Dual-edged Effect of Host Country's Trade Dependence on the Completion of Home Country MNEs' Mergers and Acquisitions

Abstract

Economic relation between the countries is an important factor influencing the legitimacy of the MNEs in the host country, while it has largely been ignored in the cross-border acquisition literatures. In this paper, I argue that the trade dependence of the host country on the home country can have countervailing impact on home country MNEs' legitimacy as perceived by host country regulatory agencies, which exerts both positive and negative effect on the completion of the home country MNEs' cross-border acquisitions. Utilizing the cross-border acquisitions carried out by Chinese MNEs, I find that the trade dependence of the host country on the home country has an inverted U-shape relation with the likelihood of the home country MNEs' acquisition completion. And such an impact is further contingent on target firm high technology industry and the industry relatedness between acquirer and target.

Key words: Acquisition Completion, Trade dependence, Legitimacy

4.1 Introduction

Cross-border merger and acquisitions are becoming more of an important strategy for firms all over the world. Literature in the field of strategic management and international business have paid attention to multiple aspects of cross-border acquisitions, including equity ownership choice (Chari & Chang, 2009), post-acquisition performance (Huang, Zhu & Brass, 2016), acquisition completion (Dikova et al, 2010; Zhang et al., 2011) and so on. Since there exist a high rate of deal abandonment in cross-border acquisitions and a fact that failure to complete acquisitions will bring about substantial costs, research into the factors that might lead to deal completion seems very important and needy. However, relative to other aspects of cross-border acquisition, the antecedents of acquisition completion or abandonment is still under-researched.

In the extant literature in terms of the antecedents of cross-border M&A completion and abandonment, the aspects that have been studied include macro-level indicators like social, economic and institutional differences between countries (Dikova, Sahib & Witteloostuijn, 2010; Zhang, & Ebbers, 2010), diplomatic relations among countries (Zhang & He, 2014; 李诗 & 吴超鹏, 2016); industry- and firm-level indicators like acquiring firm's acquisition experience, acquiring firm's state ownership and acquirer firm size (Li, Xia & Lin, 2017; 朱华, 2017), target state ownership (Zhang & He, 2014), and industry relatedness (Lim & Lee, 2016).

Among these extant literatures, an important mechanism that could impact acquisition

completion is the host regulatory agencies' perception of the foreign MNE legitimacy. MNEs with higher legitimacy in the perception of the host regulatory agency who scrutinize the foreign investment will have higher probability of getting their acquisition deal proved and completed. While those that are perceived to be less legitimate might face with longer and stricter scrutiny before their deal could completed, or may even be rejected.

However, among all these different factors, I found that very few literature has paid attention to how the economic relations, especially trade relations between the home and host country might impact deal completion. This seems quite surprising to us since during a time of global integration, economic relations are playing very important roles in the decisions of the nations and organizations. Even though there are some literature which has touched upon the relation between bilateral trade and M&A completion (Zhang & Ebbers, 2010; Li et al., 2017), they haven't extended much about the theoretical arguments behind the mechanism.

In fact, this lack of research into the economic relationship between countries and the M&A completion is a great contrast to the increasing importance of it. Nowadays, several advanced economies have intensified their scrutiny of foreign investment and strengthened the review procedures. The increasing tension in the trade relation between the US and China are spreading into other areas of economic interaction between the countries, with the cross-border acquisitions from China suffering a great loss. The close bilateral trade relation is not acting as a bargaining power for the MNEs from the home country, but

instead becomes a source of legitimacy deficit. It is intriguing to find out what aspect of the trade relation might impact the likelihood of acquisition success of the MNEs and how it might change under certain circumstances.

Therefore, in this paper the research question I want to focus on is how the foreign trade dependence of the host country on the home country (China) will impact the completion of cross-border M&A carried out by home country acquirers? Furthermore, I will study the boundary conditions of this impact. By looking at how the industry relatedness between the acquirer and the target as well as the high technology industry of the target firm moderate the previous relationship, I further explore the contingencies under which the relationship between trade dependence and acquisition completion would be strengthened or mitigated.

Our paper intends to make several contributions to the extant literature. First, by exploring the impact of trade dependence and cross-border acquisition completion, this paper is to enrich the cross-border acquisition literature as the economic relation has been an under-researched yet important factor in determining acquisition completion. Second, by studying how changing trade dependence alters the legitimacy perception by the host country about the foreign firms, I want to show the existence of a dynamic and countervailing organizational legitimacy mechanism which varies with the changing environment thus further enriching the organizational legitimacy literature.

4.2 Theory and hypothesis development

To better convey our theoretical explanation of the trade dependence on the cross-border M&A completion, I will first review some literature concerning trade dependence in the area of international relations and political science.

The concept of dependence is used to signify reliance on others. It is the imbalance in the relationship between two actors (Caporaso, 1978). Compared to the concept of interdependence, trade dependence can be seen as a condition of asymmetrical interdependence (Armstrong, 1981).

Previous literature has explored the relation between economic interdependence and inter-state conflict and came up with mixed findings. Generally, two basic schools of thought on this issue can be identified. The first argues that interdependence contributes to greater cooperation and hence less conflict between the countries involved. Nye (1971: 109-110) argues that a 'functional web of interdependence' can reduce international conflict by raising its net costs, creating a sense of community, and producing value changes that promote 'integrative solutions' to conflict. Similarly, early writers on integration theory, such as Haas and Schmitter (1966), have argued that economic integration can 'spill over' and lead to political integration. A related view is that of Polachek (1978, 1980), who argues that a desire to achieve the 'gains from trade' creates incentives for trading countries to maintain cooperative relations. In Polachek's view, increased trade is associated in this way with declining conflict. The second school of thought holds that interdependence can lead to greater conflict between countries. Keohane (1975) has warned of a 'crisis of

interdependence' involving increased international tension due to the difficulties interdependence creates for policymaking. Keohane focuses particularly on the problems created by sensitivities, such as US-Japanese tension over Japanese auto and steel exports. Another view is that of Keohane and Nye (1973: 119-122), who argue that asymmetric economic interdependence provides a new form of power that can be used by less interdependent countries to gain concessions from others that are more interdependent. Similar views are expressed by Bergsten, Keohane, and Nye (1975: 9), who argue that economic ties provide an opportunity to conduct 'war by other means', and by Hirschman (1945), who examines the use of trade as an instrument of power by Nazi Germany. For these writers, vulnerabilities can be used as 'economic weapons', enabling countries that lack substantial military power or prefer not to use it to coerce their interaction partners. By making it possible for countries to exert such coercion, vulnerabilities can be a source of increased international conflict. In a related view, Knorr (1977) has argued that vulnerabilities can lead to unanticipated crises that may threaten national security.

The difference between these schools of thoughts about interdependence stem mainly from different interpretations of the meaning of interdependence, as one emphasizes the cooperative benefit from the trade while the other emphasizes the potential cost from trade due to the threat to national security.

In this paper, I will focus our main argument on trade dependence, instead of interdependence. By looking at this asymmetrical interdependence, I want to focus on how the host country perceive of the acquisition attempt of the MNE from the home country and

link our arguments with the organizational legitimacy literatures. I will further extend on how the trade dependence can be a double edged sword for the completion of the home country MNEs' acquisitions by simultaneous increasing the MNEs' legitimacy and illegitimacy perceived by host country regulatory agencies. That is as the trade dependence of the host country on the home country increases, there accompanies, on the one hand, an increased legitimacy due to the intensified knowledge exchange between the home and host country, a cut in the liability of foreignness due to unfamiliarity hazards, as well as increased power of the home country government perceived by the host country, while on the other hand, an increased illegitimacy due to the increasing vulnerability concern and economic nationalistic attitude of the host country government toward the home country. These countervailing effects, when combined, will exert a curvilinear impact on acquisition completion and abandonment of the MNEs.

4.2.1 Impact of trade dependence on cross-border M&A completion: an inverted U-shape hypothesis

I argue that trade dependence of the host country on home country can have two simultaneous yet countervailing effects on cross-border M&A completion. And I will adopt a legitimacy perspective to explain this countervailing effect of trade dependence on the completion likelihood.

Legitimacy refers to a “generalized perception” that “the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values,

beliefs, and definitions" (Suchman, 1995). Many previous literature has talked about the abundant meaning of legitimacy, with Kostova and Zaheer (1999) laid the foundation for comprehensive research into the legitimacy mechanism for the multinational enterprises (Pant & Ramachandran, 2012).

Legitimacy is important for firms' growth and survival. In terms of the cross-border acquisitions carried out by firms, legitimacy will also impact the possibility of the deal completion. Li et al (2017) has provided a theoretical model of how the legitimacy concerns of the host regulatory agencies about the SOEs from home country might impact the likelihood of their cross border acquisitions. Concerns about the host country national security make the cross-border acquisitions carried out by SOEs more difficult to get completed.

Actually, governments and regulatory agencies have the right and possibility of influencing or deciding the approval of each single cross-border acquisition deals, not only the cross border acquisitions carried out by the SOEs. Especially, as the host countries tightens up its foreign acquisition review process, the reasons to prohibit a domestic firm being acquired by foreign investors become more blurred and extensive. In the following part, I will try to link the changing legitimacy of the MNE in the host country related to the different level of the host country trade dependence on the home country.

Positive effect of trade dependence on foreign acquisition completion

In terms of the positive side of the trade dependence--completion relation which I argue is due to an increase of the legitimacy perception of the MNE by the host government,

I think this positive effect is the result of two mechanisms. One is the legitimacy increase due to an increase in knowledge flow and a cut on unfamiliarity between the home and host country; the other is the trade dependence acting as a home government coercive power on host country, therefore increasing the legitimacy of the home country MNEs.

I start with the first mechanism. Kostova and Zaheer (1999) provided a framework for analyzing the complexity of legitimacy faced by MNEs from three aspects: (1) the characteristics of the institutional environment, (2) the organization's characteristics and actions, and (3) the legitimation process by which the environment builds its perceptions of the organization (Hybels, 1995; Maurer, 1971).

The first two aspects have been dealt with in the literature of legitimacy and cross-border acquisition completion. For example, in terms of how the institutional environment can impact the acquisition completion, as the cultural and institutional distance between the host and home countries can decrease firms' legitimacy (Kogut & Singh, 1988), Dikova et al (2010) has pointed out that larger institutional distance between the home and host country will make the deal more difficult to get completed; in terms of organizations' characteristics, Li et al (2017) has specifically analyzed how the government ownership of the MNE will endanger its legitimacy in the eyes of host government which in turn decrease the likelihood of the completion of the cross-border acquisition.

Here in this paper, I want to focus on the third factor of the liability of foreignness—the legitimation process by which the host country environment, especially the regulatory institutions, build their perceptions of the MNE.

Legitimation process is the one through which the legitimacy is achieved (Hybels, 1995; Maurer, 1971). This process is, to a large extent, cognitive in essence (Kostova & Zaheer, 1999), which implies that it is a complex, imperfect, and bounded rational process (March & Simon, 1958). And it is important to mention that not only the environment is vital in this process, the organization itself also makes a difference. In terms of the organization, it will need to figure out the legitimacy requirements of the institutional environment (Doz & Prahalad, 1980; Weick, 1993) while the legitimating environment will also try to specify and justify the legitimacy of the foreign entrant.

Kostova and Zaheer (1999) points out that "foreignness presents challenges to legitimacy because of (1) the lack of information about the MNE on behalf of the host environment, (2) the use of stereotypes and different standards in judging foreign firms, and (3) the use of MNEs as targets for attacks by interest groups in the host country." This further implies that information plays a significant role in this process.

Typically, the host country legitimating environment, in this case, the regulatory agencies, has less information based on which to judge the legitimacy of the foreign entrant (Kostova & Zaheer, 1999). This could lead to delays in legitimation and stricter scrutiny of the MNE compared with other domestic firms.

Therefore, bilateral trade between the home and host country can play an important role in impacting the MNEs' legitimacy by influencing the information flows, and this is how most of the previous research has treated the mechanism of the trade in cross-border acquisition.

Li et al (2017) has expected that the volume of the bilateral trade between the home and host country prior to the acquisition may increase the regulatory agencies' acceptance of the foreign acquisitions. Zhang and Ebbers (2010) suggested that trade intensity between China and the host country can increase the likelihood of completion of the cross-border acquisitions carried out by Chinese MNEs. They explained this by saying that an increase in the trade intensity can increase the Chinese enterprises' understanding of the host country business environment and culture which would reduce the uncertainty in the acquisition process. They also mentioned that the higher trade intensity means a higher level of penetration and recognition of the Chinese firms in the host country.

Some other literature, although doesn't directly studies the impact of bilateral trade and acquisition completion, has mentioned the effect of trade on MNE's knowledge of the host market. Pan and David (2000) think that the flow of business (which they measured with bilateral trade) is a better and more direct indicator than the diplomatic ties for measuring the extent of interaction between the home and host country. Extent of interaction between the host and home countries reflects the level of learning firms have acquired (Johanson & Vahlne, 1977, 1990). The closer and more similar the two countries are, the easier it is for firms from the home country to do the acculturation process and learn how to compete effectively in the host country (Barkema, Bell & Pennings, 1996; Kogut & Singh, 1988). The higher the volume of bilateral trade and business, the more knowledge the firms will accumulate about the host country.

Therefore, from the first mechanism, increased trade dependence, represent as an

increasing knowledge flow and decreasing unfamiliarity hazards between the home and host country, can increase the legitimacy of home country MNEs.

Now I talk about the second mechanism on the positive side of the trade dependence--completion relationship. That is when the host country trade dependence on the home country increases, it will performing as a coercive power on the perception and decisions of the host country (Duanmu, 2014). Economic coercive power is an important statecraft that can work more effectively than military actions in the context of increasing economic globalization (Drezner, 2003). It has been argued that when faced with potential expropriation risk in the host country, home country can leverage its coercive power to elicit cooperation from the host government and increase the credibility of the host government.

Further, According to Suchman (1995), pragmatic legitimacy rests on audiences' evaluations of whether an actor maximizes those audiences' utility. That is when audiences perceive an actor as relatively legitimate "because they obtain immediate material benefits or because they believe that it is responsive to their larger interests" (Hiatt & Park, 2013). Foreign firms could engender greater pragmatic legitimacy depending on the degree to which their countries have "broader political, economic, and social interdependencies" with the host country (Suchman, 1995; Kim & Hiatt, 2018). Economic trade not only can help countries with opposing ideologies and goals to overcome differences for the sake of the potential economic benefit of the trade relation (Doyle, 1986), but also foster "materialistic power-dependence relations" which can help one country to justify the other's "right to

exist" (Suchman, 1995).

To sum up, when the host country trade dependence on the home country increases, it will increase the home country MNEs' legitimacy in the perception of the host country regulatory agencies, thus exerting a positive impact on the completion of the home country MNEs' completion probability.

Negative effect of trade dependence on the foreign acquisition completion

Above I have explained a positive effect of trade dependence on the cross-border acquisition completion. However, I have to argue that, it is only half of the whole picture. Higher trade dependence, not only increase the home country MNE legitimacy due to increased inter-country knowledge flow and economic coercive power, it will also lead to an increase of home country MNEs' illegitimacy perception due to the higher economic vulnerability and economic nationalistic attitude of the host government.

In the following session, I will argue, from a legitimacy perspective, when the trade dependence exceeds a certain moderate level, this illegitimacy perception might dominate and lead to a decrease in the completion of the home country MNEs' acquisition deals.

Zaheer (1995) has pointed out that, generally, at least four factors might lead to liability of foreignness: costs directly associated with spatial distance, such as the costs of travel, transportation, and coordination over distance and across time zones; firm-specific costs based on a particular company’s unfamiliarity with and lack of roots in a local environment; costs resulting from the host country environment, such as the lack of legitimacy of foreign firms and economic nationalism; costs from the home country

environment, such as the restrictions on high-technology sales to certain countries imposed on US-owned MNEs. Similar to what Zaheer suggests, other researchers also point out that, the political and economic nationalism, even if not being the only reason, can lead to a lack of legitimacy (Moran, 1985; Murtha & Lenway, 1994).

Then I need to see how higher trade dependence of the host country on the home country might lead to economic nationalism toward MNEs.

Even the views in this matter are inconsistent, some research believe that international trade could jeopardize the survival and growth of some domestic firms and hurt the domestic economic well-being (Han, 1988). And even if it doesn't directly worsen the economic situation in the host country, trade dependence on another country can make it more risky.

Some earlier researches have pointed out that trade dependence, which is measured as the volume of a nation's foreign trade to its gross national product, is a potential source of economic vulnerability (Hirschman, 1945; Knorr & Trager, 1977). The more a nation' well-being is dependent on foreign transactions, especially on a dominant market, the higher risk and uncertainty will the nation bears. As long as the market is cut off, the nation will undergo severe economic adjustments.

Akhter (2007) mentioned that the motivations that lead to economic nationalism may mainly come from three aspects: political, economic, and security factors. The economic motivation for increased economic nationalism comes from the desire to protect domestic business interests.

By referring to the resource dependence theory of the organizations put forward by Pfeffer and Slancik (1976), I can find that the resource dependence theory shares some common characteristics with the economic nationalism caused by the strong economic dependence of the host country on the home country.

From the resource dependence theory, Pfeffer and Salancik (1978) stated that corporations are dependent on the contingencies in the external environment and they would try to reduce others' power over them and make the strategic situation more beneficial for them. One of resource dependence theory's applications has been in explaining the firms' engagement in mergers and acquisitions. They find that firms which depend on one another use mergers as a mechanism to reduce dependence and take control of the resource that cause the uncertain future.

As for the economic nationalism, it is similar yet also distinct to certain degree. It seeks to safeguard domestic resources, industries, and people from the control of foreign firms, who are considered members of the out-group. Baughn and Yaprak (1996) note that economic nationalism is the adoption of an "us first" in the in-group versus out-group distinction relating to companies, products, jobs, and workers. This desire to keep economic activities under domestic control promotes expectations of others especially those who can play a role in curtailing the influence of foreign business in the domestic economy. This means economic nationalism not only promotes the support for domestic companies, but also could lead to a more discriminating attitude toward domestic and foreign companies (Akhter, 2007).

Elsbach and Sutton (1992) has theorized legitimacy as a valenced or a 'bipolar' construct which ranges from strong forms of positive legitimacy (e.g. highly taken-for-granted) to strong forms of negative legitimacy (e.g. stigmatization), with a midpoint value indicating a switch from legitimacy too illegitimacy.

Therefore, when the level of economic dependence of the host country on the home country becomes too high and exceeds a certain midpoint, the fear of economic vulnerability and security of the host government can be very high, thus the illegitimacy of the foreign firms from the host country could increase dramatically and dominate the legitmation mechanism, making the likelihood of the deal completion drop as well.

Therefore, summing up the positive and negative side of the host country trade dependence on the home country, I see its inverted curvilinear impact on the net legitimacy of the home country MNE perceived by the host country regulatory agencies, which in turn indicating an inverted U-shape impact on the completion of the home country MNEs' acquisition deals. So I propose as follows:

Hypothesis 1: *The trade dependence of host country on the home country has an inverted U-shape effect on the likelihood of completion of the home country cross-border M&As.*

4.2.2 The moderating effect of industry relatedness

One important industry level factor that may moderate the impact of trade dependence on the acquisition completion is industry relatedness between the acquirer and target firm. Since often the related and unrelated merger itself has different motivations, these different

motivations could influence the information need and the economic nationalism the host country may display.

On the one hand, motives of the merger intrinsically imply the need for the post-merger integration (Shrivastava, 1986). And a merger is often part of an overall strategy for firms' growth or diversification. A merger maybe is carried out to achieve a related diversification which aims to acquire the target business for some important resources, product extensions, or managerial expertise; while a merger could also be carried out to achieve an unrelated diversification by acquiring a totally unrelated business and without much aim of sharing resources. Therefore, in these two cases of different merger motivation, the integration is different, with the related merger in need of extensive and higher level of integration while the unrelated merger in no need of much integration (Shrivastava, 1986). Other research has also pointed out that information needs are higher in related or complementary merger and acquisitions (Chakrabarti & Mitchell, 2013; Chakarabarti, 2015). So I can expect that when the trade dependence is from minimum to moderate, the positive impact of the trade dependence on the acquisition completion will be stronger for acquisitions carried out among related industries.

Besides, the need for higher level of integration in related merger and acquisition can pose greater legitimacy pressure for home country MNEs. Some research has pointed out that higher integration typically means more layoff of the target firm employees. This could make the host country more aware of its economic benefit. Therefore, under this situation, as the host trade dependence on the home country increases, its role as an economic

coercive power from the home country becomes more significant than it is when the MNE is targeting a related industry.

Therefore, when the host country's trade dependence is from low to moderate, the legitimacy increase impact will be more salient for MNEs that are targeting a related industry. The left part of the above hypothesized inverted U-shape will be more steep.

On the other hand, however, when the host country's trade dependence on the home country exceeds the moderate level, the illegitimacy impact of it on the home country MNE will also be stronger for MNEs that are targeting a related industry. Some research has stated that when the acquirer and target are in the same industry, it could increase the host governments' concern over potential monopoly power in the same industry, which reduces the acquisition completion. Since when the host country's trade dependence on the home country exceeds the moderate level, the economic vulnerability and uncertainty felt by the host country concerning the home country will soar, the potential monopoly threat by the cross-border acquisition will intensify this fear. And this will increase the illegitimacy of the home country MNE perceived by the host regulatory agencies. Therefore, when the trade dependence is from moderate to high, the negative impact of trade dependence on the acquisition completion may also be more salient for acquisitions of the firms from the same industry. This indicates that the right part of the hypothesized inverted U-shape will be steep for related mergers. Thus, here I propose as follows:

Hypothesis 2: *The industry relatedness of the acquirer and target firm will strengthen the inverted U-shape relationship between host country trade dependence on the cross-border*

M&A completion.

4.2.3 The moderating effect of target high-technology industry

Another important industry factor that may moderate the impact of trade dependence on the acquisition completion is the high technology intensity of the target firm. I will also analyze the possible moderating effect in accordance with the low-to-moderate and moderate-to-high phases and see how the inverted U-shape relation will change on the different phase under varying target high technology industry.

On the one hand, when acquiring targets which are in the high technology industries, it requires more knowledge about both the host country and target firm. High technology industry often is characterized by high level of knowledge tacitness. Some research has found that the liability of foreignness due to lack of unfamiliarity of the host country environment about the foreign entrant is especially high in the high tech industries that the host country has competitive advantage over other countries. Therefore, the increasing trade dependence from low to moderate level will have a greater impact on cutting unfamiliarity hazard for MNEs that are targeting high technology industries.

Furthermore, it is often argued that MNEs are having lower level of bargaining power when investing in the industries that have strategic significance to the host country, like natural resource industries, high technology industries, or national security industries. So when the MNEs are aiming to acquire a firm in high technology industry in the host country, the effect of the trade dependence as a economic coercive power of the home

country against host government will bring more legitimacy benefit than otherwise.

Therefore, I argue that when the host country's trade dependence on the home country is from low to moderate, the legitimacy increase impact will be more salient for MNEs that are targeting a high technology industry. The left part of the above hypothesized inverted U-shape will be steeper.

On the other hand, however, because the high technology industries are often sensitive and can be related to certain country security (Zhang & Ebbers, 2010), host government would be very cautious about it. Zhang and Ebbers (2010) found that it was difficult for Chinese firms to complete their cross-border acquisitions when the targets are in high technology industries. I therefore argue that when the host country's trade dependence on the home country exceeds a moderate level, the illegitimacy of the home country MNEs due to the host country's worry about the economic vulnerability and uncertainty will be stronger for MNEs that are targeting a high technology industry. They will be more prone to intervene in the acquisition aiming to acquire a firm in the high technology industry in order protect their own country's strategic and economic competence and safety. Therefore, when the trade dependence is from moderate to high, the negative impact of trade dependence on the acquisition completion may also be more salient for acquisitions of the firms targeting high technology industry. This indicates that the right part of the hypothesized inverted U-shape will be steep for home firms that are targeting a high technology industry in the host country.

Therefore, here I propose:

Hypothesis 3: *The high technology industry of the target firm will strengthen the relationship between host country trade dependence on the cross-border M&A completion.*

4.3 Methodology

Research data

I used a sample of cross-border M&As undertaken by Chinese MNEs, drawn from Thomson's Reuters SDC Platinum database. This database has been widely used in studies of domestic and cross-border acquisitions (e.g., Buckley et al., 2014; Contractor et al., 2014; Lahiri et al., 2014). In selecting our sample, I followed the following procedures. First, all acquirers were Chinese firms as classified by Thomson SDC, based on the location of the headquarters, and the targets were foreign. Second, I included only cross-border M&As with known name and nationality of acquirer and target firms. Third, I excluded acquisitions registered in tax heavens according to the earlier literature (e.g., the British Virgin Islands, Bermuda, the Cayman Islands, etc.), because these can be described as round-tripping. Fourth, I excluded deals with missing data on variables of interest, like deals with target headquarters in Hong Kong, Macau and Aruba. Finally, I excluded acquisitions of less than 10% of the equity of the target to avoid capturing portfolio investments. In our sample, the equity shares that were sought by Chinese MNEs range from 10% to 100%. I further merged our dataset with the financial database of Chinese listed firms which is name CSMAR. Because of the missing values in the variables, the final sample comprises 368 cross-border M&As undertaken between 2000 and 2015 by

Chinese MNEs in 50 host countries.

Variables and measurement

Dependent variable

The dependent variable in this paper is completion which is measured as a dummy variable taking a value of "1" when the status of the focal deal is "Completed" and "0" otherwise.

Independent variables

Trade dependence of the host country on the home country

I measured our main independent variable by the log value the sum of the bilateral trade between the home and host country divided by the host country GDP per capita. All values are measured as one year lag.

Industry relatedness

Industry relatedness between acquirer industry and target industry was measured using a common measure by comparing the primary SIC codes (2-digits) of the acquirer and target firms (Lahiri et al., 2014). I coded this as a dummy variable 1, if the firms had different primary SIC codes, and 0 otherwise, with data collected from SDC Platinum.

Target high technology industry

I controlled target' high technology industry with a dichotomous variable which takes the value "1"for target firms in the high-tech industries, and 0 for target firms that are in non-high tech industries. This data was collected from SDC Platinum that signals whether

the public status of the firms is high technology.

Control variables

I controlled for several country-level, industry-level, and firm-level variables that may impact MNE's ownership choice in the cross-border M&As.

I controlled host country institutional environment using the index of economic freedom from the Heritage Foundation. I averaged the 10 indexes to get the measure for institutional quality in the host country. I controlled political relations between acquirer nation and target nation by the affinity index data which is measured by the distance between United Nations General Assembly votes for a given bilateral pair of countries and year. The index values between −1 and 1 for all countries with higher values indicating stronger/ better political relationships. I extract all pair-wise information for China. Duanmu (2014) employed this data as an indicator of political relations when studying the determinants of the value of MNEs' FDIs. I used the log value of the geographical distance between the home and host country. The data for geographical distance is from the CEPII's distance measures.

At the country level, I also controlled several other host country indicators. I controlled the GDP growth of the host country. Besides, I also included the log value of total population of the host country. Data for these three country level variables were collected from the World Bank database.

At the industry level, I controlled the target industry's natural resource industry. Following Gomes-Casseres (1989), I created a dummy variable which equal to 1 if

subsidiary's main product was in one of the following 2-digit SIC groups, which can be considered 'resource-based' industries: food and beverages(SIC 20), tobacco (SIC 2l), textile mills (SIC 22), wood except furniture(SIC 24), pulp and paper (SIC 26)petroleum (SIC 29), rubber (SIC 30),and primary metals (SIC 33). If the 2-digit SIC of the target industry is not among the above categories, then I record it as "0". Hennart and Larimo (1998) has also adopted this approach to measure the natural resource intensity of the target industry. Natural resource industry can have influence on the firms' legitimacy perception by the host country stakeholders.

Further at the industry level, I controlled acquirer's knowledge intensity with a dichotomous variable which takes the value "1"for firms in the high-tech industries, and 0 for firms that are in non-high tech industries. This data was also collected from SDC Platinum that signals whether the public status of the firms is high technology. Same with the measure used for the acquirer high technology industry, I also controlled the high-tech industry of the target firm.

At the firm level, I included Acquirer firm size which is the log of the assets of an acquirer firm in the year prior to the focal deal announcement. I also included Acquirer firm ROA which is measured as the ratio of net income to assets in the year prior to the focal cross-border M&A announcement. I further controlled the log of the acquirers' intangible asset.

I controlled for firms' experience in cross-border M&As since firms holding an acquisition capability may influence its legitimacy perception by the host stakeholders. I

measured acquirer cross-border M&A experience in the host country since the first year for which SDC includes reports on Chinese firm acquisitions – until the year of the focal deal by a binary variable which takes the value of "1" if the cumulative number of the acquirer's experience in the host country is equal or more than 1 time, while takes the value of "0" if otherwise.

I controlled two dummy variables indicating whether an MNE is central government owned or local government owned. From the CSMAR dataset, I can identify the actual owner of a listed firm, and identify whether those firms' actual owner is central or local government.

I also controlled the target firm's government ownership from the SDC Platinum. And finally I further controlled the equity ownership sought by the acquirer in the cross-border acquisition with a continuous variable.

Empirical model

Because the dependent variable is a dummy variable, I used a logistic regression analysis. This approach has been widely used in many previous researches concerning the acquisition completion. Since our data spread over a 13- year period, I used year dummies to control for the time period. I also controlled for the acquirer industries by creating dummy variables with the two-digit SIC code of the acquirer industries. In addition, since there are firms which appear in the sample for more than one time, which might cause independence problem between observations belonging to the same acquirer firm, I used a cluster option. This option has been used in several researches (Folta & Miller, 2002; Chari

& Chang, 2009) and it can compute the robust standard errors that account for observations clustered by firms (Rogers, 1993; Williams, 2000). All independent variables were entered standardized and interaction terms calculated as the product of standardized variables. All independent variables were entered into the model with one year lag.

Table 4.1 reports the inter-correlations between and descriptive statistics of the variables in this study. The bivariate correlation values indicate that multi-collinearity is not a concern in our study. Variance Inflation Factors (VIFs) were all below the suggested cutoff value of 10 and the mean VIF is 2.52 which suggest that the multi-collinearity does not interfere with our research (Neter, Wasserman, & Kutner, 1985: 392).

[Insert Table 4.1 about here]

4.4 Empirical results

Table 4.2 reports the regression results of logit models for cross-border acquisition completion from the whole sample.

[Insert Table 4.2 about here]

Model 1 include only the control variables while in model 2 I enter our main independent variable trade dependence linearly and with its squared term and also with all the other moderating variables. In model 3 and 4 I tested the moderating effect of geographical distance between the home and host country. In model 5 and 6 I tested the moderating effect of industry relatedness of the acquirer and target firm. Finally, in the model 7 and 8, I tested the moderating effect of the target high technology feature.

On the basis of hypothesis 1, I expect a positive sign for the linear term and a negative sign for the square one. This would yield an inverted U-shaped relationship, which indicates that the probability of the completion of the Chinese cross-border M&As would increase first when the trade dependence of the host country on the home country is from minimum to moderate and then decrease when it ranges from the moderate to maximum. In model 2, the coefficient for the linear term of trade dependence is positive and significant ($b=17.39$, $p<0.1$) and the coefficient for the squared term is negative and significant ($b=0.54$, $p<0.1$). Thus our hypothesis 1 is supported.

In model 3 and 4, I add the interactions with industry relatedness between the acquirer and target. These models indicate how the industry relatedness changes the main relationship I proposed in this article. Since industry relatedness is a dummy variable, the interaction variables leave the main effects to reflect values conditional on the industry relatedness being 1 or 0. In model 3, the interaction term has a coefficient of negative and significant sign ($b=-0.74$, $p<0.05$) and further in model 4, the interaction of industry relatedness with trade dependence is positive ($b=13.87$) and significant ($p<0.05$), with trade dependence-squared interaction negative ($b=-0.49$) and also significant ($p<0.05$). This result provides strong support for hypothesis 2.

In model 5 and 6, I add the interactions with target high technology industry. These models indicate how the target high technology industry changes the main relationship between trade dependence and acquisition completion. Since target high technology industry is a dummy variable, the interaction variables leave the main effects to reflect

values conditional on the target high-tech industry being 1 or 0. In model 5, the interaction term is positive (b=0.57) and significant (p<0.1), while in the model 6 the interaction of target high-tech industry with trade dependence is positive (b=9.79) yet insignificant, with trade dependence-squared interaction negative (b=-0.31) but also insignificant. This result provides partial support for hypothesis 3 but we also need to draw interaction graph to clarify it.

Robustness checks

I also conducted robustness check test to further demonstrate the validity of the results. Since a large portion of firms choose to target firms in the United States and the relationship between China and US can be special than between China and other countries, I tested the empirical model without the samples that takes US as a target country. The results suggest that our model is robust since most of the hypotheses are supported. Only the moderating role of industry relatedness is not supported. The results for the robustness tests are shown in Table 4.3.

[Insert Table 4.3 about here]

4.5 Discussion and conclusion

As the inter-connection between the countries increase, opportunity and challenge could both be possible for multinational enterprises. Especially for emerging economy MNEs which lack international market experience and competitive resources, might face higher level of legitimacy concern in the foreign market. The increasing level of trade, on the one hand, promotes the information transfer and reduction in the information

asymmetry thus mitigating the liability of foreignness faced in the foreign country, while on the other hand, have make some countries, even some developed countries, to pay attention to its economic safety and national interests. In this paper, I find that the economic dependence (measured as trade dependence) of the host country on the home country can have an inverted U-shape relationship with the likelihood of cross-border acquisition completion of the MNEs from the home country. When the economic dependence is not that high, the foreign firms wishing to acquire targets in the host country encounter liability of foreignness and legitimacy challenge which mainly result from the unfamiliarity of host country about the foreign country and the foreign firm. As the interaction between the countries increase, this legitimacy becomes mitigated, making it more likely for the acquisition to be completed. However, when the economic dependence of the host country on the home country exceeds a moderate level, the main legitimacy concern for the foreign MNE comes more from an increasing level of economic nationalist discrimination toward foreign enterprises. In this way, the likelihood of the acquisition completion for MNEs from the home country begins to decrease as the trade dependence increases. Furthermore, I find that this relationship can become strengthened when the MNE is targeting a geographically distant host country, or it is targeting a related industry, or when the target industry is a high-tech one. These findings provide bounding conditions for the change and dynamic of the legitimacy concern for the foreign MNE due to the changing level of economic dependence.

This paper intends to make several theoretical contributions. First, for the cross-border

acquisition literature, I offer an extended analysis of the economic relation and deal completion by the mechanism of legitimacy. I figure out how the trade dependence of the host country on the home country might influence the likelihood of the cross-border acquisition completion. Second, I contribute to the organizational legitimacy literature by looking at the dynamic and countervailing legitimizing process of the host country economic factor and the change of the focus of the legitimacy concern from unfamiliarity due to lack of information to economic nationalism as the trade dependence of the host country increases.

Despite these contributions I would like to make to the extant literature, this paper is still with several limitations which I hope the future studies will address. First, since our data is limited to one home country-China, future studies could extend to include more home and host countries so as to further test the robustness of our results. Second, future studies could add more first-hand interviews and surveys in capturing and measuring the legitimacy perception by the host country regulatory agencies about the foreign enterprises which will make help get a more nuanced understanding of the organizational legitimacy mechanism. Third, more research could be done in categorizing and conceptualizing trade and economic relation between countries in order to provide more nuanced and insightful findings concerning MNEs' strategy and performance.

Table 4.1 Correlation table of the variables

	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]	[11]	[12]	[13]	[14]	[15]	[16]	[17]	[18]
Completion	1.00																	
Trade dependence	0.00	1.00																
Host institutional quality	0.12	-0.07	1.00															
Acqroa	0.05	-0.01	-0.01	1.00														
Acq size	0.03	0.04	-0.21	0.12	1.00													
Related industry	0.03	0.03	-0.10	0.04	0.13	1.00												
Political relation	-0.16	-0.17	-0.55	-0.01	0.25	-0.00	1.00											
Ownership sought	0.08	-0.13	0.02	-0.05	-0.06	0.05	-0.04	1.00										
Geo distance	0.13	-0.18	0.21	-0.00	0.05	0.07	-0.46	0.20	1.00									
Acq localgov	-0.00	-0.14	-0.10	0.02	0.12	0.07	0.08	0.03	0.05	1.00								
AcqCentralgov	-0.00	-0.03	-0.14	0.02	0.56	-0.03	0.20	0.03	0.13	-0.21	1.00							
Tar_hightech	0.04	0.14	0.20	0.03	-0.22	0.13	-0.22	-0.15	-0.03	-0.20	-0.14	1.00						
GDPGROWTH	-0.03	0.17	-0.20	0.01	0.12	-0.03	0.29	-0.15	-0.29	-0.01	0.06	-0.04	1.00					
Resource	0.08	-0.10	-0.19	0.02	-0.03	0.02	0.16	0.04	-0.06	0.04	0.06	-0.21	0.05	1.00				
Target gov	0.04	-0.11	-0.12	0.01	0.27	-0.05	0.17	-0.00	0.01	-0.07	0.31	-0.07	0.03	0.06	1.00			
Acq_hightech	-0.02	0.18	0.19	0.03	-0.26	-0.01	-0.28	-0.09	0.02	-0.22	-0.19	0.58	-0.06	-0.23	-0.09	1.00		
Host experience	0.08	-0.01	-0.02	0.01	0.12	0.07	-0.06	-0.01	0.07	0.04	0.05	0.03	0.03	0.06	0.07	-0.01	1.00	
Host population	0.11	0.77	-0.01	-0.01	0.01	0.06	-0.51	0.03	0.23	-0.09	0.02	0.14	-0.16	-0.11	-0.06	0.19	0.02	1.00
Mean	0.46	14.81	70.74	-0.04	22.42	0.46	0.31	68.50	8.86	0.17	0.18	0.20	2.44	0.15	0.02	0.29	0.07	17.67
SD.	0.50	1.46	9.72	2.19	2.01	0.50	0.57	33.40	0.62	0.38	0.39	0.40	2.64	0.35	0.14	0.46	0.26	1.47

Table 4.2 Logit regression model results

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
Acquirer roa	5.81	5.54	6.28	5.75	4.85	4.85
	(3.967)	(4.080)	(4.171)	(4.178)	(4.046)	(3.934)
Acquirer size	-0.21	-0.23	-0.26	-0.19	-0.30	-0.32
	(0.210)	(0.209)	(0.208)	(0.204)	(0.214)	(0.220)
Host experience	1.16*	1.18**	1.20**	1.15*	1.25**	1.26**
	(0.596)	(0.580)	(0.585)	(0.609)	(0.598)	(0.591)
Acquirer localgov	-0.04	0.17	0.37	0.15	0.26	0.30
	(0.667)	(0.657)	(0.643)	(0.637)	(0.684)	(0.674)
Acquirer centralgov	-0.56	-0.63	-0.58	-0.84	-0.52	-0.46
	(0.579)	(0.621)	(0.623)	(0.593)	(0.650)	(0.637)
Acquirer high-tech	0.23	0.14	0.19	0.14	0.14	0.05
	(0.595)	(0.618)	(0.651)	(0.635)	(0.613)	(0.629)
Ownership sought	0.01	0.01	0.01	0.01	0.01	0.01
	(0.006)	(0.006)	(0.005)	(0.005)	(0.006)	(0.006)
Target resource intensity	1.96**	2.10***	2.10***	2.06***	2.13***	2.03***
	(0.764)	(0.732)	(0.746)	(0.715)	(0.745)	(0.729)
Target gov	0.37	1.27	1.56	1.63	1.13	1.40
	(2.188)	(2.454)	(2.681)	(2.789)	(2.394)	(2.385)
Political relation	2.36	3.01	3.04*	3.87**	2.87	2.99
	(1.792)	(1.871)	(1.792)	(1.848)	(1.977)	(2.044)
Host institutional quality	0.16	0.03	0.03	0.00	0.03	0.01
	(0.140)	(0.161)	(0.158)	(0.158)	(0.164)	(0.164)
Host GDPGROWTH	0.22	0.19	0.19	0.14	0.20	0.18
	(0.147)	(0.150)	(0.161)	(0.169)	(0.147)	(0.146)
Host population	1.43	-4.00	-4.44	-4.92	-3.79	-4.01
	(7.294)	(8.269)	(8.494)	(8.589)	(8.491)	(8.540)
Trade dependence		17.39*	17.62**	16.67*	19.26**	18.76*
		(8.998)	(8.943)	(9.065)	(9.549)	(9.655)
Trade dependence squared		-0.54*	-0.54*	-0.53*	-0.61*	-0.59*
		(0.297)	(0.288)	(0.296)	(0.319)	(0.321)
Geographical distance		61.90	69.46	81.15	59.51	61.61
		(107.254)	(107.741)	(109.996)	(110.278)	(111.073)
Industry relatedness		-0.23	10.98**	-97.77	-0.43	-0.41
		(0.390)	(4.906)	(52.842)	(0.408)	(0.407)
Target high-tech		0.35	0.62	0.57	-8.25	-75.53
		(0.555)	(0.585)	(0.607)	(5.213)	(58.013)

Trade dependence*Industry relatedness			-0.74**	13.87*		
			(0.321)	(7.154)		
Trade dependence squared*Industry relatedness				-0.49**		
				(0.241)		
Trade dependence*Target high-tech					0.57*	9.79
					(0.344)	(7.923)
Trade dependence squared*Target high-tech						-0.31
						(0.269)
constant	-33.03	-631.43	-694.18	-782.37	-624.15	-635.17
	(143.332)	(850.848)	(863.588)	(874.687)	(874.909)	(881.129)
Pseudo R^2	0.19	0.20	0.22	0.23	0.21	0.21
Log pseudo-Likelihood	-206.77	-203.09	-199.63	-196.74	-201.43	-200.30
N	368	368	368	368	368	368

Notes: Standard errors in parentheses, * p<0.1, ** p<0.05, *** p<0.01

Table 4.3 Logit regression for robustness check

	Model (1)	Model (2)	Model (3)	Model (4)	Model (5)	Model (6)
Acquirer roa	12.70**	11.94**	12.17**	11.51*	10.82*	10.53*
	(5.607)	(5.911)	(5.894)	(5.980)	(5.623)	(5.452)
Acquirer size	-0.50**	-0.46**	-0.48**	-0.42*	-0.61***	-0.62***
	(0.206)	(0.223)	(0.224)	(0.225)	(0.234)	(0.238)
Host experience	1.07	1.08	1.10	1.04	1.21	1.21
	(0.709)	(0.726)	(0.725)	(0.749)	(0.764)	(0.747)
Acquirer localgov	0.97	1.23	1.25*	1.03	1.38	1.42*
	(0.789)	(0.756)	(0.750)	(0.755)	(0.845)	(0.794)
Acquirer centralgov	-0.41	-0.71	-0.72	-1.00	-0.41	-0.34
	(0.829)	(0.943)	(0.943)	(0.971)	(0.986)	(1.007)
Acquirer high-tech	-0.04	-0.43	-0.44	-0.53	-0.52	-0.64
	(0.711)	(0.839)	(0.841)	(0.854)	(0.861)	(0.922)
Ownership sought	0.01	0.01	0.01	0.01	0.01	0.01
	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
Target resource intensity	2.05**	2.50**	2.45**	2.39**	2.80***	2.68***
	(0.916)	(0.985)	(1.000)	(0.970)	(1.032)	(1.017)
Target gov	-0.29	1.08	1.12	1.11	0.96	1.16
	(2.374)	(2.804)	(2.800)	(2.641)	(2.773)	(2.756)
Political relation	4.52*	5.61**	5.42**	6.02**	5.30*	5.57**
	(2.405)	(2.609)	(2.670)	(2.615)	(2.727)	(2.746)
Host institutional quality	0.32	0.13	0.12	0.12	0.13	0.13
	(0.348)	(0.389)	(0.386)	(0.359)	(0.395)	(0.392)
Host GDPGROWTH	0.32*	0.30	0.29	0.26	0.35*	0.33*
	(0.174)	(0.189)	(0.192)	(0.193)	(0.199)	(0.198)
Host population	4.78	-2.29	-2.60	-3.35	-0.88	-0.98
	(7.335)	(8.805)	(8.723)	(8.731)	(9.568)	(9.614)
Trade dependence		20.21*	20.01*	19.64*	25.04**	23.55*
		(11.035)	(10.952)	(10.431)	(12.761)	(12.083)
Trade dependence squared		-0.63*	-0.63*	-0.63*	-0.82*	-0.76*
		(0.354)	(0.349)	(0.335)	(0.430)	(0.399)
Geographical distance		27.18	26.72	28.25	23.58	24.53
		(25.430)	(25.830)	(25.102)	(26.906)	(26.975)
Industry relatedness		0.11	4.24	0.00	-0.14	-0.16
		(0.537)	(4.746)	(.)	(0.543)	(0.555)
Target high-tech		0.94	0.98	0.94	-17.23**	0.00
		(0.809)	(0.812)	(0.823)	(7.924)	(.)

Trade dependence*Industry relatedness			-0.28	8.69		
			(0.316)	(6.878)		
Trade dependence squared*Industry relatedness				-0.30		
				(0.229)		
Trade dependence*Target high-tech					1.25**	8.59
					(0.541)	(7.758)
Trade dependence squared*Target high-tech						-0.25
						(0.263)
Constant	-97.16	-368.74**	-356.96**	-354.48**	-389.04**	-386.26**
	(133.851)	(171.030)	(177.569)	(166.945)	(170.620)	(172.285)
Pseudo R^2	0.24	0.27	0.27	0.27	0.29	0.30
Log pseudo-likelihood	-146.50	-141.89	-141.55	-140.61	-136.89	-136.19
N	280	280	280	280	280	280

Notes: Standard errors in parentheses, * p<0.1, ** p<0.05, *** p<0.01

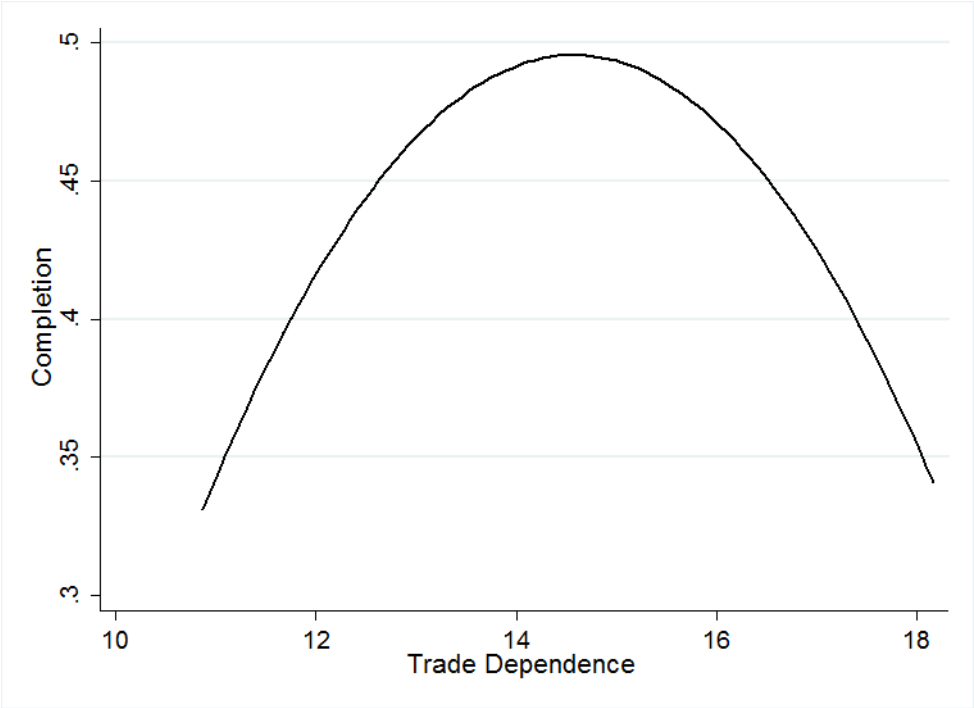

Figure 4.1 the effect of trade dependence on the likelihood of acquisition completion

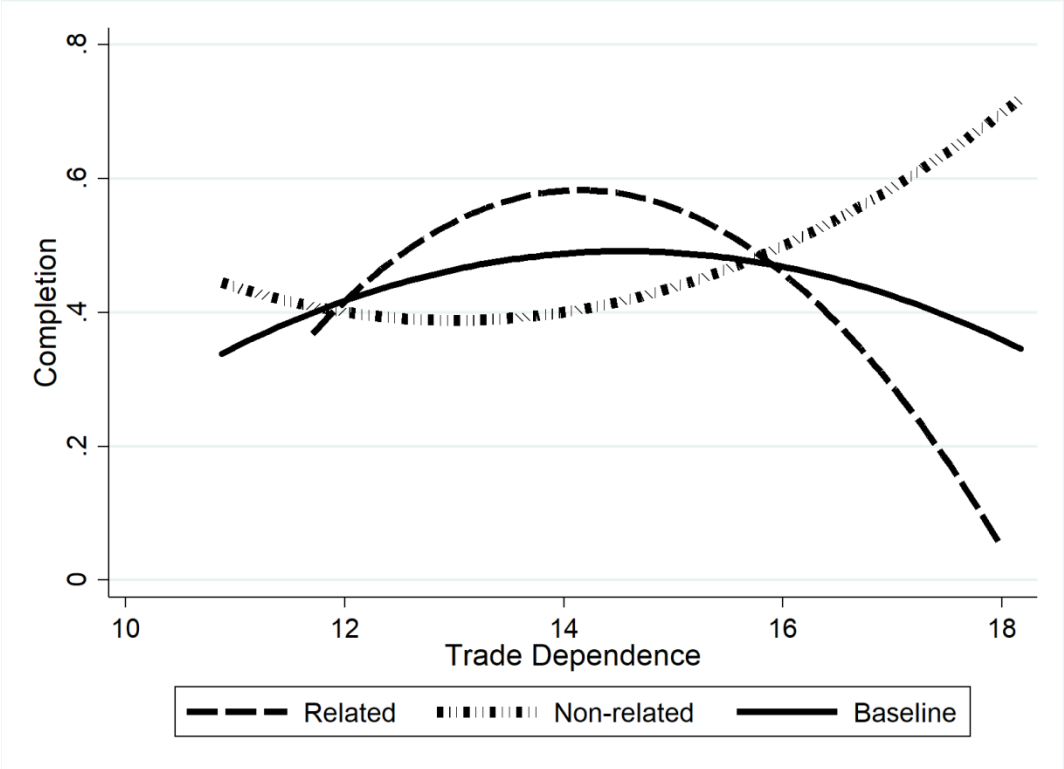

Figure 4.2 Moderating effect of industry relatedness between acquirer and target

firms

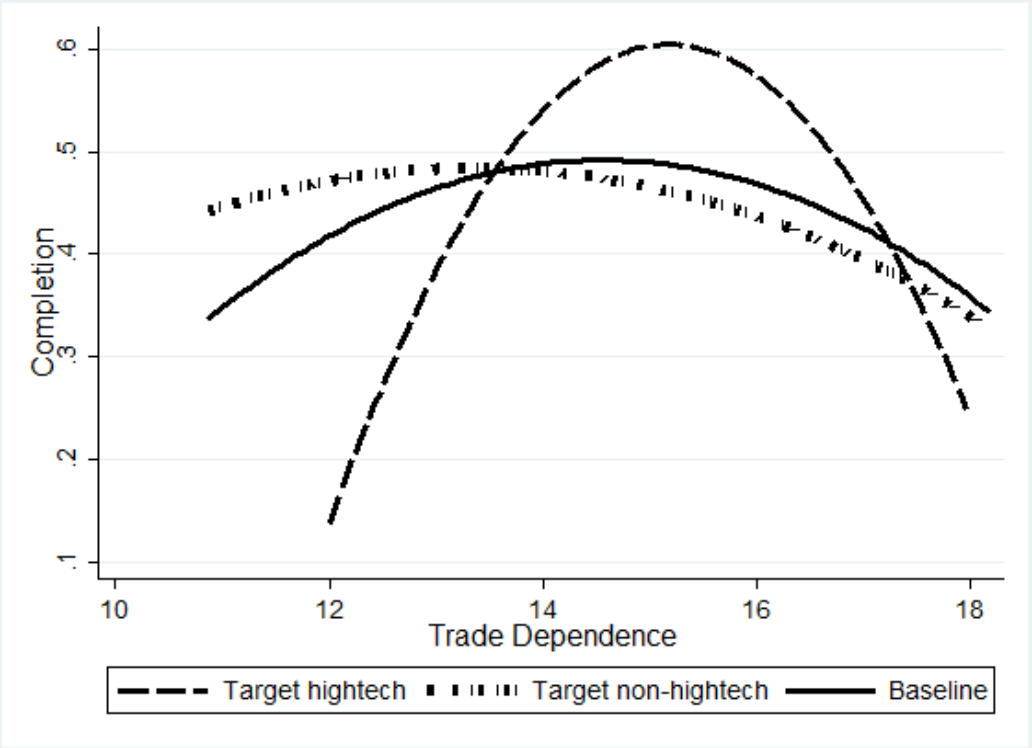

Figure 4.3 The moderating effect of the target firm high technology intensity