on choice of WOS.

The moderating effect of regional corruption on regulation is not significant. The reason of this insignificance may be the following: To measure the regional corruption arbitrariness/ seriousness, I adopted the number of civil servant put on record due to corruption out of 10,000 ones in different provinces of China from 1999 to 2007 in Nie's research, which is the only

available data in this field. There are two limitations in this measurement. Firstly, we cannot precisely separate and exclude the pervasiveness dimensions of corruption in this indictor. Generally speaking, the number of civil servant put on record reflects more arbitrariness dimensions of corruption than pervasiveness dimensions, because the Discipline Inspection Commission mainly take notice on those officials involved in a huge sum severe corruption. But this indicator also reflects the pervasiveness dimensions to some extent. Besides, the number of officials put on record is not only decided by the substantial corruption seriousness, but also decided by the governmental anti-corruption efforts. In a province with higher degree of anti-corruption efforts, this number will be correspondingly larger than that of another province while their corruption seriousness remains on the same level. In fact, the moderating effect of regional corruption on the FDI regulation index is the only one hypothesis that is not verified. And this can be mainly explained by the bias on the variable measurement of regional corruption.

This study has an important practical implication for MNEs entry mode choice in emerging countries like China. Previous studies and practice have underlined the significance of formal/regulative institutions in emerging countries (e.g., Puffer *et al*, 2010), which has become one of the most determinate factors of an MNE's entry mode choice. However, according to our findings, regional informal institutions can moderate the influence of national formal/regulative institutions. When the ethnic link between the MNE's home country and the host region is considerably strong, since the MNEs can more easily acquire resources and get convenience in doing business, the negative influence of restrictive national regulations on the WOS entry mode will be consequently weakened. In the light of this finding, when the national regulations are restrictive in the foreign country, MNEs need to pay close attention on the regional ethnic link and other regional informal institutions, rather than simply avoid the WOS entry mode.

Finally, this study offers important public policy implications in introducing and implementing necessary institutional changes to improve the unevenly distributed MNE's entry modes in different regions. It requires public policy-makers to release the regulation

restrictiveness, reduce corruption and pay careful attention on the regional ethnic link to the foreign investors. Among these factors, regional ethnic link is particularly important, because it not only directly influences the entry mode choice, but also moderates the negative regulatory effect. For a country like China, different regions have varies ethnic link to foreign countries due to linguistic, geographic, historic and other reasons. For example, the northwest provinces have more ethnic link with Middle Asia countries, the northeast province of Jilin has more ethnic link with South Korea, and the southeast provinces have very close ethnic link with Southeast Asia countries. In this way, to increase the ratio of WOS in a specific region, the central and local governments should take full advantage of these culture resources to attract MNEs from foreign countries and encourage them to choose WOS entry mode.

6.2 Contribution

This study examines the effect of national formal and regional informal institutions and the moderating effect between them on foreign entry mode choice. This research question is meaningful not only to emerging countries like China but also to developed countries, because even in developed economies, formal rules sometimes "make up only a small (though important) part of institutional constraints, and informal connections are pervasive" (North, 1990). The interaction between national and regional factors, between formal and informal institutional factors is a significant yet insufficiently studied field. Our results show that all of national regulative, regional normative and regional cognitive institutional factors are important determinants for entry choice. Moreover, the regional informal institutions also act as a moderator on the relationship between national formal institutions and the entry mode choice. This paper contributes to the study of entry mode choice under institutional theory by shedding more light on the following aspects.

Firstly, existing studies about the effect of cultural and corruption factors on the entry mode choice are mostly focused on the national level (e.g., Rodriguez *et al*, 2005; Eden & Miller, 2004).

However, even in the same country, the context may vary considerably among different regions, especially in countries like China that covers a vast but unevenly developed territory. The function of local specific determinants is easily overlooked when we regard a country as integrity to analyze the entry mode decision. Previous studies from the institutional view have suggested that strategy and international business research can benefit by "taking a broader perspective of institutions operating in different location contexts and levels" (Meyer & Peng, 2005; Peng et al., 2008; Ma, Tong & Fitza, 2013). In this paper, I discussed and measured the effect of corruption and ethnic link on subnational region level. The results suggest that these two regional informal factors play an important role in explaining the entry mode choice. To foreign investors, this result indicates the importance of concerning specific regional informal institutions when making entry mode decisions.

Secondly, previous studies about entry mode choice have studied the interaction effects between subnational regions and firm level factors including technology intensity, international experience, home country and industry (e.g. Dikova and Witteloostuijn, 2007; Ma, Tong & Fitza, 2013). But few studies have talked about the interaction between regional factors and national factors. In fact, subnational regions not only vary in terms of production factors like natural resource, labor resource and infrastructure, but also in terms of economic, political, legal and social institution background (Ma, Tong & Fitza, 2013). And these regional factors may offset or moderate national factors, and should be taken into consideration in entry mode choice.

Particularly, no existing literature is found that talks about the interaction effect between national formal institutions and regional informal institutions on entry mode choice. This paper carefully explored how the three institutional pillars (regulatory, normative, and cognitive) would interact and jointly influence the entry mode on both national and regional level. The results confirmed the significant role of regional informal institutions. Regional corruption and regional ethnic link, as two regional informal institutions, not only directly affect the entry mode choice but also make a difference indirectly through moderating the national regulative institution.

Besides, an important contribution of this paper is the measures of regional ethnic link to foreign investors. A majority of previous studies about ethnic and culture distance are focused on national level, and few studies have discussed the measures of this domain on regional level. In this study, I separate the provinces of China into two groups based on their inland/coastal location, and separate the foreign countries into two groups based on their geographic distance with China. Then I picked up six southeast coastal provinces of China as the regions with stronger ethnic link to Hong Kong, Macau, Taiwan and Southeast Asia countries, and use the ten countries in Association of Southeast Asian Nations as the scope of Southeast Asia countries, namely Indonesia, Malaysia, the Philippines, Singapore, Thailand, Brunei, Cambodia, Laos, Myanmar (Burma) and Vietnam. At last this study creates a set of ordinal variables from 0 to 2 to represent different degrees of ethnic link (See Table 1). This two-dimension measurement can be generalized to other countries to measure the different degree of regional ethnic link to foreign investors.

6.3 Limitations and Future Research

As mentioned above, the measurement of regional corruption arbitrariness needs to be improved. Future research needs to find a measurement that is able to precisely separate the pervasiveness dimensions of corruption from the arbitrariness dimension, as well as exclude the bias due to the reflection of different anti-corruption efforts in the statistical data.

Besides, during the research, this paper created a simplified model of ethnic link between MNEs home country and Chinese province-level regions, using ordinal variables from 0 to 2 to represent the different degree of ethnic link. To make the measurement more precise, in the future studies, researchers can try to create a framework to measure it as a continuous variable by a series of items from geographic, historic dimensions and other dimensions.

Another restriction of this research is the insufficient control variables. This paper has included two most significant control variables, the subsidiary size and subsidiary type. However,

some other variables should also be controlled to enhance the generalization of the result, for example, the international experience of parent companies. At the early stage of entry, since the MNEs don't have the necessary local knowledge about local resources, local market, etc., they tend to rely on local partners. However, as the MNEs accumulating local knowledge and local experience, they have the capability to control a new subsidiary. In this way, the longer the multinational enterprise's parent experience in the host country, the less likely the multinational enterprise will choose a joint-venture over a wholly owned subsidiary (Yiu & Makino, 2002). So the experience of the MNEs in China should also be taken as a control variable. A more accurate and rigorous study can be done in the future.

Beside the international experience, other firm-specific advantages such as firm reputation, diversification, average financial performance, and proprietary technology should also be included. Previous studies have indicated that when an MNE with less diversified products steps into a new industry, they prefer to choose JV as the entry mode because they need to learn tacit industry-specific knowledge from the partner (Mutinelli & Piscitello, 1998; Brouthers & Hennart, 2007). Previous studies have also indicated that a firm with better financial performance has more financial resources, other tangible assets and consequent greater competitive advantage, and will be better able to support their overseas expansion through a WOS entry mode (Claver & Quer, 2005). So these firm-specific advantages that have influenced the entry mode choice should be included in the research.

In addition, this paper only separated the subsidiaries into two general types: the ones in the manufacture industry and the ones in the non-manufacture industry. In fact, within each of these two types, the subsidiaries may still vary a lot with different degrees of proprietary technology and R&D intensity. A more concrete category should be used in the research to further identify these characteristics and better control their influence.

At last, this study included disproportionately large samples from Hong Kong. Places like Hong Kong and British Virgin Islands are jurisdictions that facilitate round tripping (round

investment), which means outward foreign direct investment will return immediately to take advantage of preferential tax treatment accorded to foreign companies. In fact, Hong Kong dominates the FDI into China mainland and a good portion of this is likely to be round tripping. However, to precisely eliminate the effect of this phenomenon in this study is beyond our strength at this moment. Thus this is a point that is worth to take more attention in the future research.

Institution theory is a relatively new theory compared with transaction-cost theory, eclectic model of international production theory and other commonly used theories. There are still many ideas to explore from this perspective such as: What else formal and informal institutions may interact mutually and influence the entry mode choice? Is there any longitudinal effect on the interaction of institutional factors of entry mode decisions? What kind of institutions interaction might lead to the transition from JV to WOS after the initial entry stage? And future research is required to examine these fields in both theoretical and empirical studies.

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Tables

Table 1: The ordinal variables representing different degrees of ethnic link to foreign investors

	Hong Kong, Macau and Taiwan	Association of Southeast Asian Nations	Other Countries
Southeast Coastal Provinces	2	1	0
Inland Provinces	1	0	0

Table 2：Sample distribution of JV and WOS in different entry years

Entry Year	**JV**	**WOS**	**Total**
1997	12	4	16
2003	15	11	26
2006	17	20	37
2010	19	21	40
2011	2	13	15
Total	**65**	**69**	**134**

Table 3：Sample distribution of JV and WOS in different industries

Industry	**JV**	**WOS**	**Total**
Agriculture	2	2	4
Business services	8	6	14
Construction	2	2	4
Electric, Electronics and other instruments	2	10	12
Electricity	2	3	5
Financial services	5	2	7
Food and other	4	9	13
Forestry	2	2	4
Hotels & restaurants		1	1

Insurance		2	2
Manufacturing	17	10	27
Maritime		5	5
Metals, machinery and other minerals	3	3	6
Mining & Quarrying		2	2
Oil ref. & Chemicals	1	2	3
Real estate investment	7	2	9
Retail	2	1	3
Transport	6	2	8
Wholesale	2	3	5
Total	**65**	**69**	**134**

Table 4：Sample distribution of JV and WOS from different home countries

Home Country	**JV**	**WOS**	**Total**
Australia	1		1
Austria	3		3
Canada	5		5
Denmark	1		1
France		1	1
Germany	2	1	3
Hong Kong	12	45	57
Indonesia	1		1
Italy		2	2
Japan	4	2	6
Korea	5	3	8
Macau		2	2

Mauritius	1		1
New Zealand		1	1
Russia	1		1
Seychelles	1		1
Singapore	3	1	4
Switzerland	1	1	2
Taiwan	1	3	4
Thailand		2	2
The British Virgin Islands	2		2
UK	3	2	5
USA	18	3	21
Total	**65**	**69**	**134**

Table 5：Sample distribution of JV and WOS in different province-level regions in China

Region	Corruption	JV	WOS	Total
Fujian	6.40	1	6	7
Guizhou	6.40	5		5
Anhui	5.90	3		3
Zhejiang	5.90		5	5
Henan	5.40	1		1
Yunnan	5.40	2		2
Jiangsu	5.10	3	4	7
Shandong	5.05	4	2	6
Jiangxi	4.90	3	1	4
Chongqing	4.80	2	1	3

Hunan	4.80	3		3
Sichuan	4.60	1		1
Hubei	4.50	4	2	6
Ningxia	4.50	4		4
Hebei	4.20	2	4	6
Jilin	4.10	6	4	10
Tianjin	4.00	4	6	10
Heilongjiang	3.90	2	5	7
Shanxi (陕西)	3.90		2	2
Shanxi (山西)	3.80	1	1	2
Guangdong	3.60	2	9	11
Liaoning	3.60	1	1	2
Gansu	3.05	2	1	3
Inner Mongolia	3.00	1	2	3
Shanghai	3.00	3	6	9
Hainan	2.95		1	1
Beijing	1.70	5	6	11
Total		65	69	134

Table 6: Descriptive Statistic

	N	Minimum	Maximum	Mean	Std Deviation
Industry type	134	0	1.000	0.600	0.492
FDI regulation index	134	0.150	0.885	0.399	0.197
Ethnic link	134	0	2.000	0.690	0.806
Regional corruption	134	1.700	6.400	4.229	1.221

Size	134	0.01	20.250	1.278	2.977

Table 7: Correlation matrix

		Entry mode	Entry year	Industry type	FDI regulation index	Ethnic link	Regional corruption	Size
Entry mode	Pearson Correlation	1						
	Sig. (2-tailed)							
Entry year	Pearson Correlation	.251**	1					
	Sig. (2-tailed)	.003						
Industry type	Pearson Correlation	.116	.018	1				
	Sig. (2-tailed)	.182	.834					
FDI regulation index	Pearson Correlation	-.124	-.343**	-.605**	1			
	Sig. (2-tailed)	.154	.000	.000				
Ethnic link	Pearson Correlation	.578**	.130	-.086	.152	1		
	Sig. (2-tailed)	.000	.134	.325	.079			
Regional corruption	Pearson Correlation	-.126	.230**	.240**	-.433**	.185*	1	
	Sig. (2-tailed)	.148	.008	.005	.000	.032		
Size	Pearson Correlation	-.070	-.102	-.251**	.230**	.015	-.232**	1
	Sig. (2-tailed)	.420	.242	.003	.008	.864	.007	

**. Correlation is significant at the 0.01 level (2-tailed).

*. Correlation is significant at the 0.05 level (2-tailed).

Table 8: Regression results

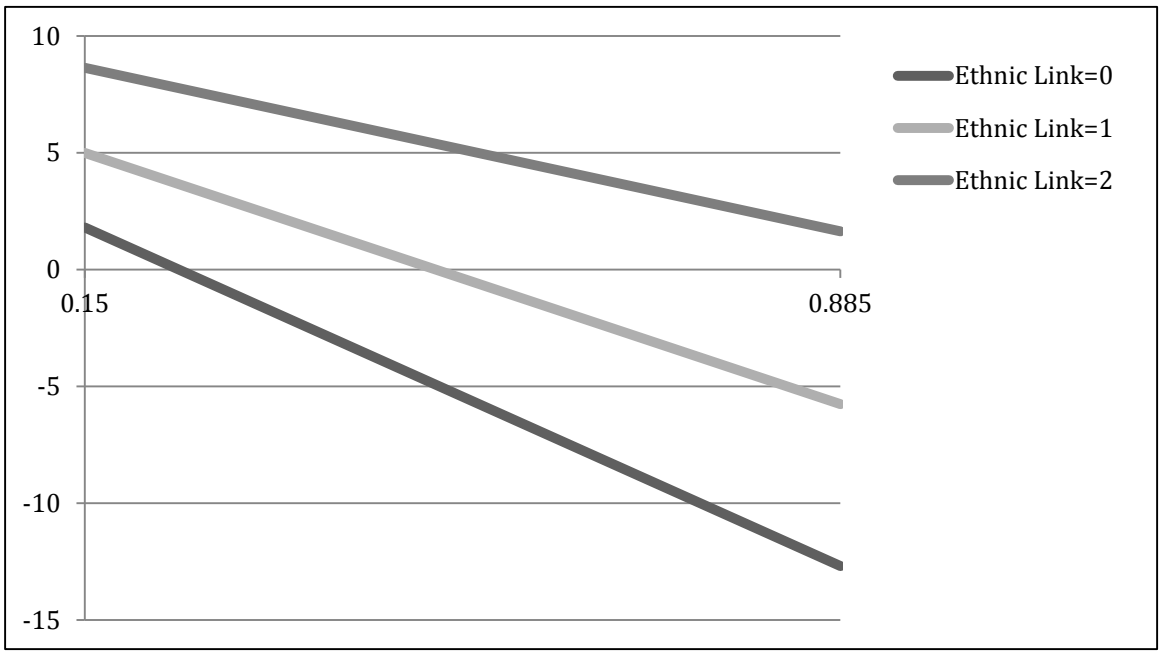
DV= Entry Mode	Predicted Sign	Model 1	Model 2	Model 3	Model 4	Model 5
Constant		-0.157 (0.604)	10.968*** (0.000)	10.949*** (0.004)	13.845*** (0.000)	12.240*** (0.002)

FDI Regulation Index	-		-13.113***	-13.064*	-19.735***	-14.990*
			(0.000)	(0.084)	(0.000)	(0.079)
Regional Corruption	-		-1.917***	-1.913**	-2.038***	-1.560*
			(0.000)	(0.021)	(0.000)	(0.060)
Regional Ethnic link	+		4.499***	4.499***	2.432**	2.165*
			(0.000)	(0.000)	(0.030)	(0.072)
FDI Index_Corruption	-			-0.013		-1.367
				(0.994)		(0.514)
FDI Index_Ethnicity	+				5.095**	5.679**
					(0.044)	(0.042)
Size		-0.031	-0.188*	-0.188*	-0.161	-0.188
		(0.623)	(0.079)	(0.091)	(0.260)	(0.200)
Subsidiary Type		0.429	-0.060	-0.061	-0.425	-0.610
		(0.241)	(0.936)	(0.937)	(0.586)	(0.465)
N		134	134	134	134	134
Cox & Snell R Square		0.015	0.541	0.541	0.557	0.559
Nagelkerke R Square		0.020	0.721	0.721	0.743	0.745
Chi-Square		2.050	104.254***	104.255***	109.147***	109.589***
d.f.		2	6	7	7	8

Note: *p<0.1; **p<0.05; ***p<0.01

Dependent variable: 0 = joint venture, 1 = wholly owned subsidiary

Figure 2: The moderation effect of the ethnic link on the entry mode choice



Note: In the sample of this study, max FDI Regulation Index = 0.885, min FDI Regulation Index = 0.15.
Dependent variable on the y-axis: 0 = joint venture, 1 = wholly owned subsidiary
Regional Corruption, Subsidiary Size and Type are controlled using their means.

Appendices

Appendices 1: Geographical distribution of inward FDI stock in China, 2002 and 2010. (US$ billion)

Region/economy	2002	2010
World	448.0	1,107.8
Developed economies	n.a.	n.a.
Europe	n.a.	n.a.
European Union	**33.9**	**72.1**
Belgium	0.6	1.1
Denmark	0.5	2.0
France	5.5	10.8
Germany	8.0	17.2
Italy	2.2	5.1
Netherlands	4.3	10.9
Spain	0.4	2.0
Sweden	0.8	2.1
United Kingdom	10.7	17.1
North America	**43.2**	**73.1**
Canada	3.4	7.9
United States	39.9	78.7
Other developed economies	n.a.	n.a.
Australia	n.a.	n.a.
Japan	36.3	73.6
Developing economies	n.a.	n.a.
Africa	n.a.	n.a.
Mauritius	n.a.	9.4
Asia	n.a.	n.a.
Hong Kong (China)	204.9	456.2
Macau (China)	4.8	9.7
Indonesia	1.1	2.1
Korea, Republic of	15.2	47.3
Malaysia	2.8	5.7
Philippines	1.4	2.8
Singapore	21.5	46.9
Taiwan Province of China	33.1	52.0
Thailand	2.4	3.3
Western Samoa	2.3	16.1
Latin America and Caribbean	n.a.	n.a.
Barbados	n.a.	3.6
British Virgin Islands	24.4	111.8
Cayman Islands	3.8	21.6
Unidentified others	n.a.	**100.7**

Source: Ministry of Commerce (MOFCOM), China, available at: www.fdi.gov.cn .The above statistics represent cumulated FDI and do not include divestments.