Institutional Influences on Chinese FDI Entry Mode Choice: A Transaction-cost Perspective

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Abstract

This thesis investigates the host and home country determinants of Chinese outward foreign direct investment (OFDI) entry mode choice between a wholly-owned subsidiary or a joint venture under the lenses of the transaction costs theory. Using Chinese OFDI data collected from 2003 to 2016, the results show the host country's low regulatory quality will increase the likelihood of Chinese MNEs to adopt wholly-owned subsidiaries instead of joint ventures. SOEs particularly prefer wholly-owned subsidiary entry mode when they face uncertainty caused by low regulatory quality, while joint venture modes are preferred when SOEs invest in host markets with high regulatory quality. A quasi-experiment is also performed to test how the 2014 OFDI approval process liberalization influences the entry modes in Chinese OFDI. The results indicate that, for SOEs, the policy liberalization in 2014 led to more join ventures. This may result from the fact that the policy liberalization reduces transaction cost for joint ventures, and therefore encourages this entry mode. To conclude, this research finds that SOEs were more willing to enter as wholly-owned subsidiaries in *host countries* that have unstable and weak institutions, and SOEs prefer to enter as joint venture in new markets when *home country* has less regulatory burden.

Institutional Influences on Chinese FDI Entry Mode Choice:

A Transaction-cost Perspective

After establishing the reform and open policy, China has become one of the world's fastest growing economies. While people attribute this rapid growth to inward foreign direct investment (FDI), less known is the fact that China has been extremely aggressive in pursuing Outward Foreign Direct Investment (OFDI). Especially after the Chinese government allowed private firms to invest outside of China in 2003, Chinese investors have become one of the most active players in the global mergers and acquisitions market. The amount of investment nearly tripled from $259 billion in 2013 to $735 billion in 2015 (Ministry of Commerce of the PRC, 2015). This thesis describes the process of OFDI expansion since 2003 and examines the institutional determinants of these investments.

In the last twenty years, many researchers have focused on the trends, motivations, and location choices behind the global outreach of Chinese firms (Deng 2007, 2009; Rui & Yip 2008). These empirical studies have specifically sought to explain host country determinants of Chinese FDI, with a focus on the motivations under Dunning's eclectic paradigm, i.e., to examine whether OFDI is market-seeking, resource-seeking, or strategic-asset-seeking (Amighini, Rabellotti & Sanfilippo, 2013, Buckley & Clegg 2007, Ramasamy, Yeung & Laforet, 2010). On the one hand, these studies show that the performance of Chinese OFDI is consistent with the conventional knowledge on FDI

determinants. Chinese investors seek for new markets in OECD countries (Buckley et al., 2007; Cheung and Qian, 2008; Kolstad and Wiig, 2010; Hurst, 2011) and for natural resources in non-OECD countries (Pradhan, 2009; Kolstad and Wiig, 2010; Sanfilippo, 2010; Buckley et al., 2007). On the other hand, the existing literature on Chinese OFDI identifies the peculiarities of Chinese multinational enterprises (MNEs) by constantly emphasizing the role of state-owned enterprises, whose investment decisions may reflect political objectives instead of profit-maximizing strategies.

As this work will show, Chinese state-owned enterprises (SOEs) are still the main force behind Chinese OFDI. This work's original database shows that cross-border merger and acquisitions by SOEs represent 34.64% of total OFDI from China. Additionally, 70.56% of large deals, deals that are greater than $300 million, were conducted by SOEs. This is why the existing literature has attached great importance to the moderating effects of SOEs and the peculiarity of China's institutional environment. The literature, for instance, has found that because SOEs have a natural advantage investing in developing countries, Chinese OFDI follows a different pattern of investments compared to OFDI from developed countries. For example, Chinese OFDI seeks destinations with high political risk and great cultural proximity, especially countries with a significance presence of SOEs (Kolstad and Wiig, 2010; Quer et al., 2011; Buckley et al., 2007; Song 2011; Ramasamy, Yeung & Laforet, 2010).

Even though the studies on motivation and determinants of Chinese OFDI have increased in the past decades, the OFDI entry mode choice is still not well understood. The entry mode of Chinese OFDI is only discussed by a few scholars (Lin & Cui 2009, 2010, 2012, Cheng 2008), who mainly use strategic behavior approach and institutional framework to explain the entry mode of Chinese OFDI. Using strategic behavior approach, Lin and Cui (2009) find that FDI entry mode choice of Chinese MNEs is dependent on host industry competition, host industry demand, the MNE's assets-seeking motivation, and its global strategic motivation. In a later paper, Lin and Cui (2012) use a neo-institutional framework to further investigate the moderating effects of state ownership on the ownership decision of MNEs in cross-border acquisitions. They focus on the legitimacy of SOEs and find that home and host country apply pressure on entry mode choices and, thus, direct SOEs to adopt joint venture forms more frequently than greenfield or 100% acquisitions.

Yet, as this thesis will explain in detail, there are many issues in the Chinese OFDI literature that deserve further attention. To contribute to the Chinese OFDI entry mode studies, this thesis covers three aspects that have not yet been investigated in the current literature. (1) This thesis incorporates the transaction cost theory, the theoretical approach most commonly used in entry mode studies, and the capability theory to explain Chinese entry mode decisions. By using the transaction cost theory, this thesis will examine how the institutional environment of host country –mainly political risk, low

regulatory quality, and cultural distance – altered the entry mode of Chinese OFDI by changing investors' perception of uncertainty and transaction cost. (2) Besides, host country variable, the institutional environment in the home country, has been widely overlooked (except for Klaus Meyer and Lin & Cui's paper on host country institutions). Thus, this thesis uses a quasi-experiment to test how changes in Chinese government's approval process for cross-border transactions, a major source of uncertainty in cross-border M&A deals, affects the entry mode choice of Chinese MNEs into foreign markets. This work takes advantage of the 2014 changes in approval process for cross-border transactions and examines how the behavior of Chinese MNEs changed afterward using a simple difference-in-differences approach. (3) This work also contributes to the debate on the behavior and advantages (or disadvantages) of Chinese SOEs when they internationalize. SOEs are commonly believed to have advantages because they operate under the government's protective umbrella. Therefore, this works argues, SOEs judge transaction costs associated with institutional uncertainty in the host country differently. The central insight is that having more experience and relational assets give SOEs an advantage to deal with partners that could be perceived as high uncertainty (and, thus, higher transaction costs) by private firms.

The original contributions of this thesis can then be summarized threefold. First, by introducing a framework that incorporates the transaction costs theory, the capability theory, and the moderating

effects of SOEs, this thesis is the first to discuss both the home country and host country institutional determinants of Chinese outward foreign direct investment (OFDI) between a wholly-owned subsidiary and a joint venture. Second, this thesis examines a set of hypotheses from the transaction costs theory using a large dataset of cross-border transactions of private and state-owned firms, as opposed to survey-based data, which is what most academic works that study Chinese OFDI entry mode have used. Third, this is the first work to use a quasi-experiment to explore the effect of changes in home country institutions on Chinese MNE internationalization strategy.

Through the statistic models, this thesis discovers that regulatory quality of host country environments will alter the entry mode choices of Chinese investors by increasing the likelihood of choosing wholly-owned subsidiaries over joint ventures. Furthermore, compared to private firms, SOEs are even more aware of transaction costs when investing abroad and prefer high control mode of entry when facing uncertainty in host markets caused by low regulatory quality. Besides, SOEs are more sensitive to the home country institution as well. The strict censorship in their own country leads to a smaller possibility of choosing joint venture choices, and the 2014 policy liberalization encourages more joint venture formations.

Theoretical foundation

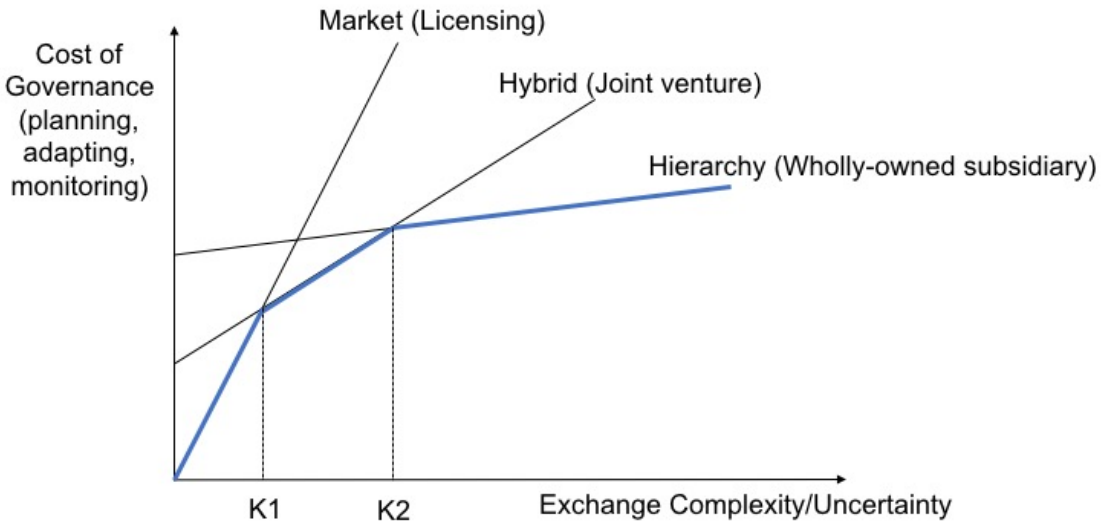
Transaction costs theory and the choice between full and partial ownership

The transaction cost theory has been widely applied to understand the choice of institutional arrangements when companies are seeking to perform business functions outside of their home country (Anderson & Gatignon, 1986). Coase (1937, 1960) pioneered the idea of transaction costs by stating that "the operation of a market costs something and by forming an organization and allowing some authority to direct the resources, certain marketing costs are saved." The transaction costs theory contends that economizing on the costs of business operations is the principle purpose of economic organization, and the cost of negotiating contracts for inputs was seen as particularly important (Conner, 1991). Williamson (1975, 1985) expands these insights by analyzing situations in which transaction cost avoidance by firms can be particularly acute (Conner, 1991).

The Williamson's framework can be explained through figure 1 below. As the diagram (figure 1) below indicates, for every mode of entry, the costs of governance (planning, adapting, and monitoring new governance structure) are positively related to exchange complexity and the uncertainty level associated with transactions. This phenomenon originates from the presence of "market imperfections," such as opportunism and asymmetric information, which may lead the two parties to pursue their own interests selfishly (Williamson, 1985). For example, with greater asset specificity,

investors may worry the other party will opportunistically infringe upon their proprietary information (Gomes-Casseres, 1989). The exchange of knowledge will also cause a problem in the way that buyers have limited knowledge of what they are buying, and, hence, are unlikely to put on it the same valuation as sellers (Arrow, 1962). Therefore, to ensure business cooperation, contracts are usually needed, yet they have transaction costs, such as information, enforcement, bargaining, and monitoring costs (Hennart 1988, 1991, Hymer 1976, Kindleberger 1969, Caves 1971, Williamson 1985). Furthermore, enforcing and monitoring contracts can lead to additional transaction costs due to distance, miscommunication, and lack of measurable outputs (Hill, 1990; Williamson, 1985; Brouthers 1995). All of these factors contribute to the upward slopes between costs of governance and exchange complexity or uncertainty. Thus, the choice of market, hybrid, or hierarchy as governance structure depends on the size and complexity of the transactions (Teece, 1986).

Figure 1: Transactions cost theory explanation



Information source: Michael Leiblein (2017)

However, as the diagram (figure 1) shows, different modes have unique slopes and intercepts, meaning that different governance structures face different (1) marginal costs of a transaction with increased exchange complexity and (2) resource commitments. When the products being exchanged are simple and homogenous, or under the condition that the transactions are subject to a small degree of uncertainty (lower than K1), licensing is endowed with the lowest costs of transactions, because the initial resource commitment is small so as the costs of planning and adapting. (Buckley and Casson, 1976). Nevertheless, when the level of exchange complexity or uncertainty increases to the point K1, the fast rate of growth of transaction costs put licensing to a disadvantageous position. This is because strict supervision is needed when products are complex or uncertainty is high, and, thus, the monitoring costs increase quickly. Hence, MNEs would prefer to invest abroad, choosing either a joint venture or a wholly-owned subsidiary, to avoid high costs of transaction.

Table 1: Comparison between joint venture and wholly-owned subsidiary

Variables / *Entry mode*	*Control*	*Transaction cost*	*Resource commitment*
Licensing	Low	High	Low
Joint venture	Medium	Medium	Medium
Wholly owned subsidiary	High	Low	High

Information Source: Kim & Hwang (1990)

Among a joint venture and a wholly-owned subsidiary, the joint venture mode is preferred when the level of exchange complexity or uncertainty is higher than K1 but still lower than K2. Joint venture structure can combat opportunism to a certain extent by allowing acquirers to exert controls, and thus reduce transaction costs, while not commit too many resources. However, when the product complexity or the uncertainty of the market exceeds K2, the governance costs of a joint venture will surpass those of a wholly-owned subsidiary. Wholly-owned subsidiary structure, although entails a high price and large commitment of resources, can internalize transactions and ensure the full utilization of the specific assets in question (Teece, 1986). Hence, this economic structure has the lowest transaction cost and is preferred when the exchange complexity and uncertainty are very high. Thus, in general, for MNEs, the choice of entry mode is the joint outcome of a consideration of transaction costs and resource commitments under different conditions, with the objective to maximize long-term efficiency (Anderson, Gatignon 1988).

Alternative explanation: the capabilities theory

In addition to the transaction costs theory, strategy scholars (e.g. Hennart 1988a, Kogut and Zander 1992) propose that firm's similar capabilities also play important roles in defining boundaries of the firm (Argyres & Zenger, 2007). The transaction costs theory alone has been criticized for paying little attention to value creation process (e.g., Zajac and Olsen 1993, Madhok 2002). It is

arguable that the choice of entry mode is not solely the consideration of minimizing transaction costs, but also of value creation (Argyres & Zenger, 2012). For example, Hennart (1988a, 1991) suggests that JVs are forms of joint equity ownership. In other words, apart from the transaction costs, what also determines the choice of JVs is an MNE's need for complementary resources that are hard to purchase in the market (Delios & Beamish, 1999; Hennart 1988a, 1988b, 1991; Padmanabhan & Cho, 1996). For example, Japanese investors were more likely to use JVs when they had little experience of U.S. market or when they were venturing into a different industry than their primary industry. Through joint-venture, Japanese investors wanted to tap partners for local or industry knowledge. Thus, strategy scholars indicated that the JV entry mode is preferred when companies need complementary resources that they could not easily acquire on the market (Hennart, 1988, 1991). However, as Gomes-Casseres (1989) pointed out, "the costs of managing a joint venture could be great, and may outweigh the benefits from using ownership channels for partners' contributions." Therefore, when surveying ownership preferences of MNEs, both transaction cost arguments and capabilities arguments should be considered.

Many other existing pieces of research have also suggested that the transaction costs theory and the capabilities theory are deeply intertwined (Hennart 1988a, Argyres & Zenger, 2012). The cases of the United States (Gatignon, Anderson 1988, Gomes-Casseres 1987) and Japan (Hennart, 1991) show

that MNEs tend to choose joint ventures when MNEs have little experience in the market that they are entering in or when they need resources that are controlled by local firms. In contrast, MNEs would prefer wholly-owned subsidiaries when MNEs (1) already held or could acquire on the market all the assets necessary to operate abroad; and (2) when the market for the assets MNEs were contributing to the venture was characterized by high transaction costs (Franko, 1971; Stopford & Wells, 1972; Hennart, 1991). By testing variables such as research and development (R&D) expenditure, advertising intensity, international experience, and familiarity with the host country, the literature provides empirical evidence of the importance of the transaction costs theory and the capabilities theory to the study of entry mode. This thesis will analyze the determinants of entry mode choices mainly under the lenses of the transaction costs theory and assisted by the capabilities approach, and will test these theories using the particular case of the internationalization of Chinese firms.

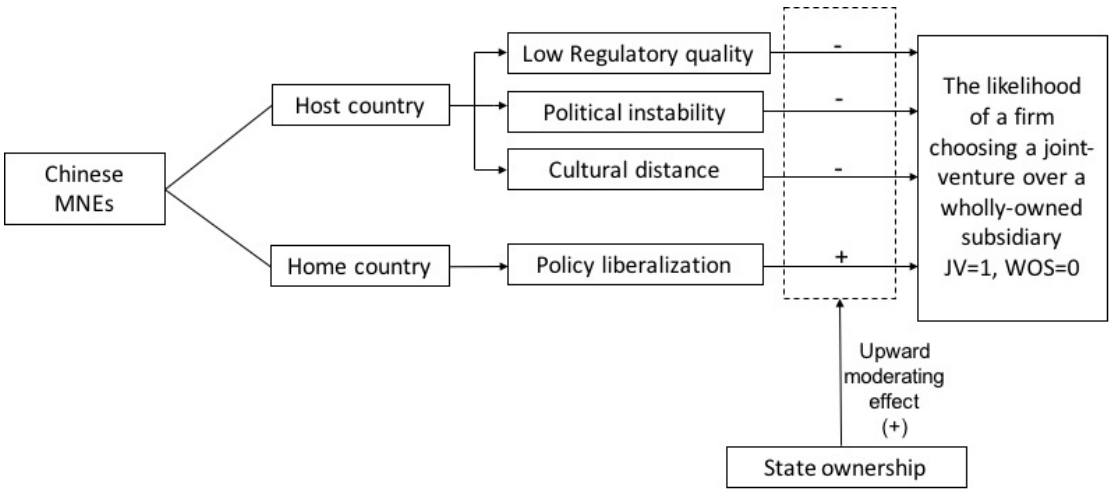
Hypotheses development

Hypotheses framework

The five hypotheses that I develop can be divided into three parts (see figure 2). The first part is how Chinese firms, in general, react to the host country uncertainty created by formal and informal rules. I hypothesize that low regulatory quality, political instability, and cultural distance are positively related to the host country uncertainty, and therefore (Chinese) MNEs are more likely to choose

wholly-owned subsidiaries as entry vehicles to avoid high transaction csots (H1, H2, H3). The second part of this thesis investigates the moderating effects of SOEs on the choice of a joint venture, and surveys how the connection with the Chinese government changed the SOEs' perception of such uncertainties. I hypothesize that state ownership has an upward moderating effect on the relationship between host country uncertainty and the choice of entry mode, meaning SOEs are more likely to choose joint ventures over wholly-owned subsidiaries, even though the country risk in the host country is high or the cultural distance is large (H4). The third part of the thesis looks into the home country institutions regulating cross-border transactions. I hypothesize that the liberalization of the approval process in the home country reduces the home country uncertainty, therefore promoting more investment abroad in the form of joint ventures. This effect is especially strong when the acquirer is state-owned because the scrutiny of cross-border transactions is more important in these firms (H5).

Figure 2: Hypotheses framework



Part 1: Uncertainty in the host country

According to the classical transaction cost theory, we know that contracts are needed in order to solve market failures, such as asymmetric information and opportunism. However, Williamson (1985) suggests that efficiency of contracts is inversely related to the asset specificity and to the extent of uncertainty surrounding the transaction. Therefore, apart from asset specificity, the extent of uncertainty in the host country perceived by companies will greatly influence the entry mode decisions by changing the companies' evaluation of transaction costs. Anderson and Gatignon (1986) suggest that if host markets have volatile institutional environments, such as high country risk and high cultural distance, then the uncertainty and the transaction costs increase (Anderson & Gatignon, 1986). Eventually, the entry mode choice will adjust according to the change in the evaluation of uncertainty. After their study, cultural and institutional variables in host countries have been widely studied in the field that tests transaction cost theory.

However, past studies have found mixed results regarding the direction in which uncertainty in host markets influences entry mode. According to Williamson (1979), in general, in an unstable environment, entrants will be better off accepting low-control entry modes to avoid resource commitment. Also, low-control entry mode can free entrants to change partners or renegotiate contract terms as circumstances develop and change. For example, in the case of Eastern Europe, Meyer (2001)

found that when MNEs entered, they preferred wholly-owned subsidiaries only when the host country was making fast institutional progress. This showed firms opt for lower-control and lower-commitment entry modes when facing more uncertainty in host countries.

Nevertheless, it is more generally believed that when entering a volatile market, businesses are more likely to choose wholly-owned subsidiaries rather than joint ventures because of high transaction costs. As Anderson and Gatignon (1986) suggest, if an entrant has already formed a partnership arrangement instead of licensing, lock-in will eliminate the flexibility needed to avoid the volatile environment. If the flexibility has been eliminated, firms will adopt governance forms that minimize the sum of transaction costs. If transaction costs are low, a rational firm will prefer its transactions to be governed by the market. Nevertheless, if the costs of adoption, performance monitoring, and safeguarding against opportunistic behavior are too high, the firm will prefer an internal governance structure such as a wholly owned subsidiary.

In volatile countries, it is generally believed that transaction costs are higher due to lack of market-based institutions. Moreover, new entrants usually lack knowledge of both how to use the market mechanism and of potential partners and competitors (Meyer, 2001). For new entrants, identifying a potential business partner in volatile markets is difficult and increases searching costs. Similarly, dealing with inexperienced bureaucracies, business agents, and facing the potential risk of IP

infringement magnifies transaction costs. The combined risks increase investor preference for hierarchical modes of entry, meaning wholly-owned subsidiary (Oxley, 1999). Therefore, it is generally believed that if MNEs enter unstable countries, they face higher transaction costs and, hence, are likely to prefer wholly-owned subsidiaries.

The question of how does uncertainty in host markets influence entry mode choices of Chinese MNEs is still unanswered. Generally speaking, emerging markets usually have higher country risk than developed countries due to their imperfect institutional development. MNEs from industrialized countries, who usually are risk-averse when investing in countries with great country risk, therefore, tend to choose wholly-owned subsidiaries as a preferred entry mode when facing high uncertainty.

However, Buckley (2007) first brings forward that Chinese MNEs may require a particular application of the general theory because they come from an emerging market themselves. He hypothesizes that Chinese OFDI tends to be less risk-averse, and many subsequent studies verified his hypothesis (Ramasamy, Yeung & Laforet, 2010; Child & Rodrigues, 2005). Nevertheless, many recent studies, on the other hand, tend to show limited evidence linking Chinese OFDI and an uncertain institutional environment (Cheung & Qian, 2009; Kolstad & Wiig, 2009). The time period used by previous studies may explain the different findings. In Buckley's study, he used official Chinese Outward Direct Investment (ODI) data collected from 1984 to 2001, yet private firms were

legally prohibited from investing abroad prior to 2003. Therefore, in his dataset, Chinese OFDI was all government-led, and carried out by SOEs. In contrast, recent studies include private firms in their samples and study OFDI activities after 2003, and they find some contradictory results. For instance, Cheung and Qian (2009) concluded that there is no clear relationship between an uncertain institutional environment and the amount of Chinese OFDI stock.

Because the time range of the dataset used for this research is from the year 2003 to the year 2016, both private firms and SOEs play important roles. Hence, this thesis hypothesizes that Chinese companies follow the transaction cost predictions. That is, when facing institutional uncertainty, Chinese firms are more likely to choose wholly-owned subsidiaries. It is well perceived that Chinese private firms are different from state-owned enterprises in many ways, and the most significant difference is that private firms are not bound by the government's political objectives, and, thus, they emphasize efficiency and for-profit motives for their own interests. Therefore, I hypothesize that the behavior of Chinese firms in general after 2003 is similar to those of firms from industrialized countries that when the political environment in the host country is unstable, Chinese firms will prefer wholly-owned subsidiaries over joint-ventures as a governance form to avoid high transaction costs that associated with uncertainty.

Hypothesis 1: *Chinese MNEs are less likely to choose a joint venture as an entry mode, over a wholly owned subsidiary when there is more political instability in the host country.*

Similar to political risk, regulatory quality is another indicator of the institutional environment in the host country. When regulatory quality is low, the perceived cost of preventing the host party from engaging in opportunistic behavior is high, and hence there is a higher possibility of shirking (Gomes-Casseres, 1989). That is why wholly-owned subsidiaries are preferred by Chinese firms to avoid severe opportunism.

Hypothesis 2: *Chinese MNEs are less likely to choose a joint venture as an entry mode, as opposed to a wholly owned subsidiary when there is lower regulatory quality in the host country.*

Apart from the formal (institutional) environment, the informal (sociocultural) environment of the host country is also worth studying (North, 1934). According to the transaction costs theory, it is believed that the greater the sociocultural distance between the home country and the host country, the greater the internal uncertainty, resulting from different organizational and administrative practices. Due to unfamiliarity with local partners and local culture, the cost of negotiation and contract formation

between the two sides are very high, so as the possibility of management conflicts between the partners. If two parties have difficulties cooperating to maximize business efficiency and profits because of cultural distance, joint venture becomes costly. However, by entering as wholly-owned subsidiaries, firms can avoid both the costs of integration and conflict over sharing proprietary assets by imposing the management style of the investing firms (Kogut & Singh, 1988). Thus, for Chinese MNEs, I expect that wholly-owned subsidiaries might also be preferred based on the transaction costs theory.

Hypothesis 3: *Chinese MNEs are less likely to choose a joint venture entry mode when there is a more cultural distance between China and the host country.*

Part 2: The moderating effect of SOEs on host country uncertainty

In this thesis, although I hypothesize that Chinese firms, in general, follow the transaction cost theory, how state ownership moderates the mode of entry given an unstable environment is still uncertain. As previous studies on Chinese OFDI indicated, SOEs have different behaviors when investing abroad (Buckley & Clegg, 2007; Ramasamy, Yeung & Laforet, 2010; Kolstad & Wiig, 2009). These studies stated that Chinese SOEs may have comparative advantages over investors from industrialized markets in dealing with unstable host countries, therefore do not follow the general rules. Buckley (2007) suggested three layers of advantages of SOEs. First, Chinese SOEs are experienced in "navigating complex patron-client relationships and personal and institutional favors in relatively

opaque and difficult business environment" (Yeung & Liu 2008). Their long-term interactions with Chinese governments and familiarity with Chinese institutional environment gave them more experience doing business in emerging markets. Second, SOEs can access resources and capitals more easily because of their special connection with the government. For instance, SOEs may have capital made available to them at below market rates (Lardy, 1998; Scott, 2002), and, the government may provide a certain level of political support to help SOEs address disputes abroad. Third, under the umbrella of the Chinese government, SOEs are able to engage in beneficial relations with firms and other actors in order to provide access to resources controlled by others. When institutions are weak in host countries, more room is left for SOEs to leverage relational assets, which help SOEs obtain market information about the most suitable and profitable investment opportunities.

These advantages, I hypothesized, may change the way SOEs perceive transaction cost, and, eventually, alter SOEs' choices of entry mode. When institutions in host countries are weak, private firms, usually, will seek more control in order to avoid high transaction costs that resulted from market imperfections. SOEs, however, face lower transaction costs investing in countries with poor institutions. This is because SOEs have comparative advantages as Buckley stated. For SOEs, the searching costs fall, because SOEs can leverage the relational assets and information provided by the Chinese government to navigate suitable partners. Likewise, the negotiation and monitoring costs decrease due

to the familiarity of cooperating with agents within an emerging market context. Moreover, the enormous support from the Chinese government gives SOEs high bargaining power when initiating contract with foreign partners, which further lowers the transaction costs. Different from private firms or firms from industrialized countries, Chinese SOEs are not deterred, but rather are attracted to invest in countries with poor institutions so that SOEs can take advantages of the market imperfections. Because of the low transaction cost, SOEs have higher chance to choose joint venture even when institutional environments in host countries are unstable.

However, the capabilities theory may predict the results differently. According to the capabilities theory, a joint venture is preferred not only because the transaction costs are relatively lower, but also because new entrants need country-specific knowledge, industry-specific knowledge, or other resources that are controlled by local partners (Hennart, 1991). If state-owned enterprises already acquire experience doing business in emerging markets, have financial resources provided by the government, and hold relational assets in host countries, SOEs do not need local partners to navigate risks under the protective umbrella of the Chinese government, and thus SOEs may have more incentives to enter new markets as wholly-owned subsidiaries. In this thesis, I will mainly apply the transaction costs theory to the case of China, but the capabilities theory can help explain if the results are different from what we expected.

Hypothesis 4a: *State ownership will moderate upward the relationship between political instability and the choice of joint venture by MNEs.*

Hypothesis 4b: *State ownership will moderate upward the relationship between low regulatory quality and the choice of joint venture by MNEs*

However, part of advantages of SOEs will diminish when investing in countries with large cultural distance, since SOEs' experience accrues from home country embeddedness. If the cultural distance between the home country and the host country is large, SOEs need to familiarize themselves with new environments, and, hence, they lose parts of their competitive advantages in searching for, negotiating with, and monitoring local partners. Nevertheless, support from the Chinese government still gives SOEs high bargaining power when initiating contracts, and, thus, the perceived transaction costs of these deals will be slightly lower than those of cross-border deals implemented by private firms. Therefore, I hypothesize that state-owned enterprises will have a higher chance to choose the joint venture form when investing in countries with large cultural distance. In this case, however, the moderating effect should be slightly lower than in the case of regulatory quality and political instability.

Hypothesis 4c: *State ownership will have a small upward moderating effect on the relationship between cultural distance and the choice of joint venture of MNEs*

Part 3: The Policy Liberalization

In Cui and Jiang's paper (2012), they argue that the governmental approval process imposes home institutional pressure on SOEs. When investing abroad, SOEs are compelled to choose joint ventures because the Chinese government hopes to prevent capital flight by establishing a strenuous screening process. The burdensome approval process increased uncertainty and, therefore, either discouraged cross-border transactions or influenced the choice of entrance mode for Chinese firms. That is, under the approval process, the Chinese government could reject deals proposed by Chinese investors. The possibility of rejection caused uncertainties for cross-border deals. The transaction costs, therefore, were higher because uncertainty about the approval meant there could be more negotiation, or more complex contracts would be needed. Transaction costs would be particularly high when acquirers were owned and controlled by the Chinese government. In order to ensure that the cross-border deals proposed by SOEs are in line with national interests and political objectives, the government would censor SOEs' proposals more strictly; therefore, the approval rate could be lower and the transaction time span longer. For instance, deals proposed by SOEs would require the approval of more government agencies. Apart from Ministry of Commerce(MoC), the National Development and

Reform Commission(NDRC), and the State Administration of Foreign Exchange(SAFE), State-owned Assets Supervision and Administration Commission of the State Council (SASAC) would review the details of all acquisition deals proposed by SOEs as well.

Table 2: Comparison of approval process before and after 2014

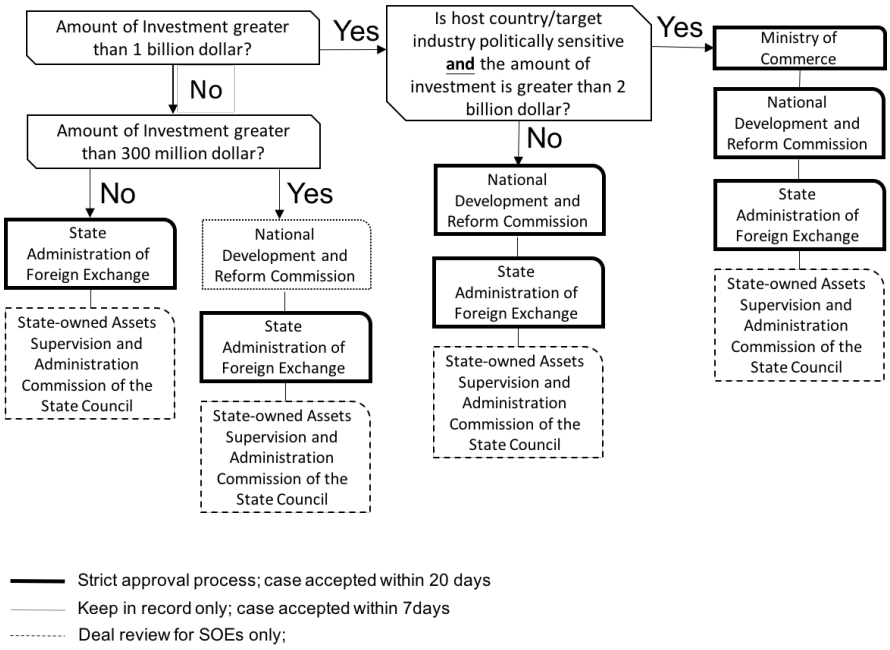
Supervisory Department	
Pre-2014	*Post-2014*
Deals > $300 million	Deals > $300 million
National Development and Reform Commission	National Development and Reform Commission (keep on record only)
State Administration of Foreign Exchange	State Administration of Foreign Exchange
State-owned Assets Supervision and Administration Commission of the State Council (SOE only)	State-owned Assets Supervision and Administration Commission of the State Council (SOE only)
Deals ≤ $300 million	Deals ≤ $300 million
National Development and Reform Commission	
State Administration of Foreign Exchange	State Administration of Foreign Exchange
State-owned Assets Supervision and Administration Commission of the State Council (SOE only)	State-owned Assets Supervision and Administration Commission of the State Council (SOE only)

Information Source: Ministry of Commerce of China

A longer time span and lower passing rate would result in more uncertainty and, possibly, more failed joint ventures. In 2013, however, top Communist Party leaders pledged to reform SOEs and liberalized the OFDI approval process. In 2014, the Chinese government finally released the latest

update to the "Catalogue for the Guidance of Foreign Investment Industries," which encouraged and eased restrictions on foreign investment (see table 2 above). After the liberalization of OFDI, deals larger than $300 million no longer need to be strictly censored by the NDRC, but only keep their deals on record. However, deals below $300 million can directly skip the censorship from NDRC completely. Deals conducted by SOEs would be additionally reviewed by SASAC. Through the easing of this regulation, the approval procedures were greatly simplified and the time span of approval of both SOEs and private firms were shortened, especially when the deal was smaller than $300 million (more information can be found in figure 3 below). Therefore, I hypothesize that the liberalization of OFDI decreased the uncertainty of forming a joint venture when the transaction value was smaller than 300 million dollars, especially for state-owned enterprises. This is because SOEs benefited disproportionately from the liberalization of the approval process.

Figure 3: approval process of Chinese OFDI after 2014 policy liberalization



Information Source: Ministry of Commerce of China

Hypothesis 5a: *Chinese private firms are more likely to choose a JV entry mode after the home country regulations of OFDI are liberalized*

Hypothesis 5b: *Chinese SOEs are more likely to choose a JV entry mode after the home country regulations of OFDI are liberalized*

Data and method

Data Collection

This paper uses an original database of all cross-border mergers and acquisitions by Chinese companies compiled from the Securities Data Corporation (SDC) database. Even though this database

has been used in earlier studies (Erel, Liao, and Weisbach, 2012), it has not been used by most of the literature. The database goes from 2003, the year in which the Chinese government allowed private companies to pursue OFDI, to 2016, and includes all deals originated in mainland China. Therefore, it ignores all cross-border deals pursued by Chinese firms using their subsidiaries in the tax heavens and other foreign jurisdictions. The database contains 3,530 acquisition deals, containing information about individual subsidiaries and about Chinese acquirer's ultimate parent, including names, countries, 4-digit SIC codes of acquirers and target companies, owned shares after a transaction, and the transaction value. Given the unavailability of information for some transaction values and shares owned by acquirer after the transaction, the sample is reduced to 1,048 observations. Deals conducted by financial investors are also excluded from this sample, because financial investors do not manage business corporations on their own, meaning the transaction cost theory do not apply to these deals. In the end, the sample is reduced to 900.

The database also includes country-level macroeconomic and regulation data from the World Bank and Kogut & Singh (1988). However, because the World Bank did not disclose its index of institutional quality in 2016, 115 observations were excluded from the first logit model that tests the relationship between entry mode and institutional factors in host countries.

In order to identify which cross-border transactions were undertaken by SOEs, it was necessary to code state ownership by hand using Wind, a Chinese financial database. I manually collected the information of ownership structure of 936 Chinese acquirers. Out of the 936 enterprises, 363(34.6%) are state-owned firms. Once these companies are coded, the final matched sample consists of 1,015 deals. Yet, the sample is even smaller for some of the tests because there is no quality of regulations index for a few dozen countries, something that reduced the sample to 785 observations. Still, this sample size is larger than all of the samples used by the existing literature on Chinese OFDI.

Table 3 below shows the firm characteristics of the sample. In the sample without missing values, the number of joint venture constitutes 56% of the sample, 591 observations, and the number of wholly-owned subsidiary constitutes 44% of it. Besides, most of the deals have a small size deals concentrated on mining (20.32%), manufacturing (33.11%), finance (17.37%), and services (14.03%). The most common destinations for Chinese OFDI in the sample are Asia (41.6%), North America (20.61%), Europe (19.56%), and Australia (14.03%).

Table 3: Sample Firm Characteristics

	Firms with missing values (n=3,530)		Firms without missing values (n=1,015)	
	No. firm	Percentage	No. firm	Percentage
1. Transaction value				
<=300 million	1,837	85.4	868	82.82
>300 million & <=1 billion	174	8.09	103	9.83
>1 billion	140	6.51	77	7.35
2. Industry sector	No. firm	Percentage	No. firm	Percentage
Agriculture	32	0.91	9	0.86
Mining	638	18.07	213	20.32
Construction	30	0.85	10	0.95
Manufacturing	1,185	33.57	347	33.11
Transportation, Communications, Electric, Gas and Sanitary service	294	8.33	72	6.87
Wholesale Trade	157	4.45	45	4.29
Retail Trade	66	1.87	21	2.00
Finance, Insurance and Real Estate	612	17.34	182	17.37
Services	512	14.5	147	14.03
Public Administration	4	0.11	2	0.19
3.Region	No. firm	Percentage	No. firm	Percentage
Asia	1,440	40.79	436	41.60
Europe	781	22.12	205	19.56
Australia	384	10.88	147	14.03
Africa	86	2.44	21	2.00
South America	91	2.58	23	2.19
North America	748	21.19	216	20.61
4. State ownership	No. firm	Percentage	No. firm	Percentage
State-owned	1,044	29.64	363	34.64
Non-state owned	2,478	70.36	685	65.36

Variables

Dependent variable

The dependent variable is a dichotomous variable that takes a value of 1 when the acquirer enters a foreign country through a joint venture and 0 when the entry mode is a wholly-owned subsidiary. Following previous studies (Gomes-Casseres, 1989), when a firm owns over 95% of equity after acquisition I code it as a wholly-owned subsidiary, while ownership shares below 95% are coded as joint ventures.

Explanatory variables

Four explanatory variables were included in this paper. First, low regulatory quality captures perceptions of the inability of the government to formulate and implement sound policies and regulations that permit and promote private sector development (Worldwide Governance Indicator). Second, political instability measures perceptions of the likelihood of political instability or politically-motivated violence, including terrorism in the host country (Worldwide Governance Indicator). Both the low regulatory quality and political instability represent external uncertainties that Chinese investors faced when entering a target country. Besides these two institutional variables that measure institutional volatility, cultural distance was included to indicate the normative uncertainty. The variable cultural distance used in this paper was measured by Kogut and Singh (1988) based on

Hofstede's four dimensions: power distance, uncertainty, individualism, and masculinity. By including the cultural distance variable, I hope to understand what entry mode choice was preferred when Chinese investors confronted normative uncertainty.

The last explanatory variable is a dummy variable that equals one when the acquirer is fully-owned or majority-owned by the Chinese government, and 0 otherwise. This SOE variable alone tries to capture which entry mode SOEs prefer in general. Also, different interaction effects between the SOE variable and each of institutional and cultural variables have been included with the aim of understanding the moderating effect of SOE on the formal and informal risk.

Control variables

From the previous transaction cost studies, we know that the organizational capabilities significantly influence the choice of entry mode. Organizational capabilities take many forms. For example, the firm OFDI experience is positively related to the entrant's degree of control of a foreign business entity, because experienced firms have knowledge about international markets, and thus the marginal costs of an additional entry would be lowered (Meyer, 2000; Anderson & Gatignon 1986). Similar to a firm's OFDI experience, firm industry experience also decreases costs of entry. Likewise, whether buyer have specified assets when investing abroad also influence the choice of entry mode. When the acquirer owns transaction-specific assets, transaction cost analysis suggests firms would

prefer high-control entry modes to avoid the hazard of transmission and valuation, and the possibility of shirking (Gomes-Casseres, 1989).

In general, because this thesis only surveys the influence of uncertainty created by the institutional environment in home and host country, I control for company-level variables that indicate different levels of organizational capacity, which could bias the influence of institutional effect on entrance mode choice. These company-level control variables include four dummies variables that respectively indicate whether the acquirer has past OFDI experience, whether acquirers or target companies are from high-tech business sectors, and whether acquirers invest in companies that have the same core business.

Besides company-level control variables, deal-level and country-level control variables are added. These include the size of the deal since the larger the deal the more likely a firm is to choose wholly-owned subsidiaries and GDP and a dummy variable proxy for whether the host country is an OECD country to avoid "gravity" (countries with large GDPs attract to each other). I use logged GDP and logged size of the deal to compress large variance. In addition, I include time fixed effect, country fixed effect, and industry fixed effect (measured by 2-digit SIC code) to control for unobserved heterogeneity across time, countries, and industries, and I use robust standard error since in the presence of heteroscedasticity.

Table 4 and Table 5 provide information on the variables and correlation between the variables in our regression model. However, the correlation matrix shows that political stability and regulatory quality are highly correlated (0.76). Thus, I conducted a variance inflation factor (VIF) analysis, which measures how much the variance of an estimated regression coefficient increases if predictors are correlated. The result of which showed that 7.84 as the highest value, which is below the recommended benchmark of 10, meaning that VIFs are in an acceptable range and the regression can be proceed (Hair, Anderson, Tatham, & Black, 1995, Estrin, Meyer, Nielson. B &Nielson. S, 2015).

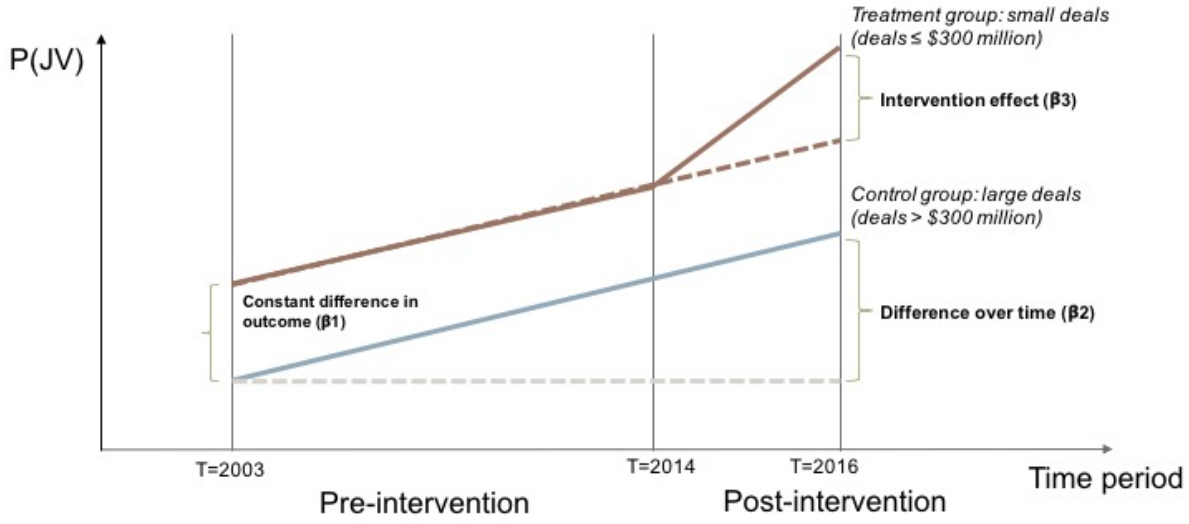
Model

I use two different models to test my hypotheses. First, I use a binary logistic regression, in which I employ different specifications to test the direct effect of institutional uncertainty on the choice of entry mode, and the moderating effect of SOEs. I test the first four hypotheses using this model.

The fifth hypothesis, however, requires a completely different setup. In order to test the effect of home country risk on entry mode, I take advantage of a change in the Chinese policy liberalization regarding the approval of cross-border M&As. I do a difference-in-differences test to see how such domestic institutions affect entry choice. In this DiD model (see figure 4 below), a treatment dummy (β1) indicates whether the deal is smaller than 300 million, and the year dummy(β2) indicates whether the deal is proposed after 2014. Because the small deals have a higher possibility of choosing

joint venture due to the limited investing capital, the treatment dummy(**β**1) can control for the constant difference in outcome. Meanwhile, the time dummy(**β**2) can control for the difference that will take place over time even without the policy intervention. Then, the interaction between the time dummy and treatment dummy(**β**3) is the true intervention effect, which is the change in the probability of a small deal choosing joint venture after the policy liberalization in 2014. Through this model, we can investigate the effect of liberalization on the likelihood of choosing a joint-venture or WOS by comparing entry mode choice of the treated and control groups before liberalization, from 2003 to 2013, versus the years after liberalization, 2015 and 2016. Then, by using a sample split regression, I draw a distinction between private companies and SOEs so that we can further investigate whether two parties react to the liberalization differently.

Figure 4: Difference-in-differences model explanation



Hypotheses testing: host country uncertainty and moderating effects of SOEs

Logistic regression models are presented in Table 6. In our logistic regression models, a positive regression coefficient means that an increase in the value of the explanatory variable leads to a greater likelihood of the firm's choosing a joint venture over a wholly owned subsidiary in its OFDI.

Table 6: Logistic Regression of OFDI ownership structure

DV: JV=1, WOS=0	1.0	1.1	1.2	1.3	1.4	1.5
Institutional variables						
Political risk		0.196	0.622	0.343	0.198	0.348
		(0.93)	(0.80)	(0.78)	(0.96)	(0.80)
Low regulatory quality		-2.362**	-2.229*	-1.871	-2.355**	-1.907
		(1.16)	(1.15)	(1.16)	(1.17)	(1.16)
Cultural distance		0.857	1.049	2.077**	0.819	1.982*
		(0.99)	(1.00)	(1.05)	(0.99)	(1.08)
Moderator						
SOE		0.995***	0.191	-1.362**	1.352***	-1.053
		(0.24)	(0.38)	(0.68)	(0.38)	(0.83)
Interactions						
Political risk x SOE			-1.006***			-0.044
			(0.37)			(0.57)
Low regulatory quality x SOE				-1.439***		-1.338**
				(0.39)		(0.62)
Cultural distance x SOE					-0.148	-0.072
					(0.11)	(0.12)
Acquirer's asset specificity	-0.827***	-0.775***	-0.764**	-0.814***	-0.788***	-0.817***
	(0.29)	(0.29)	(0.29)	(0.29)	(0.29)	(0.30)
Target firm's asset specificity	0.222	0.268	0.262	0.274	0.280	0.277
	(0.38)	(0.39)	(0.39)	(0.40)	(0.39)	(0.40)
GDP	-0.261	-1.560	-1.535	-1.334	-1.491	-1.322
	(0.87)	(1.05)	(1.06)	(1.06)	(1.05)	(1.06)
OECD	0.017	-0.922	-1.280	-4.866	-1.066	-4.669
	(3.52)	(3.72)	(3.58)	(3.74)	(3.76)	(3.93)
FDI experience	0.935***	0.815***	0.827***	0.848***	0.823***	0.851***
	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Deal size	-0.185***	-0.245***	-0.241***	-0.242***	-0.243***	-0.241***
	(0.04)	(0.05)	(0.05)	(0.05)	(0.05)	(0.05)
Vertical integration	0.180	0.258	0.266	0.263	0.252	0.260
	(0.18)	(0.19)	(0.19)	(0.19)	(0.19)	(0.19)
Constant	0.157	7.100	6.931	5.116	6.679	5.084

	(5.42)	(5.23)	(5.23)	(5.22)	(5.22)	(5.26)
Country dummies	Yes	Yes	Yes	Yes	Yes	Yes
Time dummies	Yes	Yes	Yes	Yes	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes	Yes	Yes
Observations	787	785	785	785	785	785

Robust standard errors in parentheses; *** p<0.01, ** p<0.05, * p<0.1

Model 1.0, the baseline model only includes control variables. From the baseline model, we see that the size of the deal positively related to the likelihood of choosing wholly-owned subsidiary as expected. What is interesting is that acquirers' own capacities did have an impact on entry mode choices. If an acquirer is from a high-tech industry, having highly proprietary products or processes, the chance to wholly-own the target company increases 0.78 in the log-odds. This is a logical consequence of having assets and IP that can be opportunistically abused and that are hard to control in a JV contract. However, if an acquirer has past experience in OFDI, their familiarity with the process of searching, negotiating, and initiating a contract with foreign partners increases the likelihood of choosing a joint venture as entry mode by 0.94 log-odds. These findings are consistent with the transaction costs theory.

Model 1.1, on the other hand, includes institutional variables to measure the direct effect of institutional factors and state ownership on entry mode choices. According to model 1.1, political instability and cultural distance have positive but non-significant coefficients. Therefore, hypothesis 1

and hypothesis 3 are unsupported. This result contradicts the existing theory of transaction costs that the uncertainties created by an unstable politic environment and a large cultural distance will lead MNEs to choose a high-control mode of entry, i.e., a wholly-owned subsidiary (e.g., Erramilli & Rao, 1993; Gatignon & Andersen, 1988). Nevertheless, low regulatory quality has a negative and significant coefficient in model 1.1. It shows that a 0.1 increase in low regulatory quality does lead to a 0.94 decrease of the log-odds of Chinese MNEs to enter as joint venture, holding other variables constant. This result implies that when evaluating uncertainties in the host country, the regulatory quality plays a greater role than political risk or cultural distance. When uncertainties created by low regulatory quality is high, Chinese companies prefer choosing a wholly-owned subsidiary as the entrance mode. This result supports hypothesis 2 and verifies the transaction costs theory. However, the coefficient of low regulatory quality is not significant in model 1.5, where includes interactions between state ownership and all institutional variables. This further suggests the effects of low regulatory quality on joint venture choices are dominated by state-owned enterprises.

Model 1.1 also demonstrates that compared to private firms, Chinese SOEs, in general, prefer choosing a joint venture as the entrance mode. This result is in line with what the transaction cost theory would predict. SOEs are more familiar with the process of searching, negotiating, and

initiating a contract with foreign partners. Advantages that SOEs have greatly reduce the transaction costs and therefore result in a higher possibility to choose joint venture as entry mode.

Model 1.2 to Model 1.5 test the hypothesized moderating effects of state ownership on the choice of entry mode. The interaction between state ownership and cultural distance is insignificant in all models. Therefore, hypothesis 4c is unsupported. The interaction between state ownership and political risk is negative and significant ($p<0.01$) in model 1.2, but insignificant in model 1.5. This may result from the multicollinearity between interaction terms. However, the interaction between state ownership and low regulatory quality is negative and significant ($p<0.05$) in model 1.3 as well as in model 1.5. These results suggest that if the MNE is state-owned, a 0.1 increase in low regulatory quality will result in a 0.134 decrease in the log-odds of a firm to choose a joint venture over a wholly-owned subsidiary structure, holding all other variables constant.

Thus, the significant coefficient of this interaction term proves that affiliation with the Chinese government did lead to different behaviors in OFDI. However, even if this seems consistent with previous studies on Chinese OFDI (Wang, Hong, Kafouros & Boateng, 2010; Ramasamy, Yeung & Laforet, 2010; Cui & Jiang, 2010), the results of this thesis show that state ownership does not moderate the relationship between the host country uncertainty and the choice of a joint venture upward, but rather downward. SOEs greatly preferred to use joint venture as entry vehicle when the

regulatory quality is high, yet SOEs preferred to use wholly owned subsidiary as entry vehicle when regulatory quality is low.

Although the fact that Chinese SOEs seem to be more risk averse than private companies in countries with weak institutions goes against hypothesis 4 and the prediction of the previous literature (e.g., Buckley, 2007; Ramasamy, Yeung & Laforet, 2010), there are two possible explanations. First, SOEs are less risk prone than what has normally assumed because of the strict control from the government. As figure 3 indicates, deals proposed by SOEs will be censored by more departments, which include SASAC. These supervisory departments will ensure that deals conducted by SOEs would not be exposed to a high level of risk. Second, SOE managers are very careful about the deals they pursue because they care about their long-term career in the Communist Party. It is well-known that the promotion path of SOE managers is closely related to the performance of their SOEs. Therefore, SOE managers seek job security by avoiding making risky investments (Musacchio, Ramaswamy, Inkpen & Cuervo-Cazurra, 2014).

The preference of SOEs to choose wholly-owned subsidiaries can be even better explained by the capabilities theory. The three layers of advantages of SOEs may reduce the transaction costs for SOEs, but they also ensure that SOEs already held all the assets necessary to operate in countries with low regulatory quality. From previous literature (e.g. Hennart, 1991; Gomes-Casseres, 1989), we

know that MNEs resist entering as a joint venture when they already had resources needed to operate abroad. In the case of Chinese SOEs, familiarity with emerging markets, a large amount of capital, and relational assets all grant SOEs advantages and abilities to solely operate businesses in poor institutional countries without the guidance of local partners. Therefore, the transaction costs of a joint venture, although have been reduced, still outweigh the benefits of partnership, since SOEs themselves have capabilities operating in risky countries.

Hypotheses testing: home country uncertainty

I test hypotheses 5a and 5b in Table 7. The test examines the effect of the 2014 OFDI liberalization on entrance mode choice for both SOEs and private enterprises. I employ a structural break framework to differentiate the effect between SOEs and non-SOEs. Because Chinese firms with high levels of state ownership depended heavily on the home-country government for critical resources and political support, SOEs and non-SOEs were expected to react differently to home regulation reform. Moreover, the effect of the liberalization of OFDI should mainly affect deals in treatment group (deals below $300 million), since 2014 policy liberalization removes all censorship for small deals, but deals in control group (deals above $300 million) still need to be censored by different departments, though the approval process has been simplified. Thus, we would expect a

significant effect of the interaction between treatment dummy and year dummy, meaning entrance mode choices of small deals may be altered after 2014.

Table 7: 2014 policy liberalization: Differences Estimates with Additional Regressors

	2.0	2.1	2.2	2.3
DV: JV=1, WOS=0	SOE	non-SOE	SOE	non-SOE
Treatment x Time (**β**3)	0.371**	0.110	0.340**	0.071
	(0.1538)	(0.1369)	(0.1697)	(0.1551)
Time dummy (**β**2)	-0.506***	-0.078	-0.517***	-0.101
	(0.1263)	(0.1294)	(0.1343)	(0.1441)
Treatment dummy (**β**1)	0.042	0.277**	0.150**	0.370***
	(0.0581)	(0.1115)	(0.0653)	(0.1208)
Control variables	No	No	Yes	Yes
Industry dummies	Yes	Yes	Yes	Yes
Constant	0.688***	0.250**	0.086	0.770**
	(0.0476)	(0.1086)	(0.1472)	(0.3210)
Observations	325	618	296	506
R-squared	0.049	0.032	0.191	0.165

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Model 2.0 and 2.1 directly test the difference-in-differences estimators of both SOEs and private firms. In model 2.0, the coefficient of difference-in-differences estimator of SOEs (**β**3) is 0.371, which is the average change in possibility of SOEs choosing joint venture for those deals smaller than $300 million (treatment group), minus the average change in possibility of choosing joint venture for

deals greater than $300 million (control group). This significant ($p<0.01$) and positive (0.537) coefficient indicates that after 2014 policy liberalization, SOEs are 37.1% more likely to choose a joint venture as entry vehicle at 0.01 significance level. However, in model 2.1, the difference-in-differences estimator of private firms is close to zero and is not significant, meaning 2014 policy liberalization may not influence the joint venture choices of private firms. These results confirm my hypothesis 5b, but hypothesis 5a is unsupported.

In model 2.2 and 2.3, I include additional regressors, which measure different deals' characteristics in order to check the randomization and avoid imperfect randomization. After adding additional regressors, the coefficients of dummies and interaction terms have not changed significantly. In model 2.2, the difference-in-differences estimator ($\beta 3$) is still positive ($p<0.01$) and significant (0.340), suggesting that after 2014, SOEs are 34% more likely to choose joint venture over wholly-owned subsidiary at 0.01 significance level, while private firms did not alter their joint venture choices after 2014.

In addition, since the database this paper uses is a pool data rather than panel data, deals before and after 2014 policy liberalization are not the same deals. In order to avoid inconsistency, as well as the serial correlation over time (SOEs may have a natural tendency to choose joint venture over time when deals are small), I conduct a placebo test, using 2013 as the time split off point instead of 2014.

Through the placebo test (see table 8), we can see that the significant level of difference-in-difference estimators (**β**3) disappears. These results suggest that after 2013, the behaviors of SOEs have not been changed, but after 2014, SOEs are more likely to choose joint venture structures as entry vehicles.

Table 8: Placebo test: the year 2013 as the threshold

	3.0	3.1	3.2	3.3
DV: JV=1, WOS=0	SOE	non-SOE	SOE	non-SOE
Treatment dummy x Time dummy (2013)	0.110	0.026	0.060	-0.007
	(0.1276)	(0.1485)	(0.1417)	(0.1707)
Time dummy (2013)	-0.207**	-0.011	-0.117	-0.018
	(0.1042)	(0.1424)	(0.1187)	(0.1628)
Treatment dummy	0.075	0.312**	0.156**	0.413***
	(0.0628)	(0.1298)	(0.0707)	(0.1525)
Control variables	No	No	Yes	Yes
Constant	0.659***	0.200	0.052	0.740**
	(0.0527)	(0.1269)	(0.1554)	(0.3302)
Observations	337	630	308	518
R-squared	0.030	0.030	0.143	0.162

Robust standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Therefore, based on table 7 and table 8, we can conclude that after the 2014 approval process easing, SOEs adopted more joint ventures than before when the deal size is smaller than $300 million. However, according to model 2.1 and 2.3, for non-SOEs, the regulation does not seem to have enormous impact on their entrance mode preferences. Even though the interaction term between small

deals and year dummy has a positive coefficient, meaning small deals proposed by private firms were more likely to choose JVS after 2014, the result is not significant to make any conclusion. This is consistent with the theory, in the sense that private firms make the decisions based on firms' interests, yet SOEs react according to the government instructions. When the approval process has been eased, the effect will be larger in SOEs than in private firms. Therefore, for SOEs, the risk of being restricted by the Chinese government has been largely reduced after 2014 and the transaction cost was also likely reduced, resulting in a higher chance of choosing joint venture as entry mode.

Conclusion and Discussion

Based on the regression models discussed above, there are important findings that further our understanding of the interaction between Chinese MNEs internationalization strategies and institutional settings in the countries they target. First, for Chinese firms, in general, cultural distance and political risk had no obvious impact on the choice between full or partial ownership of their subsidiaries. This may result from the fact that when political risk is high and cultural distance is large, some firms are expected to avoid risks by choosing joint ventures and committing less resources, while some other firms hope to reduce high transaction cost of using contractual channel by choosing wholly-owned subsidiaries (Hennart, 1988; Gomes-Casseres, 1989). However, low regulatory quality of the host country will alter the behaviors of Chinese MNEs. From model 1.2, we can see that an

increase in low regulatory quality index will lead to a higher possibility of Chinese MNEs entering as wholly-owned subsidiary over joint venture, holding other variables constant. Previous studies (e.g., Buckley 2007; Ramasamy, Yeung & Laforet, 2010) on Chinese OFDI usually used political risk to measure country risk, yet this thesis finds that regulatory quality plays a more important role than the political risk in entry mode choices of Chinese OFDI.

Nevertheless, different from my hypotheses, the moderating effects of state ownership on the relationship between the low regulatory quality of host country and the choice of joint venture are downward rather than upward. This is puzzling because I expected the transaction costs of choosing a joint venture as the entry mode would be lower for SOEs when investing in countries with the poor institution. To date, the theory of SOE internationalization has assumed or showed with smaller datasets that state ownership moderates upwards those risks. That is, for the case of SOE MNEs the Chinese government supposedly facilitates the process of finding partners and initiating, implementing, and monitoring contracts (Buckley, 2007). The regression models with the larger dataset, however, shows that when investing in countries with low regulatory quality, the Chinese SOEs were more likely to choose wholly owned subsidiaries than did private companies.

There may be several reasons that contribute to this phenomenon. First, the Chinese government, through SASAC, is less risk prone than what is usually assumed and they do not promote JVs in risky

countries as much, and SASAC may restraint JVs deals that flow to countries with low regulatory quality. In addition, SOE managers are risk averse and are very careful about the deals they pursue because they care about their long-term career in the Communist Party (Musacchio, Ramaswamy, Inkpen & Cuervo-Cazurra, 2014).

Moreover, I expected that capability theory can help us understand the downward moderating effects of SOEs on the choice of a joint venture. According to past studies on Chinese OFDI, scholars (Ding 2000; Deng 2004; Buckley, Clegg, Cross, Liu, Voss & Zheng) have indicated that it is easier for Chinese SOEs to access capital as a consequence of home country capital market imperfections. Even though high risks were associated with the investment destination, Chinese state-owned commercial banks were still willing to finance the acquisition. Thus, I expected that a large amount of capital would give SOEs high bargaining power when initiating contracts with partners, and would, therefore, reduce transaction costs and increase the chance of choosing joint venture. This is clearly not the case. Yet, it could be that the ease to access capital actually allows SOEs to commit more resources, giving SOE incentives to choose wholly-owned subsidiaries. Moreover, relying more on the government-to-government (G2G) relationships as the basis of their decisions, SOEs do not have a strong need to find a local partner to navigate risks in host countries, even if the transaction costs of finding suitable partners can be lower for SOEs. Therefore, because SOEs themselves already have

experiences and resources provided by the Chinese government, SOEs may prefer a wholly-owned subsidiary as entry vehicle to protect their assets from weak institutional environments.

On the other hand, SOEs especially prefer joint-venture in host countries with high regulatory quality. This is because, in host countries with high regulatory quality, there is little room for the Chinese government to exert influence. In those countries, SOEs may need local partners who can familiarize SOEs with local rules and institutions, something Japanese MNEs did when they entered the US market (Hennart, 1991).

From the simple difference-in-differences model, I find that the OFDI liberalization in 2014 has had a positive effect on stimulating joint venture for SOEs. After the policy liberalization, the home country uncertainty was mitigated, because the time span of approval was shortened and the approval hurdles were reduced. Thus, the potential partners would have more faith in effectively coordinating with SOEs. The transaction costs of searching, negotiating, and initiating a contract with foreign partners were decreased accordingly. This aspect demonstrates that home country institutions have an important role in SOEs' entrance mode choice for Chinese SOEs, a finding that supports claims in previous studies (Lin & Cui, 2012).

This thesis contributes to both the transaction cost and the entry mode studies. By investigating recent Chinese OFDI activities from 2003 to 2016, it aims to understand whether the mainstream

theory that explains industrialized country entrance mode choice is applicable to the case of China, especially whether the institutional environment was as important for Chinese investors as for investors from industrialized countries. Interestingly, some of the findings contradict existing theory and show that for the case of Chinese MNEs the theory does not work. Since such a large percentage of M&A deals around the world is conducted by Chinese firms, the theory of entry mode may need a revision soon.

This research also hopes to further our understanding of internationalization strategy of state-owned enterprises. Although many prior studies had analyzed the internationalization strategies of Chinese SOEs, I looked at this academic question from the entrance mode choice perspective. I suggest that SOEs have very different attitudes toward joint ventures and wholly-owned subsidiary than what the literature assumed or showed with smaller databases. SOEs were more willing to commit resources and entered as wholly-owned subsidiaries than expected, even in settings in which institutions are unstable and weak. Again, contrary to what was expected, SOEs preferred joint venture when the external uncertainties were low (high regulatory quality). This suggests we need further research to understand whether these findings are China-specific or if our theories of the internationalization advantages of SOEs need a revision.

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Table 4: Correlation matrix

	JV	PR	LRQ	CD	SOE	ACQTECH	TGTTECH	GDP	EXP	TV	INTG	OECD	CORP
CORP													1
OECD												1	-0.0271
INTG											1	0.0129	-0.130***
TV										1	-0.0649	-0.0131	-0.171***
EXP									1	0.203***	-0.0697*	0.0678*	-0.0384
GDP								1	0.0201	0.0305	-0.0307	0.419***	-0.0937**
TGTTECH							1	0.238***	-0.0397	-0.122***	-0.0880**	0.0610	-0.0215
ACQTECH						1	0.579***	0.209***	-0.00156	-0.124***	-0.118***	0.0580	-0.00778
SOE					1	-0.229***	-0.200***	-0.142***	0.274***	0.324***	-0.129***	0.0546	-0.0551
CD				1	0.112***	0.0538	0.0533	0.380***	0.0733*	0.0598	0.00177	0.924***	-0.0501
LRQ			1	0.127***	0.0888**	-0.0104	-0.00226	0.113***	0.0586	0.181***	-0.0344	0.0280	-0.0311
PR		1	0.793***	0.0855*	0.0744*	0.00608	0.0353	0.0853*	0.0558	0.148***	-0.0361	-0.0116	-0.0835***
JV	1	0.0602	0.0804*	0.0241	0.184***	-0.116***	-0.0643	-0.179***	0.157***	-0.00766	0.0522	0.0166	0.00736

*** p<0.001" ** p<0.01 ="* p<0.05

Table 5: List of Variables and sources of data		
Dependent variable	Proxy for	Source
JV	=1 if the acquirer owned less than 95% of the subsidiary's equity	SDC
Explanatory variables		
Low regulatory quality	continuous variable measures irregularity of host country	Worldwide Government Indicators
Political risk	continuous variable measures political instability level in the host country	Worldwide Government Indicators
Cultural distance	continuous variable measures cultural distance between China and the host country	Hofstede(1980), Kogut & Singh(1988)
SOE	=1 when the acquirer is a state-owned enterpise	Winds
Interactions		
LRQ x SOE	when acquirer is SOE investing in country with low regulatory quality	
PR x SOE	when acquirer is SOE investing in country with low political stability	
CD x SOE	when acquirer is SOE investing in country with large cultural distance	
Treatment x Time	Deals that are smaller than 300 million dollars and being made after 2014	
Control variables		
Treatment dummy	=1 when deals are larger than 300 million dollars	SDC
Year dummy	=1 when deals are proposed after 2014	SDC
Experience	=1 when the acquirer has past OFDI experience	SDC
Target firm's asset specificity	=1 when the target company is from high-tech industry	SDC
Acquirer's asset specificity	=1 when the acquirer company is from high-tech industry	SDC
Vertical integration		SDC

	=1 when the acquisition is vertical integration	
Deal size	continuous variable measures the size of transaction(in million)	SDC
Corporate	=1 when the acquirer company is corporate instead of financial buyer	SDC
Industry dummies	categorical variable indicates the industry of the target company	SDC
GDP	GDP of host country	World Bank Development Indicator
OECD	=1 when the host country is OECD country	www.oecd.org

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