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Multilevel Determinants of Foreign Direct Investments Entry Mode Strategies and Subsidiary Survival of Multinationals in China

An Analysis of Nordic firms

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Kieli
Englanti

Julkaisun nimike
Ulkomaisten entry-strategioiden ja tytäryritysten selviytymisen monitasoiset vaikuttavat tekijät monikansallisissa yrityksissä: Analyysi pohjoismaisten yritysten investoinneista Kiinaan.

Tiivistelmä
Ulkomaisten tuotannollisten investointien strategiavalintoihin ja tytäryritysten selviytymiseen voivat vaikuttaa hyvin useat eri tekijä. Tämä tutkimus on ensimmäisiä, missä tarkastellaan samassa tutkimuksessa eri yritys-, toimiala- ja kohdemaakohtaisten tekijöiden vaikutusta yritysten omistus- ja investointimuotovalintoihin sekä tytäryritysten selviytymistä samassa tutkimuksessa. Tutkimuksessa käytetään transaktiokustannusteoriaa, resurssiorientoitunutta teoriaa sekä institutionaalista lähestäymistapaa em. tekijöiden vaikutusten analyysissä. Tutkimuksessa testataan myös kahden institutionaalisen tekijän – institutionaalisen muutoksen vaiheen sekä Kiinan alueellisten institutionaalisten eroavaisuuksien – potentiaalista vaikutusta tutkittaviin kysymyksiin.
Tutkimuksen näyte koostuu 405 eri Pohjoismaisten yritysten Kiinaan vuosina1982–2012 tekemästä investoinnista. Tulokset osoittavat että kohdemaakohtainen kokemus lisäsi todennäköisyyttä valita täysin omistettu tytäryritys, valita yritysosto investoinnin toteutusmuodoksi sekä tytäryrityksen selviytymisen todennäköisyyttä. Institutionaalisen muutoksen myöhäisempi vaihe lisäsi todennäköisyyttä valita täysin omistettu tytäryritys, suorittaa investointi yritysostona sekä tytäryrityksen selviytymistodennäköisyyttä. Yritysten tuotannon monialaisuus lisäsi yhteisyritysmuodon valinnan todennäköisyyttä ja suuri yrityskoko yritysmuodon valintaa investoinnin toteutusmuodoksi. Molemmat tekijät vaikuttivat merkittävästi tytäryritysten selviytymisen todennäköisyyteen. Alueelliset institutionaaliset erot vaikuttivat positiivisesti täysin omistetun tytäryritysmuodon sekä uusperustatoteutusmuodon valintaan. Yrityksen kansainvälinen kokemus lisäsi yhteisyritysmuodon valinnan todennäköisyyttä. Investoinnin toimialan T&K -intensiteetti lisäsi yhteisyritysmuodon valinnan todennäköisyyttä, kun taas toimialan myynnin kasvu lisäsi täysin omistetun tytäryritysmuodon valintaa. Toimialan yritysten lukumäärän kasvulla ei sen sijaan ollut tilastollisesti merkittävää vaikutusta yritysten omistusmuoto- ja investointimuotovalintoihin. Sen sijaan tekijä vaikutti positiivisesti yritysten selviytymiseen Kiinassa. Täysin omistettu tytäryritysmuoto sekä akvisition valinta investoinnin toteutusmuodoksi lisäsivät molemmat yritysten investointien selviytymisen todennäköisyyttä. Työn tulokset tukivat oletettua institutionaalisen muutoksen kehittymisen sekä alueellisten institutionaalisten erojen moderoivaa vaikutusta. Teoreettisen ja empiirisen kontribuution lisäksi työn tulokset tarjoavat hyödyllisiä toimenpidesuosituksia yritysjohtajille sekä julkisen hallinnon päätöksentekijöille.

Asiasanat
Omistusmuoto, investointimuoto, tytäryrityksen selviytyminen, Pohjoismaat, Kiina

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Multilevel Determinants of Foreign Direct Investments Entry Mode Strategies and Subsidiary Survival of Multinationals in China: An Analysis of Nordic firms

Abstract

Foreign direct investments entry mode strategies and post-entry subsidiary survival can be influenced by several different types of determinants. This research analyses the impacts of firm, industry and institution specific determinants on FDI ownership mode strategy, FDI establishment mode strategy and subsidiary survival together. This study applies transaction costs economics, resource- and institution-based view as the main theoretical foundations to approach firm, industry and institution specific determinants. This dissertation also tests the potential moderating effects of two institution specific determinants, stage of institutional transition and regional institutional differences within China.

The developed hypotheses are tested using a sample of 405 FDIs made by Danish, Finnish, Norwegian and Swedish firms operating in China during 1982–2012. The results reveal that the host country experience results in the preference for WOS and acquisitions investments and subsidiary survival. The later stage of institutional transition increases the probability of WOS and acquisitions and subsidiary survival. While degree of product diversification is associated with JVs, parent firm size results in preference of acquisitions. Both of them significantly influence subsidiary survival. Regional institutional differences are positively related to WOS and greenfields investments. International experience is positively associated with JVs. Industry R&D intensity is positively associated with JVs, whereas industry sales' growth encourages WOS. Industry growth in terms of the number of firms is not related to FDI entry mode strategy, whereas it is positively associated with subsidiary survival. WOS and acquisitions increase the probability to survive. The results confirm the moderating effects of both stage of institutional transition and regional institutional differences. Along with theoretical and empirical contributions, this research offers useful implications to both managers and policy makers.

Keywords

FDI Ownership Mode, FDI Establishment Mode, Subsidiary Survival, Nordic, China

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> "*The will to win, the desire to succeed, the urge to reach your full potential, these are the keys that will unlock the door to personal excellence*" - Confucius.

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Yi Wang

31st September 2014, Vaasa, Finland

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LIST OF ABBREVIATIONS

CEE	Central and Eastern Europe
CSA	Country Specific Advantage
FDI	Foreign Direct Investment
FSA	Firm Specific Advantage
IB	International Business
IBV	Institution-based View
IMF	International Monetary Fund
JVs	Joint Ventures
MNEs	Multinational Enterprises
NIE	New Institutional Economics
OCCs	Open Coastal Cities
COEZs	Coastal Open Economic Zones
OLI	Ownership, Location, and Internalization (Dunning's Eclectic Theory)
RBV	Resource-based View
SEZs	Special Economic Zones
SMOPECs	Small and Open Economies
TCE	Transaction Cost Economics
ETDZs	Economic and Technological Development Zones
UNCTAD	United Nations Conference on Trade and Development
VIF	Variance Inflation Factor
VRIN	Valuable, Rare, Inimitable and Non-substitutable (Barney's framework on sustainable competitive advantages)
WOS	Wholly-owned Subsidiary
WTO	World Trade Organization

1. INTRODUCTION

1.1. Study Background

Foreign direct investment (FDI) has been an important characteristic of globalization for the past thirty years (Tang, Selvanathan & Selvanathan 2012). Kumar (2003) refers FDI as "a bundle of resources including, besides capital, production technology, organizational and managerial skills, marketing know-how, and even market access through the marketing networks of multinational enterprises who undertake FDI". FDI has been considered as an important way to access markets, technology, and resources (Tang et al. 2012). The world economy has witnessed a rapid increase in FDIs since the middle of 1980s due to general trend of economic liberalization in the world economies. In 2007, global FDIs reached a new record level of US$ 2272 billion. As a consequence of global financial and economic crisis, the total amount of FDIs decreased to US$ 1150 billion in 2009 from the record year of 2007. Since 2010, the amount of FDIs has recovered modestly, reaching a level of US$ 1505 billion. In 2012, global FDIs have reached to US$ 1391 billion (UNCTAD 2013).

Foreign direct investments from Small and Open Economies (SMOPECs) such as Austria, Belgium, Denmark, Finland, Ireland, Israel, the Netherlands, New Zealand, Norway, Portugal, Sweden, and Switzerland (Dick & Merret 2007; Laantti, McDougall & Baume 2009) have shown a similar increasing trend compared to global FDIs. Accumulated FDIs made by multinationals from SMOPECs increased from US$ 214,243 million in 1990 to US$ 4,875,476 million in 2012 (UNCTAD 2013). This increasing amount of FDIs clearly shows that SMOPEC firms are increasingly expanding their products and/or services to foreign markets. Firms such as Carlsberg, Danfoss, and Daniscc from Denmark, Kone, Kemira, and UPM from Finland, Elkem, Norsk Hydro, and Orkla from Norway, ABB (Swiss–Swedish), Atlas Copco, and Sandvik from Sweden, Red bull GmbH, and Fischer GmbH from Austria have been important players in Europe and even at globe level.

Developing and transition economies were more resilient to the global financial and economic crisis happened in 2007, as decline in FDI into these countries was much smaller compared to that of developed countries. Also, their shares on global FDI inflows have kept growing. In 2012, developing and transition economies received more FDIs than developed countries (UNCTAD 2013). This is particularly true for global FDI inflows into China. China opened its national boundary to foreign investments in 1979 (open-door policy 改革开放), which have led to a

thorough reform in its economic structures and political systems (Child & Tse 2001; Hale & Long 2012). One of the nation's significant economic reforms has been to liberalize FDIs and to create a more favorable environment for FDIs (Claver & Quer 2005). During 1980s, FDIs into China grew steadily but remained low. Total global FDI inflows into China were less than US$20 billion in 1980s. Since the early 1990s, China's FDI inflows increased dramatically and the annual FDI inflows reached more than US$35 billion (UNCTAD 2013).

In 2000, the total amount of FDIs made by foreign MNEs in China was some US$40 billion. In 2008 the total utilized value of FDIs in China reached to US$92 billion. While FDI inflows in China slightly declined in 2009 due to global economic and financial crisis, the nation was one of the first at the globe level experiencing FDI rebound. In 2010, the total realized value of FDI in China reached a new record level of $106 billion, an increase of 17 percent year on year (China Statistical Yearbook). This increasing tendency of global foreign investments made by MNEs in China showed no potential to decline in the future (UNCTAD 2013). Figure 1 illustrates the growth in China's FDI inflows during 1982–2010 (Detailed information as to the FDI inflows into China can be found in appendix 1). China became the largest FDI recipient in the developing countries in 1993 and surpassed U.S. as the largest destination for FDI in 2002 (Peng 2006). This rapidly increasing trend of FDI inflows into China is primarily attributed to Chinese government policies that favor economic and trade liberalization (Wright, Filatotchev, Hoskisson & Peng 2005).

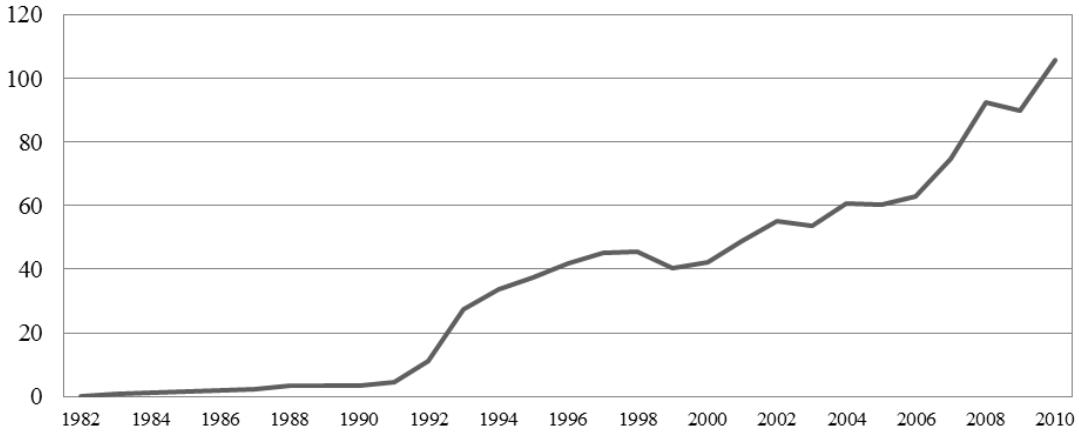


Figure 1. Growth in global FDIs in China 1982–2010 (Billions of US dollars) (Source: China Statistical Yearbook 1983–2011).

Foreign direct investments were not allowed prior to 1979 in China. Since 1979, China adopted an opening policy and opened its national boundary to foreign trade and investments (Child & Tse 2001; Polsa, So & Speece 2005; He, Wei & Xie 2008). The goal was to develop a "market system with socialistic characteristics" (Child & Tse 2001). Several laws have been enacted and a number of open areas have been created to attract foreign investments. The enactment of "**The Law of the People's Republic of China on Chinese-Foreign Equity Joint Ventures**" in 1979 established the principles and procedures for establishing foreign subsidiaries. One of the key features in the early period of institutional transitions was to establish open areas. China established four **Special Economic Zones (SEZs)** (经济特区) in 1979 and 1980: Shenzhen, Zhuhai, and Shantou within Guangdong province and Xiamen located in Fujian province. The intention of the Chinese government was to use the four SEZs to attract FDIs, expand exports, and introduce advanced technology from Western multinationals (Zhou, Delios & Yang 2002; Yeung, Lee & Kee 2009).

Special Economic Zones were created as a testing ground for innovative policies that, if proven effective, would be implemented to other cities of China. The Chinese government has implemented pragmatic and open economic policies in SEZs. In the early period of China's "open-door" policy, SEZs received a significant amount of China's total FDI inflows. For example, in 1981, the four SEZs, Shenzhen, Zhuhai, Shantou, and Xiamen, received approximately 60 percent of China's total FDI inflows. In 1984, the four SEZs still attracted some 26 percent of total FDIs in China. One year later, although the total share of FDIs in the four SEZs decreased, approximately 20 percent of the total FDIs in China were still made in SEZs (Yeung et al. 2009).

Given the success of the four SEZs established in Guangdong and Fujian province in 1980, the Chinese government decided to further open its national boundaries by extending similar "open-door" policy to ten Coastal Open Economic Zones (COEZs) (沿海经济开放区) or fourteen Open Coastal Cities (OCCs) (沿海开放城市) at Liaoning, Hebei, Tianjin, Shandong, Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, and Guangxi province in 1984. In the same year, the Chinese government established eight Economic and Technological Development Zones (ETDZs) (经济技术开发区) at Liaoning, Hebei, Tianjin, Shandong, Jiangsu, Zhejiang, Guangdong and Fujian. One year later, the Chinese government further extended the COEZs to broader areas: Pearl River Delta, the Yangtze River Delta, and the Min Delta in Fujian province.

In 1988, the entire Hainan province was designated as a fifth SEZ. In order to attract more foreign direct investments in Yangtze River Delta, Shanghai Pudong

new district was created in 1990. By the end of 1992, the open areas were further extended to a few cities located in China's border areas and to all capitals of inland provinces and autonomous regions in the interior. From 1993 to 1994, fourteen ETDZs were established at Anhui, Guangdong, Hubei, Liaoning, Sichuan, Fujian, Jilin, Zhejiang, Beijing, and Xinjiang province. In addition to open areas such as SEZs, COEZs/OCCs, and ETDZs mentioned above, several other forms of open areas were designated throughout the whole country, for example Free Trade Zones (自由贸易区) and High-Tech Industrial Development Zones (高新企业开发区) (Yeung et al. 2009). Table 1 presents a summary of the development of open areas in China during 1978 to 1994.

Table 1. Development of Open Areas in China from 1978 to 1994.

Year	Number and types of open areas
1979	Economic and political reform started
1979	3 Special Economic Zones established at Guangdong province (Shenzhen, Zhuhai, and Shantou)
1980	1 Special Economic Zone established at Fujian province (Xiamen)
1984-1985	10 Coastal Open Economic Zones or 14 Open Coastal Cities at Liaoning, Hebei, Tianjin, Shandong, Jiangsu, Shanghai, Zhejiang, Fujian, Guangdong, and Guangxi; 8 Economic and Technological Development Zones established at Liaoning, Hebei, Tianjin, Shandong, Jiangsu, Zhejiang, Guangdong, and Fujian province
1986	2 Economic and Technological Development Zones established at Shanghai
1988	1 Special Economic Zone established at Hainan province; 1 Economic and Technological Development Zone established at Shanghai; Open Coastal Belt at Liaoning, Shandong, Guangxi and Hebei province
1990	Creation of Shanghai Pudong New District
1992	Opening of all inland capital cities and autonomous areas; 5 Economic and Technological Development Zones.
1993–1994	14 Economic and Technological Development Zones at Anhui, Guangdong, Hubei, Liaoning, Sichuan, Fujian, Jilin, Zhejiang, Beijing, and Xinjiang province

Chinese government's policies associated with FDIs have gradually changed from permissive to encouraging through favorable treatment in taxes, tariffs and foreign exchange regulations. The enactment of "**Provisions of the State Council of the People's Republic of China for the Encouragement of Foreign Investment (1986)**" further fueled global FDIs into China from the middle of 1980s to middle of 1990s. The "**Provisional Guidelines for Foreign Investment Projects**", which enacted in 1995, classified all industries in China into four categories: encouraged, permitted, restricted, and prohibited industries. Chinese government encouraged FDIs inflows into export-oriented, high technological, agri-

cultural, and infrastructural sectors, and hence, FDIs in China shifted from labor intensive to capital and technological intensive industries (Tang et al. 2012).

Since the beginning of 2000s, Chinese government adjusted again its foreign investment's policies. This was not only because China was eager to enter into World Trade Organization (WTO), it was also because Chinese government wanted foreign investors to help to develop its Central and Northwest and West regions. The "**Guiding Catalogue of Foreign Investment Projects**", which took into effect in 2002, classified all industries in China into three categories: encouraged, permitted, and prohibited industries (Hale & Long 2012). Since 2003, several new laws and regulations have been enacted with the purpose of attracting service firms. Table 2 summarizes the key FDI policies in China over the past decades.

Table 2. Key FDIs Policies in China from 1979 to Present

Year	Key FDI policies
1979	The law of the people's Republic of China on Chinese-Foreign Equity Joint Ventures
1986	Provisions of the State Council of the People's Republic of China for the Encouragement of Foreign Investment" allowed for the establishment of WOS
1992	Deng Xiaoping's 'Southern China Tour'
1995	'Provisional Guidance for Foreign Investment Projects' classified all industries into encouraged, restricted, prohibited and permitted industries. Chinese government encouraged FDI inflows into export-oriented, high technology, agriculture and infrastructure sectors
1996	Chinese government encouraged FDI inflows into North West and South West of China
2001	China joined World Trade Organization (WTO)
2002	'Guiding Catalogue of Foreign Investment Projects' classified all industries into encouraged, prohibited and permitted industries
2003 onwards	Several new laws and regulations enacted for service sectors

Multinational enterprises opt for different entry mode strategies to exploit their resources and capabilities and achieve business objectives in their internationalization process. **FDI entry mode strategy is an important strategic decision in international expansion** (Anderson & Gatignon 1986; Brouthers 2013; Shaver 2013). **First**, FDI entry mode strategy has significant implications for post-entry subsidiary performance (Anderson & Gatignon 1986; Brouthers 2002). **Second**, FDI entry mode strategy has implications for the degree of control, the resources it must commit to the foreign operations, and the risks that it must bear to expand into the foreign country (Hill, Hwang & Kim 1990; Luo 2001). **Third**, as FDI entry mode is difficult to change or to correct, it has long-term consequences for

foreign investing firms (Anderson & Gatignon 1986; Brouthers & Hennart 2007). There are two dimensions of FDI entry mode strategy: 1) ownership and 2) establishment mode strategy. Ownership mode strategy refers to the choice between joint ventures (JVs) and wholly-owned subsidiaries (WOS) (Zhao, Luo & Suh 2004; Brouthers & Hennart 2007), whereas the choice between greenfields and acquisitions is considered as establishment mode strategy (Padmanabhan & Cho 1995; Larimo 2003; Slangen & Hennart 2007).

Multinationals have used various foreign entry modes to enter into Chinese market such as contractual JVs, equity JVs, wholly foreign-owned enterprises, FDI shareholding, and joint exploration (National Bureau of Statistics of China). However, the most frequently used foreign entry modes have been contractual JVs, equity JVs, and wholly foreign-owned enterprises. Equity JVs have been clearly the most preferred FDI entry modes prior to the middle of 1990s. The number of wholly foreign-owned enterprises increased rapidly from 9602 in 1997 to 32308 in the peak year 2005. Further on, as the Chinese central government gradually removed FDI restrictions on acquisitions (both full and partial acquisitions) of local Chinese firms, the number of cross-border acquisitions by foreign MNEs using acquisition as an entry mode has increased during the last decades in China as depicted in the appendix 2.

Post-entry subsidiary survival/performance is equally important as FDI entry mode strategy. Several early studies have reported that the exit rate for foreign subsidiaries is high (Vermeulen & Barkema 2001; Demirbag, Apaydin & Tatoglu 2011). This is also true for foreign affiliates operating in China (Papyrina 2007; Kim, Delios & Xu, 2010). For example, Papyrina (2007) and Kim et al. (2010) documented that nearly 30 per cent of the foreign subsidiaries in China were divested. Although there have been debates whether FDIs inflows or subsidiary performance is positively correlated with subsidiary survival, several early empirical studies have found that subsidiary survival is an important indicator of financial performance of foreign affiliates (Shaver 1994; Geringer & Hebert 1991; Vermeulen & Barkema 2001). Further on, subsidiary survival provides good information related to dynamics of foreign subsidiaries, which is particularly useful to policymakers in developing and transition economies (Dhanaraj & Beamish 2009). Thus, it would be of great interests to analyze what are the determinants of foreign subsidiary survival.

1.2. Research Question and Study Objectives

The main research question of this dissertation is:

- ***What are the firm, industry, and institution specific determinants of FDI ownership and establishment mode strategy and subsidiary survival in China*?**

The main research question will be answered and addressed both theoretically and empirically, and hence, this study aims to achieve the following four **research sub-objectives**:

• To theoretically address FDI ownership and establishment mode strategy, as well as subsidiary survival by reviewing research in transaction cost economics, resource- and institution-based view literature.

• To develop hypotheses about the direct impacts of firm, industry, and institution specific determinants and potential moderating effects of institutional variables on FDI ownership and establishment mode strategy.

• To develop hypotheses about the direct impacts of firm, industry, and institution specific determinants and potential moderating effects of institutional variables on FDI subsidiary survival.

• To empirically test the hypotheses using a sample of 405 Nordic firms in an emerging market of China for thirty years from 1982 to 2012.

China is one of the major FDI destinations due to its large market size and high economic growth (Luo 2001; Tang et al. 2012). Since MNEs are increasingly investing in China, it is of great importance to analyze FDI entry mode strategy and performance/survival in China. The choice of FDI entry modes depends on two key dimensions: need for operational and management control and the way to access complementary local assets (Peng & Meyer 2011). While JVs provide MNEs with limited operational and strategic control, WOS allows MNEs to exert complete control over foreign subsidiaries (Brouthers & Hennart 2007). The choice between JVs and WOS is referred as ownership mode strategy in the IB literature (Padmanabhan & Cho 1996; Cho & Padmanabhan 2005; Kuo, Kao, Chang & Chiu 2012).

Local complementary assets can be accessed by either greenfields or acquisitions investments. Greenfields allow MNEs to develop and deploy resources from scratch, whereas MNEs can access complementary local assets by acquiring existing local firms (Peng & Meyer 2011). IB scholars refer the choice between green-

fields and acquisitions as establishment mode strategy (Padmanabhan & Cho 1995; Slangen 2011). Early China-based studies have mainly analyzed determinants of FDI ownership mode strategy (Chiao, Lo & Yu 2010; Duanmu 2011). Although FDI establishment mode strategy has been considerably studied in developing and transitional economies such as Central and Eastern Europe (CEE) (Dikova & van Witteloostuijn 2007; Brouthers & Dikova 2010) and Turkey (Demirbag, Tatoglu & Glaister 2008), it has not been sufficiently addressed in the context of China.

Foreign multinationals are increasingly investing in China, nevertheless, several studies have reported that nearly one third of the foreign subsidiaries in China have been divested (Papyrina 2007; Kim et al. 2010). Thus, it is of great importance to understand what factors have influenced on FDI subsidiary survival in China. Papyrina (2007) analyzed the joint effect of entry timing and entry mode on survival of Japanese firms operating in China. Papyrina (2007) found that JVs are more likely to survive in the early stage of institutional reform in China, whereas WOS established in later stage of institutional reform are more likely to survive. Kim et al. (2010) analyzed how a subsidiary's geographical proximity to its industry peers and MNE's industry experience has influenced exit rate of Japanese subsidiaries in China. They found that both geographical proximity and industry experience would increase the survival of Japanese firms operating in China.

1.3. Positioning and Study Contributions

Foreign entry mode strategy is one of the most important and researched topics in both the IB and strategic management literature (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007; Canabal & White 2008; Benito, Petersen & Welch 2009; Morschett, Schramm-Klein & Swoboda 2010; Brouthers 2013; Shaver 2013). In general, there are two streams of research for foreign entry mode strategy. **One group of studies** has included both non-equity and equity entry modes into their analysis (Erramilli 1991; Tse, Pan & Au 1997; Pan & Tse 2000; Rajan & Pangarkar 2000; Meyer 2001; Quer, Claver & Rienda 2007) or analyzed non-equity mode choices such as franchising and management service contract (Erramilli, Agarwal & Dev 2002).

The other group of studies has focused on entry mode choices within equity or FDI modes. Of the FDI entry mode studies, there are three groups of studies. One line of these studies has analyzed ***binary*** FDI entry modes strategic choice between JVs and WOS (Hennart 1991; Taylor, Zou & Osland 1998; Padmanabhan

& Chao 1999; Yiu & Makino 2002; Brouthers & Brouthers 2003; Chiao et al. 2010), between greenfields and acquisitions (Hennart & Park 1993; Harzing 2002; Larimo 2003; Brouthers & Dikova 2010; Slangen 2011), between full and partial acquisitions (Chen 2008; Chari & Chang 2009; Arslan & Larimo 2012; Contractor, Lahiri, Elango & Kundu 2014; Arslan & Wang 2015, forthcoming), and between full acquisitions and JVs greenfields (Hennart & Reddy 1997).

A few studies have addressed ***trichotomy*** FDI entry modes strategy between WOS greenfields, full acquisitions and JVs greenfields (Kogut & Singh 1988; Elango & Sambharya 2004; Chung & Beamish 2005; Somlev & Hoshi 2005; Dikova 2012) or between full acquisitions, partial acquisitions, and greenfields JVs (Lopez-Duarte & Garcia-Canal 2002). The rest of the studies have placed emphasis on FDI entry mode strategy at ***quartation*** levels: between WOS greenfields, full acquisitions, JVs greenfields and partial acquisitions (Barkema & Vermeulen 1998; Jakobsen & Meyer 2008; Jakobsen 2008) or between minority JVs, equal JVs, majority JVs, and WOS (Demirbag, Tatoglu & Glaister 2009; Li & Meyer 2009). Table 3 in the next page presents the key studies focusing on FDI entry mode strategy.

Table 3. FDI Entry Mode Studies

Binary entry strategy				**Trichotomy entry strategy**		**Quartation entry strategy**	
Ownership mode strategy (WOS vs. IJVS)	**Establishment mode strategy (greenfields vs.acquisitions)**	**Full vs. partial acquisitions**	**Full acquisitions vs. JVs greenfields**	**JVs, acquisitions vs. greenfields**	**JVs, full acquisitions vs. partial acquisitions**	**WOS greenfields, JV greenfields, full acquisitions vs. partial acquisitions**	**Minority JV, equal JV, majority JV and WOS**
Gatignon & Anderson (1988); Gomes-Casseres (1989); Gomes-Casseres (1990); Hennart (1991); Erramilli & Rao (1993); Agarwal (1994); Padmanabhan & Cho (1996); Hennart & Larimo (1998)***; Taylor et al. (1998); Padmanabhan & Cho (1999); Palenzuela & Bobillo (1999); Makino & Neupert (2000); Brouthers & Brouthers (2001)**; Luo (2001)*; Shi et al. (2001)*; Brouthers (2002)**; Chen & Hennart (2002); Yiu & Makino (2002); Lu (2002); Brouthers & Brouthers (2003)**; Brouthers et al. (2003)**/****; Ekeledo & Sivakumar (2003); Brouthers & Nakos (2004)****; Cho & Padmanabhan (2005); Meyer & Nguyen (2005)**; Arregle et al. (2006); Gil et al. (2006)**; Dikova & van Witteloostuijn (2007)**; Brouthers et al. (2008)**; Wang & Schaan (2008); Cui & Jiang (2009); Liang et al. (2009); Slangen & Tulder (2009)****; Chiao et al. (2010)*; Arslan & Larimo (2010)**, Lee (2010)*; Duanmu (2011)*; Kuo et al. (2012)*; Lopez-Duarte & Vidal-Suarez (2013); Arslan & Larimo (2013)**	Hennart & Park (1993); Padmanabhan & Cho (1995); Andersson & Svensson (1994)****; Padmanabhan & Cho (1999); Brouthers & Brouthers (2000); Anand & Delios (2002); Harzing (2002); Larimo (2003)***; Chen & Zeng (2004); Drogendijk & Slangen (2006)****; Dikova & van Witteloostuijn (2007)**; Demirbag et al. (2008)**; Slangen & Hennart (2008)****; Brouthers & Dikova (2010)**; Arslan & Larimo (2011)**, Slangen (2011)	Chen (2008); Chari & Chang (2009); Arslan & Larimo (2012)**/***; Contractor et al. (2014); Arslan & Wang (2015, forthcoming) */***	Hennart & Reddy (1997)	Kogut & Singh (1988); Chang & Rosenzweig (2001); Elango & Sambharya (2004); Chung & Beamish (2005); Somlev & Hoshino (2005); Herrmann & Datta (2006); Meyer et al. (2009); Dikova (2012)**	Lopez-Duarte & Garcia-Canal (2002)	Barkema & Vermeulen (1998); Jakobson & Meyer (2008); Jakobson (2008)	Erramilli et al. (1997); Delios & Henisz (2000)**; Demirbag et al. (2009); Li & Meyer (2009)

*Studies focusing on FDI entry mode strategy in China.
**Studies focusing on FDI entry mode strategy in other developing and transition economies.
***Studies focusing on FDI entry mode strategy of Nordic MNEs
****Studies focusing on FDI entry mode strategy of other SMOPEC firms

Entry strategies such as FDI entry mode strategy are relatively well established. However, post-entry subsidiary survival is relatively under-explored and theoretically fragmented (Demirbag et al. 2011). Survival of MNEs' subsidiaries is of great interest to both academicians and practitioners (Payprina 2007; Demirbag et al. 2011). Although there have been debates whether FDIs or subsidiary performance is positively correlated with subsidiary survival, several existing empirical studies found that subsidiary survival is an important indicator of financial performance of foreign affiliates (Shaver 1994; Geringer & Hebert 1991; Vermeulen & Barkema 2001). Subsidiary survival is particularly useful to study when accounting data for the foreign subsidiaries are not available (Geringer & Hebert 1991). Moreover, subsidiary survival provides good information relating to dynamics of population of foreign subsidiaries, which is particularly useful to policymakers in developing and transition economies (Dhanaraj & Beamish 2009).

There are three lines of research on subsidiary survival. **One line of research** established a link between FDI entry mode strategy and subsidiary survival (Mata & Portugal 2000; Vermeulen & Barkema 2001; Dhanaraj & Beamish 2004; Papyrina 2007; Gaur & Lu 2007). Their studies found that both ownership (Mata & Portugal 2000; Papyrina 2007; Gaur & Lu 2007) and establishment mode strategy (Vermeulen & Barkema 2001; Mata & Portugal 2000) have significant influenced on MNE's subsidiary survival. **A second group of studies** has investigated firm specific determinants such as R&D and/or advertising intensity (Delios & Makino 2003), MNEs' experience (Delios & Beamish 2001; Gaur & Lu 2007), and timing of entry (Pan & Chi 1999; Delios & Makino 2003; Papyrina 2007) on the probability of subsidiary survival. **A third line of studies** has linked institutional variables such as subsidiary density (Silverman, Nickerson & Freeman 1997; Demirbag et al. 2011), regulative and normative institutional distance (Gaur & Lu 2007), political and social openness (Dhanaraj & Beamish 2009), economic distance, economic freedom distance and cultural clusters (Demirbag et al. 2011) with MNEs' subsidiary survival.

Previous subsidiary survival studies have also analyzed interaction effects, but only limited so. For example, Papyrina (2007) found that JVs established in the early stage of institutional reform in China were more likely to survive than WOS founded at that time. Moreover, Dhanaraj and Beamish (2009) found that political and social openness in the host country interacted with JV ownership strategy to increase the mortality of Japanese subsidiaries. Demirbag et al. (2011) found that both economic distance and economic freedom distance negatively interacted with subsidiary density to impact on subsidiary exit. Kim et al. (2010) revealed that China experience interacted with geographic proximity to industry peers from the same home country to influence on FDI subsidiary exit rate in China.

Figure 2 illustrates the focus of existing IB studies addressing FDI entry mode strategy and subsidiary survival in an emerging market of China. **First**, this figure shows that previous China-based studies have analyzed various determinants of FDI ownership mode strategy (Luo 2001; Shi, Ho & Siu 2001; Chiao et al. 2010; Kuo et al. 2012) and equity versus non-equity modes strategy (Tse et al. 1997; Pan & Chi 1999; Sun 1999; Pan & Tse 2000; Claver & Quer 2005; Wei, Liu & Xia 2005). **Second**, figure 2 illustrates that several studies have linked FDI ownership mode strategy with subsidiary survival in China (Pan & Chi 1999; Papyrina 2007; Kim et al. 2010). This line of research has provided mixed results regarding the relationship of FDI ownership mode strategy and subsidiary survival. For example, Papyrina (2007) provided empirical support that MNEs are more likely to survive when entering into China at the later stage of institutional transitions, whereas this relationship was found to be insignificant in the study by Pan and Chi (1999). **Third**, figure 2 illustrates that existing China-based studies have also linked a limited numbers of FDI entry modes determinants such as timing of entry, geographical proximity to other subsidiaries, and industry specific experience with MNE's subsidiary survival (Papyrina 2007; Kim et al. 2010).

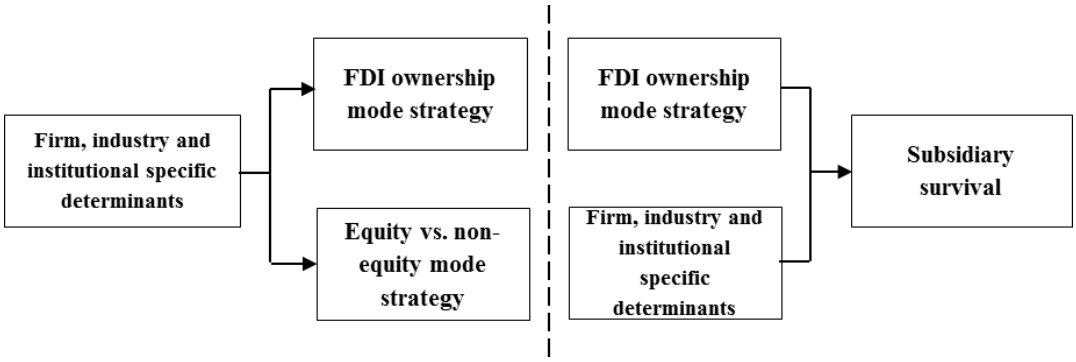


Figure 2. Focus of Previous IB Studies Addressing Entry Mode Strategy and Subsidiary Survival in China.

Figure 3 presents the focus and contributions of this dissertation. The **first** contribution is related to theoretical contribution. This study contributes to China-based FDI literature by analyzing the impacts of the **same variables** on FDI ownership and establishment mode strategy, as well as subsidiary survival in China. In existing China-based studies, FDI ownership mode choice has received considerable attention (Luo 2001; Shi et al. 2001; Chiao et al. 2010; Duanmu 2011; Kuo et al. 2012). Other China-based studies have included both non-equity and equity modes in their analysis (Tse et al. 1997; Sun 1999; Pan & Tse 2000; Chen & Hu 2002; Claver & Quer 2005; Wei et al. 2005). However, FDI establishment mode strategy has received very limited attention in China-based FDI studies. Moreover, previous studies have attempted to analyze certain factors affecting either

ownership or establishment mode strategy in isolation. The arguments are that FDI ownership mode strategy hinges on the need for control, whereas FDI establishment mode strategy depends on the methods to access complementary local assets (Hennart & Park 1993; Slangen & Hennart 2007; Peng & Meyer 2011). However, a review of empirical studies reveals that both of FDI ownership and establishment mode strategy are influenced by a similar range of firm-, industry- and country-specific factors.

Although FDI subsidiary survival is relatively under-explored and theoretically fragmented, several studies have attempted to apply arguments from TCE, RBV, and institutional related perspectives such as new institutional economics and institutional theory to analyze the determinants of FDI subsidiary survival (Delios & Beamish 2001; Delios & Makino 2003; Gaur & Lu 2007; Demirbag et al. 2011). These studies find that subsidiary survival has been influenced by certain factors such as R&D intensity, firm experience, economic distance, and institutional distance. The above mentioned factors have been found to be significantly associated with both FDI ownership and establishment mode strategy (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007). Hence, it seems that the determinants of FDI entry modes strategy tend to influence also MNEs' subsidiary survival. Thus, the first contribution of this study is to apply the same variables to analyze FDI ownership and establishment mode strategy, as well as subsidiary survival together.

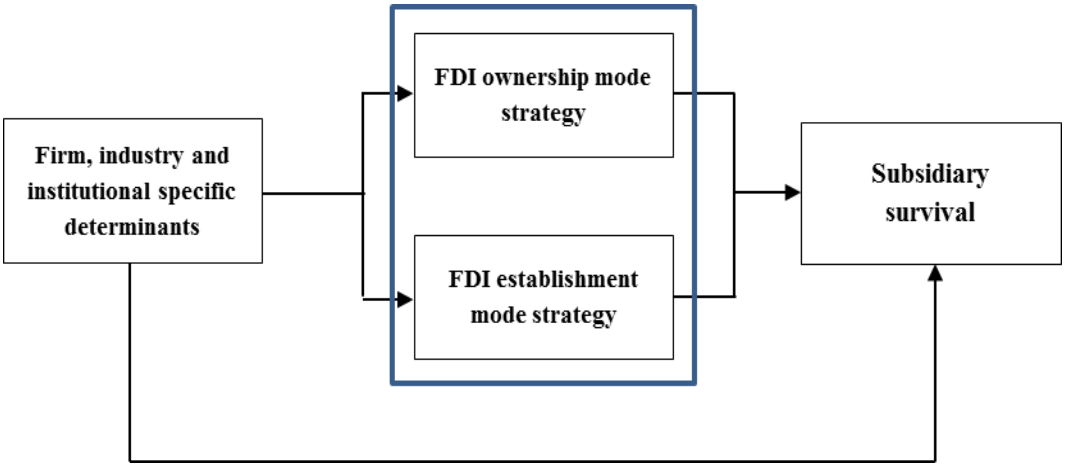


Figure 3. Focus and Expected Contributions of This Study

Second, this study is one of the first to analyze the determinants of FDI entry mode strategy and subsidiary survival in China by ***combining*** arguments from three theories: transaction cost economics (TCE) (Williamson 1975, 1985; Anderson & Gatignon 1986), resource-based (RBV) (Barney 1991, 2001), and institution-based view (IBV) (Peng 2002). TCE, RBV and IBV have been identified as

leading theoretical foundations for research in transition and emerging markets such as CEE and China (Hoskisson, Eden, Lau & Wright 2000; Meyer & Peng 2005; Wright et al. 2005: Xu & Meyer 2012). The choice of the three theories is further justified that the core constructs of TCE, RBV and IBV have been operationalized with a similar range of variables (Claver & Quer 2005; Dikova & van Witteloostuijn 2007; Dikova, Rao & van Witteloostuijn 2010; Demirbag et al. 2011; Dikova 2012). For example, asset specificity has been proxied by R&D intensity either at firm or industry level in existing TCE-based studies (Hennart 1991; Larimo 2003; Chiao et al. 2010), the same construct has also been used in RBV-based studies to proxy important intangible firm specific resources (Erramilli 1991; Park, Lee & Hong 2011). Since this study analyzes the factors influencing both FDI entry mode strategy and subsidiary survival by combining arguments from more than one of the above mentioned three theories, we argue that this dissertation contributes to both China-based FDI literature and FDI literature in general.

A **third** contribution is associated with empirical part of this study. Since the present study uses a sample of Nordic foreign investments in China, it is expected that the findings of this study can be extended to other **SMOPECs** firms entering into China. Much attention in existing literature has been on MNEs originating in largest economies such as U.S., Japan, Germany and United Kingdom (e.g. Papyrina 2007; Meyer 2001; Meyer, Estrin, Bhaumik & Peng 2009; Demirbag et al. 2011). SMOPECs firms have been analyzed but not so much in FDI literature (Erramilli 1991; Larimo 2003; Drogendijk & Slangen 2006; Slangen & Hennart 2008).

Multinationals from SMOPECs face similar challenges when entering into foreign markets. SMOPECs' firms seem to be more internationalized due to relatively small home market size (Benito, Larimo, Narula & Pedersen 2002; Luostarinen & Gabrielsson 2006). However, it is a fact that nearly half of the FDIs around the globe still originate from largest economies (UNCTAD 2013). The firm size of MNEs from large economies on average is much larger than those firms originate from SMOPECs, and hence, MNEs from countries such as U.S. and Japan have enjoyed competitive advantages from large parent firm size and relative efficiency. In order to cope with the above mentioned challenges, SMOPEC firms tend to opt for different entry strategies when entering into foreign markets such as forming strategic alliances and implementing niche market strategy (Benito et al. 2002; Laantti et al. 2009). It is therefore expected that FDI strategic decisions made by SMOPEC firms would differ from multinationals from largest economies. This study is therefore an attempt to address the differences in FDI behaviours of firms from largest economies and SMOPECs.

Further on, of the limited studies on SMOPECs, the Netherlands has received the most attention (Vermeulen & Barkema 2001; Brouthers & Nakos 2004; Drogendijk & Slangen 2006; Gil, Nakos, Brouthers & Brouthers. 2006; Slangen & Hennart 2008; Slangen & Tulder 2009; Slangen 2011). Firms originate from Nordic countries (Denmark, Finland, Norway and Sweden) have been analyzed but not so much in FDI ownership (Hennart & Larimo 1998) and establishment mode studies (Zejan 1990; Andersson & Svensson 1994; Larimo 2003). Zejan (1990) and Andersson and Svensson (1994) used a sample of Swedish firms to analyze FDI establishment mode strategy, whereas Hennart and Larimo (1998) compared the FDI ownership mode strategy of Japanese and Finnish MNEs around the globe. Although Larimo (2003) included all four Nordic countries in the empirical analysis, the focus of his study was on Nordic MNEs' FDI establishment mode strategy at the globe. The present study differs from the above mentioned studies that use a unique sample of firms originating from Denmark, Finland, Norway and Sweden to analyze both FDI ownership and establishment mode strategy in an emerging market of China.

Finally, the findings of this study are expected to provide useful implications for the **managers** of Western and especially Nordic and other SMOPEC manufacturing firms aspiring to enter into Chinese market. This study includes firm specific variables into analysis and it is expect that managers gain better understanding what firm attributes (e.g. experience, parent firm size, and degree of product diversification) need to be evaluated before making investments in China. This study also includes industry level specific determinants, and therefore, it is expected that managers are made award of differences in industry conditions in China, i.e. industry sales' growth and growth in terms of the number of firms, and how industry variables have influenced on FDI entry mode strategy and subsidiary survival. Furthermore, since this study uses a sample of Nordic manufacturing firms operating in different regions in China over a relative long time period (30 years), the findings of this dissertation provides useful implications to managers about how regional institutional differences and stages in institutional transitions in China has altered the strategic choices and survival of Nordic MNEs.

1.4. Definition of Key Terms

The key terms identified are important in understanding the phenomenon being studied for the present research. These key terms are: foreign direct investments, FDI entry mode strategy, ownership mode strategy, establishment mode strategy, subsidiary survival, wholly-owned subsidiary, joint venture, greenfield and acquisition. Table 4 presents a summary of the definitions of the key terms.

Table 4. Definition of Key Terms

Key terms	Definitions	References
Foreign direct investments	"Foriegn direct investment reflects the objective of obtaining a lasting interest by a resident entity in one economy (direct investor) in an entity resident in an economy other than that of the investor (direct investment enterprise)"	Adopted from IMF (1993) and OECD (1996)
FDI entry mode strategy	"An institutional arrangement that makes the entry of a company's products, technology, human skills, management or other resources into a foreign country possible, or the "how" part of foreign operations"	Adopted from Welch &Luostarinen (1988) and Root (1994)
Ownership mode strategy	The choice between joint ventures and wholly-owned subsidiary at the time of entry	Adapted from Anderson & Gatignon (1986)
Establishment mode strategy	The choice between greenfields and acquisitions at the time of entry	Adapted from Cho & Padmanabhan (1995) and Slangen & Hennart (2007)
Subsidiary survival	Outright sales or liquidation are considered as non-surviving subsidiaries, the rest of the subsidiaries are considered as surviving subsidiaries.	Adapted from Yan & Zeng (1999)
Wholly-owned subsidiary	A foreign subsidiary located in a foreign country that is entirely owned by foreign multinationals.	Adapted from Anderson & Gatignon (1986) and Kogut & Singh (1988)
Joint ventures	A joint venture is the pooling of complementary assets in a separate organization, which is owned by two or more partners	Adapted from Anderson & Gatignon (1986) and Kogut & Singh (1988)
Greenfield	Building factories and offices from scratch in a host country. Greenfield can be partially or fully owned by investing firms.	Adapted from Kogut & Singh (1988), Cho & Padmanabhan (1995) and Larimo (2003)
Acquisition	Purchase of a part of or entire equity in an existing business. Acquisitions can be partially or fully owned by investing firms.	Adapted from Kogut & Singh (1988); Hennart & Park (1993) and Larimo (2003)

It should be mentioned that this dissertation analyzes determinants of FDI entry mode strategy and subsidiary survival at multiple levels: i.e. firm, industrial and institutional level. The specific variables that will be included in the empirical analysis are: international experience, host country experience, degree of product diversification, parent firm size, industry R&D intensity, industry sales' growth, industry growth in terms of number of firms, stage of institutional transition and regional institutional differences within China (SEZs and/or OCCs versus other regions within China). The definitions and operationalization of these determinants will be discussed in the following chapters (Chapter 5, section 5.2.).

1.5. Structure and Content of the Dissertation

The **first** chapter (**Introduction**) starts with a brief discussion about study background. The discussion of the study background is followed by setting up the main research question and study sub-objectives. Next, positioning of this dissertation in existing China-based FDI entry mode and subsidiary survival literature and expected contributions of this dissertation are discussed. Then, the definitions of key terms used in this dissertation are presented. Finally, the first chapter ends with a discussion as to the structure and content of the dissertation.

The purpose of chapter **two** (**Literature Review**) is to provide a solid theoretical background of the study and an overview of the key existing empirical studies. This chapter starts with an introduction of FDI entry modes strategy in terms of definition and types of FDI entry mode strategy, as well as advantages/disadvantages and risks associated with different FDI entry mode strategies. Then, chapter two presents a detailed review related to the three main theories used in this dissertation: transaction cost economics, resource-based and institution-based view. The review of each of the theories starts with a discussion of the development of the esteemed theory. This is followed by a discussion of main theoretical explanations in FDI entry mode strategy and subsidiary survival. Then, operationalization and applications of the core theoretical constructs in existing FDI entry mode strategy and subsidiary survival studies are reviewed. The review of each of the theories ends with a discussion regarding the limitations of the theory.

Chapter **three** and **four** (**FDI Entry Mode Strategy and Subsidiary Survival**) include a discussion of the main constructs used in this study: international experience, host country experience, degree of product diversification, parent firm size, industry R&D intensity, industry sales' growth, industry growth in terms of number of firms, stage of institutional transition, and regional institutional differ-

ences. This chapter mainly presents the theoretical arguments which lead to the hypotheses related to the impacts of the above mentioned variables on FDI entry mode strategy and subsidiary survival, respectively. In addition to hypothesizing the main effects of the above mentioned determinants, this chapter develops hypotheses as to the potential moderating effects of institution specific determinants, stages of institutional transitions and regional institution differences, on FDI entry mode strategy and FDI subsidiary survival.

Chapter **five** (**Research Methodology**) presents the empirical design of this dissertation. This chapter starts with an introduction of alternative research approaches (deductive and inductive) and methods (quantitative and qualitative) available in conducting international business research, and provides justifications for the choices in this dissertation. Next, the author discusses data sources and the samples. Then the operationalization of dependent, independent and control variables are presented, respectively. This is followed by a description of the sample characteristics in more detail. Lastly, validity and reliability of the empirical design are assessed and evaluated.

Chapter **six** (**Results)** presents the findings of this study. This chapter starts with a discussion and justification of the statistical method used in the empirical analysis. This is followed by a presentation of descriptive statistics and correlation matrix. Then, this chapter presents the results of binary regression analysis associated with FDI ownership mode strategy, focusing on interpreting the sign and significance of coefficients related to both control and independent variables. Moreover, the results associated with moderating effects are discussed. The discussion of results associated with FDI ownership mode strategy is followed by presenting results for FDI establishment mode strategy. The focus is on interpreting the coefficients related to control and independent variables, as well as moderating effects. In the last section of this chapter, the coefficients associated with the main effects and moderating effects related to subsidiary survival are interpreted.

Chapter **seven** (**Discussions and Conclusion**) starts with a summary of the major findings of the empirical part of this dissertation. Next, this chapter presents both theoretical and empirical contributions of this dissertation in detail. The discussion of theoretical and empirical contributions is followed by a discussion of both managerial and policy implications. This chapter ends with a discussion of study limitations and suggestions for future research avenues.

Figure 4 in the next page depicts the content and structure of this dissertation.

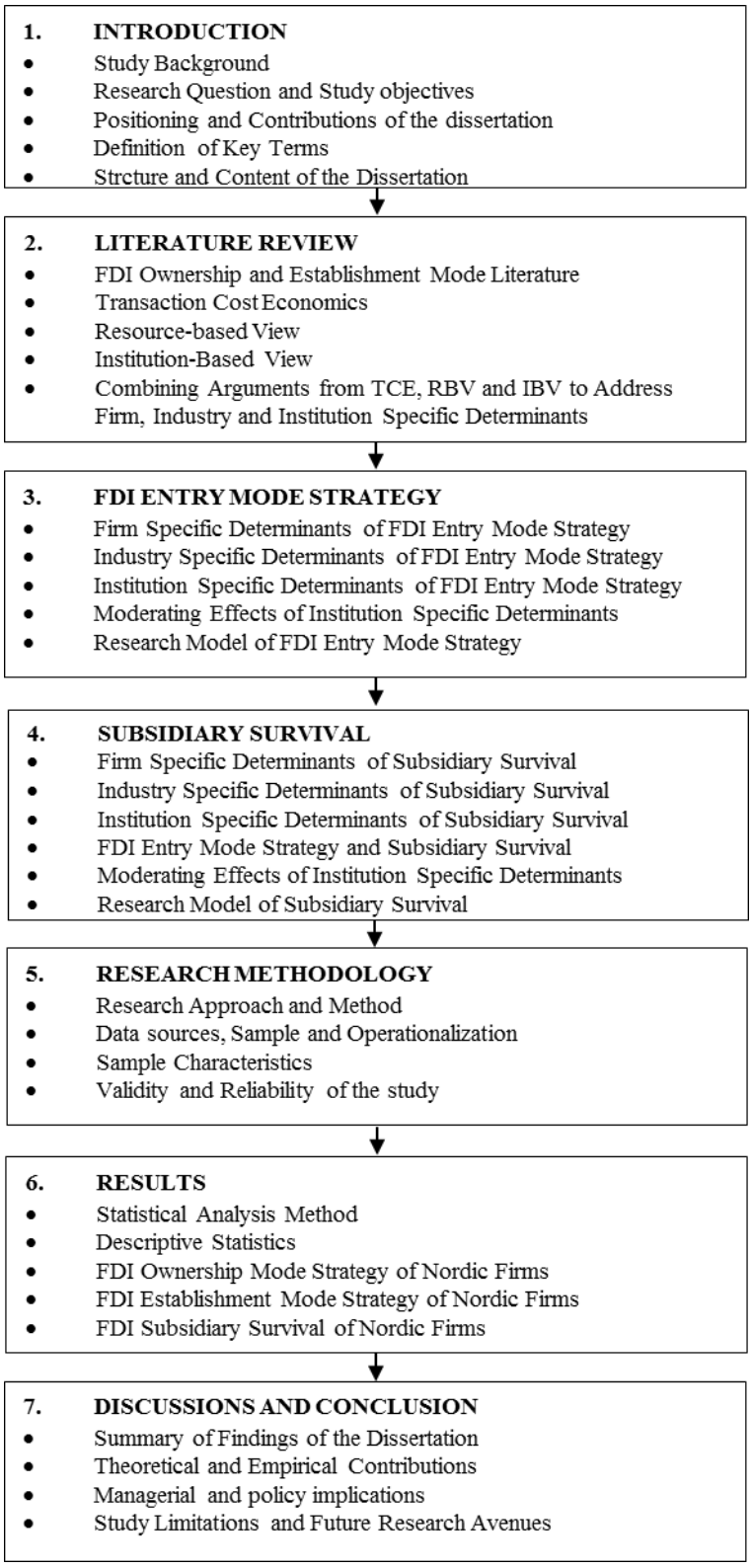


Figure 4. Structure of the Dissertation

2. LITERATURE REVIEW

Both theoretical and empirical studies on FDIs have evolved over the past decades. The purpose of this chapter (chapter 2) is to provide a detailed review of existing literature on FDI entry mode strategies and subsidiary survival. Chapter two starts with an introduction on FDI ownership and establishment mode strategy. Definitions, types of FDI entry mode strategy, and advantages/disadvantages and risks associated with different FDI entry modes are discussed (section 2.1.). Then, this chapter reviews the three main theories used in this study: transaction cost economics, resource-based and institution-based view literature. Next, this chapter provides a detailed review of key empirical studies on FDI entry mode strategy and subsidiary survival and synthesizes their main findings (section 2.2, 2.3., and 2.4.). Then, next section (section 2.5.) provides a summary of the three theories used in this dissertation. This chapter ends with a discussion and justification for combining arguments from transaction costs economics, resource- and institution-based view to address firm, industry and institution specific determinants (section 2.6.).

2.1. FDI Ownership and Establishment Mode Literature

Marketing scholars Anderson and Gatignon (1986) and Gatignon and Anderson (1988) referred an entry mode as a governance structure that allows a firm to exercise control over its foreign operations. According to Welch and Luostarinen (1988), foreign operation mode or its equivalent is generally accepted to mean a company's way of operating in foreign markets, or the "how" part of foreign operations. Hill et al. (1990) defined an entry mode as a way of organizing a firm's business activities in a foreign country. More specifically, foreign entry mode strategy is understood as an institutional arrangement that makes the entry of a company's products, technology, human skills, management or other resources into a foreign country possible (Root 1994). Sharma and Erramilli (2004) described an entry mode as a structural arrangement that allows a firm to implement its product market strategy in a host country either by carrying out only the marketing operations (i.e. exports) or both production and marketing operations by itself or in partnership with others (contractual modes, joint ventures, wholly-owned subsidiaries). In a recent study, Benito, Petersen and Welch (2009) regarded foreign operation modes "as the organizational arrangements that a company uses to conduct international business activities". Table 5 in the next page summarizes the exiting definitions of foreign market entry modes.

In this dissertation, Welch and Luostarinen (1988) and Root (1994)'s definition of foreign entry modes has been adopted. This is because their definitions have explicitly emphasized the "entry" of firm in a foreign market. The definitions provided by Anderson and Gatignon (1986), Gatignon and Anderson (1988), and Hill et al. (1990) have exclusively focused on degree of control. Since this dissertation also analyzes FDI establishment mode strategy of greenfields and acquisitions, Anderson and Gatignon (1986), Gatignon & Anderson (1988) and Hill et al. (1990)'s definitions do not fit the present dissertation. As mentioned by Benito et al. (2009), their definition of foreign entry modes beyond the "entry" of a firm, and hence, has taken into account the changes after entry in a foreign market. Thus, Benito et al. (2009)'s definition of foreign entry mode is not adopted in the present dissertation. The definition by Sharma and Erramilli (2004) included both equity and non-equity modes, and thus, beyond the focus of the present research.

Table 5. Definitions of Foreign Market Entry Strategy

Author(s)	**Definition of foreign market entry strategy**
Anderson & Gatignon (1986), Gatignon & Aanderson (1988)	A governance structure that allows a firm to exercise control over its foreign operations.
Welch & Luostarinen (1988)	A company's way of operating in foreign markets, or the "how" part of foreign operations.
Root (1994)	An institutional arrangement that makes the entry of a company's products, technology, human skills, management or other resources into a foreign country possible
Hill, Hwang & Kim (1990)	A way of organizing a firm's business activities in a foreign country.
Sharma & Erramilli (2004)	Structural arrangement that allows a firm to implement its product market strategy in a host country either by carrying our only the marketing operations or both production and marketing operations.
Benito, Petersen & Welch (2009)	The organizational arrangements that a company uses to conduct international business activities.

There are a wide variety of foreign entry modes available to foreign investors to enter into international markets. Several academicians have classified a diverse range of foreign entry modes using various criteria. For example, based on the degree of control, Anderson and Gatignon (1986) identified seventeen different entry modes, ranging from small shareholder organization (lowest control mode) to WOS (highest control mode). It is worth noting that Anderson and Gatignon (1986) referred to control as a determinant of both risk and return. According to Hill et al. (1990), the choice between contracts (licensing or franchising), JVs and

WOS depends on three criteria: control, resource commitment, and risk. WOS is chosen when MNEs prefer completely operational and management control and are willing to commit highest level of resources and to bear highest level of risks. Based on the degree of control, scholars such as Andersson and Gatignon (1986) and Hill et al. (1990) classified various entry modes into low, medium and high control modes and referred to JV as a medium control mode.

Pan and Tse (2000) suggested a hierarchical model of market entry and classified various entry modes into two broad categories: non-equity and equity modes. While non-equity modes include direct/indirect exports, contractual arrangements such as licensing, R&D contracts, and other alliances, equity modes consist of JVs and WOS. JVs can be further classified into minority, equal, and majority JVs. Depending on the method of establishment, WOS is divided into WOS greenfields and full acquisitions. Hennart (1988, 1989, 2000, 2009, 2012) broadly classified different foreign entry modes into contracts and equity, arguing that the main difference between contracts and equity modes hinge on the method chosen to remunerate input providers. The payments for input providers in a contract are specified *ex ante*, whereas contributors of inputs in equity modes are paid *ex post* from the profits of the venture. For scholars such as Pan and Tse and Hennart, JV is not an intermediate mode between contracts and WOS, rather, it is considered as a hierarchy mode. The only difference between a JV and a WOS is that the former is a joint internalization mode, whereas the latter is a sole internalization mode (Brouthers & Hennart 2007).

The decision on FDI entry mode strategy depends on two dimensions: 1) control and 2) methods for resource growth (Peng & Meyer 2011). Control refers to the ability to influence both the operational and strategic decisions of foreign operations (Porter 1986). WOS provides MNEs with the completed control, as foreign parent firms are the only owners of the foreign affiliates (Agarwal & Ramaswami 1992; Hill et al. 1990; Luo 2001). In the case of JVs, since MNEs partially own the affiliates, their degree of control over foreign subsidiaries tends to be limited.

Both WOS and JVs can be established through either greenfields or acquisitions, depending on the methods to access complementary assets and resources possessed by local firms. Greenfield investments allow MNEs to develop and deploy their own resources from scratch, whereas acquisitions enable foreign investors to acquire complementary local assets and resources from an on-going local firm (Larimo 2003). Hence, there are four types of FDI entry modes available for MNEs to enter host country when combing the two dimensions: WOS or full acquisition (cell 1), WOS greenfields (cell 2), JV greenfields (cell 3), and JV or partial acquisition (cell 4) (figure 5).

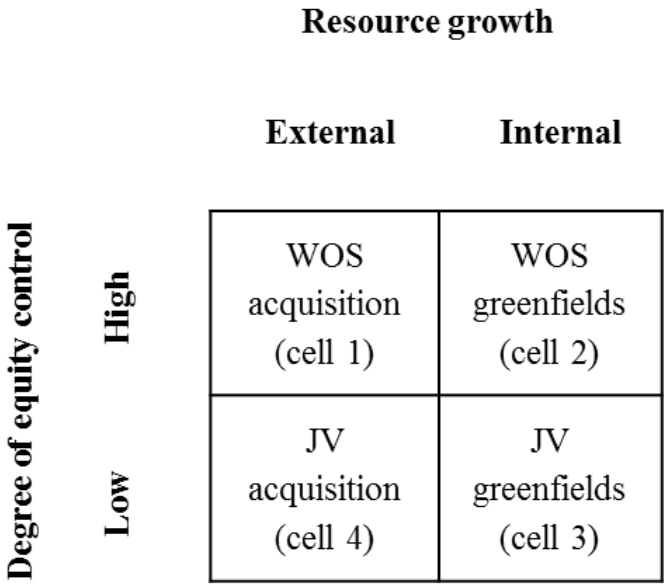


Figure 5.Types of FDI Entry Modes (source: Peng and Meyer 2011, p 369)

Each of the above mentioned FDI entry modes has its **advantages and disadvantages** and exposes itself to different types and levels of **risks**. **WOS greenfields** allow MNEs to start their operations from scratch, and hence, design operations to fit the overall strategy of the parent firm. Since MNEs completely control their foreign subsidiaries, they can better protect their transferred proprietary know-how through WOS. There are a few disadvantages for choosing WOS greenfields. WOS greenfields usually add new production capacity to the target industry entered, and thus, increase the level of industry competition. Moreover, the entry speed for WOS greenfields tends to be slower compared to entries through acquisitions.

In addition to complete operational and strategic control, **full acquisitions** do not add new production capacity to the industry entered and the entry speed for full acquisitions is relatively faster (compared to WOS greenfields). There are several drawbacks associated with full acquisitions. MNEs usually need large capital investments in order to fully acquire an existing local firm. Moreover, full acquisitions are more likely to suffer from resistance from both individuals working in the acquired firms and from nationalistic sentiments (Slangen & Hennart 2007; Peng & Meyer 2011). Further on, given to cultural differences, cross-border full acquisitions also suffer from post-acquisition integration challenges (Hennart & Park 1993; Slangen & Hennart 2007; Chen 2008).

Joint ventures can be established through either greenfields or acquisitions. Since MNEs and local partner(s) share the equity and control in JVs, costs and risks

associated with establishing and running **JVs greenfields** is relatively lower (compared to WOS greenfields). MNEs can also use JVs greenfields to access local partners' knowledge and assets. Moreover, JVs greenfields are more likely to be politically accepted relative to full and partial acquisitions. However, JV partners usually have divergent goals and interests, and hence, JVs greenfields suffer more from coordination failure between two or more JV partners.

There are several advantages associated with **partial acquisitions**. First, partial acquisitions allow MNEs to access local firms, which are unwilling to sell the entire business. Second, partial acquisitions are particular feasible for MNEs to buy firms that would still need the contribution of previous owners. In terms of drawbacks, MNEs have limited operational and strategic control over the acquired local firms, and hence, their power to implement changes in company structures and processes tend to be limited (Peng & Meyer 2011). The second and third columns in table 6 provide a summary of the advantages and disadvantages associated with each of the FDI entry modes.

Various FDI entry modes also expose themselves to different types of risks. According to Peng and Meyer (2011), there are three types of risks related to FDI entry modes: 1) investment risk, 2) co-owner related risk, and 3) integration risk. Since MNEs are the sole owner of the foreign affiliates, there are no co-owner related risks for MNEs choosing WOS greenfields and full acquisitions (Agarwal & Ramaswami 1992). It has been referred that while full acquisitions are difficult to manage due to post-acquisition integration problems, MNEs setting up WOS greenfield investments suffer more from liability of foreignness and newness (Pennings, Barkema & Douma 1994). Further on, both of WOS greenfields and full acquisitions suffer from high capital investments risks associated with establishing physical facilities and building relationships and networks with various stakeholders such as suppliers, distributors, and governments (Andersson et al. 1997; Peng & Meyer 2011). Although JVs greenfields and partial acquisitions suffer less from investments risk due to lower capital commitments relative to WOS greenfields and full acquisitions, the internal coordination costs and co-owner related risk are larger (Meyer & Tran 2006). Thus, the management of JVs and partial acquisitions is of great importance to multinationals (Madhok 2006). It can be also referred that both of full and partial acquisitions are associated with post-acquisition integration risks, whereas greenfields do not. Table 6 summarizes the advantages/disadvantages as well as risks associated with FDI entry modes.

Table 6. Advantages/Disadvantages and Risks associated with FDI Entry Modes Strategy

FDI Entry modes	Advantages	Disadvantages	Risks
WOS Greenfield	• Design operations to fit the parent • Complete equity and operational control • Option to scale operation to needs	• Add new capacity to industry • Slow entry speed (relative to acquisitions)	• No co-owner related risks, no integration failure risk • High investment risk due to large capital commitment and long pay-back periods.
Full acquisitions	• Complete equity and operational control • Do not add new capacity • Fast entry speed	• Political sensitivity • High up-front capital need • Post-acquisition integration challenges	• High investment risk due to large up-front capital commitment • Integration process related risks • No co-owner related risks
JVs greenfields	• Sharing costs, risks and profits • Access to partners' knowledge and assets • Politically acceptable	• Divergent goals and interests of partners • Limited equity and operational control • Difficult to coordinate globally	• Limited investment risk due to lower capital commitment • High risk of coordination failure
Partial acquisitions	• Access to operations that the previous owner is reluctant to give up • Previous owners continued commitment	• Need to restructure and integrate, yet with limited control	• Limited investment risk due to lower capital commitment • High risk of integration problems • High risk of conflicts with co-owners

Investment risk refers to maximal loss if the project fails. Co-owner related risk is regarded as the failure due to conflict and/or coordination failure between partners. Integration risk is the risk associated with integration of an existing firm (Source: adopted from Peng & Meyer 2011).

The performance of foreign subsidiaries has been measured in a diverse range of ways, of which subsidiary survival is an important performance indicator (Christoffersen 2013). Subsidiary survival has received increasing interests in the IB field. The conceptualization of subsidiary survival has been inconsistent. This is particularly true for research on instability and/or survival of JVs (Blodgett 1992; Yan 1998; Steensma & Lyles, 2000; Dhanaraj & Beamish, 2004; Gaur & Lu, 2007; Meschi & Riccio, 2008; Belderbos & Zou, 2009; Fang & Zhou 2010). Existing studies have conceptualized and operationalized JVs instability in two ways: outcome-oriented and process-oriented approach. Yan and Zeng (1999) defined outcome-oriented instability as outright sales or liquidation and changes in ownership structure. This approach was adopted in several studies such as Mata and Portugal (2000), Steensma and Lyles (2000), Dhanaraj and Beamish (2004), Beamish and Jung (2005), Lu and Hebert (2005), Meschi and Riccio (2008), Gaur and Lu (2007), and Belderbos and Zou (2009). On the other hand, a process-oriented approach conceptualizes JVs instability as reorganization and contractual renegotiation (Yan & Zeng, 1999). Process-oriented approach to JVs instability was adopted by only a few studies such as Blodgett (1992), Puck,

Holtbrugge and Mohr (2009), and Fang and Zou (2010). The conceptualization of instability of WOS is less ambiguous compared to JVs. In the present study, both WOS and JVs are included in survival analysis, and thus, the author follows outcome-oriented approach and considers outright sales or liquidation of JVs and WOS as non-surviving subsidiaries. The rest of the subsidiaries are treated as surviving foreign subsidiaries.

2.2. Transaction Cost Economics

This section (section 2.2.) provides a detailed review for transaction costs economics literature. This review starts with a discussion associated with intellectual thoughts established by several leading TCE scholars such as Coase (1937), Williamson (1975, 1985), Buckley and Casson (1976), Anderson & Gatignon (1986); Hennart (1988, 1993, 2009, 2012), and Verbeke and Greidanus (2009) (subsection 2.2.1. and subsection 2.2.2). Then, the author reviews and synthesizes the main findings of the key existing empirical studies, applying TCE arguments to address 1) FDI ownership mode strategy, 2) FDI establishment mode strategy, or 3) subsidiary survival (subsection 2.2.3.). In the last, limitations of transaction costs economics are shortly presented (subsection 2.2.4.).

2.2.1. Development of Transaction Cost Economics

Both the marketing and IB scholars provided definitions associated with transaction costs (e.g. Hennart 1988; Kogut 1988; Hollensen 2014). Hennart (1988) referred to transaction costs as information, bargaining, and enforcement costs. Kogut (1988) defined transaction costs as "the expenses incurred for writing and enforcing contracts, for haggling over terms and contingent claims, for deviating from optimal kinds of investments in order to increase dependence on a party or to stabilize a relationship, and for administering a transaction". Thus, transaction costs can be broadly divided into two forms: 1) *ex-ante* and 2) *ex-post* costs. *Ex-ante* costs include searching and contracting costs, whereas *ex-post* costs consist of both monitoring and enforcement costs incurred after signing the contract (Hollensen 2014).

Transaction cost economics has its origin in Coase (1937)'s seminal work, titled as "*The Nature of The firm*". Coase (1937) discussed two alternative methods of allocation of factors of production: price mechanism and firm. Coase (1937)'s paper aimed to explain the existence of firm to supersede price mechanism to coordinate production activities. Coase (1937) argued that "a firm will tend to expand until the cost of organizing an extra transaction within the firm will become

equal to the cost of carrying out the same transaction by means of an exchange on the open market". Thus, Coase (1937)'s seminal work also shed some useful lights on the definition of firms.

Williamson (1975, 1985)'s work extended Coase (1937)'s intellectual thoughts, arguing that the combination of "bounded rationality" (Simon 1956) and "opportunism" is the major source of transaction costs. Bounded rationality is referred to as the belief that managers are limited in their abilities to process information and thus decisions are made by imperfect information. Opportunism refers to as the belief that one of the contractual parties in an agreement may seek their self-interests, and therefore, do not fulfil their contractual responsibility (Williamson 1985). The expectation of opportunistic behaviours of transaction partners would increase the need to draft comprehensive contracts. However, bounded rationality of human beings inhibits drafting such complete and comprehensive contracts.

Transaction costs arise from "bounded rationality" and "opportunism" is particularly silent for a particular transaction that is characterized by 1) asset specificity, 2) (internal and external) uncertainty, and 3) transaction frequency between the same partners. Asset specificity refers to assets that are tailored to a particular transaction and are not easily redeployable outside the relationship of the parties to the transaction. Uncertainty arises either when the environments surrounding a transaction are too unpredictable to be specified *ex ante* a contract (external uncertainty) or performance of transaction partners cannot be easily verified *ex post* (internal uncertainty). Transaction frequency refers to the extent to which the transactions recur between same transaction partners. Asset specificity, uncertainty, and transaction frequency would increase the need for a firm to internalize their transactions within a firm (Williamson 1975, 1985; Williamson & Ghani 2012).

Several IB and marketing scholars have extended Williamson (1975, 1985)'s original transaction costs framework (Buckley & Casson 1976; Anderson & Gatignon 1986; Hennart 1988, 1993, 2009, 2012 Verbeke & Greidanus 2009). Buckley and Casson (1976) developed famous internalization theory, which aimed to explain why some investing firms exploit their proprietary know-how through internalized firms, while others rely on open market transactions. Buckley and Casson (1976) argued that the choice between internalized firms and market transactions depends on costs and benefits of alternative governance structures. A key difference between Williamson (1975, 1985)'s original transaction costs framework and internalization theory is that the latter relies on information asymmetry to explain market transactions and firms. The market for information is often failure because buyers usually have limited information as to the products

or services they are buying. Thus, the information asymmetry between buyers and sellers is the main reason for using internalized firms. Verbeke and Greidanus (2009) further extended Williamson (1975, 1985)'s original TCE framework. They have introduced the concept of "bounded reliability" to substitute the concept of "opportunism" originally introduced by Williamson (1975, 1985) to explain failed human commitment. There are two sources for bounded reliability: opportunism as intentional deceit and benevolent preference reversal. Further on, Verbeke and Greidanus (2009) argued that since opportunistic behaviours of transaction partners arise *ex post*, it is not opportunistic behaviour *per se* influences the choice of organization structure. It is the *expectation* of opportunistic behaviours of the other transaction partner and lack of trust between transaction partners determine strategic decisions such as FDI entry mode strategies. Much like bounded rationality, bounded reliability suggests that transaction partners may be reliable but only boundedly so (Simon 1955). Thus, for Verbeke and Greidanus (2009), the primary cause of transaction costs is the combination of "bounded rationality" and "bounded reliability".

2.2.2. Transaction Cost Explanations of FDI Entry Mode Strategy and Subsidiary Survival

Although original transaction costs framework tends to predict the choice between market transactions and hierarchy, several marketing and IB scholars such as Anderson and Gatignon (1986) and Hennart (1988, 1993, 2009, 2012) extended TCE arguments to explain a broader range of foreign entry mode strategies. Anderson and Gatignon (1986) identified seventeen different types of entry modes based on the degree of control, risk and return, and hence, the choice of a particular entry mode depends on the MNEs' need for control. Following transaction costs reasoning, four constructs are proposed to increase investing firm's preference for high-control as opposed to low-control modes: transaction-specific assets, external uncertainty, internal uncertainty, and free-riding potential. Table 7 in the below highlights the propositions associated with each of the four constructs. It should be noted that external uncertainty in Anderson and Gatignon (1986)'s framework does not influence on the degree of control without the presence of transaction-specific assets, it is the joint effect of these two constructs leads to high transaction costs and therefore foreign investors are more likely to choose high-control modes (i.e. WOS) as opposed to low-control modes (i.e. JVs) so that they can completely control over their foreign subsidiaries.

Table 7. Anderson and Gatignon (1986)'s Transaction Cost Propositions on Degree of Control

TCE constructs	Propositions*
Transaction specific assets	1) Highly proprietary products and processes (+) 2) Unstructured and poorly understood products and processes (+) 3) Customized products (+) 4) Immature products (+)
External uncertainty	1) Country risk (non-significant) 2) Interaction of country risk and transaction specific assets (+)
Internal uncertainty	1) International experience (+) 2) Socio-cultural distance (-)
Free-riding potential	Valuable brand name (+)

*Positive sign: increases in the preference of high control modes; Negative sign: increases in the preference of low control modes

Hennart (1988)'s study offered a transaction costs explanation of JVs as opposed to other governance structures such as market, contracts, and WOS. There are two types of JVs: scale and link JVs. Scale JVs are created when two or more firms enter together a continuous stage of production or distribution or a new market. For link JVs, the motives of partners are not necessarily the same as in the case of scale JVs. The classification of scale and link JVs is particularly useful in explaining FDI ownership mode choice, i.e. JVs and WOS. According to Hennart (1988), scale JVs are preferable to both full acquisitions and WOS greenfield investments in the circumstances where economies of scale and scope are large. It is more efficient to use link JVs or full acquisitions as opposed to WOS greenfields investments when the assets possessed by a local partner are "public goods" such as distribution channels and experiential knowledge. This is because share of the "public goods" would incur none or low marginal costs. Link JVs are preferable to acquisitions when the complementary assets possessed by local firms are difficult to be separated from unneeded assets.

Hennart (1993) distinguished two organizing methods: price and hierarchy. It has been referred by Hennart (1993) that market and firm are two alternative economic institutions to organize economic activities. Market mainly uses price systems, whereas firms rely primarily on hierarchy. The primary organizing costs for price and hierarchy mechanism are fundamentally different. Price mechanism incurs relatively high cheating costs but reduce shirking costs, whereas firms would in-

crease shirking costs but reduce cheating costs. The choice of markets and hierarchy depends on the sum of cheating and shirking costs. Market and firm institutions may also use a combination of both organizing methods. Hybrid arrangements combine elements from both price and hierarchy organizing method.

Hennart (2009) extended Anderson and Gatignon (1986)'s transaction costs framework, arguing that the choice between JVs and WOS depends largely on transaction characteristics of *both* foreign and local inputs. Anderson and Gatignon (1986)'s TCE framework and the work in their tradition have neglected the perspective of local owners of complementary assets (Hennart 2009). Dunning's OLI paradigm (Dunning 1993; Dunning & Lundan 2008a, 2008b) and internalization theory (Rugman & Verbeke 1990; Verbeke 2009) argued that in order to expand to foreign markets, MNEs need to combine their firm-specific advantages (FSAs) with country-specific advantages (CSAs) (CSAs has been referred to as location advantages in OLI paradigm) such as natural resources and low cost labours. However, OLI paradigm and internalization theory are flawed, as they implicitly assume that CSAs or location advantages are country specific, but freely available for all MNEs to access (Hennart 2009). For example, the access to distribution market in some host countries is subject to high transaction costs.

Hennart (2009) introduced two concepts: 1) the relationships between markets for service of assets, markets for assets, and markets for firms and 2) the role residual claimancy in maximizing rents from exchange. These two concepts are crucial for the bundling model of foreign market entry mode. According to Hennart (2009), when the transfer of the inputs of foreign MNEs is subject to high transaction costs and the access of local complementary assets is efficient, WOS of MNEs is the most efficient entry mode. In situations where the access of the local complementary assets incurs positive transaction costs and inputs of MNEs can be efficiently exploited, the optimal solution is to opt for WOS of local firms. When the access of both foreign and local inputs is subject to high transaction costs, the most efficient entry mode is a JV between MNEs and local firms.

Hennart (2012) extended the bundling model of foreign market entry to explain the emergence of emerging market multinationals (EMMs). Hennart (2012) assumed that locally-owned complementary assets are rarely available in efficient markets. This is particularly true for transitional and emerging markets, where crucial assets are monopolized by large local firms. Thus, emerging market firms possess market power and sometimes get the foreign intangibles at low costs and retain most of the rents from bundling foreign and local assets. These rents allow emerging market firms to establish foreign subsidiaries to access or acquire foreign knowledge and technology. In order for emerging market firms to establish

foreign presence to access foreign knowledge and technology, two conditions must be met simultaneously: 1) knowledge is most efficiently acquired through employment contract *and* 2) those employees are located abroad. Emerging market firms establish foreign subsidiaries and hire local employees when the productivity is clearly higher than in the home markets.

In addition to FDI ownership mode strategy, TCE has been extended to explain FDI establishment mode strategy. The conventional transaction costs argument is that the choice of FDI establishment modes depends on the costs associated with exploiting or exploring firm specific advantages. Hennart (1988) sheds some lights on how to use TCE arguments to approach FDI establishment mode strategy. According to Hennart (1988), it is more efficient to use acquisitions as opposed to greenfields when the assets possessed by the local partner are "public goods" such as distribution channels and experiential knowledge. Hennart (2009) argued that the choice between greenfields and acquisitions depends on the efficiency of markets for service of assets and for assets relative to those markets for firms. Acquisitions are preferred when 1) the assets are embedded in target firm, 2) the markets for acquiring firms are efficient, *and* 3) management costs are sufficiently low.

Although TCE has been primarily developed to explain organizational forms such as JVs as opposed to WOS, it has also shed some lights on post-entry subsidiary performance/survival. A core proposition of TCE is that entry mode choice is an efficiency driven strategic decision, which provides highest benefit-to-costs ratio (Anderson & Gatignon 1986; Hill et al. 1990). Efficiency has been expressed as the long-term return to its investments in a foreign entry mode, adjusted for risk (Anderson & Gatignon 1986). Thus, it can be said that MNEs tend to achieve risk-adjusted efficiency in long-term if they choose the foreign entry mode predicted by transaction costs economics.

2.2.3. Application of TCE in FDI Entry Mode Strategy and Subsidiary Survival Studies

Transaction costs economics has motivated a large number of studies of organizational forms for foreign market entry. In this section, the author attempts to review and synthesize the major findings of existing TCE-based studies on FDI entry mode strategy and subsidiary survival. The author used two criteria for selecting empirical studies for this review: First, the dependent variables are 1) FDI ownership mode strategy, 2) establishment mode strategy, and 3) subsidiary survival. Second, the authors of the reviewed studies used TCE as the main theory to motivate their empirical study, for example by using concepts such as asset speci-

ficity and (internal and external) uncertainty (Williamson 1975; 1985; Andersson & Gatignon 1986). Since transaction frequency has received limited attention in existing TCE-based studies (Klein, Frazier & Ruth 1990; Taylor et al. 1998), it is not included in this review. It is worth mentioning that several review studies by Zhao et al. (2004), Geyskens, Steenkamp and Kumar (2006), and Brouthers and Hennart (2007) noted that transaction frequency as an important construct of TCE has not been analyzed sufficiently and this has not changed.

Asset Specificity: Asset specificity has been proxied using both archival and survey-based data. The most popular proxies are firm level measures such as the ratio of R&D and/or advertising intensity at either industry or firm level (Hennart & Larimo 1998; Padmanabhan & Cho 1996; Makino & Neupert 2000; Meyer 2001; Chen & Hennart 2002; Dikova & van Witteloostuijn 2007). Several studies measured asset specificity at the level of transactions, for example using survey-based measures on professional skills, specialized know-how, and customization (Erramilli & Rao 1993), on technology and management transfer (Meyer 2001), or on human asset specificity, proprietary products/service, and dedicated asset specificity (Brouthers & Brouthers 2003; Brouthers, Brouthers & Werner 2003).

Existing empirical studies provided mixed findings as to the relationship between asset specificity and FDI ownership mode strategy. R&D intensity was found to increase the preference for MNEs choosing WOS over JVs (Gatignon & Anderson 1988; Padmanabhan & Cho 1996; Makino & Neupert 2000; Hennart & Larimo 1998; Chen & Hu 2002; Dikova & van Witteloostuijn 2007), whereas non-significant relationship was found in the studies by Gomes-Casseres (1989, 1990), Hennart (1991), Taylor et al. (1998), Meyer (2001), Brouthers (2002), and Chen and Hennart (2002) and the positive relationship between asset specificity and JVs was found in the study by Palenzuela and Bobillo (1999). Inconsistent findings were also found for advertising intensity. For example, while Gatignon and Anderson (1988) and Gomes-Casseres (1989, 1990) found that MNEs preferred WOS over JVs when the degree of advertising intensity is high, whereas Hennart (1991) found insignificant relationship.

For studies using survey-based data, Meyer (2001) found that technological and management transfer provided non-significant influence on the choice between WOS and JVs. Brouthers et al. (2003) provided empirical support that asset specificity proxied at the transaction level was positively related to WOS as opposed to JVs for both manufacturing and service firms, whereas Brouthers and Brouthers (2003) found that this relationship was significant for service firms but not for manufacturing firms.

Internal Uncertainty: Internal uncertainty relates to uncertainties that arise from incomplete knowledge about partners' future actions, or what Williamson (1975, 1985) referred to as "opportunism" and Verbeke and Graidanus (2009) as "bounded reliability". The most commonly used empirical constructs for internal uncertainty are cultural distance between home and host country and international experience (Hennart 1991; Agarwal 1994; Erramilli & Rao 1993; Padmanabhan & Cho 1996; Hennart & Larimo 1998). The conventional arguments are that the more "distant" a target country and the less experienced a firm is in dealing with that sort of business partner, the higher the likelihood of unexpected or opportunistic behaviours of the business partner (Tihanyi, Griffith & Russell 2005). Cultural distance has often been measured by Kogut and Singh (1988)'s composite index based on Hofstede (1980, 1991, 2001)'s four cultural dimensions (Gatignon & Anderson 1988; Erramilli & Rao 1993; Agarwal 1994; Erramilli 1996; Hennart & Larimo 1998; Padmanabhan & Cho 1996; Cho & Padmanabhan 2005). The study by Lopez-Duarz and Vidal-Suarez (2013) measured cultural distance by Schwartz and GLOBE's approach. A few other studies approached cultural distance with the geographical locations in which the investments are located (Chang & Rosenzweig 2001).

In terms of the findings, most of the reviewed studies such as Gatignon and Anderson (1988), Erramilli and Rao (1993), Agarwal (1994), Hennart and Larimo (1998), Taylor et al. (1998) and Brouthers and Brouthers (2001) found that cultural distance have a positive impact on preference for JVs over WOS, whereas Padmanabhan and Cho (1996), Meyer (2001), Chang, Kao, Kuo and Chiu (2012) and Lopez-Duarte and Vidal-Suarez (2013) found the opposite relationship and Cho and Padmanabhan (2005) and Demirbag et al. (2009) revealed insignificant relationship.

International experience has been proxied using secondary data and consists of four dimensions: length, scope, diversity, and intensity (Clarke, Tamaschke & Liesch 2013). The length of international experience is related to the number of years since the establishment of the MNE's first foreign subsidiary (Hennart 1991; Padmanabhan & Cho 1996; Contractor & Kundu 1998; Cho & Padmanabhan 2005; Li & Meyer 2009). The scope of international experience refers to the number of countries in which the parent firms have established subsidiaries (Kuo et al. 2012), intensity of international experience refers to the volume of cross-border activities and is often measured by the number of foreign subsidiaries prior to the observed investment (Gatignon & Anderson 1988; Gomes-Casseres 1989; Kuo et al. 2012). Further on, Agarwal (1994) indirectly measured international experience with the proportion of assets in foreign countries. Direct measures of internal uncertainty at the level of specific partner firms include sur-

vey-based perceptual measures such as problems associated with monitoring performance product/service quality (Brouthers et al. 2003), monitoring and safeguarding proprietary knowledge (Brouthers et al. 2003) and the costs of search, contracting and enforcement (Brouthers and Brouthers 2003).

Existing empirical findings related to international experience tend to be mixed, For example, Gatignon and Anderson (1988), Hennart (1991), Agarwal and Ramaswami (1992), Contractor and Kundu (1998), and Kuo et al. (2012) found that firms with limited or no international experience tend to prefer JVs as opposed to WOS, whereas Gomes-Casseres (1989) found reverse relationship and Padmanabhan and Cho (1996) found non-significant relationship. Li and Meyer (2009) even found different effects for different types of host countries. Previous studies relying on survey-base data also provided mixed results. While Brouthers et al. (2003) found that the impact of internal uncertainty was non-significant, Brouthers and Brouthers (2003) found internal uncertainty was associated with WOS as opposed to JVs for service firms. Overall, the findings on the impacts of internal uncertainty on FDI entry mode strategy have far been consistent.

External Uncertainty: External (or environmental) uncertainty has been operationalized in a number of different ways. Some existing studies focused on country risk, operationalized for example using the classification system of Goodnow and Hanz (1972) (Anderson & Gatignon 1988; Agarwal 1994). Several studies relied on survey data to directly measure country risk, for example, risk of converting and repatriating profits, nationalization risk, as well as political, social and economic stability (Brouthers 2002; Brouthers & Brouthers 2003; Brouthers et al. 2003). Moreover, Klein et al. (1990) proxied country risk with managerial perceptions on volatility and diversity surrounding a particular transaction.

The impacts of country risk on FDI entry mode strategy have been mixed. While a few studies such as Gatignon and Anderson (1988) and Agarwal (1994) found that country risk would lead to the preference of WOS as opposed to JVs, several other studies such as Klein et al. (1990), Contractor and Kundu (1998), Palenzuela and Bobillo (1999), Brouthers (2002), Brouthers and Brouthers (2003) and Brouthers et al. (2003) found that lower commitment mode is preferable when entering high risk economies. In a meta-analysis study, Zhao et al. (2004) found that country risk is the most influential TCE factor to explain the entry mode choice of JVs and WOS.

External uncertainty has also been proxied by market uncertainty or potential for a firm's product or service (Agarwal 1994; Taylor et al. 1998; Brouthers 2002; Cui & Jiang 2009). Most of the reviewed studies found that market potential in the host country would increase the preference of parent firms to choose WOS as

opposed to JVs (Agarwal & Ramaswami 1992; Agarwal 1994; Taylor et al. 1998). However, in a recent study, Cui and Jiang (2009) found that Chinese firms preferred JVs over WOS when entering into high potential markets. Brouthers (2002) found non-significant relationship between market potential and organizational form.

As can be seen from the discussion above (subsection 2.2.3.), the existing findings as to the impacts of key TCE variables such as asset specificity and uncertainty on FDI entry mode strategy have been far from consistent. Those inconsistent findings may be partly explained by unrecognized moderating effects and different research designs.

2.2.4. Limitations of Transaction Cost Economics

Transaction costs economics have evolved over the past decades and it has been regarded as one of the most powerful theories to explain governance structures. However, there are several limitations associated with TCE. **First**, it has been argued that TCE literature focuses on cost minimization but underestimates value creation. This is likely to be a limitation for ignoring value creations for several reasons. First, TCE has largely ignored the opportunity costs associated with timing of entry. Second, TCE underestimates the potential of generating high returns when investing in high uncertain markets. Thus, TCE focuses on incurred unobserved costs when making investments under uncertainty, but it ignores the opportunity costs arise from not making such investments (Brouthers, Brouthers & Werner 2008).

Second, TCE framework has been criticized to underestimate "internal" transaction costs within a multinational firm (Li & Meyer 2009; Meyer & Wang 2015 forthcoming). Internal transaction costs within a multinational is equally important, if not more important, as transaction costs of external market to influence FDI decisions. The same construct of TCE may influence the costs of using JVs and WOS in the same direction. For example, traditional TCE argues that international experience plays an important role in lowering internal uncertainty, and thus, firms with more international experience are more likely to opt for WOS as opposed to JVs ownership strategy (Anderson & Gatignon 1988; Brouthers & Hennart 2007). However, it has also been argued that experienced firms are able to lower the costs when finding, negotiating, and coordinating with a local partner, making JV a preferred FDI ownership mode strategy (Li & Meyer 2009). The same arguments can be applied to cultural distance between home and host country (Meyer & Wang 2015, forthcoming). Thus, it can be said that the relationship

between several TCE constructs and FDI ownership mode strategy has been ambiguous.

Third, it has been mentioned that the production costs such as taxes and labour costs have been largely overlooked in TCE framework (Hollensen 2014). Williamson (1985) argued that the most efficient form of entry is the one that helps to minimize the sum of production and transaction costs. Anderson and Gatignon (1986) added that foreign entry mode is an efficiency driven strategic choice. In a longer run, it is expected that the foreign entry mode choice would increase risk adjusted return of the firm (Hill et al. 1990). However, existing empirical studies have not sufficiently considered production and transaction costs into their research design.

2.3. Resource-based View

In this section (section 2.3.), the author offers a detailed literature review for RBV of the firm. The review of RBV starts with a discussion of the intellectual thoughts established by scholars including Penrose (1956), Wernerfelt (1984), Rumelt (1984), Dierickx and Cool (1989), Barney (1986, 1991), Peteraf (1993), Oliver (1997), and among others (subsection 2.3.1.). In the second part of this section, RBV-based explanations of FDI entry mode strategy and subsidiary survival are presented (subsection 2.3.2.). Then, subsection three reviews and synthesizes the major findings of existing RBV-based studies on FDI entry modes and subsidiary survival (subsection 2.3.3.). In the last subsection, the limitations associated with RBV of the firm are briefly discussed (subsection 2.3.4.).

2.3.1. Development of Resource-based View

Resource-based view of the firm has been considered as one of the most prominent and powerful theories to describe, explain, and predict organizational relationships. The RBV of the firm started to emerge and grow in 1980s and it has been evolved over past thirty years (Barney, Ketchen & Wright 2011). The main contributions of RBV of the firm have been in the field of strategic management and other related scientific disciplines such as human resource management (Wright, Dunford & Snell 2011), international business (Peng 2001), and entrepreneurship (Alvarez & Busenitz 2001). The development of the RBV has undergone three stages: introduction (1980s and early 1990s), growth (1990s), and maturity stage (2000s) (Barney et al. 2011). In the next, the key RBV related intellectual thoughts are reviewed chronologically.

Penrose (1956)'s seminar work on "*The Theory of the Growth of the Firm*" has been widely regarded as one of the earliest intellectual work to RBV. Penrose (1956) aimed to understand the process through which firms grow and limits of such growth. To understand what have constrained firms to growth, Penrose (1956) suggested that firms should be defined from two dimensions: 1) a collection of resources and 2) administrative framework that coordinates activities of groups and individuals. According to Penrose, the growth of firms is constrained by the productive opportunities provided by a collection of resources controlled by firms and the administrative framework coordinating the use of these resources. In other words, firms' growth is limited when resources are limited and inadequate. There are two additional contributions by Penrose (1956). First, Penrose argues that firms are fundamentally different because they control heterogeneous bundle of resources. Second, Penrose starts looking at the influence of broaden firm specific resources such as entrepreneurial skills and management group have on the competitiveness of the firm. Although Penrose (1956) shed some lights on the importance of firm specific resources on firms' growth, RBV of the firm started to grow from the beginning of 1980s.

Other influential work on RBV of the firm includes Wernerfelt (1984), Rumelt (1984), Dierickx and Cool (1989), Barney (1986, 1991), Peteraf (1993), Oliver (1997), and among others. Wernerfelt (1984)'s study was an attempt to develop a theory of competitive advantage based on resources a firm develops or acquires to implement product market strategy. Wernerfelt's work was a complementary perspective to Porter (1980)'s theory of competitive advantage based on a firm's product market position in an industry. This is the reason why Wernerfelt (1984) referred to his thoughts as a resource-based *view*. Wernerfelt (1984) defined resources as a strength and weakness of a given firm. Wernerfelt (1984) argued that a firm's product market positions are influenced by the portfolio of resources it controls, and hence, competitions in product market positions can also be seen as competitions in the resources positions. An important contribution by Wernerfelt to RBV is that the firm specific resources enable firms to gain competitive advantage to implement their product market strategy.

Rumelt (1984) developed a strategic theory of firms, focusing on the ability of firms to more efficiently generate economic rents than other forms of governance structure. In contrast to the TCE-based notion of minimizing transaction costs and opportunism, Rumelt (1984) explained existence of firms from the perspective of rent generating. Similar to Penrose (1956), Rumelt (1984) referred firm as a unique bundle of resources and relationships. As time, competition, and change may gradually diminish the economic value of resources and relationships, the task of management group is to adjust and renew them. Furthermore, Rumelt

(1984) argued that imitability of the resources largely depends on the "isolating mechanisms". In his paper, Rumelt (1984) presented a list of isolating mechanisms (e.g. special information, patents and trademarks, reputation, and image) and discussed the characteristics of the resources that are likely to increase the economic rents.

Consistent with Wernerfelt (1984), Barney (1986) suggested that based on the resources controlled by a firm, it is possible to develop a theory of firm performance. Barney (1986) introduced the concept of strategic factor market, where resources necessary to implement a product market strategy are acquired. Barney (1986) argued that firms would need to create competitive imperfections in strategic factor markets so that they can earn above normal returns. According to Barney (1986), different expectations of future values of resources between different firms are the major causes of competitive imperfections in strategic factor market. Firms are able to achieve better expectations of future values of resources by analyzing competitive environment and skills and capabilities they already possess. An additional contribution of Barney (1986)'s paper was to theorizing how organizational culture could be a source of sustainable competitive advantage.

Dierickx and Cool (1989) further extended Barney (1986)'s work, arguing that critical resources are accumulated rather than acquired in strategic factor markets. According to Dierickx and Cool (1989), critical and strategic assets are those assets which are non-tradable, non-imitable, and non-substitutable. Particularly, Dierickx and Cool (1989) claimed that resources are very useful when no effective substitutes are available.

Dierickx and Cool (1989)'s intellectual thoughts have been further developed by Barney (1991) and Peteraf (1993). Barney (1991) provided a detailed definition of resources and conceptualized firm specific resources to consist of all assets, capabilities, organizational processes, firm attributes, information, and knowledge, which are controlled by a firm to enable a firm to conceive of and implement strategies that improves its efficiency and effectiveness. An important contribution of Barney (1991)'s work was to develop a framework of sustainable competitive advantage, which are helpful for firms to achieve long-term efficiency and effectiveness. According to Barney (1991), these resources must be simultaneously valuable, rare, inimitable, and non-substitutable (VRIN framework) in order to provide firms some types of sustainable competitive advantage (Barney 1991). Figure 6 depicts Barney (1991)'s framework for sustainable competitive advantage.

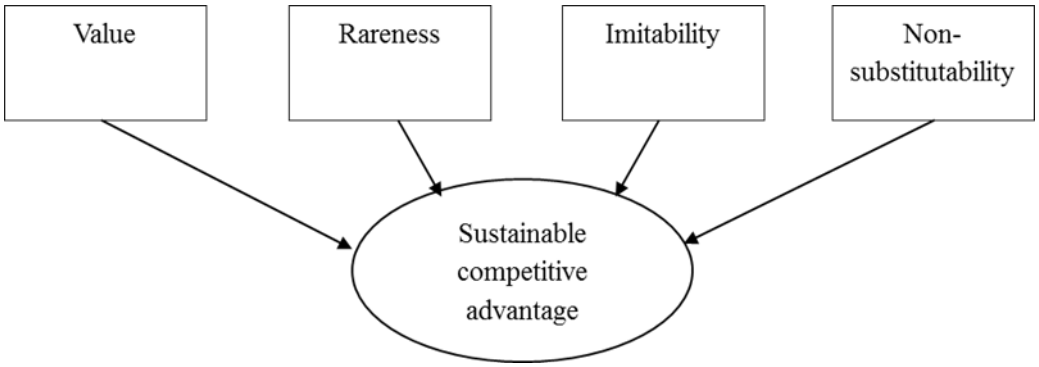


Figure 6. Barney (1991)'s Framework on Sustainable Competitive Advantage

Peteraf (1993) developed a resource-based model of sustainable competitive advantage. According to Peteraf (1993), four conditions must be met to achieve sustainable competitive advantage: 1) resource heterogeneity, 2) *ex-post* limits to competition, 3) imperfect resource mobility, and 4) *ex-ante* limits to competition. Resource heterogeneity is important since it creates Ricardian or monopoly rents. *Ex-post* limits to the degree of competition would ensure that Ricardian or monopoly rents are prevented from being reduced. Imperfect mobile resources help the firm to retain their resources within firm. *Ex-ante* limits to competition prevent the rents from being offset by costs. Peteraf (1993) claimed that the resource-based model of sustainable competitive advantage explains differences in firms' performance. Furthermore, this model is also helpful for both single business strategy and corporate strategy. Figure 7 in the below illustrates Peteraf (1993)'s framework on sustainable competitive advantage.

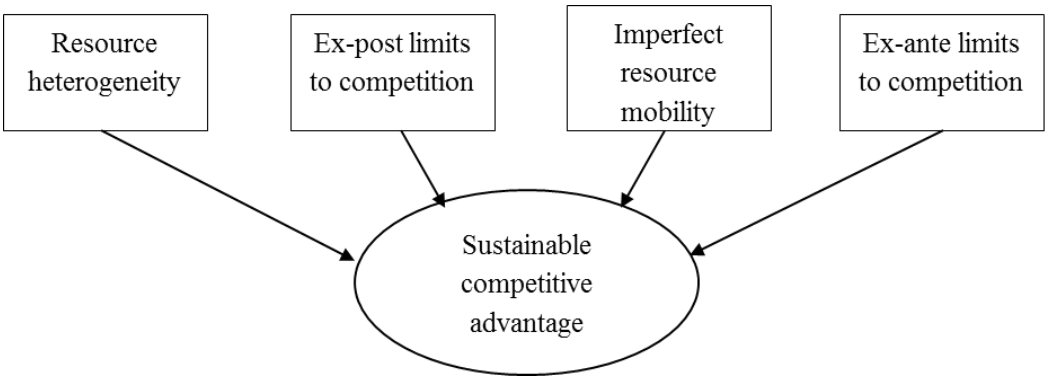


Figure 7. Peteraf (1993)'s Framework on Sustainable Competitive Advantage

Oliver (1997) mentioned that one of the limitations of RBV of the firm is that it ignores the context where the resources selection decisions are made. Thus, the main contribution of Oliver (1997)'s study was to combine insights from both RBV of the firm and institutional theory to analyze sustainable competitive advantages for firms. Oliver (1997) argued that the context and process of resource

selection exert remarkable influences on firms' sustainable competitive advantages. It has been argued that the sustainable competitive advantage depends on the ability of firms to manage institutional context (i.e. internal cultures, state, and society) in which the resource decisions are made.

It should be noted that since the middle of 1990s, RBV has triggered the development of closely related theoretical perspectives such as knowledge-based view (Grant 1996), nature resource-based view (Hart 1995), dynamic capabilities (Teece, Pisano & Shuen 1997), and property rights theory (Foss & Foss 2005).

In the period of 2000s, the development of RBV entered to the maturity stage. Several review and meta-analysis studies have been carried out during this time period to assess and evaluate the usefulness of RBV of the firm. For example, Barney, Wright and Ketchen (2001) reviewed the impacts of RBV of the firm on fields other than strategic management such as human resource management, marketing, entrepreneurship, economics, finance, and international business. Armstrong and Shimizu (2007) critically reviewed the methodological issues used in existing RBV-based empirical studies. Kraaijenbrink, Spender and Groen (2010) reviewed the critiques associated with the RBV.

2.3.2. Resource-based Explanations of FDI Entry Mode Strategy and Subsidiary Survival

Barney (1991) argued that firms generate sustainable competitive advantages by developing or acquiring resources and capabilities, which are valuable, rare, imperfectly imitable, and non-substitutable (VRIN framework). The IB literature has directly applied RBV of the firm's arguments of resource exploitation and exploration to both FDI ownership and establishment mode strategy (Peng 2001; Sharma & Erramilli 2004). It has been argued that multinationals tend to exploit their firm specific advantages abroad or use foreign markets to explore crucial resources and capabilities possessed by local firms (Peng & Meyer 2011). Multinationals would need to access hard-to-transact complementary resources and capabilities controlled by local firms, so that they can be competitively successful when operating in international markets. There are three entry mode choices for MNEs to access complementary resources and capabilities: 1) they can access them by forming JVs with local partners (JVs greenfields), 2) they can create the resources and capabilities from scratch (WOS greenfields), or 3) they can acquire them from existing firms (full or partial acquisitions) (Peng & Meyer 2011).

However, it has been referred that it is sometimes difficult for investing firms to opt for full ownership as opposed to shared ownership to access crucial resource

and capabilities possessed by local firms. First, both WOS greenfields and full acquisitions require larger capital commitment. Further on, acquisitions are subject to resistance from both individuals working in the local acquired firms and from nationalistic sentiments (Slangen & Hennart 2007; Peng & Meyer 2011). Many of developing and transitional economies such as China have placed ownership restrictions on domestic firms, and hence, it is sometimes difficult for Western MNEs to acquire the target firms (Hennart & Park 1993; Child & Tse 2001; Teng 2004; Slangen & Hennart 2007). Thus, although TCE argues that asset specificity would increase the preference for MNEs opting for WOS as opposed to JVs ownership mode strategy, RBV of the firm argues that MNE may still opt for JVs to avoid the costs and challenges associated with full ownership, i.e. WOS greenfields and full acquisitions.

Resource-based view of the firm has also been used to analyze determinants of establishment mode strategy, i.e. greenfields and acquisitions. The typical argument is that firms operating in a diverse range of events and ideas can enhance their knowledge base and technological skills (Slangen & Hennart 2007). International experience has been considered as an important determinant for establishment mode strategy. MNEs operating in many countries have learnt sufficient technological skills, and hence, it is less likely for internationally experienced MNEs to use acquisitions to acquire such technological skills (Barkema & Vermeulen 1998). A similar argument has been linked with degree of product diversification of the investing firm. MNEs operating in multiple product markets have gained a diverse range of technological skills, and thus, their preference for greenfield investments over acquisitions tend to increase (Cho & Padmanabhan 1995; Barkema & Vermeulen 1998).

Since RBV of the firm has been developed to address the sources of sustainable competitive advantage, it shed some important lights on post-entry subsidiary performance or survival. According to Barney (1991), resources that are valuable, rare, non-imitable, and non-substitutable are the main sources of firms' sustainable competitive advantage. Sustainable competitive advantage allows firms to generate above normal returns to the firms (Barney 1991; Oliver 1997). Thus, valuable, rare, non-imitable and non-substitutable resources would improve firms' performance or survival. It has been argued that RBV of the firm is a theory of firm rents, and TCE is a theory of existence of firm. Thus, the RBV is a complementary theory to TCE (Tsang 2000; Barney 2001).

2.3.3. Applications of RBV in FDI Entry Mode Strategy and Subsidiary Survival Studies

Although RBV of the firm has been primarily developed to explain sustainable competitive advantages and firm's performance (Barney et al. 2011), several existing empirical studies have directly applied RBV-based arguments to analyze either FDI entry mode strategy or subsidiary survival. The purpose of this subsection is to review and synthesize the key findings associated with the impacts of key RBV of the firm constructs on 1) FDI ownership mode strategy, 2) FDI establishment mode strategy, or 3) subsidiary survival. The author of the present research used two criteria to select empirical studies for this review: 1) the dependent variable includes either ownership or establishment mode strategy, or subsidiary survival, and 2) the authors of the reviewed studies used RBV of the firm as the main theoretical foundation to address the phenomenon.

Existing RBV-based studies have considerably addressed the impacts of both **tangible and intangible** firm specific resources have on FDI entry mode strategy and subsidiary survival. **Parent firm size** has been an important tangible firm specific resource. In China-based studies, the impacts of firm size on FDI ownership mode strategy tend to be consistent. Both of Shi et al. (2001) and Claver and Quer (2005) found that parent firm size increased the preference of WOS as opposed to JVs. Parent firm size has also been linked with FDI establishment mode strategy and the existing findings have been mixed. For example, while Andersson and Svensson (1994) and Larimo (2003) found that parent firm size encouraged acquisitions, Cho and Padmanabhan (1995) and Padmanabhan and Cho (1999) found non-significant relationship between parent firm size and establishment mode strategy.

Building on RBV of the firm, Anand and Delios (2002) found that relative industry **R&D intensity** is a significant determinant of establishment mode strategy. A high degree of R&D intensity of the industry entered in the host country increased the preference of acquisitions, whereas a high level of industry R&D intensity of the same industry in the home country encouraged MNEs to opt for greenfields investments. Thus, the impact of industry R&D intensity on FDI establishment mode strategy was moderated by home versus host industry. R&D intensity has also been linked with subsidiary survival. Delios and Makino (2003) provided empirical support that a high degree of technological intensity increased the probability of MNEs' survival.

Host country experience has been considered as an important intangible firm specific resource (Luo 2001; Claver & Quer 2005). The existing findings for the impacts of host country experience on FDI entry mode strategy tend to be mixed.

For example, in existing China-based studies, Shi et al. (2001) found that host country experience was positively associated with JVs as opposed to WOS, whereas both Luo (2001) and Claver and Quer (2005) found that MNEs with sufficient experience in China would opt for WOS over JVs ownership mode strategy.

In non-China-based studies, the empirical findings as to the impact of host country experience on FDI establishment mode strategy also tend to be mixed. While Anderson and Svenssen (1994) and Barkema and Vermeulen (1998) found positive relationship between host country experience and the choice of acquisitions, this relationship was non-significant in the studies by Hennart and Park (1993), Cho and Padmanabhan (1995), Padmanabhan and Cho (1999) and Larimo (2003). Related to the findings in existing subsidiary survival studies, Delios and Beamish (2001) and Delios and Makino (2003) provided empirical support that host country experience would increase the survival rate of Japanese foreign subsidiaries.

Another important intangible firm specific resource is **international experience**. In China-based studies, Chiao et al. (2010) found that international experience increased the preference for MNEs to choose WOS over JVs. For studies in other developing and transitional economies, Brouthers and Brouthers (2001) found that CEE's experience increased the preference for MNEs to opt for WOS as opposed to JVs when entering into Central and Eastern Europe. Other studies found that MNEs are less likely to opt for WOS greenfields as opposed to JVs and full acquisitions when they access intangible complementary local resources (Meyer et al. 2009). Delios and Henisz (2000) found that experience-based capabilities interacted with both public and private expropriation hazards to influence MNEs' preference on high versus low ownership mode strategy.

Existing studies have provided mixed findings as to the relationship between international experience and FDI establishment mode strategy. Several studies found that international experience increased the preference for acquisitions (Andersson & Svensson 1994; Harzing 2002), other studies found non-significant impacts (Cho & Padmanabhan 1995; Larimo 2003) or even negative relationship (Barkema & Vermeulen 1998; Padmanabhan & Cho 1999; Brouthers & Brouthers 2000). Several scholars empirically found that international experience would increase the probability of foreign subsidiaries to survive (Delios & Makino 2003).

Degree of product diversification has been referred to as an important firm specific resource in existing RBV-based studies (Slangen & Hennart 2007). The traditional argument is that MNEs operating in multiple product markets have learnt sufficient technological skills, and thus, they are less likely to make acquisitions

as opposed to greenfields (Slangen & Hennart 2007). The findings from early studies on the impacts of degree of product diversification have been mixed. For example both Cho and Padmanabhan (1995) and Padmanabhan and Cho (1999) found that degree of product diversification was not a significant determinant for FDI establishment mode strategy, however, Barkema and Vermeulen (1998) found that degree of product diversification was positively associated with greenfields over acquisitions.

2.3.4. Limitations of Resource-based View

As referred by Barney et al. (2011), the development of RBV of the firm has evolved over the past decades, and several studies have started to offer retrospective assessments associated with RBV of the firm. For example, Crook, Ketchen, Combs and Todd (2008) provided a meta-analysis of RBV-based empirical studies, and they conclude that strategic resources indeed increase the organizations' performance. Armstrong and Shimizu (2007) and Newbert (2007) critically examined methodological issues associated with RBV. In a more recent study, Kraaijenbrink et al. (2010) provided a comprehensive and critical review of the limitations associated with RBV of the firm. The discussion of the limitations of RBV in this dissertation is therefore based on the review study by Kraaijenbrink et al. (2010).

According to Kraaijenbrink et al. (2010), there are three major limitations associated with RBV of the firm. The **first** limitation is concerned that both Barney's (1991) and Peteraf (1993)'s framework are neither necessary nor sufficient conditions for firms to generate sustainable competitive advantage. The limitation associated with sufficiency concerns with the lack of strong empirical supports for the relationship between firm specific resources and sustainable competitive advantage. As pointed out by review studies such as Armstrong and Shimizu (2007) and Newbert (2007), existing RBV-based empirical research has only generated modest supports, suggesting that other factors need to be considered so that firms can generate sustainable competitive advantage. There are also studies such as Foss and Kundsen (2003), arguing that both Barney's (1991) and Peteraf (1993)'s frameworks are not necessary for sustainable competitive advantages. For example, Foss and Knudsen (2003) argued that "immobility" and "uncertainty" are the necessary conditions for sustainable competitive advantage. Other conditions are additions to the explanation of sustainable competitive advantage.

A **second** limitation associated with RBV of the firm is that the concept of "value" has not been clearly defined. Barney (1991) referred that valuable, rare, inimitable, and non-substitutable firm specific resources would generate sustainable

competitive advantage. Further on, Barney (2002) defined sustainable competitive advantages as improved effectiveness (increasing value) and efficiency (reducing costs). Thus, the term "value" seems to appear in the definitions of both "resources" and "sustainable competitive advantages". Kraaijenbrink et al. (2010) argued that since the "resources" and the "sustainable competitive advantages" the resources generated have been defined with identical concepts, such as "value", the independent and dependent variable of the RBV of the firm are somewhat the same.

The **last** limitation associated with RBV is that the definition of "resource" is too broad and inclusive. For example, Wernerfelt (1984) conceptualized resources as "strength and weakness of a given firm". Barney (1991) defined firm resources as "a bundle of tangible and intangible assets, including a firm's management skills, its organizational process and routines, and information and knowledge it controls". Thus, it seems that firm specific resources include all kind of assets, skills, and knowledge. Krraijenbrink et al. (2010) argued that inclusiveness of RBV is one of the major weaknesses of RBV, as it causes tautology. There are two challenges when the definition of "resource" is too broad. First, inclusive definition of resource fails to distinguish between resources that are inputs of the firms and capabilities that allow firms to select, deploy and organize such inputs. Second, a broader definition of resources does not allow RBV to examine the impacts of different resources on sustainable competitive advantage (Kraaijenbrink et al. 2010).

2.4. Institution-based View

This section (section 2.4.) presents a literature review about the applications of IBV of business strategy. This review starts with a discussion of two alternative perspectives on institutions: sociological (DiMaggio & Powell 1983; Scott 1987, 1995, 2008) and economic version of institutions (North 1990; Williamson 1975, 1985, 2000). Then, both internal and external drivers of IBV of business strategy (Peng 2002; Peng, Wang & Jiang 2008) are discussed (subsection 2.4.1.). Next, the institution-based explanations of FDI entry mode strategy and subsidiary survival is shortly presented (subsection 2.4.2.). This chapter then reviews and synthesizes the key findings in existing institution-based empirical studies on FDI entry mode strategy and subsidiary survival (subsection 2.4.3). This chapter ends with a brief discussion associated with the limitations of IBV of business strategy (subsection 2.4.4.).

2.4.1. Development of Institution-based View

There are several definitions of institutions. According to Williamson (1985), institutions are the "mechanisms which govern transactions and a transaction occurs when a good or service is transferred across technologically separable interfaces". Economic historian North (1990) defined institutions as "the humanly devised constrains that structure human interaction". Sociologist Scott's (1995) definition is that institutions are the "regulatory, normative and cognitive structures and activities that provide stable and meaning to social behavior". Davis and North (1971) defined institutional framework in a host country as "the set of fundamental political, social, and legal ground rules that establishes the basis for production, exchange, and distribution".

As pointed out by Peng, Sun, Pinkham and Chen (2009), there are both **external and internal forces** which drive the emergence and growing of IBV of business strategy. There are two perspectives on institutions in the existing literature: economic and sociological version of institutions. These two perspectives of institutions have been considered as **external forces** for the emergence of IBV of business strategy. While the sociological perspective of institutions focuses on gaining legitimacy in a host country (DiMaggio & Powell 1983; Scott 1987, 1995, 2008; Kostova 1996), the economic version of institutions places emphasis on improving efficiency (Coase 1937, 1960; North 1995; Williamson 1991, 1998, 2000). The sociological version of institutions has been labelled as "Institutional Theory", whereas economic perspective of institutions has been referred to as "New Institutional Economics" (NIE). Although the labels used for the above mentioned two versions of institutions are seemingly different, it can be said that the sociological perspective of institutions complements with the economic version of institutions (Scott 1995; Peng et al. 2009).

New institutional economics are mainly concerned with 1) institutional environments (rules of the game) and 2) institutions of governance (play of the game). Institutional environment or "the rules of the game" has its origin in Coase (1960)'s seminal work, titled as "The Problem of Social Cost", whereas the institutions of governance or "the play of the game" is rooted in Coase (1937)'s work on "The Nature of the Firm". The term of new institutional economies was firstly introduced in Williamson (1975)'s work, titled as "Markets and Hierarchies". NIE has relaxed the assumptions of neo-classical economics, including perfect information, unbounded rationality, and zero transaction costs. For example NIE explicitly assumed that individuals deal with incomplete information and have bounded rationality, and hence, they would face uncertainties arise from unfore-

seen events and would incur higher level of transaction costs to acquire information (Menard & Shirley 2005, 2008).

Institutional framework in the host country can be broadly classified into formal and informal institutions. Formal institutions refer to constitution, statute law, and common law, whereas informal institutions include conventions, norms of behavior, and self-imposed codes of conduct. Both formal and informal institutions have been designed to reduce uncertainty and transaction costs and to establish a stable structure that facilitates interactions between various economic agents (North 1990).

As pointed out by Scott (2008), the sociological version of institution, referred as institutional theory, has evolved over the past thirty years. Sociological perspective of institutions claimed that business strategy is mainly shaped by institutional constrains (Hoskisson et al. 2000). Institutional theory emphasized the systems surrounding organizations that shape social and organizational behavior (Scott 1995). Scott (1995) introduced regulative, normative and cognitive pillars of institutions that provide three distinctive but related bases for legitimacy. Regulative pillar, defined as the coercive power of governments, is the supportive pillar for formal institutions. The normative pillar refers to as how the values, beliefs, and norms of other relevant players influence the behaviour of individuals and firms, whereas the cognitive pillar is defined as the internalized, taken-for-granted values, and beliefs that guide individuals and firms' behaviour (Peng et al. 2009).

As discussed above, the economic and sociological perspective of institutions differ in their focus, origins, and applications to IB studies. **First of all**, the focus of economic and sociological versions of institutions is different. While the focus of NIE is on economic efficiency, institutional theory emphasizes both internal and external legitimacy. **Second**, the origin of the two perspectives of institutions differs from each other. NIE has its origin in economics literature, whereas institutional theory is rooted in sociological literature. The core constructs derived from economic perspective of institutions are formal and informal institutions (North 1990). **Third**, the key theoretical constructs derived from the economic and sociological version of institutions and their impacts on IB strategy and firm performance have been different. NIE refers that both formal and informal institutions affect transaction costs of operating in foreign markets, which in turn, influence IB strategy. Institutional theory conceptualizes institutions consist of three dimensions: regulative, normative, and cognitive dimension. The institutional distance in terms of the above mentioned three dimensions exert significant influence on IB strategy and firm performance. Table 8 provides a summary of the economic and sociological versions of institutions.

Table 8. A Comparison of Economic and Sociological Version of Institutions

Perspectives	Focus	Origins	Applications to IB studies	Influential studies
New Institutional Economics	Efficiency	Economics	Formal and informal institutions in the host country shape TCs of operating in foreign markets, and hence, influence the IB strategy.	Coase (1937, 1960); North (1990, 1995); Williamson (1998; 2000)
Institutional theory	Legitimacy	Sociological	Regulative, normative and cognitive institutional distance influence on IB strategy and survival/performance of foreign subsidiaries.	DiMaggio & Powell (1983, 1991); Scott (1995); Kostova (1996)

In addition to external forces, there are **internal forces** underpinning the fast growing of IBV of business strategy (Peng et al. 2009). In the strategic management literature, industry organization or industry-based view (Porter 1980) has been criticized for not paying much attention on contextual variables which may influence the competition in a particular industry (Dobbin & Dowd 1997). For example, it has been mentioned that under certain formal institutional conditions (government laws and regulations), a cost leadership strategy has been considered as unethical (e.g. Wal-Mart "everyday low price strategy") or even illegal in some industries (e.g. Japanese bookselling industry). Similarly, RBV of the firm has also been criticized to ignore the context (Priem & Butler 2001; Oliver 1997). For example, it has been argued that valuable, rare, inimitable and non-substitutable resources in one context may become non-valuable, plentiful, and easy to imitate and substitute in another context (Brouthers et al. 2008). Those critiques associated with lack of attention to context have called for more research addressing the institutions of a host country (Peng 2002; Meyer & Peng 2005; Peng et al. 2008; Peng et al. 2009).

Peng (2002) introduced an **institution-based view of business strategy** to combine insights from both economic and sociological version of institutions. Peng (2003) claim that although there are some differences between new institutional economics (North 1990; Williamson 2000) and institutional theory (Scott 1995), these two perspectives of institutions complement to each other. According to Peng et al. (2009), there are two core assumptions for institution-based view. **First**, managers make rational strategic choices within both formal and informal constraints in a given institutional framework. However, managers "intended to be rational, but only limited so" (Simon 1956). **Second**, when formal institutions

failed, informal institutions play a more significant role in reducing uncertainty (Peng & Heath 1996; Peng et al. 2009).

Institution-based view has mainly shed useful lights for research in developing and transition economies such as CEE and China. For example, it has been applied to theoretically address the growth of the firm (Peng & Heath 1996), organizational learning (Luo & Peng 1999), network strategies (Peng 2003; Peng & Zhou 2005), corporate governance (Peng 2004), and strategic groups (Peng, Tan & Tong 2004) in China. Further on, IBV of business strategy has been applied to study FDI entry strategies (Arslan 2011; Arslan & Larimo 2011; Arslan 2012). Since the present research focuses on China context, in the next, the author reviews intellectual thoughts associated with IBV established mainly by Mike Peng.

Peng (2003) proposed a two-phase model of market-oriented institutional transitions in developing and transition economies, focusing on the change of network strategies from a relationship-based, personalized transaction structure, calling for a network-centered strategy to a rule-based, impersonal exchange regime suggesting a market-based strategy (Peng 2003). In the early phase of transitions, the costs to engage in relational contracting are high and benefits are low. This is because transaction parties need to build strong social networks through a time- and resource-consuming process to check each other out (Peng 2003; 2009). Once the strong social networks are built between transaction parties, the benefits may outweigh costs of relational contracting. In the later phase of transitions, as the scale, scope and specificity of transactions expends, the costs of relational contracting may gradually increase and outweigh its benefits over time. Hence, the number and strength of network ties a firm can possess is limited (Peng 2003).

Peng and Zhou (2005) evaluated Peng (2003)'s two-phase model of dynamic fit between institutions and network strategies, arguing that the mode is too simplistic and unrealistic. Two arguments have been made. First, there is evidence on embeddedness of strategic networks in both transition and developed economies. Second, both institutional transitions and network content are multi-dimension in nature. Institutional transitions consist of both political and legal institutions. There are two types of networks: business to government (B2G) and business to business (B2B) relationship. Peng and Zhou (2005) proposed that as market transits from a centrally planned to a market economy system, strong-tie based strategy will gradually shift to weak-tie based strategy. Moreover, it has been argued by Peng and Zhou (2005) that transitions in political institutions primarily influence on B2G relationship, while institutional transitions in legal system tend to influence.

Zhou and Peng (2010) further extended the two-phase framework, analyzing the institutional contingencies governing firms' strategic transitions from relational to arm's length transactions during institutional transitions. They decomposed the formal institutions supporting the development of a market economy into three dimensions: competition, legal, and information institutions. Moreover, Zhou and Peng (2010) argued that the more developed institutions that encouraging market competition, enhancing legal effectiveness, and reducing information problems, the early the firms in that country to move from relational to arm's length transactions. Informal institutions also exert an influence on the timing for the strategic transitions. Zhou and Peng argued that the higher a country's level of cooperative norms and values, the later the firms in that country to transit from relational to arm's length transactions. Further on, Zhou and Peng (2010) claimed that the industry and firm characteristics are also likely to influence the change from relational to arm's length transactions. For example in industries where the need for inter-firm coordination is high, relationship-based strategy is more beneficial. Relational transactions are more beneficial for firms with established relationship networks and strong relational capability.

The above intellectual thoughts provided important insights that institutional transition has a direct impact on FDI entry strategies of MNEs operating in emerging and transition markets like China. Peng (2003) and Peng et al. (2008) mentioned that IBV of business strategy is particularly helpful to analyze MNE strategies in developing and transition economies.

2.4.2. Institution-based Explanations of FDI Entry Mode Strategy and Subsidiary survival

Economic theorists such as North (1990) and Williamson (2000) have referred TCE as a part of NIE. Thus, IBV of business strategy has been considered as a complementary theory to TCE. TCE focuses on how the micro institutions such as "opportunism" of the transaction parties have influenced on FDI entry mode strategy, IBV of business strategy, on the other hand, is an attempt to focus on the macro institutions such as formal institutions (government regulations, laws and rules) and informal institutions (norms and values) on FDI entry mode strategy. Thus, IBV contributes to NIE literature by connecting micro and macro institutions (Peng et al. 2009).

Institution-based view provides also implications to the success and failure of firms around the globe (Peng 2006; Peng et al. 2009). Firm performance has been approached from two perspectives in strategic management literature. Industry organization literature focused on impacts of the degree of the industry competi-

tiveness on firm performance (Porter 1980). RBV of the firm posit that firm specific resources and capabilities explain differences in firm performance (Barney 1991). IBV, on the other hand, argues that firm performance is mainly driven by institution conditions in the host country (Peng et al. 2009). It has been argued that it would be difficult for investing firms to perform better than other investing and local firms without getting familiar with formal and informal institution framework in the host country (Luo & Peng 1999; Peng et al. 2009). This is particularly true for Western MNEs entering to developing and transition economies such as CEE and China (Meyer & Peng 2005).

It has been mentioned that IBV is a complementary perspective to industry organization theory (Porter 1980) and resource-based view (Barney 1991) in explaining firm performance (Peng et al. 2008; Peng et al. 2009). Thus, the determinants of firm strategy and performance are a combination of all three theories: industry organization theory, resource-based view and institution-based view. This is particularly true for research in economies like CEE and China, where both formal and informal institutions (Hoskisson et al. 2000; Meyer & Peng 2005; Peng et al. 2008; Peng et al. 2009).

2.4.3. Applications of Institution-based View in FDI Entry Mode Strategy and Subsidiary Survival Studies

Building on IBV, an increasing number of studies have placed emphasis on the impacts of **between-country institutional variables** on FDI entry mode strategy and subsidiary survival. For example, Meyer (2001) operationalized institutional development by European Bank for Reconstruction and Development (EBRD) indices, and found that multinationals preferred WOS as opposed to trade, JVs, and contracts in economies that have progressed further in establishing market economy. Brouthers (2002) found that legal restrictions in host country were significantly associated with JVs as opposed to WOS ownership mode strategy.

Dikova and van Witteloostuijn (2007) found that greater institutional advancement in the host country encouraged the preference of acquisitions establishment and JVs ownership mode strategy in CEE. Also, Dikova and van Witteloostuijn (2007) pointed out that institutional advancement interacted with both technological intensity and international strategy to influence on establishment mode strategy. Meyer et al. (2009) found that in weaker institutions, JVs is preferable to acquisitions and greenfields to access resources, whereas in stronger institutions, acquisitions are preferable to access resources that are intangible and embedded in organizations. Chiao et al. (2010) found that perceived institutional differences have a positive influence on the choice of WOS as opposed to JVs in China.

Chiao et al. (2010) further found that managerial perceived institutional differences moderated the impacts of TCE and RBV constructs on FDI ownership mode strategy.

Building on IBV of business strategy, Arslan (2011)'s doctoral dissertation analyzed the impacts of institutional distance and strength of market conforming values on FDI ownership and establishment mode strategy together. He found that while formal institutional distance increased the probability for Finnish MNEs to opt for JVs as opposed WOS, informal institutional distance was positively associated with WOS. Strength of market conforming values was negatively associated with JVs as opposed to WOS. Further on, informal institutional distance negatively interacted with strength of market conforming values to influence JVs ownership mode strategy.

For the FDI establishment mode strategy, Arslan (2011) found that the impacts of both formal and informal institutional distance were not significant. However, strength of market conforming values was positively and significantly related to the preference of acquisitions over greenfields establishment mode strategy. His results further revealed that informal institutional distance negatively interacted with strength of market conforming values to impact on acquisitions. Arslan and Larimo (2011) focused their analysis on the impacts of both formal and informal institutional distance on FDI establishment mode strategy. Their sample is based on 343 FDIs made by Finnish MNEs operating in selected Asia, Eastern Europe and Latin America. Their empirical findings revealed that high degree of informal institutional distance encouraged greenfields investments, whereas formal institutional distance was significantly associated with acquisition entries.

In addition several studies provided empirical evidence that institutions in the host country exerted significant impacts on FDI subsidiary survival. For example, Gaur and Lu (2007) found that subsidiary survival rate increases when the level of institutional distance is low or mediate and decreases when the institutional distance between home and host country is large. Delios, Xu and Beamish (2008) indicated that the direct impact of institutional strength in the host country is non-significant, however, it positively interacts with degree of within-country product diversity to influence subsidiary exit. Dhanaraj and Beamish (2009) found that both political and social openness are positively associated with subsidiary survival. Demirbag et al. (2011) found that both economic distance and economic freedom distance are significantly associated with subsidiary survival.

In more recent years several scholars are increasingly focusing on how **institutional variables within a single country** have influenced on FDI entry mode strategy and subsidiary survival/performance (Meyer & Nguyen 2005; Chan,

Makino & Isobe 2010; Shi, Sun & Peng 2012; Ma, Tong & Fitza 2013). Meyer and Nguyen (2005) examined the extent to which the subnational institutional differences could explain the location and entry mode strategy of MNEs operating in Vietnam. They found that subnational institutional variables significantly influence both strategic dimensions of MNEs. Drawing on sample of 4931 foreign subsidiaries of 1842 Japanese MNEs operating around 34 states in the U.S. and 21 provinces in China, Chan et al. (2010) found that the performance of Japanese foreign affiliates varies between the States in the U.S. and provinces in China. Their results also indicated that institutional variables are particularly salient in an emerging market of China.

In an article published recently on Journal of International Business Studies (JIBS), Ma et al. (2013) analyzed the direct and indirect impacts of subnational regional effects on performance of MNEs in China. Drawing on a sample of 4303 foreign subsidiaries formed by 428 MNEs ranked among Fortune Global 500 during 1998–2006, Ma et al. (2013)'s results suggested that not only subnational region effects statistically significant in explaining the variation of subsidiary performance, but their interactions with industry, corporate parent, and home-country variables were also significant and economically important.

2.4.4. Limitations of Institution-based View

Although NIE and institutional theory began to take shape already in several decades ago, IBV can be said as a relatively new theoretical lens that combines the best insights from both NIE and institutional theory began to emerge and grow in the early of 2000s (Peng 2002). The limitations and critiques explicitly associated with IBV have not emerged (to my best of knowledge). This is perhaps because the development of IBV has not reached its maturity stage. Both TCE and RBV of the firm have grown for decades and have reached the maturity stage. Thus, both TCE and RBV have received several critiques (Borys & Jemison, 1989; Zajac & Olsen, 1993; Kraaijenbrink et al. 2010).

However, both NIE and institutional theory received some critiques. Thus, the discussion of the limitations of IBV in this dissertation is based on the critiques associated with either NIE or institutional theory. The main limitation related to IBV is that scholars have not agreed with the conceptualization and measurement of institutions. Sociologist scholars such as Scott (1995) conceptualized institutions as regulative, normative, and cognitive intuitions. North (1990) decomposed institutions into formal and informal institutions. Peng and Zhou (2005) further decomposed formal institutions into three dimensions: competition, legal, and information institutions. Several scholars included other institutional variables

into their analysis, such as market-supporting institutions (Meyer & Nguyen 2005), institutional advancement (Dikova & van Witteloostuijn 2007), institutional distance and market conforming values (Arslan 2011). Thus, it can be referred that early scholars have not reached an agreement as to the definitions and conceptualizations of institutions.

The measurements of institutions applied in existing studies also tend to be inconsistent. For example, some scholars have used archival data derived from Global Competitiveness Report (Arslan 2011), Heritage Foundation Economic Freedom (Meyer et al. 2009), World Bank Governance Indicators (Dikova & van Witteloostuijn 2007), World Competitiveness Yearbook (Gaur & Lu 2007), and so on. However, several other scholars directly measured institutional differences though survey based questionnaire (Chiao et al. 2010). To summarize, the major challenge for institutional theorists and researchers is to deal with the inconsistency associated with conceptualization and measurements of institutions.

2.5. Summary of Theoretical Foundations

This section (section 2.5.) provides a summary of the three theories used in this study: transaction costs economics, resource-based, and institution-based view. As can be seen from summary table 9, those three theories differ in their core assumptions, level of analysis, key theoretical constructs, and applications in IB studies. Also, all three theories are subject to some limitations.

First, the assumptions associated with the three theories are different. Bounded rationality is one of the core assumptions associated with TCE. The other assumption of TCE is expected opportunistic behaviours of transaction parties. It is the combination of both bounded rationality and opportunism increases the unobservable transaction costs between transaction parties. Since IBV of business strategy integrates arguments from both sociological (institutional theory) and economic (NIE) perspective of institutions, bounded rationality is also an important assumption for IBV. Another assumption related to IBV is that when formal institution fails to reduce uncertainty, informal institutions play a more important role in reducing risk and uncertainty. The core assumptions of RBV of the firm are resource heterogeneity and resource immobility (Barney 1991).

The three theories differ also in their appropriate level of analysis. The primary level of analysis for TCE is at the transaction level (Tsang 2006), however, the core constructs of TCE such as asset specificity, internal uncertainty, and transaction frequency of the same transactions have been frequently proxied at the firm

level. It should also be noted that another core construct of TCE, external uncertainty, has been proxied either at country level (i.e. cultural distance, country risk) or industry level (i.e. industry sales' growth, market potential). The level of analysis for RBV of firm is clearly at the firm level. IBV has been frequently proxied at the country level. It should be noted that IBV has been also applied in studies focusing on a single emerging economy, whereas the development of market economy have been different across provinces and cities (Meyer & Nguyen 2005).

Further on, TCE, RBV and IBV differ in their key theoretical constructs. It has been widely acknowledged that asset specificity, (internal and external) uncertainty, and frequency of the transaction between the same partners would increase the unobserved transaction costs. The constructs associated with RBV of the firm can be broadly classified into tangible and intangible firm specific resources. Formal and informal institutions are the key variables derived from IBV of business strategy. It should be noted that while the key constructs of the three theories are clearly different, the same constructs have been operationalized with a similar range of variables. For example, R&D intensity, international experience, host country experience, and parent firm size have been considered as important proxies for both transaction costs and resource-based constructs.

Furthermore, the applications of those three theories in IB studies have been somewhat different. TCE-based arguments have been originally applied to explain organizational governance structure between market and hierarchy. It has been extended to analyze both FDI ownership and establishment mode strategy (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007). The conventional wisdom is that a high control mode (i.e. WOS) is more likely to be chosen when the degree of asset specificity, (internal and external) uncertainty, and transaction frequency is high, otherwise, a low control mode (i.e. JVs) is chosen. RBV tends to explain FDI entry mode strategy from both resource exploitation and exploration perspective. Further on, RBV explains differences in firm performance from resource heterogeneity and immobility. IBV of business strategy has placed emphasis on the impacts of both formal and informal institutions in the host country on firm entry strategies and performance (Peng et al. 2008; Peng et al. 2009).

All the three theories have been subject to some limitations. TCE has overlooked "internal" costs and production costs. Further on, TCE have placed emphasis on unobservable transaction costs and efficiency, however, it has underestimated value creation. It has been referred that existing frameworks such as Barney (1991) and Peteraf (1993) are neither necessary nor sufficient conditions for firms

to generate sustainable competitive advantages. Furthermore, the concepts of "value" and "resource" have been defined unclearly in RBV of the firm. The main limitation of IBV of business strategy is that the conceptualization and operationalization of institutions have been ambiguous.

Table 9. Summary of the Transaction Cost Economics, Resource- and Institution-based View

Theoretical approach	Key assumptions	Level of analysis	Key constructs	Applications in IB studies	Main limitation	Influential studies
Transaction cost economics	Bounded rationality and opportunism	Transaction	Asset specificity, uncertainty and transaction frequency between the same partners	A high control mode is chosen when the degree of asset specificity, uncertainty and transaction frequency is high, otherwise a low control mode is chosen.	1) TCE overlooks " internal" costs and production costs. 2) Further, it focus on costs minimization but underestimate value creation.	E.g. Williamson (1975, 1985), Anderson & Gatignon (1986), Hennart (1988, 1993, 2009), Verbeke & Greidanus (2009)
Resource-based View of the firm	Resource heterogeneity and resource immobility	Firm	Intangible and tangible firm specific resources	Possession of some types of firm specific resources increases the choice of high control mode. RBV emphasizes firms' performance differences based on resource heterogeneity and resource immobility.	1) Existing framework such as Barney (1991) and Peteraf (1993) are neither necessary nor suffient conditions for firms to generate sustainable competititve advantage. 2) The concepts of "value" and "resource" are not clearly defined in RBV of the firm.	E.g. Penrose (1959); Wernerfelt (1984), Rumelt (1984), Dierickx and Cool (1989), Barney (1986, 1991); Peteraf (1993)
Institution-based view of business strategy	Bounded rationality, when formal institutions fail, informal institutions play a larger role in reducing uncertainty	Cross-country or within country	Formal and informal institutions	Larger formal and informal institutional distance between home and host country tend to increase the probability of firms to choose high control mode.	Conceptualization and operationalization of institutions	E.g. Peng (2002), Peng (2003), Peng et al. (2009)

2.6. Combining Arguments from TCE, RBV and IBV to Address Firm, Industry and Institution Specific Determinants

The present study builds on transaction costs economics, resource-based and institution-based view to address FDI entry mode strategy and subsidiary survival at multiple levels: i.e. firm, industrial and institutional level. It has been discussed in previous section (section 2.5.) that the three above mentioned theories differ clearly in their core theoretical constructs. For example, the core constructs for TCE are asset specificity, internal, and external uncertainty (Williamson 1975, 1985). The variables derived from RBV are tangible and intangible firm specific resources. The important constructs derived from IBV are formal and informal institutions.

However, although TCE, RBV and IBV differ in their core explanatory variables, these constructs have been operationalized with a similar range of variables in existing empirical studies. For example, asset specificity as a core construct of TCE has been mainly operationalized by **R&D intensity** at either firm or industry level (Kogut & Singh 1988; Brouthers 2002; Larimo 2003; Dikova & van Witteloostuijn 2007; Chiao et al. 2010). R&D intensity has also been referred in RBV-based studies as an important intangible firm specific resource (Anand & Delios 2002).

International experience and **host country experience** have been considered as important proxies for internal uncertainty in TCE-based studies (Hennart 1991; Larimo 2003; Li & Meyer 2009; Kuo et al. 2012), while the same constructs have also been used in RBV-based studies to proxy intangible firm specific resource (Erramili 1991; Cho & Padmanabhan 2001; Ekeledo & Sivakuma 2004; Claver & Quer 2005; Chiao et al. 2010). Further on, **parent firm size** has also been considered as an important determinant of FDI entry strategies in both TCE-based and RBV-based studies (Shi et al. 2001; Ekeleko & Sivakuma 2004: Claver & Quer 2005).

Degree of product diversification has been included in the empirical analysis in both existing TCE-based (Hennart & Park 1993; Larimo 2003) and RBV-based (Cho & Padmanabhan 1995; Barkema & Vermeulen 1998) studies. An extended TCE framework has also included **industry sales' growth** and industrial concentration ratio into their analysis (Hennart 1991; Luo 2001). It should be noted that **industry growth in terms of number of firms** has been referred as a more appropriate proxy for industry competition in transition economies like China (Luo 2001). Institution-based literature has referred that industry sales' growth and

industry growth in terms of the number of firms in transition economies can be attributed to their institutional reform (He et al. 2008). In existing China-based studies, **stage of institutional transition** and **regional institutional differences within China** have been considered as important institution specific determinants (Luo 2001; Papyrina 2007). It should be noted that the above mentioned institution specific determinants can also be linked with TCE, as transaction costs would differ for MNEs operating in the early vs. later stage of institutional transition and in different locations within China.

As can be seen from the discussion above, the same variables (e.g. international experience, host country experience, parent firm size, degree of product diversification, industry R&D intensity, industry sales' growth, industry growth in terms of number of firms, stage of institutional transition, and regional institutional differences within China) can be linked with more than one of the three theories: i.e. transaction costs economics, resource-based and institution-based view. However, existing empirical studies have mainly applied one of the three above mentioned theories to analyze either FDI entry mode strategy or subsidiary survival (e.g. Claver & Quer 2005; Brouthers & Hennart 2007; Dikova & van Witteloostuijn 2007; Papyrina 2007; Arslan & Larimo 2010, 2011, 2012; Demirbag et al. 2011; Dikova 2012). A detailed summary of the characteristics of the key FDI entry mode strategy and subsidiary survival literature can be found from table 10 and table 11, respectively.

The characteristics of the reviewed foreign entry mode studies are summarized in table 10. Two criteria have been used to select the reviewed articles: 1) the target country is a developing or a transition economy such as China, CEE, and Vietnam, and 2) the dependent variable includes FDI ownership mode strategy, FDI establishment mode strategy, or both equity and non-equity modes.

As can be seen from table 10, previous foreign entry mode studies focusing on developing and transition economies differ in their set of choices, home and host country, determinants of foreign entry modes, types of MNEs, time period, and sample size. Several studies included both equity and non-equity modes into their analysis (Tse et al. 1997; Sun 1999; Pan & Tse 2000; Meyer 2001; Claver & Quer 2005; Wei et al. 2005). Other studies have placed emphasis on equity or FDI entry mode strategy (Brouthers & Brouthers 2001; Luo 2001; Shi et al. 2001; Gil et al, 2006; Meyer et al. 2009; Kuo et al. 2012). Previous studies in emerging and transition economies analyzed the impacts of a diverse range of variables at firm, industrial, and institutional or country level on foreign entry mode studies. In terms of home and host country, primary attention has been given to MNEs from

Triad Nations (U.S., Japan, and Europe) operating in transition economies including CEE and China.

In addition, the author presents a table (table 11), summarizing the key characteristics of the reviewed subsidiary survival studies. The selection criterion is that the reviewed studies included subsidiary exit or outright sales as a dependent variable. Previous empirical studies on MNEs' survival have included considerable variations in their research design. In terms of home country, existing subsidiary survival studies have primarily analyzed the Japanese FDIs at the globe level (e.g. Chung & Beamish 2005; Dhanaraj & Beamish 2009; Demirbag et al. 2011). Several studies have focused their analysis in a single country such as U.S. (Li 1995; Silverman et al. 1997) and China (Papyrina 2007; Kim et al. 2010). Previous studies on subsidiary survival also differ in the key variables included in the analysis, time period, sample size, divestment rate, and method of analysis.

Existing studies have included a diverse range of variables at firm, industrial and institutional/country level into their analysis. The sample size included in the analysis differs from 265 (Demirbag et al. 2011) to 29,279 FDIs (Delios et al. 2008). Several of the studies included manufacturing industries into analysis (e.g. Delios & Beamish 2001; Delios & Makino 2003; Park et al. 2011), whereas others have included both manufacturing and whole sale/retailing industries into their study (Papyrina 2007; Gaur & Lu 2007). The divestment rate varies from some 21% (Delios & Beamish 2001) to 51% (Vermeulen & Barkema 2001). Previous subsidiary survival studies have mainly used two method of analysis: event history analysis and cox regression analysis.

In this dissertation, the author ***combines*** arguments from more than one of the three theories, TCE, RBV and IBV, to theoretically and empirically address the determinants of FDI entry mode strategy and subsidiary survival in China at multiple levels: i.e. firm, industrial, and institutional level. Thus, the present dissertation contributes to existing China-based FDI literature and FDI literature in general by analyzing the key determinants of FDI entry mode strategy and performance/survival in a more comprehensive way.

Table 10. Key Foreign Entry Mode Studies in Developing and Transition Economies

Study	Entry modes	Home & host country	Entry modes determinants	MNE type	Time period	Sample size	Method of analysis
Tse et al. (1997)	Export, licensing, JVs, WOS	**Home country**: U.S., West Europe, Japan, and other Asian countries **Host country**: China	China's experience in attracting foreign investments, Length of diplomatic tie, Cultural dimensions, Scale of operation, Operation location, Levels of government, Country of origin	Manufacturing	1979 to 1993	2998	Binary logistic regression
Sun (1999)	CJV, JVs, WOS	**Home country**: Hong Kong, Taiwan, U.S., Europe, Australia and other East Asian countries **Host country**: China	Cultural distance, R&D intensity, economic environment and government policy	Manufacturing/service	1987-1993	1270	Multinomial logistic regression
Delios & Henisz (2000)	Minority JVs, majority JVs vs. WOS	**Home country**: Japan **Host country**: 18 Emerging countries	Partner capability, Firm experience, Organizational capability, Public expropriation hazards, Private expropriation hazards	Manufacturing	Pre- 1997	2827	Tobit regression analysis
Pan & Tse (2000)	Export, contractual, JVs, WOS	**Home country**: Hong Kong, U.S., Japan, UK, France, Germany, etc. **Host country**: China	Prioritized location, Host country risk, Risk orientation, Power distance, Advertising intensity, capital intensity, extent of interaction between host and home countries	Manufacturing	1979 to 1998	14080	Binary logistic regression
Brouthers &Brouthers (2001)	WOS vs. JVs	**Home country**: Netherland, Germany, United Kingdom and United States **Host country**: CEE	Cultural distance, Investment risk, Cultural attribute (power distance, individualism, masculinity and uncertainty avoidance)	Manufacturing	1990-1997	231	Binary logistic regression
Luo (2001)	WOS vs. JVs	**Home country**: Hong Kong, Taiwan, Singapore, U.S., Japan, UK, Germany, France, etc. **Host country**: China	Government intervention, property right systems, environmental uncertainty, Industry, sales growth, industry asset intensity, growth of number of firms in each industry, knowledge protection, global integration, host country experience, project orientation, project size and project location	Manufacturing	1993 to 1996	174	Binary logistic regression
Meyer (2001)	Trade, contracts, JVs and WOS	**Home country**: Germany, United Kingdom **Host country**: Czech Republic, Hungary, Poland, Russia and Rumania	Progress of institutional reform, Psychic distance, R&D intensity, Human intensity, Technology transfer, Management transfer, Consumer goods	Manufacturing	Pre- 1995	576	Multinomial logistic regression
Shi et al. (2001)	WOS vs. JVs	**Home country**: Hong Kong **Host country**: China	Firm size, International experience, Host country experience, Relationship, Contractual risk, Asset specificity, Market potential, Production costs, Host government policy, Location of investments, Export-orientation, Market-seeking	Manufacturing	Pre-1996/97	218	Binary logistic regression
Brouthers (2002)	WOS and JVs	**Home country**: EU **Host country**: Developing and transnational countries	General transaction costs, Asset specificity, Legal restrictions, Investment risk, Market potential	Manufacturing/service	Pre- 1995	178	Binary logistic regression
Brouthers & Brouthers (2003)	WOS and JVs	**Home country**: Netherlands, Germany, United Kingdom **Host country**: CEE	Asset specificity, Environmental uncertainty, Behavioural uncertainty	Manufacturing/service	n.a.	227	Binary logistic regression

Claver & Quer (2005)	Representative office, WOS vs. JVs	**Home country**: Spain **Host country**: China	Firm size, Sales increase rate, ROA, Investment experience, Experience concerning China, Intangibility of know-how, FDI in Hong Kong	Manufacturing	1984 to 2002	129	Binary logistic regression, multinomial logistic regression
Meyer & Nguyen (2005)	WOS vs. JVs	**Home country**: Europe, U.S., ASEAN, Japan, Korea, Hong Kong, Taiwan, etc. **Host country**: Vietnam	Efficiency in supporting markets for critical resources, Dominance of State-owned Enterprises, Local oriented FDI	Manufacturing	1991-2000	171	Binary logistic regression
Wei et al. (2005)	JSC, CJV, JVs vs. WOS	**Home country**: Hong Kong, Taiwan, Marco, and other countries **Host country**: China	Host country experience, Specific location, Resource commitment, Cultural distance, Asset intensity	Manufacturing	1999	10607	Multinomial logistic regression
Gil et al. (2006)	WOS vs. JVs	**Home country**: Netherlands, Germany, Greece, U.S. **Host country**: CEE	Strategic variables	Manufacturing/service	n.a.	247	Binary logistic regression
Dikova & van Witteloostuijn (2007)	WOS vs. IJVs, Greenfields vs. acquisitions	**Home country**: EU countries **Host country**: CEE	Institutional advancement in the host country, Technological intensity, International strategy (multi-domestic strategy)	Manufacturing	Pre- 2002	160	Binary logistic regression
Demirbag et al. (2008)	GRE vs. ACQ	**Home country**: Multiple countries **Host country**: Turkey	Host country investments risk, Market potential, Investments incentives, Production costs, Input quality	Manufacturing/service	Pre- 1980 1980 to 1986 1987 to 1994	145	Binary logistic regression
Meyer et al. (2009)	Greenfields, acquisitions and JVs	**Home country**: Multiple countries **Host country**: Egypt, India, South Africa, Vietnam	Strength of market-supporting institutions, Resource needs	Manufacturing	Pre- 2000	336	Multinomial logistic regression
Brouthers & Dikova (2010)	GRE vs. ACQ	**Home country**: Western European countries **Host country**: CEE	Demand uncertainty, Acquisition-based strategic flexibility, Investments size	Manufacturing/service	Pre- 2003	154	Binary logistic regression
Chiao et al. (2010)	WOS vs. JVs	**Home country**: Taiwan **Host country**: China	Firm specific assets, complementary assets, R&D capacity, international experience, customer following, perceived institutional differences	Manufacturing	Pre- 2001	819	Binary logistic regression
Duanmu (2011)	WOS vs. JVs	**Home country**: Multiple countries **Host country**: China	Corruption distance, market orientation	Manufacturing	1981 to 2005	9564	Random effects logistic regression
Kuo et al. (2012)	WOS vs. JVs	**Home country**: Taiwan **Host country**: China	International, family vs. non-family firms	Manufacturing (electronics and computer)	1996-2006	1550	Binary logistic regression

Table 11. FDI Subsidiary Survival Studies Reviewed

Study	Home country	Host country	Subsidiary survival determinants	MNE type	Time period	No. of investments	Divestments rate	Method of analysis
Li (1995)	Multiple countries	U.S.	Diversification strategy, entry mode strategy, organizational learning and experience	Manufacturing (computer and pharmaceutical)	1974 – 1989	267	30.7%	Event history analysis
Silverman et al. (1997)	Multiple countries	U.S.	Subsidiary density, liability of newness, profitability	Manufacturing (motor carrier)	1977 - 1989	2669	42%	Event history analysis
Mata and Portugal (2000)	Multiple countries	Portugal	Establishment mode, ownership structure, ownership advantage	Manufacturing	1983 – 1989	1033	Divestiture (5.7%/year), disclosure (5.9%/year)	Cox regression analysis
Delios and Beamish (2001)	Japan	Asia, North America and Europe	Intangible asset, host country experience, IJV experience	Manufacturing	1986 - 1996	3080	21.1%	Event history analysis
Vermeulen and Barkema (2001)	Netherlands	Multiple countries	Number of preceding greenfields or acquisitions, preceding greenfields in familiar/unfamiliar markets, preceding acquisitions in related/unrelated domain	Manufacturing	1966 - 1994	1349	51%	Cox regression analysis
Delios and Makino (2003)	Japan	Asia, North America and Europe	Timing of entry, R&D/advertising intensity expenditures to its sales	Manufacturing	1986- 1999	6955	n.a.*	Event history model
Chuang and Beamish (2005)	Japan	Indonesia, Thailand, Korea, Malaysia and Philippines	Pre- and post-crisis institutional differences; ownership mode choice, level of equity, trading vs. manufacturing operations	Trading vs. Manufacturing operations	1986 - 2001	3515	22.8%	Cox regression analysis

Papyrina (2007)	Japan	China	Timing of entry, ownership structure	Manufacturing, whole sale and retail, finance, etc.	Pre-2001	1733	28.5%	Cox regression analysis
Tsang & Yip (2007)	Singapore	42 countries	Economic distance, establishment mode	All industries under two-digit SIC codes	1980 - 2000	1373	n.a.	Cox regression analysis
Delios et al. (2008)	Japan	120 countries in the globe	Host institutional environment, within country product diversification, corporate-level product diversification and corporate-level geographic diversification	Manufacturing	1988 - 2001	29,279	36%	Event history analysis
Gaur and Lu (2008)	Japan	52 countries	Ownership structure, regulative and normative institutional distance	Manufacturing, whole sale, retailing	Pre-2001	20,177	41%	Cox regression analysis
Dhanaraj and Beamish (2009)	Japan	25 countries	Political openness, social openness	Manufacturing	1986 - 1997	12,000	n.a.	Cox regression analysis
Kim et al. (2010)	Japan	China	A subsidiary's relative proximity to other Japanese subsidiaries, industry-specific experience	Manufacturing	1979 - 2001	3416	24.3%	Exponential transition rate analysis
Demirbag et al. (2011)	Japan	Middle east and North Africa	Economic distance, economic freedom distance, subsidiary density	Manufacturing	1956 - 2003	265	49%	Cox regression analysis
Park et al. (2011)	Korea (Chaebol)	51 countries in the globe	Order of entry (pioneers and latecomers)	Manufacturing	1999 - 2004	500	n.a.	Cox regression analysis

3. FDI ENTRY MODE STRATEGY

This chapter (chapter 3) discusses how firm, industry, and institution specific determinants have influenced on 1) FDI ownership and 2) establishment mode strategy. This chapter starts with the discussion as to how firm specific determinants have influence on FDI entry mode strategy (section 3.1.). The firm specific determinants included in analysis are international experience, host country experience, degree of product diversification and parent firm size. Then, next section (section 3.2.) presents the arguments lead to hypotheses associated with industry specific determinants. Industry specific determinants included in the discussion are industry R&D intensity, industry sales growth and industry growth in terms of number of firms. Two hypotheses related to institutional specific determinants are developed: stages of institutional transitions (early versus later stages) and regional institutional differences (SEZs and/or OCCs versus other regions within China) (section 3.3.). In the last section (section 3.4.), the author summarizes the hypotheses and presenting the research model associated with both FDI ownership and establishment mode strategy.

3.1. Firm Specific Determinants of FDI Entry Mode Strategy

International Experience: Experience is one of the core concepts for the Uppsala model (Johanson & Vahlne 1977). According to Uppsala model, firms' current behavior is influenced by their past behaviour, especially experience and knowledge. International experience was one of the most commonly studied proxies for intangible firm specific resource to be exploited abroad (Erramilli 1991; Erramilli & Rao 1993; Delios & Henisz 2000; Shi et al. 2001). MNEs with high international experience have developed general processes and systems for managing subsidiaries around the globe (Anderson & Gatignon 1986; Barkema, Bell & Pennings et al.1996; Larimo 2003). Hence, as international experience increases, MNEs are less likely to form JVs to access international market knowledge and practices. TCE emphasizes the role of international experience in lowering internal uncertainty (Anderson & Gatignon 1986). The conventional argument is that MNEs with more international experience are more efficient when dealing with suppliers, distributors and customers. Thus, international experience tends to increase the preference for WOS as opposed to JVs (Erramilli & Rao 1993; Hennart & Larimo 1998; Taylor et al. 1998). Li and Meyer (2009) found that international experience was a more important determinant of ownership strategy in developed economies than in China.

Existing empirical studies have reported mixed findings for the impact of international experience on FDI ownership strategy. For China-based studies, Shi et al. (2001) and Claver and Quer (2005) indicated that international experience is not a significant determinant of FDI ownership mode strategy, whereas Chiao et al. (2010), Lee (2010) and Kuo et al. (2012) found that international experience is positively associated with the probability of MNEs to opt for WOS as opposed to JVs in China. For studies in other developing and transition economies, Dikova and van Witteloostuijn (2007) found that EU firms with greater international experience prefer WOS over JVs in CEE countries. For non-China-based studies such as Cho and Padmanabhan (1995); Padmanabhan and Cho (1999), Brouthers (2002), and Cho and Padmanabhan (2005) revealed non-significant relationship between international experience and FDI ownership mode strategy, but some other studies supported the positive relationship between international experience and preference of WOS over JVs (Gatignon & Anderson 1988; Hennart 1991; Agarwal & Ramaswami 1992; Contractor & Kundu 1998).

However, the above mentioned arguments implicitly assume that investing firms are able to effectively transfer their general international market knowledge abroad (Johanson & Vahlne 1977). This holds true for MNEs entering into mature markets, where the legal framework has been well developed. On the other hand, this may not hold true for transition markets like China, where the business environment is uncertain and risky and the legal institutional frameworks are less developed (Li & Meyer 2009). In this context, the roles of local partners are important as they know how to deal with these uncertainties and especially with local authorities in business procedure and legal matters. The author argues that MNEs with international experience may prefer JVs to WOS in transition economies in China. The author follows the theoretical arguments and expects that:

Hypothesis 1a*: International experience is negatively associated with the probability of foreign MNEs choosing WOS over JVs.*

Both RBV-based and TCE-based studies have attempted to link international experience with FDI establishment mode strategy (Slangen & Hennart 2007). RBV tends to explain FDI establishment mode strategy from both resource exploitation and exploration perspective (Sharma & Erramilli 2004). Knowledge about how to successfully operate in international markets is tacit in nature, and hence, it is embedded in the incumbent firms (Hennart 1988; Hennart 2009). MNEs with no or limited international experience are therefore lack such knowledge. Since international experience is experiential and tacit in nature, it is difficult for MNEs to access it through markets for assets or assets service (Hennart 2009, 2012), and hence, they are more likely to opt for acquisitions as opposed to greenfields to

acquire local market knowledge from existing firms. On the other hand, MNEs with sufficient international experience may have already accumulated knowledge as to how to operate in international markets, and thus, they are less dependent on local JVs partners (Larimo 2003). Therefore, it is expected that MNEs with more international experience would prefer greenfields over acquisitions establishment mode strategy.

Existing studies have reported mixed findings for the impact of international experience on FDI establishment mode strategy. A few non-China-based studies such as Andersson and Svensson (1994), Harzing (2002) and Slangen and Hennart (2008) found negative relationship between international experience and greenfield investments. However, several studies such as Cho and Padmanabhan (1995) and Larimo (2003) revealed insignificant relationship between international experience and FDI establishment modes strategy, some other studies even found the opposite relationship (Wilson 1980; Barkema & Vermeulen 1998; Padmanabhan & Cho 1999; Brouthers & Brouthers 2000; Brouthers & Dikova 2010). Since there were no China-based studies which have linked international experience with FDI establishment mode strategy, the development of the following hypothesis is based on above theoretical discussions and empirical studies.

Hypothesis 1b*: International experience is positively associated with the probability of foreign MNEs choosing greenfields over acquisitions.*

Host Country Experience: Both TCE and RBV studies have considered host country experience as an important determinant of FDI ownership mode strategy. Firms with no or limited experience of operating in a particular country usually possess limited knowledge of the local business environment and practices (Hennart 1991; Hennart & Park 1993; Hennart 2009). Established firms have accumulated such knowledge through their presence in the local market over a long period of time. Knowledge of host country is therefore embedded in the local firms and is costly to duplicate internally or purchase externally (Chen 2005; Hennart 1988, 2009). One would therefore expect that in order for accessing local market knowledge, investing firms with limited host country experience are inclined to form and operate their subsidiaries jointly with local partners. On the other hand, firms with more experience in the target country have gradually accumulated local knowledge and therefore are less dependent on local partner, and hence, they are less likely to share the ownership of subsidiary with local partners.

Existing empirical findings have been mixed. Hennart (1991) found that Japanese MNEs having greater host country experience are more likely to choose WOS over JVs when entering into United States. His finding was supported by several existing China-based empirical studies such as those of Luo (2001), Claver and

Quer (2005), and Wei et al. (2005). However, Shi et al. (2001) and Li and Meyer (2001) found that host country experience is negatively associated with the probability of opting for WOS as opposed to JVs. Since more China-based studies supported the positive relationship of host country experience and the probability of choosing WOS ownership mode strategy, the author expects that:

***Hypothesis 2a**: Host country experience is positively associated with the probability of foreign MNEs choosing WOS over JVs.*

Host country experience has also been associated with FDI establishment mode strategy. Firms with limited experience of operating in a particular market usually lack the knowledge of local business environment and practices (Hennart 1991; Hennart & Park 1993; Hennart 2009). Incumbent firms in a host country have gradually accumulated such knowledge through presence in the local market for a long period of time. Such knowledge is therefore embedded in the local firms and is costly to access through the markets for assets or assets service in a disassembled form (Hennart & Park 1993; Hennart 1988, 2009). One would therefore expect that MNEs with little knowledge about the host market are inclined to acquire such knowledge from an existing local firm. On the other hand, firms with sufficient prior investment experience in the target country have gradually accumulated such knowledge, and hence, they are less likely to opt for acquisitions (Hennart & Park 1993; Larimo 2003).

However, it has also been argued that firms with little experience in a particular country tend to opt for greenfields rather than acquisitions in emerging markets. This is because it is difficult and costlier for MNEs with no or little prior host country experience to evaluate and select good acquisitions targets in the host country. Further on, MNEs with little host country experience may find costlier to integrate acquired local firms (Chen 2008; Slangen & Hennart 2008). Thus, it can be also expected that host country experience would increase the choice of acquisitions over greenfields establishment mode strategy in emerging and transitional economies.

Existing non-China-based studies have provided mixed findings as to the impact of host country experience on FDI establishment mode strategy. The studies by Hennart and Park (1993), Cho and Padmanabhan (1995), Padmanabhan and Cho (1999) and Larimo (2003) could not find significant relationship between host country experience and the preference for MNEs establishing greenfield investments. However, several studies such as Andersson and Svensson (1994), Barkema and Vermeulen (1998) and Drogendijk and Slangen (2006) supported the notion that MNEs with sufficient host country experience tend to choose acquisitions. As there were no China-based studies that specifically addressed the

impact of host country experience on FDI establishment mode strategy, and thus, based on the theoretical discussion, the author expects that:

Hypothesis 2b*: Host country experience is negatively associated with the probability of foreign MNEs choosing greenfields over acquisitions.*

Degree of Product Diversification: Both TCE and RBV have considered the degree of product diversification as an important determinant of FDI strategy (Larimo 2003; Slangen & Hennart 2007; Demirbag et al. 2009). More diversified firms may find that they do not possess enough product-specific knowledge in all industries where they operate to carry out the foreign subsidiary operation alone (Larimo 2000). Product specific knowledge is experiential and tacit in nature, and therefore it is costly to replicate such knowledge internally and difficult to purchase it in the market (Hennart & Park 1993; Slangen & Hennart 2007). Thus, one would expect that firms operating in multiple product markets may find shared ownership mode to be the most efficient way to access product specific knowledge for local markets. Demirbag et al. (2009) found that the degree of product diversification is negatively associated with the preference for WOS over JVs. So far China-based studies have not specifically addressed the degree of product diversification on FDI ownership mode strategy, and therefore, based on TCE and RBV arguments, the author expects that:

Hypothesis 3a*: Degree of product diversification is negatively associated with the probability of MNEs choosing WOS over JVs.*

Both TCE and RBV literature have considered the degree of product diversification as an important determinant of FDI establishment mode strategy. TCE argues that the degree of product diversification is positively associated with acquisitions as opposed to greenfields, as more diversified MNEs have developed advanced management control systems which reduce the management costs associated with acquisitions (Hennart & Park 1993). On the other hand, less diversified firms do not possess the skills to plan and manage acquisitions, and hence, are less likely to opt for acquisitions (Larimo 2003). RBV further argues that MNEs operating in multiple product markets have developed rich knowledge structure and technological capabilities, and hence, they are more likely to establish greenfields to exploit their capabilities abroad (Barkema & Vermeulen 1998).

Early empirical studies have provided mixed research findings. For example, Barkema and Vermeulen (1998) found that the degree of product diversification is positively associated with greenfield investments, whereas Zejan (1990) found that the degree of product diversification is positively and significantly associated

with the preference for acquisitions over greenfields. In line with the TCE-based theoretical arguments and existing empirical studies, the author expects that:

Hypothesis 3b*: Degree of product diversification is negatively associated with the probability of MNEs choosing greenfields over acquisitions.*

Parent Firm Size: Parent firm size has been considered as an important indicator of resource availability (Hollensen 2014). A traditional TCE-based and RBV-based argument in the extant literature is that compared to JVs, a WOS involves higher levels of resource commitment and risk (Taylor et al. 1998). Large investing firms, being more able to provide adequate financial and management resources (Padmanabhan & Cho 1996) and to absorb risk (Taylor et al. 1998), will have a greater probability for choosing high control mode than will small ones. On the other hand, smaller parent firms perhaps do not possess adequate resources to set up and manage foreign subsidiaries alone, and hence, are less likely to choose WOS in foreign markets.

Empirical evidence on the relationship between parent firm size and ownership mode choice has been inconclusive for non-China-based studies. The positive relationship of parent firm size with the probability of choosing WOS was supported in studies such as Erramilli and Rao (1993), Erramilli (1996), Taylor et al (1998) and Cui and Jiang (2009). However, Brouthers (2002) and Wang and Schaan (2008) found that parent firm size was non-significantly associated with ownership mode choice of firms in international markets. The empirical evidence in China-based studies tends to be consistent. Shi et al. (2001) found that the relative firm size of Hong Kong investors was positively related to the probability of firms to choose WOS over JVS ownership mode strategy. Similarly, Claver and Quer (2005) found that the larger the size of a parent firm is, the more likely that a firm tends to establish WOS in China. In a more recent study by Lee (2010), the positive association between size of parent firm and the choice of WOS was partially supported. Since most of the China-based studies supported the theoretical argument, the author of this dissertation expects that:

Hypothesis 4a*: Parent firm size is positively associated with the probability of MNEs choosing WOS over JVs.*

Both TCE and RBV arguments have been used to explain FDI establishment mode strategy. It has been argued that cross-border acquisitions require relatively larger financial investments, and hence, large MNEs are more likely to opt for acquisitions as opposed to greenfields establishment mode strategy (Hennart 1982; Hennart & Park 1993; Larimo 2003). First, acquisitions incur high searching and negotiating costs. Second, the costs associated with acquisitions is partic-

ularly high in emerging markets, as ineffective laws, regulations, norms and values may hinder MNEs to correctly value the target firm. Last, acquisitions suffer from post-acquisitions integration problems (Hennart 2009; Dikova & van Witteloostuijn 2007; Peng & Meyer 2011). However, acquisitions provide MNEs a speedy entry to fast growing industries (Hennart & Park 1993).

The findings as to the impact of parent firm size on FDI establishment mode strategy have been mixed. Several empirical studies supported the TCE and RBV arguments on the positive relationship between parent firm size and the preference of acquisitions over greenfields (Larimo 1993, 1997; Andersson & Svensson 1994). However, there were several studies such as Cho and Padmanabhan (1995), Barkema and Vermeulen (1998), Padmanabhan and Cho (1999) and Tan (2009) found insignificant relationship. Since the empirical findings have been inconclusive, and thus, based on theoretical argument, the author expects that:

Hypothesis 4b*: Parent firm size is negatively associated with the probability of MNEs choosing greenfields over acquisitions.*

3.2. Industry Specific Determinants of FDI Entry Modes Strategy

Industry Research and Development Intensity: R&D intensity at either firm or industry level has been a frequently used proxy for asset specificity in TCE-based studies (Zhao et al. 2004; Brouther & Hennart 2007). Both TCE and RBV argue that firms with a high level of R&D intensity are likely to transfer a significant amount of knowledge to their subsidiaries (Slangen & Hennart 2007). These firms are faced with greater difficulties in pricing the technology and enforcing the contracts with JVs partners (Anderson & Gatignon 1986; Hennart 1991). Hence, MNEs spending more revenues on R&D intensity are inclined to choose WOS as opposed to JVs so they can completely control their proprietary know-how (Gatignon & Anderson 1988; Padmanabha & Cho 1996).

Several China-based and non-China-based empirical studies such as Padmanabhan and Cho (1996), Cho and Padmanabhan (2005), Sun (1999); Chiao et al. (2010), and Lee (2010) found that a high degree of R&D intensity tends to increase the probability of investing firms choosing WOS as opposed to JVs ownership mode strategy. Therefore, the author expects that Nordic firms with high R&D intensity would have a greater probability of choosing WOS as opposed to JVs in China.

***Hypothesis 5a**: Industry research and development intensity is positively associated with the probability of MNEs choosing WOS over JVs.*

Research and development intensity has also been linked with FDI establishment mode strategy. It has been argued that MNEs with a high level of R&D intensity are likely to transfer significant amount of technology to their foreign subsidiaries (Slangen & Hennart 2007). The traditional argument is that the costs of transferring technological knowledge through greenfields investments are generally lower than those associated with exploiting it through acquisitions. This is because greenfields entries enable foreign investors to install their technologies from the outset and to transfer accompanying skills to a carefully selected workforce capable of and willing to absorb them (Hennart & Park 1993; Slangen & Hennart 2007). On the other hand, MNEs with a low degree of proprietary technology are more likely to acquire them from an existing local firm.

A number of previous empirical studies such as Hennart and Park (1993), Andersson and Svensson (1994), Brouthers and Brouthers (2000), Larimo (2003) and Drogendijk and Slangen (2006) supported the view that a high level of R&D intensity would encourage investing firms to choose greenfield investments as opposed to acquisitions. However, the study by Dikova and van Witteloostuijn (2007) indicated that R&D intensity was not a significant variable predicting establishment mode choice of MNEs operating in CEE. Based on theoretical discussion and empirical findings, the author expects that:

***Hypothesis 5b**: Industry research and development intensity is positively associated with the probability of MNEs choosing greenfields over acquisitions.*

Industry Sales' Growth: TCE-based studies have used sales growth rate in industry sales as proxy for external uncertainty (Luo 2001; Cui & Jiang 2009). It has been argued that MNEs are less likely to commit large amount of resources when the sales growth in the target industry is unpredictable. Large commitment limits the flexibility of MNEs to withdraw from the host market when the market demand does not reach a significant level (Luo 2001). On the other hand, when the sales growth in an industry is stable and predictable, MNEs prefer to choose full control mode as opposed to shared ownership structure to capture more rents (Hennart 1991). Cui and Jiang (2009) indicated that the impact of industry sales' growth on the choice of WOS was positive. In China-based studies, Luo (2001) found that the relationship between industry sales' growth and the preference for WOS over JVs was not significant. However, Lu et al. (2011) found that market potential increased the probability of foreign retailing companies opting for high control mode such as WOS as opposed to low control modes such as exports,

contracts and JVs in China. So far the findings have been mixed. The author follows TCE argument and expects that:

Hypothesis 6a*: Industry sales' growth is positively associated with the probability of MNEs choosing WOS over JVs.*

Industry sales' growth has also been linked with FDI establishment mode strategy. The traditional argument is that existing firms are more likely to respond to greenfields investments when the sales growth in a particular industry is slower. This is because greenfields entries would decrease the market shares of incumbent firms operating in slow growing industries. Thus, while fast growing industries would encourage greenfields investments, acquisitions would be preferred in slow growing industries (Hennart & Park 1993; Slangen & Hennart 2007). A few studies have linked industry sales' growth with FDI establishment mode strategy and their findings have been inconsistent. For example, Zejan (1990) found that Swedish MNEs are more likely to use greenfields when the industry sales' growth is high. However, Tan (2009) indicated that industry sales' growth was not a significant determinant of FDI establishment mode strategy. Since there were no China-based studies have specifically addressed the impacts of industry sales' growth on FDI establishment mode strategy, the hypothesis in the below is developed based on above theoretical arguments and non-China based empirical studies.

Hypothesis 6b*: Industry sales' growth is positively associated with the probability of MNEs choosing greenfields over acquisitions.*

Industry Growth in Terms of the Number of Firms: Industry concentration ratio has been a major indicator of industry competition in developed and mature markets such as the U.S. (Elango & Sambharya 2004). A typical TCE argument is that MNEs are less likely to use WOS when entering to a competitive industry, as highly competitive markets are less profitable. However, industry concentration ratio is inappropriate as a proxy for the degree of industry competition in transition economies like China, as the unequal shares among firms in an industry is a consequence of government intervention and state-owned enterprises (Luo 2001). As China started its economic and political reforms, such as decentralization and privatization, the number of firms actually increased to meet the huge market demand. It has been argued that the growth in terms of the number of firms is a good proxy for the degree of competition in transition economies (Luo 2001). It has also been argued that the growth in terms of the number of firms in an industry is associated with greater business potential and market opportunities in transition economies (Luo 2001). Thus, MNEs are expected to use WOS to capture more rents when entering to industries where the number of firms is growing fast.

Existing empirical finding tend to consistent with the theoretical arguments. In China-based studies, Luo (2001) supported the notion that growth in terms of number of firms increases the preference of WOS as opposed to JVs. Further on, Lu, Karpova and Fiore (2011) found that competition in China resulted in the preference for international fashion retailers to choose high as opposed low control modes. Thus, the author expects that:

***Hypothesis 7a**: Industry growth in terms of the number of firms is positively associated with the probability of MNEs choosing WOS over JVs.*

Industry growth in terms of number of firms has been referred as a determinant of FDI establishment mode strategy. A key difference between both FDI establishment modes is that greenfields add significant production capacity in the entered industry, whereas acquisitions investments do not. This increase in production capacity is particularly salient when entering into concentrated industry, as greenfields entrants need to enter with large-scale operations in order to compete with a few existing large firms (Hennart & Park 1993; Slangen & Hennart 2007). Since the revenues and profits may reduce, incumbent firms operating in concentrated industries are more likely to competitively respond to greenfield entries. On the other hand, less concentrated industries are more tolerant to greenfield investments. Hence, it is theoretically expected that a high degree of industry competition would increase the preference of greenfields over acquisitions establishment mode strategy. Brouthers and Dikova (2010) indicated that industry concentration ratio was not significantly associated with FDI establishment mode strategy of European MNEs operating in CEE. Nevertheless, in accordance with the theoretical arguments, the author of this dissertation expects that industry growth in terms of number of firms as an appropriate proxy to industry competition in transition economies like China increases the probability for MNEs choosing greenfields investments over acquisitions.

***Hypothesis 7b**: Industry growth in terms of the number of firms is positively associated with the probability of MNEs choosing greenfields over acquisitions.*

3.3. Institution Specific Determinants of FDI Entry Mode Strategy

The stage of Institutional Transition (the later versus early stage): An important goal of China's institutional transition was to transit from a centrally planned to a market oriented economy (Child & Tse 2001; Polsa et al. 2005). There are three fundamental reforms that have been adopted by the Chinese gov-

ernment: marketization, decentralization, and privatization. While marketization signaled the creation of efficient and competitive markets, decentralization and privatization were attempts to reduce business interventions by the Chinese central government. Thus, it can be said that the overall transaction costs and FDI restrictions on full ownership strategy have been gradually reduced, as China continued to implement its institutional transition (Papyrina 2007). Thus, it is expected that Western MNEs are more likely to establish WOS as opposed to JVs to absorb more rents at the later stage of institutional transition.

In their study focusing on entry strategies in the CEE, Dikova and van Witteloostuijn (2007) found that greater institutional advancement in the CEE resulted in the preference for JVs as opposed to WOS ownership mode strategy. They argued that institutional advancement reduced the risk of asset expropriation, and therefore, JVs were preferable over WOS. Nevertheless, we argue that as transaction costs and FDI restrictions on WOS have been gradually reduced in China, MNEs are more likely to opt for WOS as opposed to JVs so that they can capture more rents from their subsidiaries.

Hypothesis 8a: *The later stage of institutional transition is positively associated with the probability of MNEs to choose WOS over JVs.*

Institution-based view studies suggested that different phases of transitions are likely to affect strategic choices of MNEs in a transition economy (Peng 2002, 2003; Peng & Zhou 2005; Peng et al. 2008). This is particularly true for MNEs investing into transition economies like China. During the early phase of institutional transition, the market for acquisitions was relatively inefficient. China was characterized by government intervention for business operations and weak intellectual property rights protection (Luo 2001; Meyer 2004; Wei et al. 2005). Further on, Chinese government discouraged and restricted cross-border merger and acquisitions in some strategic important industries. Good acquisition targets in China were also hard to find in the earlier phase of institutional transition. In addition, in the early years, many enterprises, especially State-owned Enterprises (SOEs) in China had a large number of inefficient workforces (Teng 2004).

In the later stage of transition, the Chinese government implemented several changes to its foreign investments' policy to improve acquisitions market in China. First, China opened Shanghai and Shenzhen Stock Exchanges. A large number of Chinese enterprises have been listed on the above mentioned two stock exchanges. Furthermore, the shares of several Chinese firms have been traded in Hong Kong Stock Exchange, NASDAQ, and so on. The Stock Exchanges offered a convenient way for foreign investors to acquire Chinese firms. Second, Chinese government changed its policy and allowed the foreign investors to acquire some

SOEs (Norton & Chao 2001). SOEs in China have been suffered from redundant labor force, low efficiency, and huge financial losses. Third, the Chinese policy of "grasp the large, release the small" allowed Western investors to acquire small and medium sized (SMEs) Chinese enterprises. The number of Chinese private enterprises was the fastest growing sector in China. Because the Chinese government imposed relatively little control over private enterprises in the later stage of institutional transition, MNEs had a greater opportunity to acquire private enterprises in China. As China continued to transit towards from a centrally planned to a market oriented economy, it is clear that the above mentioned changes made cross-border acquisitions in China easier and more attractive (Teng 2004).

Dikova and van Witteloostuijn (2007) found that greater institutional advancement in CEE resulted in the preference for MNEs choosing acquisitions establishment mode strategy. Since there were no China-based studies that have specifically linked stage of institutional transition or timing of entry with FDI establishment mode strategy, based on the discussions presented above, the author expects that:

Hypothesis 8b*: The later stage of institutional transition is negatively associated with the probability of MNEs choosing greenfields over acquisitions.*

Regional Institutional Differences (SEZs and/or OCCs versus other regions within China): One of the key features in transitional economies like China is that both formal and informal institutions differ across provinces and cities (Zhou, Tse & Li 2006). In 1980, China designated Shenzhen, Zhuhai and Shantou within Guangdong province and Xiamen within Fujian province as SEZs. The intention of the Chinese government was to use SEZs to attract foreign investments, expand exports and introduce advanced technology. In 1984, the Chinese government decided to further open its economy by extending similar policies to fourteen OCCs. In 1985, the OCCs were extended to Pearl River Delta, the Yangtze River Delta, and Min Delta in Fujian. In 1988, the entire Hainan province was designated as a fifth SEZ. (Yeung et al. 2009).

Both the overall investment climate and local government effectiveness and efficiency in SEZs and/or OCCs were ranked in the top quintile of all surveyed cities. On the other hand, the quintile of cities ranked lowest were all located within inland China (World Bank Survey 2006). In addition, MNEs operating in SEZs and/or OCCs received preferential corporate tax rate, which was generally lower than that of other enterprises. Furthermore, although laws and regulations have been consistent at the national level, the time spends on interactions with the governments at provincial or city level differ across regions in China. Compared to foreign subsidiaries operating in interior cities in China, MNEs doing business in

SEZs and/or OCCs generally spend less time with local government. Thus, the overall costs of doing business in regions such as SEZ and/or OCCs tend to be lower (Yeung et al. 2009). Demirbag Glaister and Tatoglu (2007) found that MNEs set up subsidiaries in more developed regions in Turkey tend to opt for WOS as opposed to JVs. Hence, it is expected that:

Hypothesis 9a*: Regional institutional difference (SEZs and/or OCCs versus other regions within China) is positively associated with the probability of MNEs choosing WOS over JVs.*

Regional institutional differences between SEZs and OCCs and other regions within China are expected to influence FDI establishment mode strategy. One key difference between greenfields and acquisitions is associated with the method to access crucial complementary local assets (Hennart & Park 1993; Slangen & Hennart 2007). While greenfields allow MNEs to establish their subsidiaries from scratch and access local complementary resources on efficient markets, whereas acquisitions enable foreign investing firms to acquire local assets from an existing firm (Hennart & Park 1993; Meyer & Nguyen 2005; Peng & Meyer 2011). It has been argued that markets for complementary resources possessed by local firms are relatively more efficient in developed economies than in emerging markets (Meyer & Nguyen 2005; Myer et al. 2009). The same argument can be applied to transition economies like China, where the progress of market economy transition have been different across provinces and cities. MNEs may find easier to access complementary local resources in more developed market-supporting areas such as SEZs and OCCs, and thus, are less likely to obtain them by acquiring an existing firm.

Previous empirical studies have provided mixed findings. Meyer et al. (2009) found that strong institutions in the host country increased the probability of MNEs to opt for acquisitions as opposed to greenfields in India, Vietnam, South Africa and Egypt. However, Meyer and Nguyen (2005) found that the market supporting institutions would increase the preference for greenfields investments in Vietnam. Since there were no early China-based studies have specifically linked regional institutional differences with FDI establishment mode strategy, based on above discussions, the author hypothesizes that:

Hypothesis 9b*: Regional institutional difference (SEZs and/or OCCs versus other regions within China) is positively associated with the probability of MNEs choosing greenfields over acquisitions.*

3.4. Moderating Effects of Institution Specific Determinants

It has been referred by several review studies that past IB and FDI studies have not sufficiently analyzed potential moderating effects (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007). In this dissertation, the author is particularly interested in how two institution specific determinants including 1) stages of institutional transitions *and* 2) regional institutional differences (SEZs and/or OCCs versus other regions within China) have moderated the direct impacts of firm and industry specific determinants on FDI ownership and establishment mode strategy. Institutional variables have been considered as an important determinant of business strategy for MNEs entering into developing and transition economies such as CEE and China (Peng 2003; Meyer & Peng 2005; Peng et al. 2008; Peng et al. 2009).

It has been argued that institutions in the host country shape the transaction costs, which in turn, influence FDI entry strategies (Meyer & Peng 2005). One of the characteristics of China's market economy transition has been the transition from a centrally planned to a market oriented economy (Peng & Heath 1996; Child & Tse 2001; Peng 2003; Papyrina 2007). In the early stage of institutional transition (i.e. prior to 2002), transaction costs of doing business in China were likely to be higher, as formal institutions such as the laws, regulations, and property rights system were not well developed and the market for product and services was not efficient (Child & Tse 2001; Papyrina 2007). On the other hand, as China continuously developed its market oriented institutional framework, the risk and costs tended to be reduced in the later stage of institutional transition (i.e. after 2001) (Papyrina 2007). The stage of institutional transition in China tend to moderate the impacts of both firm and industry specific determinants. For example, since the laws and regulations were not well developed, the risk and uncertainty associated with transferring technological skills and proprietary know-how (i.e. international experience and product-specific knowledge) to the foreign subsidiaries in China were relatively higher in the earlier rather than in the later stage of institutional transition. Further on, as China transited towards a market economy, the market was relatively more efficient in the later stage of institutional transition, and thus, it is easier for MNEs to access complementary local assets during the later stage of institutional transition (Chiao et al. 2010).

Similar arguments can be applied to the potential moderating effect of regional institutional differences between SEZs/OCCs and other cities within China. It has been argued that institutional differences at the subnational level are equally important, if not more important, as between-country institutional differences in

their influence on business strategy in transition economies (Meyer & Nguyen 2005). One of the key FDI policies in China has been the development of open areas such as SEZs and/or OCCs with the purpose of attracting foreign direct investments. Firms face different degrees of institutional uncertainty and risk in operating different parts of China. Hence, the transaction costs of operating in open areas for foreign investments tended to be relatively lower. Further on, the laws, regulations, and property rights systems have been better developed in SEZs and OCCs than in other regions of China. Regional institutional differences tended to moderate firm and industry specific determinants. For instance, the costs associated with transferring MNEs technological skills, international experience, and product-specific knowledge tend to be lower in SEZs and/or OCCs than in other regions within China. Furthermore, as the market is relatively more competitive and efficient in SEZs and/or OCCs, it is easier for MNEs to access complementary local assets. Thus, it can be expected that both the stage of institutional transition and regional institutional differences within China tend to moderate the explanatory powers of transaction costs and resource-based variables.

In existing China-based studies, Chiao et al. (2010) found that perceived institutional differences moderate the impacts of both transaction cost and resource-based variables on FDI ownership mode strategy. However, there were no existing China-based studies that specifically addressed the potential moderating effects of both stage of institutional transition and regional institutional differences within China on FDI establishment mode strategy. Based on above discussions, it is expected that:

Hypothesis 10a*: The stage of institutional transition and regional institutional differences in China moderate the impacts of firm and industry specific determinants on FDI ownership mode strategy.*

Hypothesis 10b*: The stage of institutional transition and regional institutional differences in China moderate the impacts of firm and industry specific determinants on FDI establishment mode strategy.*

3.5. Research Model of FDI Ownership and Establishment Mode Strategy

In this section (section 3.5.), the author summarizes the hypotheses and presents the research model associated with 1) FDI ownership and 2) establishment mode strategy (figure 8 and figure 9, respectively). Three groups of variables have been hypothesized to influence FDI ownership mode strategy. For firm specific determinants, it is expected that host country experience (H2a) and parent firm size (H4a) would increase WOS ownership mode strategy, whereas international experience (H1a) and degree of product diversification (H3a) would increase the preference for Nordic MNEs opting for JVs as opposed to WOS.

For industry specific determinants, the author expects that industry R&D intensity (H5a), industry sales' growth (H6a) and industry growth in terms of the number of firms (H7a) are positively associated with WOS as opposed to JVs. Both of the institution specific determinants, stage of institutional transition (H8a) and regional institutional differences (H9a), are expected to increase the likelihood of Nordic firms to choose WOS as opposed to JVs ownership mode strategy. Figure 8 depicts that the stage of institutional transition and regional institutional differences within China are expected to moderate the impacts of firm and industry specific determinants on FDI ownership mode strategy (H10a).

The hypotheses associated with the impacts of independent variables on FDI establishment mode strategy are summarized in figure 9. The figure illustrates that three levels of variables are expected to influence FDI establishment mode strategy: firm, industry, and institution specific determinants. Of the firm specific determinants, it is expected that international experience (H1b) would encourage greenfield investments, whereas host country experience (H2b), degree of product diversification (H3b), and parent firm size (H4b) are all expected to be positively associated with acquisitions establishment mode strategy.

For the industry specific determinants, industry R&D intensity (H5b), industry sales' growth (H6b), and industry growth in terms of the number of firms (H7b) are hypothesized to associate positively with the greenfield investments. For institution specific determinants, it is hypothesized that while stage of institutional transition (H8b) would encourage acquisitions establishment mode strategy, regional institutional differences within China (H9b) would increase the probability for Nordic MNEs choosing greenfields as opposed to acquisitions. Further on, the dotted arrows in figure 9 depicts that stage of institutional transition and regional institutional differences are expected to moderate the impacts of both firm and industry specific determinants on FDI establishment mode strategy (H10b).

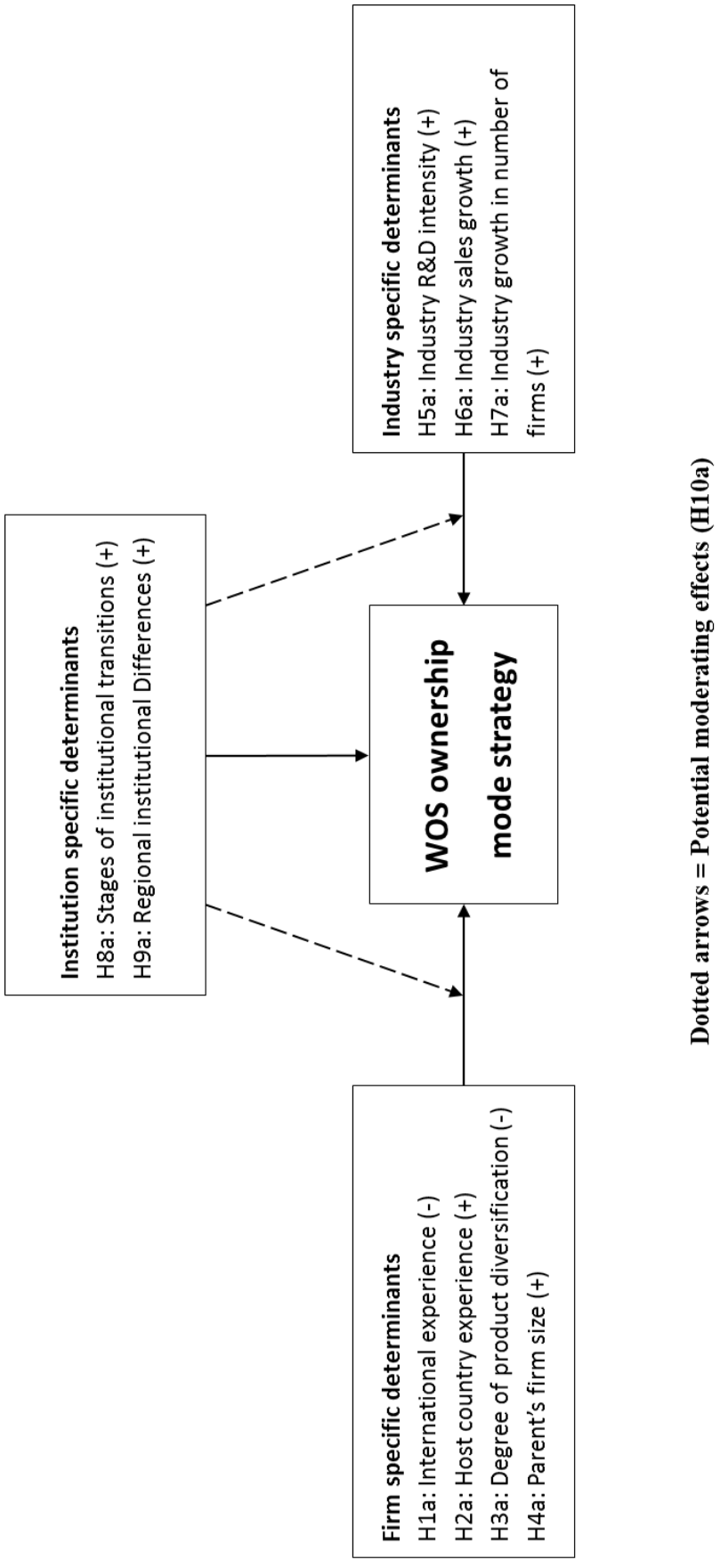


Figure 8. Research Model of FDI Ownership Mode Strategy

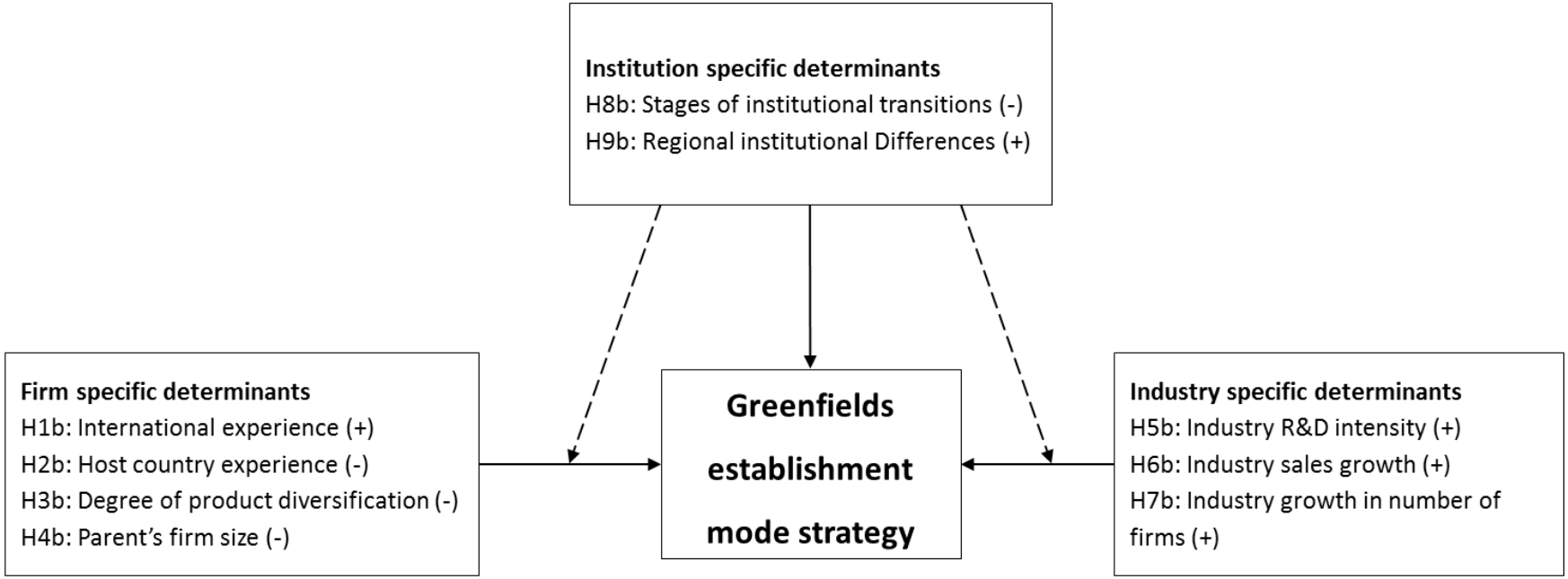


Figure 9. Research Model of FDI Establishment Mode Strategy

4. SUBSIDIARY SURVIVAL

This chapter (chapter 4) discusses how firm, industry and institution specific determinants have influenced on subsidiary survival. This chapter starts with the discussion as to how firm specific determinants have influence on FDI subsidiary survival (section 4.1.). The firm specific determinants included in the discussion consist of international experience, host country experience, degree of product diversification and parent's firm size. Then, next section (section 4.2.) presents the arguments lead to hypotheses associated with industry specific determinants. Industry specific determinants included in the discussions are: industry R&D intensity, industry sales growth and industry growth in number of firms. Next, two institutional specific variables are analyzed: stages of institutional transitions (early vs. later stages) and regional institutional differences (SEZs and/or OCCs versus other regions within China) (section 4.3.). The author also developed hypotheses as to the impacts of both FDI ownership and establishment mode strategy on FDI subsidiary survival (section 4.4.). The last section (section 4.5.) summarizes the hypotheses and presented research model of subsidiary survival.

4.1. Firm Specific Determinants of Subsidiary Survival

International Experience: Both TCE and RBV theoretical reasoning have referred to international experience as an important determinant of firm strategy (Anderson & Gatignon 1986; Erramilli 1991; Hennart 1991; Clarke et al. 2013). International experience is one of the core constructs of famous Uppsala Model (Johanson & Vahlne 1977). It has been argued that MNEs with no or limited international experience usually lack the general skills and knowledge in setting up and managing subsidiaries in a foreign market (Dow & Larimo 2009; Li & Meyer 2009). This knowledge is primarily developed through foreign presence, and therefore, it is embedded in the incumbent firms (Johanson & Vahlne 1977; Slangen & Hennart 2007). TCE-based studies have emphasized the important role of international experience in lowering internal uncertainty (Anderson & Gatignon 1986; Zhao et al. 2004; Brouthers & Hennart 2007). Thus, it can be expected that international experience would encourage FDI subsidiary survival.

Previous non China-based empirical studies have found that international experience is positively associated with subsidiary survival (Delios & Makino 2003; Tsang & Yip 2007). However, China-based studies provided somewhat mixed results. While Papyrina (2007) found that the international experience of MNEs increased the probability of foreign subsidiaries to survive in China, non-significant relationship was found in the study by Kim et al. (2010). The previous

findings have been mixed, and therefore, based on the TCE and RBV arguments, the author expects that:

Hypothesis 11*: International experience is positively associated with the probability of foreign subsidiaries to survive in China.*

Host Country Experience: In RBV-based studies, host country experience has been referred to as an important firm specific resource for the success of foreign subsidiaries (Kim et al. 2010). Firms with no or only limited business experience in a particular host market usually lack the knowledge as to local business and management practices (Hennart 1991). It has been argued that experiential knowledge about a particular country is more important for MNEs entering into emerging markets (Li & Meyer 2009). MNEs need to develop new resources and capabilities so that they can cope with the difficulties in doing business in a new environment. MNEs with more host country experience have obtained local knowledge, i.e. how to deal with suppliers, customers, and local governments (Li & Meyer 2009; Kim et al. 2010).

Non China-based empirical studies have provided mixed results. Delios and Beamish (2001) and Park et al. (2011) indicated that host country experience was not a significant determinant of subsidiary survival. However, Delios and Makino (2003) found that host country experience increased the likelihood of survival of Japanese subsidiaries. The existing findings in China-based studies have been consistent. The positive impact of host country experience on subsidiary survival was found in the study by Papyrina (2007) and Kim et al. (2010), focusing on subsidiary survival in China. In line with theoretical argumentations and China-based empirical studies, it is expected that:

Hypothesis 12*: Host country experience is positively associated with the probability of foreign subsidiaries to survive in China.*

Degree of Product Diversification: While single businesses, or undiversified firms, concentrate on one main product line, diversified firms operate in multiple products markets. The degree of product diversification has been generally proxied using 3-digit or 4-digit Standard Industrial Classification (SIC) codes (Mudambi & Mudambi 2002; Larimo 2003). According to TCE reasoning, when the degree of product diversification of the MNEs increases, lack of product-specific knowledge in all fields of industries becomes evident, which in turn, increase the failure rate of foreign MNEs' subsidiaries. Another argument is that MNEs operating in multiple products markets would increase the governance costs of business, and hence, lessen the probability of foreign subsidiaries to survive.

Early findings on the relationship of the degree of product diversification and subsidiary survival have been mixed. For example, while Delios et al. (2008) found that degree of product diversification was positively associated with subsidiary survival, Vermeulen and Barkema (2001) and Tsang and Yip (2007) found opposite relationship, and Delios and Makino (2003) found that the relationship of degree of product diversification and subsidiary survival was not significant. The impact of degree of product diversification has not been specifically analyzed in China-based studies. Thus, based on the theoretical arguments, the author expects that:

Hypothesis 13*: Degree of product diversification is negatively associated with the probability of foreign subsidiaries to survive in China.*

Parent Firm Size: Both TCE-based and RBV-based studies have considered parent firm size as an important determinant of MNEs' entry strategy (Larimo 2003; Claver & Quer 2005). Larger MNEs are able to provide adequate resources (Padmanabhan & Cho, 1996; Dhanaraj & Beamish, 2009) and to absorb risk (Taylor et al. 1998), and thus, a positive relationship between parent firm size and subsidiary survival could be expected.

The findings of existing non-China-based studies tend to be mixed. Vermeulen and Barkema (2001) and Demirbag et al. (2011) found that parent firm size decreased subsidiary survival of MNEs. However, Dhanaraj and Beamish (2009) and Park et al. (2011) found that parent firm size was positively related to subsidiary survival. Tsang and Yip (2007) found that the impact of parent firm size was not a significant determinant of subsidiary survival. In China-based studies, the findings have also been mixed. Firm size was found to increase the subsidiary survival of MNEs (Papyrina 2007), however, Kim et al. (2010) found insignificant relationship. Although the findings for both China-based and non-China-based studies have been somewhat mixed, the author expects that foreign subsidiaries located in China need adequate resources to absorb risks and uncertainty.

Hypothesis 14*: Parent firm size is positively associated with the probability of foreign subsidiaries to survive in China.*

4.2. Industry Specific Determinants of Subsidiary Survival

Industry Research and Development Intensity: R&D intensity is a frequently used proxy for asset specificity in TCE-based studies (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007). It has been argued that firms with a high level of R&D intensity are more likely to exploit significant amount of advanced technological knowledge to international markets (Slangen & Hennart 2007). The possession of technological knowledge helps parent MNEs to develop competitive advantage in a host country (Delios & Makino 2003). According to TCE and RBV, intangible assets possessed by MNEs can be an effective barrier against failure in the host country (Delios & Beamish 1999; Delios & Henisz 2000; Lu & Hebert 2005). In the study by Papyrina (2007), R&D intensity was found to be non-significantly associated with subsidiary survival in China. However, Demirbag et al. (2011) found that R&D intensity increased the probability of Japanese parent MNEs to survive in Middle East and North Africa. The previous findings tend to be mixed. Thus, based on the theoretical argument, the author expects that:

Hypothesis 15*: Industry research and development intensity is positively associated with the probability of foreign subsidiaries to survive in China.*

Industry Sales' Growth: Industry sales growth has been used to proxy external uncertainty in existing TCE-based studies (Cui & Jiang 2009). It has been argued that high growth rate in a particular industry makes FDIs even more attractive, and hence, the probability for subsidiary's survival in high growth industries is likely to be high (Hollensen 2014: 411). On the other hand, the existing literature has also suggested that firms in a high growth industry are also likely to be the target firms in cross-border mergers and acquisitions. Further on, increased sales growth can also be interpreted as increased degree of competition. Thus, industry sales growth would decrease the probability for subsidiaries to divest or exit the host country. Hence, TCE arguments on the impacts of industry sales growth seem to be ambiguous. Li (1995) found that industry sales growth was positively associated with subsidiary survival. In accordance with both theoretical argument and existing empirical findings presented above, it is expected that:

Hypothesis 16*: Industry sales' growth is positively associated with the probability of foreign subsidiaries to survive in China.*

Industry Growth in Terms of the Number of Firms: A typical TCE argument is that MNEs are less profitable when entering into highly competitive industries. As China progressively started its economic and political reform such as decentralization and privatization, the number of firms in a particular industry actually increased to meet the huge market demand. It has been argued that the growth in number of firms is a good proxy to the degree of competition in transition economies. It has also been argued that the growth in number of firms in an industry is associated with greater business potential and market opportunities (Luo 2001). Thus, the greater business potential and opportunities as indicated by growth in number of firms in a particular industry are expected to increase the likelihood of foreign affiliates to survive in China. Li (1995) used industry concentration ratio as a proxy to industry competition and found that it was not related to subsidiary survival. Since there are no studies that have specifically linked industry growth in number of firms with subsidiary survival in China, the author developed hypothesis based on theoretical arguments. Thus, it is expected that:

Hypothesis 17*: Industry growth in terms of the number of firms is positively associated with the probability of foreign subsidiaries to survive in China.*

4.3. Institution Specific Determinants of Subsidiary Survival

The stage of Institutional Transition (the later versus early stage): IBV-based studies claimed that firm strategy is considerably influenced by the development and effectiveness of market economy institutions of their host countries (Peng 2003; Child & Tsai 2005; Meyer & Peng 2005). An important issue to note while analyzing various FDI issues in emerging economies like China is related to timing as a proxy to the level of market economy institutional development (Peng 2003; 2009). During the early stage of institutional transition and development of market economy, China was characterized by government intervention for business operations, lack of reliable business information, and weak intellectual property protection (Luo 2001; Wei et al. 2005; Luo 2007; Chung & Beamish 2005). On the other hand, in later stage of institutional reform, the market economy institutions were strengthened as well as volatility in institutional environment started gradually to reduce (Norton & Chao, 2001; Papyrina 2007). Thus, it can be expected that foreign subsidiaries established in later stage of institutional transition in China are more likely to survive than in early stage. The empirical results by Papyrina (2007) indicated that foreign subsidiaries formed in the early stage of institutional reforms are less likely to survive in China. For non-China-based studies, Dhanaraj and Beamish (2009) found transition periods were not signifi-

cantly associated with subsidiary survival. In line with the theoretical discussions and finding of China-based study, the author hypothesizes that:

Hypothesis 18*: Later stage of institutional transition is positively associated with the probability of foreign subsidiaries to survive in China.*

Regional Institutional Differences (SEZs and/or OCCs versus other regions within China): A key feature of institutional reforms and development of market economy in China has been the designation of open areas such as SEZs and OCCs, where the level of government restrictions of foreign MNEs tended to be lower than the other part of China (Luo 2001; He et al. 2008; Chan et al. 2010). World Bank Survey of 120 Chinese cities (2006) have shown that both the overall investment climates and local government effectiveness and efficiency in SEZs and OCCs were ranked in the top quintile of all surveyed cities. On the other hand, the quintile of cities ranked lowest were all located in other part of China.

Further on, according to World Bank Survey of 120 cities in China, parent MNEs operating in SEZs and OCCs received preferential corporate tax rate, which was generally lower than other enterprises. Moreover, although laws and regulations were consistent at the nation level, the time spent on interactions with the Chinese local government differed across regions. MNEs conducting business in SEZs and OCCs generally spent less time with local government. In China-based study, Kim et al. (2010) found non-significant relationship between SEZs and subsidiary survival. The author followed the theoretical discussions as well as empirical previous China-based studies presented above and expected that:

Hypothesis 19*: Regional Institutional Differences (SEZs and/or OCCs versus other regions within China) are positively associated with the probability of foreign subsidiaries to survive in China.*

4.4. FDI Entry Mode Strategy and Subsidiary Survival

FDI Ownership Mode Strategy: FDI ownership mode strategy is believed to have different implications on the survival of foreign subsidiaries. While WOS provide MNEs with complete control over their foreign subsidiaries, JVs allow MNEs to access hard-to-transact complementary local resources such as local business knowledge from the JVs' partner (Hennart 1988, 2000, 2009, 2012; Peng & Meyer 2011). Several scholars argue that since the local partner firms are able effectively to manage idiosyncrasies of environment, JV is particularly useful for Western MNEs operating in developing and transition economies like China (Teng 2004; Meyer et al. 2009). On the other hand, JVs have been considered as

unstable because of conflicts and goal incongruence between JV partners (Mehta, Polsa, Mazur, Xiucheng & Dubinsky 2006). Further on, it has been argued that JVs suffer from high degree of coordination risk (Peng & Meyer 2011).

Both China-based and non-China-based empirical studies tend to provide mixed findings for the impact of FDI ownership mode strategy on subsidiary survival. Mata and Portugal (2000) revealed that WOS are more likely to be divested than are JVs. However, Tsang and Yip (2007) found that the probability of survival for WOS is higher than it is for JVs. For China-based studies, Papyrina (2007) and Kim et al. (2010) found that WOS were positively associated with subsidiary survival, whereas Pan and Chi (1999) reveal that JVs resulted in higher survival rate of foreign subsidiaries. In this dissertation, since the cultural distance between Nordic countries and China is relatively large, it is thus difficult for Nordic MNEs to manage local JVs partners. Thus, WOS is expected to be more likely to survive than JVs entries in the context of China.

Hypothesis 20*: WOS are positively associated with the probability of foreign subsidiaries to survive.*

FDI Establishment Mode Strategy: Establishment mode strategy is another critical strategic decision for MNEs entering into foreign markets. Greenfields investments provide an opportunity for MNEs to establish subsidiaries from scratch, whereas acquisitions enable investing firms to acquire an existing target firm (Cho & Padmanabhan 1995; Slangen & Hennart 2007; Peng & Meyer 2011). It has been argued that acquisitions are costlier to manage than greenfields when entering into culturally distant countries (Kogut & Singh 1988; Cho & Padmanaban 1995), and thus, a negative relationship between acquisitions and subsidiary survival is expected. Acquisitions, on the other hand, are believed to be less risky than greenfield establishment mode strategy because acquired local firms already developed capabilities and systems to cope with environmental uncertainties prevailing in transition economies (Slangen & Hennart 2008).

Existing studies found inconsistent relationships with regard to FDI establishment mode strategy and subsidiary survival. For example, Mata and Portugal (2000) found that acquisitions are less likely to be closed down than are greenfields investments. Tsang and Yip (2007) found that the choice between greenfields and acquisitions was not significantly associated with post-entry subsidiary survival. Since there were no China based studies specifically linked FDI establishment mode strategy with subsidiary survival, the author expects that:

Hypothesis 21*: Acquisitions are positively associated with the probability of foreign subsidiaries to survive.*

4.5. Moderating Effects of Institution Specific Determinants

In addition to analyzing the main effects of firm, industry, and institution specific determinants and FDI entry mode strategy on subsidiary survival, the author of the present dissertation is interested in analyzing whether the stage of institutional transition and regional institutional differences within China have moderated the impacts of firm and industry specific determinants on FDI subsidiary survival.

Since 1979, China has gradually opened its national boundaries to foreign investments and trade (Child & Tse 2001; Polsa et al. 2005; He et al. 2008). Thus, institutional conditions in China were different in the early and later stage of institutional transition. During the early stage of institution, institutional framework was not well developed. Thus, the transaction costs of a particular transaction in the early time period in China were relatively high. As China continuously revised and improved its institutional framework, China made significant progress in transiting from a centrally planned economy to a market oriented economy (Papyrina 2007). Although the laws and regulations and property right systems were still imperfect and evolving, transaction costs and uncertainty of business environment in China gradually reduced in the later stage of institutional transition (Papyrina 2007). Therefore, the costs and risk associated with transferring technological skills, international experience, and product-specific knowledge was lower for MNEs operating in China in the later than in the early stage of institutional transition (Peng et al. 2003).

The stage of institutional transition is also expected to moderate the impacts of RBV variables on subsidiary survival. Western multinationals entering into China would need to access important complimentary local assets so that they can competitively successful (Hennart 2009; Meyer et al. 2009). In the early stage of institutional transition in China, the market was inefficient and the access of complementary local assets in China was difficult and would incur relatively higher transaction costs. On the other hand, at the later stage of institutional transition, the nation attempted to transit from a centrally planned economy towards a market oriented economy, and hence, it was easier to access crucial local assets (Meyer et al. 2009). Thus, it is easier for MNEs to exploit or explore resources in the later than in the early stage of institutional transitions. In according with the above presented theoretical arguments, it is expected that:

Hypothesis 22a*: The stages of institutional transition moderate the impacts of firm and industry specific determinants on subsidiary survival.*

Similar arguments can be applied to address the moderating effect of regional institutional differences within China. One of the key FDI policies in China has been the development of open areas such as SEZs and OCCs (Yeung et al. 2009). World Bank Survey (2006) found that the overall investments climate and government effectiveness for SEZs and OCCs ranked in the top of 120 surveyed Chinese cities. It is expected that regional institutional differences moderate the impacts of firm and industry variables. For example, the transaction costs associated with transferring experiential knowledge and technological skills to subsidiaries located in SEZs and/or OCCs tended to be lower than to those established in other cities in China.

Regional institutional differences within China tend to moderate the predictive power of RBV variables on subsidiary survival. RBV emphasized the important role of firm specific resources in generating sustainable competitive advantage and improving firm performance/survival (Barney 2001). However, although at the national level China transited from a centrally planned to a market oriented economy, the markets for important local assets in regions other than SEZs and OCCs in China were still relatively inefficient. Thus, it can be said that resource exploitation and exploration by MNEs was easier in SEZs and OCCs than in other cities in China Based on the theoretical discussions, the author expected that:

Since existing China-based studies have not specifically analyzed the moderating effects of regional institutional differences between SEZs and/or OCCs and other regions within China on FDI subsidiary survival, based on the above theoretical arguments, the author of the present research expects that:

Hypothesis 22b*: Regional institutional differences moderate the impacts of firm and industry specific determinants on subsidiary survival.*

4.6. Research Model of Subsidiary Survival

This section (section 4.6.) is an attempt to summarize the hypotheses associated with subsidiary survival. As can be seen from the figure 10 in the next page, four groups of variables are expected to influence FDI subsidiary survival in China: firm, industrial, and institutional variables and FDI entry mode strategy. For firm specific determinants, while international experience (H11), host country experience (H12), and parent firm size (H14) are expected to increase the likelihood of foreign subsidiaries to survive, degree of product diversification (H13) is hypothesized to decrease the probability for subsidiaries to survive in China.

Of the industry specific determinants, industry R&D intensity (H15), industry sales' growth (H16), and industry growth in terms of the number of firms (H17) are all expected to be positively associated with subsidiary survival. Two hypotheses were developed to link institution specific variables with subsidiary survival. Both of stage of institutional transition (H18) and regional institutional differences (H19) are expected to increase the propensity for Nordic subsidiaries to survive. Further on, the author expects that FDI entry mode strategy exerts significant influence on post-entry subsidiary survival. It is expected that WOS ownership (H20) and acquisitions (H21) establishment modes strategy (i.e. full acquisitions) would encourage subsidiaries of MNEs to survive in China.

In addition to the main effects, it is also expected that two institution specific determinants, stage of institutional transition and regional institutional differences, would moderate the impacts of firm, industry specific determinants and FDI entry mode strategy on subsidiary survival (H22a and H22b).

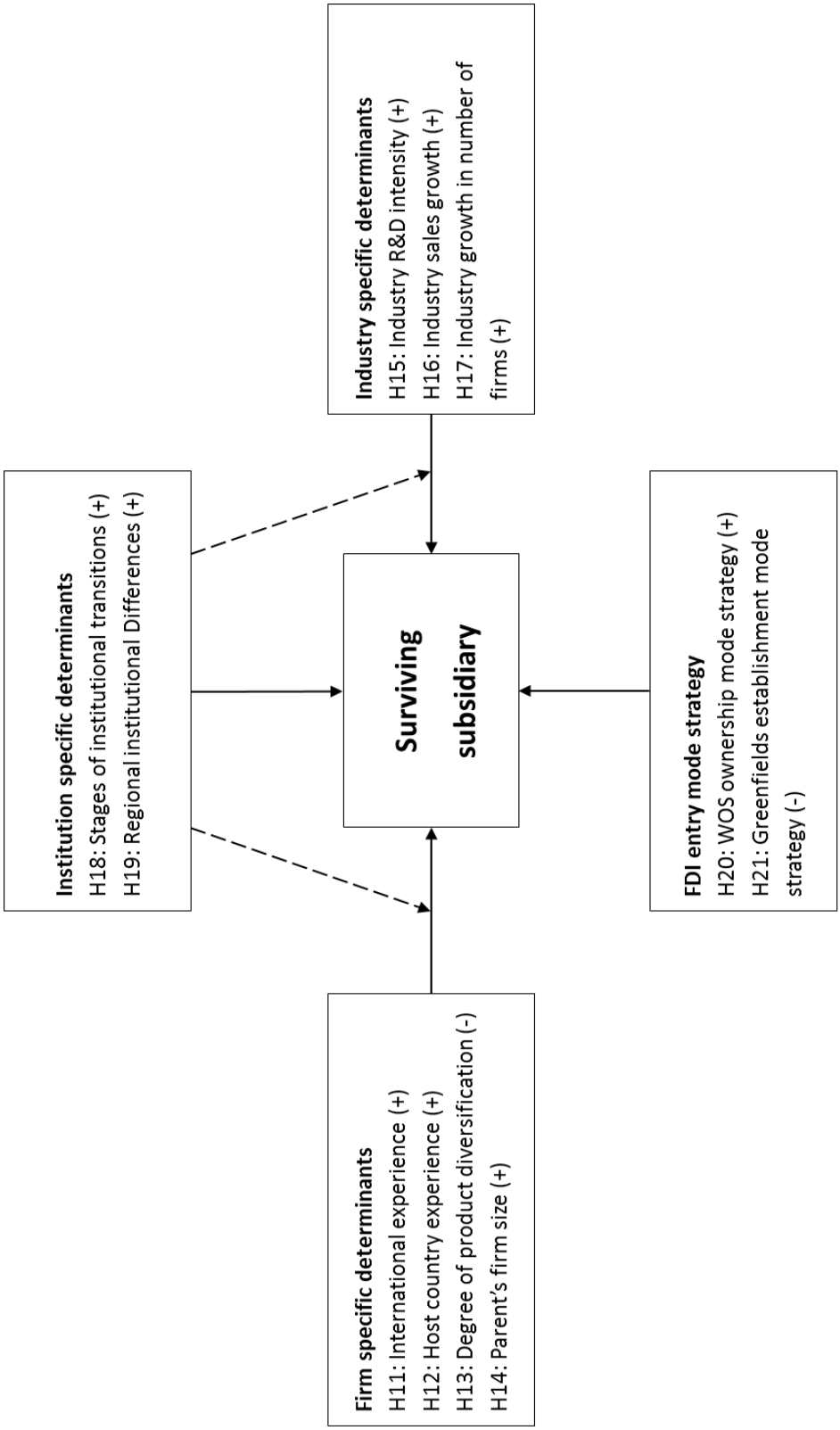


Figure 10. Research Model of Subsidiary Survival

5. RESEARCH METHODOLOGY

The purpose of the research methodology chapter (chapter 5) is to discuss the research methodology used in the empirical part of this dissertation. This chapter starts with a discussion regarding research approach (deductive and inductive) and method (quantitative and qualitative) (section 5.1). Then, data sources, sample and operationalization of dependent and independent, as well as control variables are discussed in this chapter (section 5.2). Next section (section 5.3) discusses the sample characteristics in more detail. In the last section (section 5.4), validity and reliability of the study are presented and evaluated.

5.1. Research Approach and Method

For international business and research in other related fields, there are two research approaches which can be used to conduct a research phenomenon: **1) deduction** and **2) induction research approach** (Ghauri & Gronhaug 2002). The extent to which the author is clear about the theory at the beginning raises an important question regarding the general research approach of the study. That is whether the author should use the deductive approach, in which the author develops a theory and hypothesis and design a research strategy to test the theory and hypotheses, or the inductive approach, in which the author would collect data at the beginning and theory is developed as a result of data analysis (Saunders, Lewis & Thornhill 2007).

Deductive approach involves the development of a theory, thus, the data collection would follow the theory. In contrast to deductive approach, inductive approach requires the researcher to make sense of the collected data at the beginning so as to formulate theory, thus, the theory would follow the data collection and interpretation (Saunders et al. 2007). Inductive research is based on empirical evidence, whereas deductive research is built on logic reasoning (Ghauri & Gronhaug 2002). **Since the hypotheses are developed at the first and the empirical analysis is an attempt to validate and test these hypotheses, this dissertation follows deductive research approach.**

Since there are a number of ways to collect and analyze the data, the author needs to select the most suitable data collection techniques, which align with the main research question and research objectives (Ghauri & Gronhaug 2002). The terms **quantitative** and **qualitative** are used widely in business and management research to differentiate both data collection techniques and data analysis procedures. The aim of quantitative research method is to measure the research phe-

nomenon by analyzing the data statistically. Quantitative research is a systematic research method, thus, it has a structured approach. This research method has little flexibility, and it has a high ability to replicate the result.

Quantitative research method is largely used when answering the main research question such as how much, how many, and how often. Qualitative method, in contrast to quantitative research method, is commonly applied when answering questions such as what, why, and how. The flexibility of using qualitative method is higher than quantitative method. This flexibility allows the researcher to pursue new areas of interest. The researcher could have a chance to get deep insight into the research phenomenon since the researcher is closely involved with the respondents (Saunders et al. 2007). **Since this study places emphasis on hypotheses testing and verification, the author applies quantitative research method**.

5.2. Data Sources, Sample and Operationalization

5.2.1. Data sources and Sample

There are two types of data sources: **1) primary** and **2) secondary data** sources. Primary data is the original data collected by researchers to address their own research problems, whereas secondary data are the information collected by others for different purposes. There are both advantages and disadvantages for using different data sources. The main advantage for using primary data is that the data are collected particularly for research problem at hand. Second, primary data is particularly useful to study people's opinions and attitudes. The main disadvantage associated with primary data is time or costs consuming. Second, it is sometimes difficult to collect primary data, as the respondents may reluctant or refuse to cooperate. The first advantage associated with secondary data is cost or time saving. Second, secondary data can help researchers to interpret and understand their primary data. However, secondary data are usually collected for different purposes, thus, may not suitable for studies at hand. Further on, the variables or their measurements might have been defined differently (Ghauri & Gronhaug 2002). The purpose of this study is to analyze FDI entry modes strategy and subsidiary survival at multiple levels: firm, industrial, and institutional level. Since this study addresses firm behaviour rather than human opinion and attitudes, **secondary data** is chosen to approach the main purpose of this study. **In the present research, three sources were used to collect secondary data: 1) internal databank, 2) China Statistical Yearbook, and 3) Thomson ONE Banker and Orbis databank.** The main source of the data for the empirical analysis is a part

of a large **internal data bank**, focusing on FDIs made by Nordic parent firms collected over a period of several years. The data were mainly from the annual reports and press releases of the investing firms, but also supplemented with the information gathered from articles in leading local business magazines and from direct contact with several of the investing companies. The databank includes information from approximately 2500 FDIs made by Finnish multinationals. In addition the databank covers information from some 7000 FDIs made by multinationals originating from Denmark, Norway, and Sweden. The target population includes investments made in all two digit manufacturing sectors (SIC 20-39), but almost half of the sample were investments made in SIC 26 (paper and allied products), SIC 28 (chemicals and allied products), SIC 35 (machinery), and SIC 36 (electronics). **In the empirical part of this dissertation, the developed hypotheses will be tested on a sample of 405 FDIs made by Danish, Finnish, Norwegian and Swedish MNEs in China during a time period 1982–2012.**

The data associated with all firm specific determinants including international experience, host country experience, degree of product diversification and parent firm size, as well as industry R&D intensity and institution specific determinant of stage of institutional transition were taken from the internal databank.

Further on, the source of data associated with industry variables including industry sales growth and industry growth in number of firms were various issues of **China Statistical Yearbook**. China Statistical Yearbook is an annually published leading database of statistical data in China, which reflects comprehensively the economic and social development of China. It covers data at both national level and levels of province, autonomous region and municipality directly under the central government. China Statistical Yearbook has covered information in areas such as population, employment and wages, investment in fixed assets, foreign trade and economic cooperation, resources and environment, energy, government finance, prices indices, agricultural, industry, construction and wholesale and retail trade. The data in terms of industry sales' growth and industry growth in terms of number of firms were primarily taken from industry section of various China Statistical Yearbooks.

In addition to the internal databank and China Statistical Yearbook, the author has also used other data sources such as **Thomson ONE Banker** and **Orbis databank** to cross-check the company information and data. Thomson ONE banker provides access to financial databases, which provide various data and company information related to internationally quoted companies. Orbis databank provides comprehensive company information across the globe. It offers information such

as name of companies, year of incorporation, location, industry, number of employees, and in some cases financial data.

5.2.2. Operationalization of Dependent Variables

In this dissertation, there are three dependent variables: 1) FDI ownership mode strategy, 2) FDI establishment mode strategy and 3) FDI subsidiary survival. **FDI ownership mode strategy** is operationalized with a dummy variable, which takes one if the firm owned 95% or more of the subsidiary equity and zero if it owned at least 10%, but no more than 94%. The 95% cut-off point was used in several existing studies (Gatignon & Anderson 1988; Hennart 1991). The main source of the data was the internal database. **FDI establishment mode strategy** is proxied using a dummy variable where one stands for greenfield investments and zero represents for acquisitions. A third dependent variable is **subsidiary survival**, where survived subsidiaries are coded as one and non-surviving (i.e. liquidation or outright sales) subsidiaries are coded as zero. It should be noted that subsidiary survival is positively correlated with subsidiary performance (Geringer & Hebert 1991; Vermeulen & Barkema 2001). Thus, since accounting data are not available for separate most of the subsidiaries, it is appropriate to study subsidiary survival in this dissertation.

5.2.3. Operationalization of Independent Variables

This dissertation mainly analyzes **three groups of independent variables**. The first group of determinants is firm specific determinants, i.e. international experience, host country experience, degree of product diversification and parent firms size. A second group of variables is at the industrial level, which includes industry R&D intensity, industry sales' growth and industry growth in terms of number of firms. The third group of variables is institution specific determinants, including stage of institutional transition and regional institutional differences. The same firm, industry, and institution specific determinants have been used to address both FDI entry mode strategy and subsidiary survival. For the analysis of subsidiary survival, the author of this dissertation has also addressed the impacts of FDI entry mode strategy. In the next, the author discusses the operationalization of each of the independent variables.

International experience was measured by the total number of foreign manufacturing investments preceding a subsidiary's establishment in China. Several FDI entry mode studies have used similar measures to proxy international experience of MNEs (Padmanabhan & Cho 1999; Larimo 2003; Arslan & Larimo 2011,

2012). International experience is expected to increase the probability for Nordic MNEs opting for JVs ownership mode strategy, greenfields establishment mode strategy, and subsidiary survival. The primary data source of international experience was internal databank.

Host country experience was proxied by the total count years since the first manufacturing investment made by the parent firm in China. Early studies such as Hennart and Park (1993), Padmanabhan and Cho (1999), Larimo (2003) and Arslan and Larimo (2011, 2012) have measured host country experience with similar operationalization. Host country experience is expected to increase WOS ownership mode strategy, acquisitions establishment mode strategy, and subsidiary survival. The review study by Slangen and Hennart (2007) referred that the operationalization used in this study is a preferred proxy for host country experience. The main source of the data was internal database.

Degree of product diversification of was proxied by the number of four-digit Standard Industrial Classification (SIC) codes in which the company was operating. Larger number of SIC codes implies that the degree of product diversification of the parent firm is high. This proxy has been used in early studies such as Hennart and Larimo (1998), Vermeulen and Barkema (2001) and Mudambi and Mudambi (2002). It is expected that degree of product diversification would encourage JVs ownership and acquisitions establishment mode strategy. It was also expected that degree of product diversification would decrease the probability of foreign subsidiaries to survive. The data source for degree of product diversification was internal database.

Parent firm size is a continuous variable and was calculated based on annual sales of the parent firm in the year preceding the investment in China (in million euros). Similar FDI studies such as Hennart and Larimo (1998) and Larimo (2003) proxied parent firm size with a similar measurement. The primary data source for parent firm size is internal database. Parent firm size is expected to increase the probability of WOS ownership and acquisitions establishment mode strategy, as well as subsidiary survival.

Industry R&D intensity was proxied with a ordinal variable, where 1 stands for FDIs made by low-tech firms, 2 for medium-high-tech firms, and 3 for high-tech firms. According to OECD classifications, a firm is considered as high-tech if on average it spends at least 4 per cent of its total value added for R&D. A firm uses on average 1 to 4 per cent of its total value added for R&D is classified as medium-high-tech firms. The rest of the firms are referred as to low-tech firms. Hennart and Park (1993), Larimo (2003) and Dikova and van Witteloostuijn (2007) used similar proxies in their empirical analysis. The data source for industry R&D

intensity was internal database. Industry R&D intensity is expected to increase WOS ownership and greenfield establishment mode strategy, as well as subsidiary survival.

Both **industry sales' growth** and **industry growth in terms of number of firms** were calculated using the compound growth rate over three consecutive years prior to the year of establishment of subsidiary. The primary data source was various issues of China Statistical Yearbook. In the study by Luo (2001), similar proxies have been used to analyze FDI ownership mode strategy. It is worth noting that Slangen and Hennart (2007) have referred that industry sales' growth is a preferred proxy for addressing FDI establishment mode strategy. Both industry growth in terms of sales and number of firms are expected to encourage WOS ownership and greenfield establishment mode strategy and subsidiary survival.

A categorical variable was created to proxy **stage of institutional transition**, where 1 stands for investments made in period 1982–1995, 2 for investments made in 1996–2001, and 3 for period 2002–2012. A similar proxy can be found in several studies such as Zhang, Zhang and Liu (2007) and Papyrina (2007). The main data source was internal databank. It was expected that later stage of institutional transition would encourage WOS ownership mode and acquisitions establishment mode strategy. It was also expected that later stage of institutional transition would increase the probability of foreign subsidiaries to survive in China.

Regional institutional differences were operationalized by a dummy variable, where subsidiaries established in SEZs and/or OCCs were coded as 1 and investments made in other cities in China were coded as 0. SEZs and/or OCCs are areas where market oriented economy have been more developed. Pan and Tse (2000) and Luo (2001) used similar proxy and the main sources of the data are internal databank, Thomson ONE Banker and Orbis databank. It is hypothesized that regional institutional differences would encourage WOS ownership and greenfields establishment mode strategy. Moreover, it is expected that regional institutional differences would increase the probability of foreign subsidiaries to survive in China.

The operationalization of the firm, industry, and institution specific determinants, primary data sources, and examples of early studies where similar operationalization has been used are presented in table 12 in the next page. It should be noted that **FDI ownership and establishment mode strategy are included in the analysis of subsidiary survival as independent variables**, and their operationalization has been mentioned in previous subsection (subsection 5.2.2.). It is expected that WOS ownership and acquisitions establishment mode strategy would encourage FDI subsidiary survival in China.

Table 12. Operationalization of Independent Variables

Variables	Operationalization
Firm specific determinants	
International experience	The number of foreign manufacturing investments made by the company before the reviewed investment (e.g., Padmanabhan & Cho 1999; Larimo 2003; Arslan & Larimo 2011; 2012) (Source: internal database).
Host country experience	The experience in years from the first manufacturing investment of the firm in the target country (e.g., Hennart & Park 1993; Padmanabhan & Cho 1999; Larimo 2003; Arslan &Larimo 2011; 2012) (Source: internal database).
Degree of product diversification	The number of 4-digit SIC codes in which the company was operating based on the annual reports and websites of the firms (e.g., Hennart & Larimo 1998; Vermeulen & Barkema 2001; Mudambi & Mudambi 2002) (Source: internal database).
Firm size	Worldwide annual sales of the company (in million euros) in the year preceding the investment (e.g. Hennart & Larimo 1998; Vermeulen & Barkema 2001; Larimo 2003) (Source: internal database).
Industry specific determinants	
Industry R&D intensity	A classification of various 4-digit SIC industries into three categories based on their value added figures (e.g., Hennart & Park 1993; Larimo 2003; Dikova & Witteloostuijin 2007) (Source: internal database).
Industry sales growth	Compound sales growth rate over three consecutive years prior to the establishment year (e.g., Luo 2001) (Source: China statistical yearbook).
Industry growth in number of firms	Compound growth rate of number of firms over three consecutive years prior to the establishment year (e.g., Luo 2001) (Source: China statistical yearbook).
Institution specific determinants	
Regional institutional differences	A dummy variable where 1 stands for subsidiaries located in SEZs and OCCs and 0 for otherwise (e.g., Pan & Tse 2000; Luo 2001) (Source: internal database, complemented with Thomson one databank and Orbis databank).
Stages of institutional transitions	A dummy variable where 1 stands for investments made from 1982 to1995, 2 for investments made during 1996-2001 and 3 for investments after 2002 (e.g., Zhang, Zhang & Liu 2007) (Source: internal database).

5.2.4. Operationalization of Control Variables

In addition to independent variables, the author of this dissertation added several control variables that are also likely to influence FDI entry mode strategy and subsidiary survival. Three control variables have been included in the analysis of FDI ownership and establishment mode strategy, as well as subsidiary survival. First, the author created a dummy variable which equals one if the subsidiary's main products are in a **resource-intensive industry** such as SIC 20 (food and beverage), 22 (textile), 24 (wood except furniture), 26 (paper and paper related products), 29 (petroleum), 30 (rubber), 32 (stone and glass), and 33 (primary metals) (Hennart 1991; Hennart, Larimo & Chen 1996; Demirbag et al. 2007). It is expected that resource-intensity industry would encourage JVs ownership mode and acquisitions establishment mode strategy. It is also expected that resource-intensive industry would encourage subsidiary survival.

Second, the author controlled for **industry restrictions**, a dummy variable where 1 indicates investments made in restricted industries and 0 indicates those in encouraged manufacturing industries (Lu et al. 2011; Cheng 2008; Chang et al. 2012). Industry legal restrictions are expected to increase JVs ownership and greenfields establishment mode strategy. However, it is expected that industry restrictions would decrease subsidiary survival.

Third, the author controlled for **cultural distance** between Nordic countries and China (Demirbag et al. 2007; Delios et al. 2008; Demirbag et al. 2011; Chang et al. 2012). Cultural distance is measured using the methodology developed by Kogut and Singh (1988) based on Hofstede (1980)'s four cultural dimensions: power distance, uncertainty avoidance, masculinity/femininity and individualism. The score for cultural distance from Denmark, Finland, Norway and Sweden to China is 5.74, 3.91, 5.58, and 5.78, respectively. Since the scores for Denmark, Norway and Sweden are similar to each other, the author created a dummy variable to control for cultural distance, where FDIs by Danish, Norwegian and Swedish firms were coded as one and Finnish FDIs were coded as zero. It is expected that cultural distance would encourage WOS ownership mode strategy (Brouthers & Brouthers 2001) and greenfields establishment mode strategy (Drogendijk & Slangen 2006). Cultural distance is expected to decrease the likelihood of foreign subsidiary to survive (Barkema et al. 1996).

There are **additional control** variables for each of the dependent variables. For the analysis of FDI ownership mode strategy, the author included FDI establishment mode strategy as a control variable (Hennart & Larimo 1998). It is expected that WOS ownership mode strategy would encourage greenfields establishment mode strategy. For the analysis of FDI establishment mode strategy, FDI owner-

ship mode strategy was included in the analysis as a control variable (Larimo 2003; Brouthers & Dikova 2010). The expected sign for FDI ownership mode strategy is positive. Then, for the analysis of subsidiary survival, the author included subsidiary age to control for liability of foreignness and length of operations (Li 1995; Delios et al. 2008; Demirbag et al. 2011). It is expected that subsidiary age would encourage FDI subsidiary survival.

5.3. Sample Characteristics

The empirical analysis consists of 405 manufacturing FDIs by Nordic (Denmark, Finland, Norway and Sweden) MNEs operating in China during 1982–2012. Of the four countries, the number of FDIs by Danish firms was 94, Finnish subsidiaries were 125, FDIs made by Norwegian firms were 34, and the number made by Swedish firms was 152. Table 13 presents the characteristics of the sample regardless of country of origin.

For FDI ownership mode strategy, 210 investments were JVs with local partners, whereas 195 FDIs were WOS. Concerning FDI establishment mode strategy, 293 FDIs were greenfield investments and 112 were acquisitions. Of the whole sample of 405 FDIs, 308 had existed at the end of 2012. The average length of the subsidiary was 9.6 years. The highest international experience of Nordic firms was 193 subsidiaries at the globe level, whereas the minimum international experience is 0 subsidiaries (the observed FDI in China was the first investment by the parent MNE in abroad). The maximum host country experience was 20 years and the minimum was 0 years (the observed investment was the first FDI in China).

Further on, of the total 405 investments, 138 FDIs were made by low-tech MNEs, 154 investments by medium-high-tech firms, and 113 by high-tech firms. The observed FDIs made by Nordic firms in the period of 1982–2012. Of the total investments, 79 FDIs were made in the period of 1982–1995, 144 investments made between 1996 and 2001, and 182 subsidiaries were formed during period 2002–2012. Furthermore, there is a clear preference for Nordic MENs to set up their subsidiaries in SEZs and/or OCCs, where the market economy was better developed. While 323 FDIs were located in SEZs and/or OCCs, 82 firms were formed in the interior parts within China.

The above discussion mainly focuses on the sample characteristics at an aggregated level. Since this dissertation include four countries into analysis (Denmark, Finland, Norway, and Sweden), sample characteristics on based on country of origin are discussed.

Table 13. Summary of Sample Characteristics

Sample characteristics	**Description**
Country of origin	Denmark (94), Finland (125), Norway (34), Sweden (152)
FDI ownership mode strategy	JVs (210), WOS (195)
FDI establishment mode strategy	Greenfields (293), acquisitions (112)
FDI subsidiary survival	Surviving subsidiaries (308), non-surviving subsidiaries (97)
International experience	Maximum 193 subsidiaries, minimum international experience is 0. Average international experience is 40.44 subsidiaries
Host country experience	Maximum 20 years and minimum host country experience is 0. Average of host country experience is 3.49 years.
Industry R&D intensity	Low-tech branch (138), medium-high tech branch (154), high-tech branch (113)
Timing of investments	1982-1995 (79), 1996-2001 (144), 2002-2012 (182)
FDI locations	Special Economic Zones and Open Coastal Cities (323), other parts of China (82)

5.3.1. FDI Ownership Mode Strategy by Country of Origin

This study sample consists of 210 JVs and 195 WOS during the observation period. It can be said that the FDI ownership mode strategy by all four Nordic countries is normally distributed. Of the 94 Danish FDIs, 53 were fully-owned subsidiaries and 41 were JVs with local partners. A detailed analysis reveals that 68 Finnish investments were made through JVs and 57 entries were WOS. For Norwegian FDIs, 21 were JVs and 13 were subsidiaries fully owned by MNEs. Of the Swedish investments, 80 FDIs were JVs and 72 investments via WOS (see figure 11).

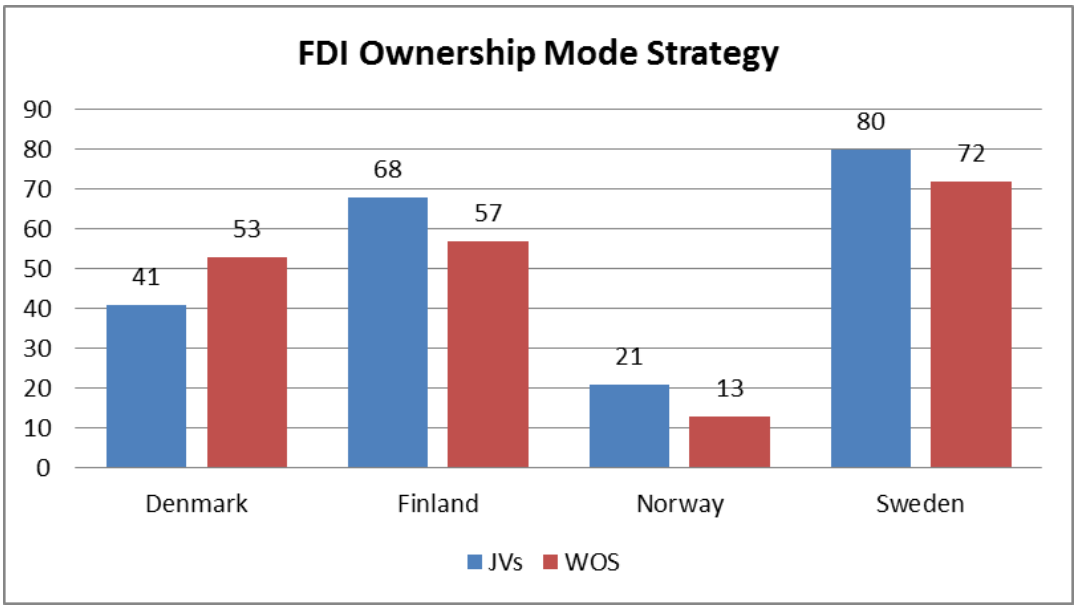


Figure 11. FDI Ownership Mode Choice by Country of Origin

5.3.2. FDI Establishment Mode Strategy by Country of Origin

This subsection discusses the FDI establishment mode strategy by country of origin. Figure 12 in the below illustrates the distribution of the greenfields and acquisitions in terms of country of origin. There is a clear preference for Nordic MNEs to opt for greenfields over acquisitions. Of the total 405 investments, 293 were greenfields investments, whereas 112 were acquisition entries. Of the 95 FDIs by Danish firms, 67 entries were greenfields and 27 were established through acquisitions. For investments from Finland, while 95 FDIs were greenfields investments, 30 were acquisitive entries. Of the 34 Norwegian investments, there were 20 greenfields and 14 acquisitions during the observation period. Finally for FDIs by Swedish firms, 111 were greenfields and 41 were acquisitions.

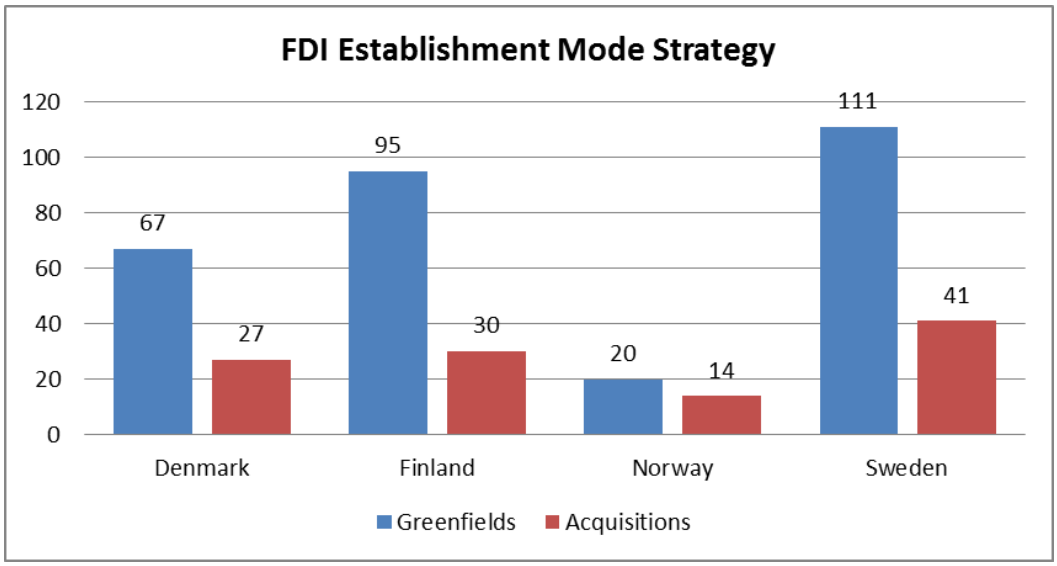


Figure 12. FDI Establishment Mode Strategy by Country of Origin

5.3.3. Subsidiary Survival by Country of Origin

Of the 405 Nordic investments in China during 1982–2012, 97 subsidiaries have been terminated either through liquidation or outright sales. For investments by Danish firms, 80 out of 94 investments were survived. Interestingly, for investments by firms from Norway, 15 investments were survived and 19 divested subsidiaries, thus, a greater proportion of FDIs by Norwegian firms have been divested during the observation period. For Swedish firms, 121 firms were survived and 31 investments were divested (see figure 13).

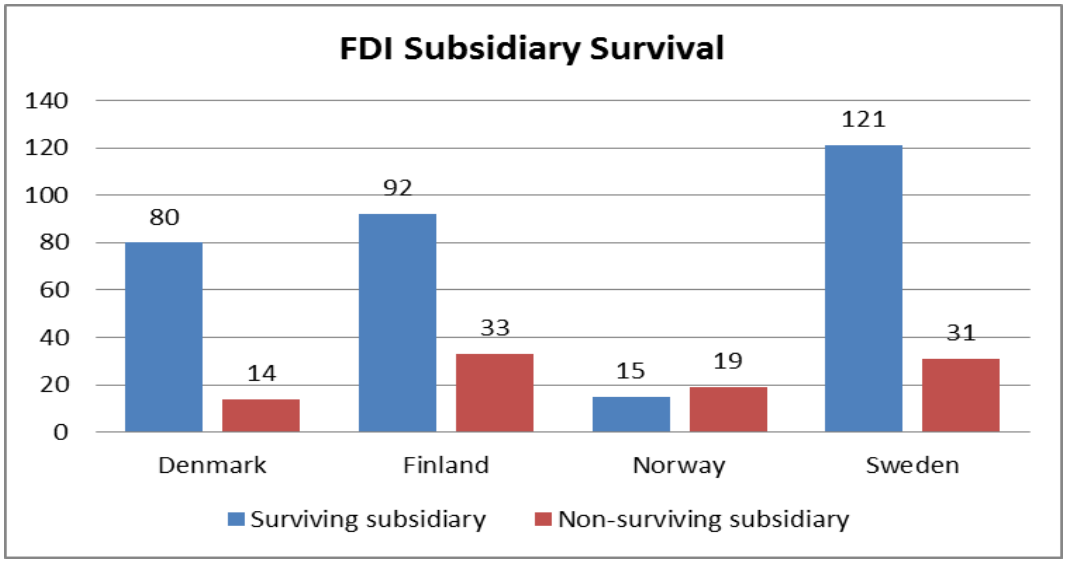


Figure 13. Surviving versus Non-surviving Subsidiaries by Country of Origin

5.3.4. International Experience of Nordic MNEs

International experience is operationalized by the number of foreign manufacturing investments made by a parent firm prior to the reviewed investment in China. The highest international experience in the sample is 193 investments and the minimum number of foreign investments by a firm is 0 (the observed investment in China is the first FDI made by parent firm in the international market) (see figure 14). The mean of international experience is 40.44 subsidiaries. An in-depth analysis shows that on average Swedish firms have highest level of international experience and the mean is 52.42 subsidiaries. Norwegian firms on average set up 43.68 foreign affiliates around the globe during observation period. Finnish firms on average established 36.64 subsidiaries at the globe level during 1982 –2012. Danish firm have lowest level of international experience and the mean is 27.75 subsidiaries.

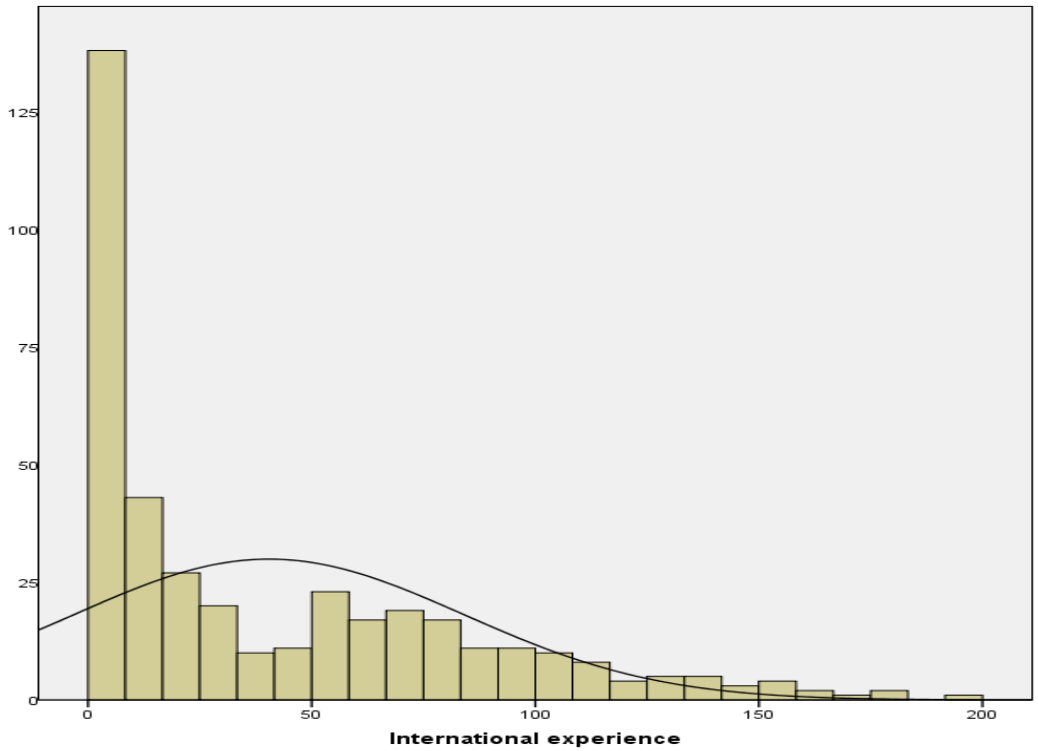


Figure 14. International Experience of Nordic MNEs Operating in China

5.3.5. Host Country Experience of Nordic MNEs

Host country experience is operationalized by total count years from the first manufacturing investment of the parent firm in China. The highest experience in China is 20 years and the smallest number of host country experience is 0 years (the observed investment is the first FDI in China) (see figure 15). The average host country experience of Nordic firms is 3.49 years. A detailed analysis provides information about the host country experience by country of origin. On average, Swedish firms have the largest level of host country experience and the mean is 4.33 years. Danish firms on average have operated in China for 3.26 years. The average host country experience for Norwegian firms is 3.15 years. The mean of the host country experience for Finnish firms is 2.74 years.

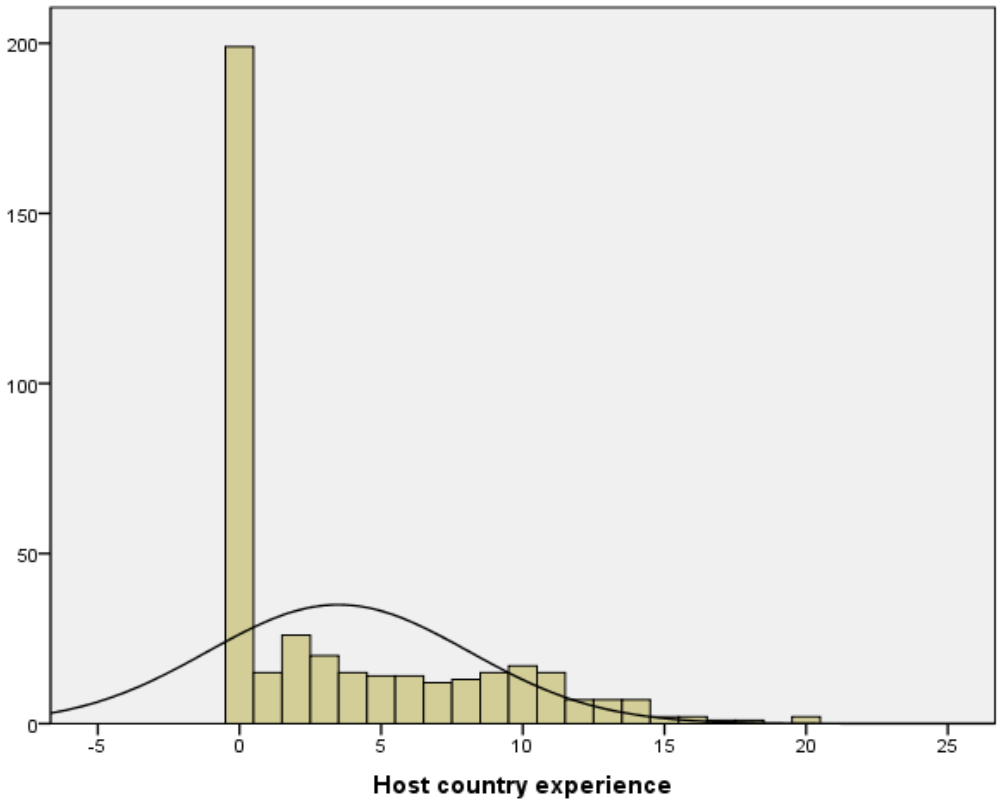


Figure 15. Host Country Experience of Nordic MNEs Operating in China

5.3.6. Industry R&D Intensity by Country of Origin

Industry R&D intensity is proxied by a classification with various four-digit SIC industries into three categories base on their value added figures, i.e. 1 stands for low-tech firm, 2 for medium-high-tech and 3 for high-tech firm. As illustrated in figure 16, it can be said that the number of investments by each of the three types of branches is normally distributed. There were 138 low-tech and 154 medium-high-tech investments, and 113 high-tech FDIs. For Danish investments, 44 FDIs made by low-tech firms, 32 were medium-high-tech firms and only 18 investments by high-tech firms. Of the 125 FDIs by Finnish firms, 40 of them were low-tech firms, 56 medium-high-tech and 29 high-tech firms. For Norwegian firms, 14 investments made by low-tech firms, 11 by medium-high-tech and 9 FDIs by high-tech firms. Of the Swedish investments, 40 FDIs were made by low-tech firms, 55 investments by medium-high-tech and 57 by high-tech firms (see figure 16).

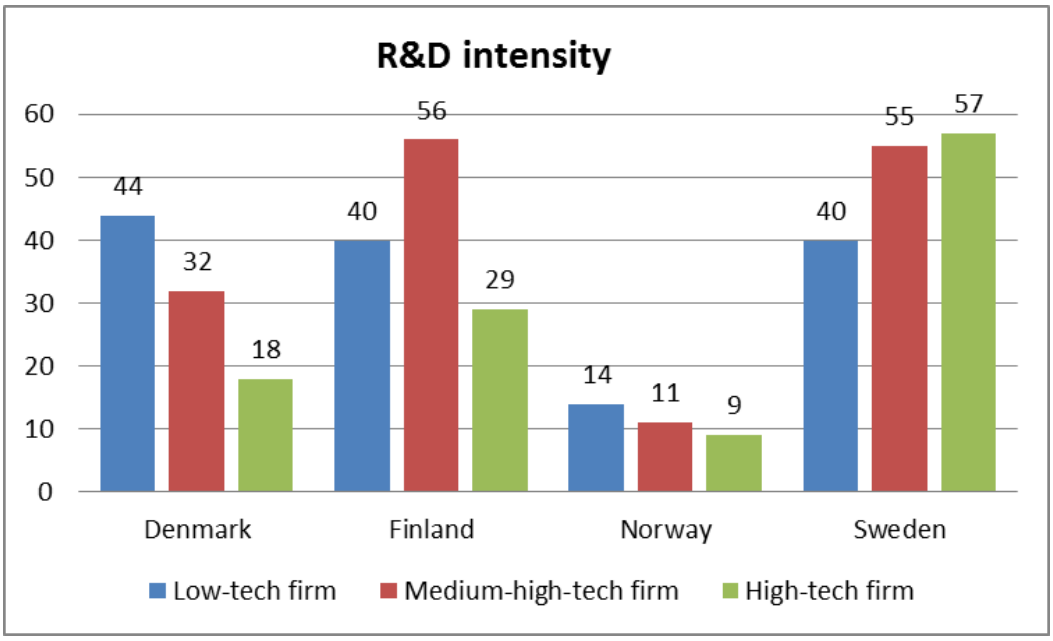


Figure 16. Industry R&D Intensity of Nordic MNEs Operating in China

5.3.7. Timing of Investments by Country of Origin

The sample consists of Nordic firms operating in China during a period of thirty years (1982 – 2012). Of the total 405 Nordic investments, 79 were made in period 1982 – 1995, 144 investments established from 1996 to 2001 and 182 subsidiaries formed between 2001 and 2012. Figure 17 in the below illustrates the timing of investments by country of origin. For Danish firms, 22 made in early period

(1982 – 1995), 34 FDIs made during 1996 – 2001 and 38 FDIs during 2002 and 2012. Of the investments originate from Finland, 18 made from 1982 to 1995, 42 made in period 1996 – 2001 and 65 made after China joint WTO (2002 – 2012). Norwegian firms made in total 34 FDIs during the observed period, of which 8 made during 1982 – 1995, 14 made in period 1996 – 2001 and the rest of the investments made between 2002 and 2012. Of the 152 subsidiaries by Swedish firms, 31 were established during period 1982 – 1995, 54 formed between 1996 and 2001 and 67 were formed from 2002 to 2012.

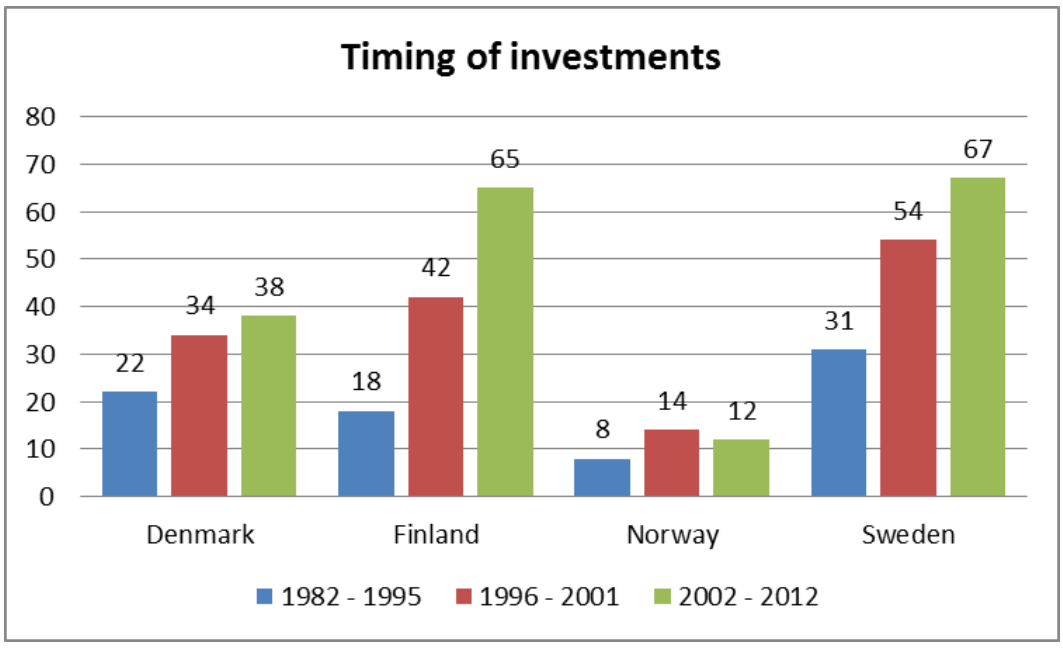


Figure 17. Timing of Investments by Nordic MNEs Operating in China

5.3.8. FDI Locations by Country of Origin

In the study sample, FDIs by Nordic firms have been made in various provinces and cities in China. Of the total 405 investments, 323 have been made in SEZs and/or OCCs and the rest in other cities of China. Figure 18 in the below illustrates the number of FDIs by different locations in China. It can be said that there is a clear preference for Nordic firms to set up their subsidiaries in regions where the market economy is better developed, i.e. SEZs or OCCs. For Danish firms, 74 FDIs have been established in SEZs and/or OCCs, whereas 20 made in other cities of China. Of the 125 investments by Finnish firms, 109 made in SEZs and/or OCCs and 16 made in other parts of China. Norway has made relatively less investments, 22 out of 34 have been established in cities where institutional transition has been progressed well, i.e. SEZs or OCCs, and 12 of the total Norwegian investments made in other areas of China. There is also a clear preference for

Swedish firms to establish their subsidiaries in SEZs and/or OCCs (118 subsidiaries), whereas only a small number of Swedish firms established in other regions in China (34 subsidiaries).

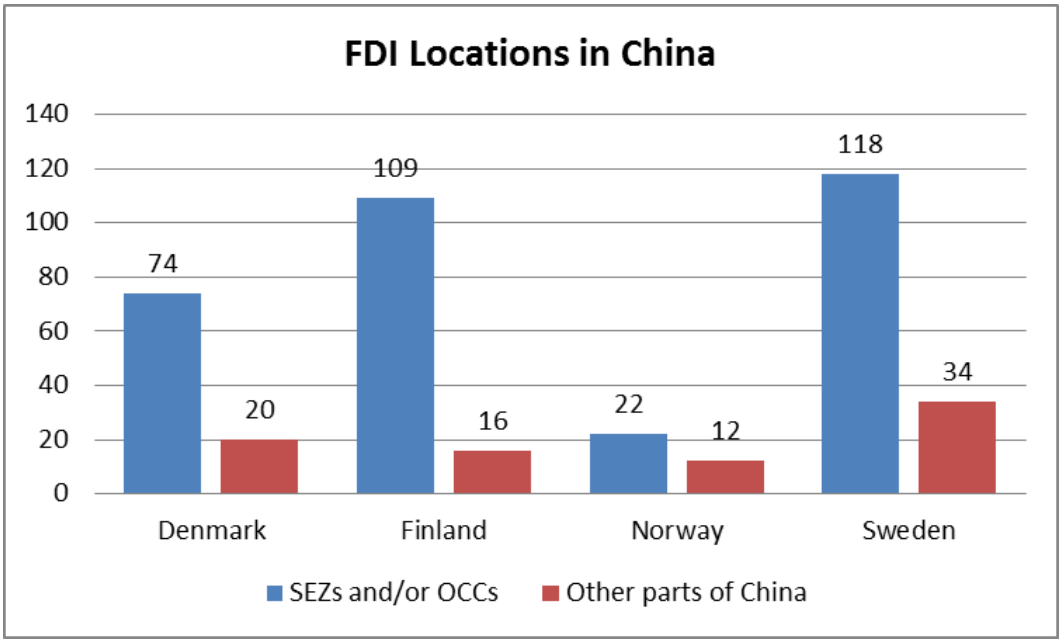


Figure 18. FDI Locations by Country of Origin

5.4. Validity and Reliability of the Study

According to Yin (2003) and Ghauri and Gronhaug (2002), four tests have been used to judge the quality of the research: construct validity, internal validity, external validity, and reliability. Table 14 provides the definition of each of the tests. Both validity and reliability associated with the present research are assessed and evaluated in the next.

Table 14. Validity and Reliability of Research

Tests	**Definition**
Construct validity	Establishing correct operational measures for the concepts being studied
Internal validity	Establishing a causal relationship, whereby certain conditions are shown to lead to other conditions, as distinguished from spurious relationship
External validity	Establishing the domain to which a study's findings can be generalized.
Reliability	Demonstrating that the operations of a study such as the data collection procedures can be repeated, with the same results.

Source: Yin (2003) and Ghauri and Gronhaug (2002)

Construct validity refers to the extent to which a proxy measures accurately the concept of the research (Yin 2003; Ghauri & Gronhaug 2002). The main constructs used in this study are: international experience, host country experience, the degree of product diversification, parent firm size, industry R&D intensity, industry sales' growth, industry growth in terms of number of firms, the stage of institutional transition, and regional institutional differences within China. The degree of construct validity is believed to be high, since the operationalization of the above mentioned constructs have been used and validated in early empirical studies (see table 12). Several measurements associated with the constructs such as international experience and industry sales' growth have been referred in the review study by Slangen and Hennart (2007) as preferred archival operationalization.

The degree of internal validity of this dissertation is satisfactory. This dissertation is an attempt to analyze the determinants of FDI ownership mode and establish-

ment mode strategy and subsidiary survival. The constructs are drawn from three theories: transaction costs economics, resource-based and institution-based view. Casual relationships between constructs of the three theories and the dependent variables including FDI ownership, establishment mode strategy and subsidiary survival have been established. The developed hypotheses will be tested and validated using a sample of Nordic MNEs operating in China.

As referred by both Yin (2003) and Ghauri and Gronhaug (2002), external validity of the research is relating to the extent to which the findings of the research at hand can be generalized to other settings. The external validity of the study is believed to be high. In the empirical part of the present dissertation, the developed hypotheses will be tested based on a unique sample of Nordic MNEs operating in China. Nordic countries have been considered as a part of SMOPECs and it has been argued that firms from these economies face similar challenges when investing abroad (Laantti et al. 2009). Since the findings of the present study are expected to be generalized to other firms from other small and open economies such as Austria, Belgium, Ireland, Israel, the Netherlands, New Zealand, Portugal, and Switzerland (Dick & Merret 2007; Laantti et al. 2009), the external validity of the present research is satisfactory.

The degree of reliability of this dissertation is believed to be high, since the data collection procedures can be repeated. The main data source used in the empirical part of this dissertation is a part of large databank focusing on Nordic manufacturing investments around the globe collected during several years from investing firms' annual reports and press releases, from leading local business magazines and from several direct contacts with the investing firms. Further on, the author cross-checked the company information and data from external databanks such as Thomson One Banker and Orbis databank. Thus, it can be said that the sample included in the analysis is relatively comprehensive and the data collection procedures can be repeated. Thus, it can be said that the degree of reliability of this dissertation is high.

6. RESULTS

The focus of this chapter (chapter 6) is to analyze and interpret data in order to empirically test developed hypotheses. This chapter first presents the statistical analysis method used in this dissertation (section 6.1.). Then, the descriptive statistics in terms of means, standard deviations, and the correlations between various variables are presented and discussed (section 6.2.). Next section presents the results associated with FDI ownership mode strategy (section 6.3.). In next section (section 6.4.), the author describes the results associated with FDI establishment mode strategy. In the last section (section 6.5.), the regression table for subsidiary survival is presented.

6.1. Statistical Analysis Method

Since all the three dependent variables in this research are binary in nature, this study applies **binary logistic regression** to examine the impacts of the explanatory variables on FDI ownership mode strategy, FDI establishment mode strategy, and subsidiary survival. Logistic regressions have been frequently used as it does not make assumptions about predictors' distributions and allows the independent variables to be any mix of continuous, discrete and dichotomous variables (Tabachnick & Fidell 2007). The binary logistic regression has been used and validated in existing studies (e.g. Brouthers & Brouthers 2001; Dikova & van Witteloostuijn 2007; Kuo et al. 2012). The regression coefficients estimate the impact of control and independent variables on the probability that the investment will be a 1) WOS ownership mode strategy, 2) greenfields establishment mode strategy, and 3) surviving subsidiary. In general, the terms of the model can be expressed as: $\boldsymbol{P(y_i = 1) = 1 / (1 + exp (–a – XiB))}$,where *yi* is the dependent variable, *Xi* is the vector of the independent variables for the *ith* observation, *a* is the intercept parameter and *B* is the vector of regression coefficients (Amemiya 1981). The recent version of PASW 22.0 was used to run logistic regression.

6.2. Descriptive Statistics

Before running the binary logistic regression, a correlation analysis (figure 19) was conducted to detect any multicollinearity between various control and independent variables (Ghauri & Gronhaug 2002). As can be seen from figure 19, the bivariate correlation between international experience and degree of product diversification is above the cut-off point of 0.70, indicating a potential for multicollinearity.

Figure 19. Correlation Matrix

Variables	Mean	S.D.	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1. Ownership mode strategy	0.48	0.50	1.00													
2. Establishment mode strategy	0.72	0.45	0.12*	1.00												
3. Resource intensive industry	0.30	0.46	-0.09	-0.09	1.00											
4. Subsidiary age	9.55	5.90	-0.22**	0.18**	-0.08	1.00										
5. Cultural distance	0.69	0.46	0.03	-0.06	0.06	0.12*	1.00									
6. International experience	40.44	43.55	-0.20**	-0.14**	0.04	-0.13*	0.06	1.00								
7. Host country experience	3.49	4.61	0.01	-0.27**	0.05	-0.32**	0.11*	0.60**	1.00							
8. Degree of product diversification	8.81	8.17	-0.22**	-0.09	0.12*	-0.03	0.02	0.71**	0.28**	1.00						
9. Parent's firm size	4402.82	5998.61	-0.08	0.05	-0.06	-0.02	0.13*	0.48**	0.29**	0.37**	1.00					
10. Industry R&D intensity	1.92	0.78	-0.01	0.08	-0.60**	0.05	0.02	-0.04	0.05	-0.08	0.16**	1.00				
11. Industry sales growth	0.22	0.21	0.09	0.06	-0.08	-0.09	0.01	0.04	0.10*	-0.02	0.02	0.09	1.00			
12. Industry growth in number of firms	0.07	0.09	0.10*	-0.02	-0.12*	-0.27**	-0.03	0.06	0.28**	-0.06	0.05	0.11*	0.39**	1.00		
13. Stages of institutional transitions	2.25	0.76	0.27**	-0.16**	0.09	-0.68**	-0.11*	0.17**	0.43**	-0.06	0.06	-0.07	0.03	0.34**	1.00	
14. Regional institutional differences	0.82	0.39	0.18**	0.26**	-0.12*	0.09	-0.93	-0.28**	-0.22**	-0.21**	-0.15**	0.08	-0.08	-0.01	-0.12*	1.00

Following Pallant (2007), additional multicollinearity diagnostics (variance inflation factor (VIF)) were conducted for the analysis of each of the three dependent variables (see appendix 4). According to Wetherill (1986), the VIF values for independent and control variables used in regression analysis should not exceed 2.50. As can be seen from appendix 4, VIF values for international experience are all above the cut-off point of 2.50, thus, the potential multicollinearity between international experience and the degree of product diversification is expected to influence the results of binary logistic regression. Thus, following Kennedy (1998)'s recommendation, the author estimates the models with and without international experience.

One way to assess the extent to which the logistic regression models fit the data is to detect its ability to classify the observations. Its ability should be judged against the classification rate that would have been obtained by chance. The classification rate is computed as $a^2 + (1-a)^2$ (Hair, Anderson, Tatham & Black 1998), where *a* is the proportion of 1) WOS in FDI ownership mode strategy, 2) greenfields in establishment mode strategy, and 3) surviving subsidiaries, respectively. In this study, the base scores are 0.50 in FDI ownership mode strategy, 0.60 in FDI establishment mode strategy, and 0.64 in FDI subsidiary survival, respectively. All the statistical models (see tables 15–20) have higher correct classification rates than those of base rates. Thus, it can be said that most of the logistic regression models fit the data well.

Further on, most of the statistical models show a highly significant chi-square (x^2), except model 3b, indicating that the explanatory powers of most of the models are good. The predictive capability of the models is also evident from Nagelkerke R^2 values, which are acceptable for FDI entry mode strategy and very good for subsidiary survival. Hosmer and lemeshow (1989)'s test is statistically insignificant in all models, indicating that there is no difference between the observed and predicted values.

6.3. FDI Ownership Mode Strategy of Nordic Firms

This section (section 6.3.) presents the results of binary logistic regression for FDI ownership mode strategy of Nordic MNEs. This section starts with a discussion associated with the results for control variables (subsection 6.3.1.). This is followed by presenting and interpreting the results associated with independent variables (subsection 6.3.2.). Then, the author discusses the results as to the moderating effects of two institution specific determinants on FDI ownership mode strategy: 1) the stage of institutional transition and 2) regional institutional differences within China (subsection 6.3.3. and subsection 6.3.4.).

6.3.1. Control Variables

The control variables included in the analysis consist of greenfield establishment mode strategy, resource-intensive industry, industry restrictions, and cultural distance between home and host country. All four control variables are found to be significantly associated with FDI ownership mode strategy. The coefficient related to greenfield establishment mode strategy is positive and significant at $p<0.05$ level in both model 1a and 1b, suggesting that greenfield establishment mode strategy is positively related to WOS ownership mode strategy (i.e. WOS greenfields). This study further find that MNEs entering into resource-intensive industries in China tend to opt for JVs as opposed to WOS ownership mode strategy ($p<0.01$) so that MNEs can access the complementary local assets.

Consistent with the expectation, industry restrictions are negatively and significantly associated with FDI ownership mode strategy at $p<0.10$ (model 1a) and $p<0.05$ (model 1b) level, indicating that MNEs investing in more restrictive manufacturing industries are more likely to use JVs as opposed to WOS ownership mode strategy. The coefficients associated with cultural distance are positive and significant in both model 1a and 1b ($p<0.10$; $p<0.05$), and hence, MNEs from culturally distant countries (Denmark, Norway, and Sweden) are more likely to opt for WOS as opposed to JVs with local partners.

6.3.2. Independent Variables and Hypotheses Testing

While the coefficient associated with international experience is negative and highly significant in model 1a ($p<0.01$), the effect of host country experience is positive and significant ($p<0.10$) in model 1a. These results suggest that the probability of Nordic MNEs to choose WOS as opposed to JVs ownership mode strategy in China is positively associated with host country experience but inversely

related to international experience. Hence, both **hypothesis *H1a*** and ***H2a* are supported**. As shown in model 1a, the degree of product diversification is not significantly associated with FDI ownership mode strategy. However, this relationship turned out to be negative when international experience was dropped from the analysis in model 1b ($p<0.05$). This relationship is consistent with the hypothesis, and hence, **hypothesis *H3a* is supported**.

The effect of parent firm size on the preference of WOS is not significant in both model 1a and 1b, suggesting that parent firm size is not a significant determinant of FDI ownership mode strategy. Thus, **hypothesis *H4a* is not supported**. The relationship of industry R&D intensity and propensity of choosing WOS as opposed to JVs are consistently negative in model 1a and 1b ($p<0.05$; $p<0.10$), and hence, Nordic firms from high-tech industries are more likely to opt for JVs as opposed to WOS ownership mode strategy when entering into China. Hence, **hypothesis *H5a* is not supported**.

For the other two industry specific determinants, the coefficients associated with industry sales' growth are positive and significant in both model 1a and 1b ($p<0.05$; $p<0.10$), suggesting that Nordic MNEs entering into industries with a high degree of sales growth are more likely to use WOS as opposed to JVs so that they can capture the full rent. **Hypothesis *H6a* is therefore supported**. Industry growth in terms of the number of firms as a proxy to industry competition in China is non-significantly associated with FDI ownership mode strategy, and hence, **hypothesis *H7a* is not supported**.

The two institution specific determinants show good explanatory powers on FDI ownership mode strategy in China. Both the stage of institutional transition and regional institutional differences within China are positively and highly significantly associated with the preference of WOS over JVs ownership mode strategy in all models ($p<0.01$), suggesting that investments made during the later stage of institutional transition and subsidiaries located in SEZs and/or OCCs would encourage the preference of Nordic MNEs to opt for WSO over JVs FDI ownership mode strategy. Thus, **both of hypotheses *H8a* and *H9a* are supported**. Table 15 presents the binary logistic regression results for FDI ownership mode strategy.

Table 15. FDI Ownership Mode Strategy (Main Effects) (WOS = 1)

Variables	Model 1a (with international experience)	Model 1b (without international experience)
Control variables		
Greenfields establishment mode strategy	0.72**	0.72**
Resource intensive industry	-1.11***	-0.86***
Industry restrictions	-0.76*	-0.83**
Cultural distance	0.47*	0.53**
Firm specific determinants		
International experience	-0.01***	
Host country experience	0.07*	0.01
Degree of product diversification	-0.01	-0.04**
Firm size	0.01	0.01
Industry specific determinants		
Industry R&D intensity	-0.49**	-0.36*
Industry sales growth	1.46**	1.16*
Industry growth in number of firms	-2.25	-1.80
Institution specific determinants		
Stages of institutional transitions	1.10***	1.08***
Regional institutional differences	0.92***	0.96***
N = 405	405 (WOS=195)	405 (WOS=195)
Nagelkerke R^2	0.30***	0.26***
Correctly classified (%)	68.2%	67.2%
Model Chi square (x^2)	91.071***	81.306***

Significant level: *** p<0.01, ** p<0.05, * p<0.10

6.3.3. Moderating Effects of Stage of Institutional Transition

In order to analyze whether the influences of the firm and industry specific determinants on FDI ownership mode strategy have changed during institutional transition in China, the author run binary logistic regressions with two subsamples: investments made prior to 2002 and after 2001. It has been argued that institutional conditions in China have been significantly progressed after China joint WTO (Teng 2004; Peng 2003).

Control variables: Of the control variables, resource-intensive industry is found to be a significant determinant for investments made in both prior to 2002 and after 2001 period ($p<0.01$, $p<0.05$) (model 2a and 2b). These results suggest that the negative impacts of resource-intensive industry on the choice of WOS as opposed to JVs have not changed for early versus later stage of institutional transition in China. The coefficients associated with the other three control variables, greenfields establishment mode strategy, industry restrictions and cultural distance between home and host country, are significant for investments made during the period of 1982–2001 (model 2a) ($p<0.05$, $p<0.10$, and $p<0.05$, respectively), however, none of these factors are significant for predicting FDI ownership mode strategy for investments made in the period of 2002–2012 (model 2b). Thus, the impacts of greenfield establishment mode strategy, resource-intensive industry, and cultural distance have changed in the two periods.

Independent variables: The coefficients associated with industry R&D intensity are negative and significant in both time periods at $p<0.10$ level (model 2a and 2b), indicating that the preference for Nordic MNEs with a higher level of R&D intensity opting for JVs over WOS remains the same in both the early and later stage of institutional transition. International experience is negatively and significantly related to WOS as opposed to JVs ($p<0.01$) for investments made after 2001 (model 2b). However, this relationship is not significant for subsidiaries established prior 2002 (model 2a). Furthermore, the positive impact of parent firm size on WOS ownership mode strategy is significant for the investments after 2001 ($p<0.05$) (model 2b), but it is not significant in the period of 1982–2001 (model 2a).

Although the coefficient associated with industry growth in number of firms is not significant for the early stage of institutional transition (1982–2001) (model 2a), the same variable is negatively and significantly related to WOS as opposed to JVs for investments after 2001 ($p<0.10$) (model 2b). Regional institutional differences within China are positive and highly significant for investments in the period 1982–2001 (model 2a), suggesting that Nordic MNEs investing in SEZs and/or OCCs are more likely to use WOS in the early stage of institutional transition ($p<0.01$). However, the coefficient associated with this variable is non-significant in the period 2002–2012 (model 2b).

The above discussions show that the impacts of both firm and industry specific determinants have changed (i.e. international experience, parent firm size and industry growth in terms of the number of firms) for the periods of 1982–2001 and the period of 2002–2012, as China gradually transits from a central planned to a market oriented economy.

6.3.4. Moderating Effects of Regional Institutional Differences

In addition to dividing the whole sample into two sub-samples based on two time periods, the author of this research further analyzed the moderating effect of regional institutional differences within China on FDI ownership mode strategy. Thus, the author divides the entire sample into two sub-samples: investments made in SEZs and/or OCCs and FDIs made in other cities within China. It is expected that both the signs and significance levels associated with firm and industry specific determinants have changed across different regions in China.

Control variables: As can be seen from binary logistic regression analysis from table 16, none of the four control variables significantly explain FDI ownership mode strategy for subsidiaries established in both SEZs/OCCs and other locations within China. The coefficient associated with greenfield establishment mode strategy is positive ($p<0.01$) for FDIs made in SEZs and/or OCCs (model 3a), suggesting that Nordic MNEs are more likely to opt for WOS greenfields in regions where the institutional framework has been better developed.

The coefficient associated with resource-intensive industry is negative and significant ($p<0.05$) for investments in SEZs and/or OCCs where transition from a central planned to a market oriented economy has been more successful (model 3a), however, the same variable is not a significant determinant for FDIs made in cities other than SEZs/OCCs (model 3b). Cultural distance is positively related with the preference for WOS over JVs ownership mode strategy for investments made in SEZs and/or OCCs at $p<0.10$ level (model 3a), whereas the same variable is not significant for subsidiaries established in other locations in China (model 3b).

Independent variables: Of the firm specific determinants, international experience and host country experience are significantly associated with FDI ownership mode strategy for investments made in SEZs and/or OCCs ($p<0.01$ and $p<0.05$, respectively) (model 3a), however, these two experience-based variables are not significantly associated with FDI ownership mode strategy for Nordic MNEs in cities where institutional transitions have been less progressed (model 3b). Thus, the impacts of international experience and host country experience have changed.

The influence of industry specific determinants of FDI ownership mode strategy has changed for Nordic MNEs entering into different regions of China. Industry R&D intensity and industry sales' growth are significant variables for subsidiaries established in SEZs and/or OCCs ($p<0.01$ and $p<0.10$, respectively) (model 3a), whereas industry growth in terms of the number of firms is a significant determinant for investments made in other cities within China ($p<0.05$) (model 3b). Fur-

ther on, the institution specific determinant, the later stage of institutional transition, is positively and significantly associated with WOS as opposed to JVs in both model 3a and 3b, hence, the impacts of institution specific determinant remained the same ($p<0.01$; $p<0.05$).

The results discussed above indicate that the impacts of firm and industry specific determinants (i.e. international experience, host country experience, industry R&D intensity, industry sales' growth, and industry growth in terms of the number of firms) have changed for investments made in SEZs and/or OCCs and in other regions within China.

Table 16. FDI Ownership Mode Strategy (Moderating Effects) (WOS = 1)

Variables	Model 2a (1982 – 2001)	Model 2b (2002 – 2012)	Model 3a (SEZs and OCCs)	Model 3b (Other locations)
Control variables				
Greenfields establishment mode strategy	1.07**	0.65	0.92***	0.84
Resource intensive industry	-1.52***	-0.95**	-0.97**	-1.39
Industry restrictions	-1.04*	-0.35	-0.66	-1.70
Cultural distance	0.92**	-0.01	0.53*	1.05
Firm specific determinants				
International experience	-0.01	-0.03***	-0.02***	0.01
Host country experience	0.08	0.09	0.09**	-0.04
Degree of product diversification	-0.03	0.01	-0.02	-0.03
Parent firm size	0.01	0.01**	0.01	0.01
Industry specific determinants				
Industry R&D intensity	-0.57*	-0.53*	-0.63***	0.83
Industry sales growth	-2.68	1.16	1.31*	4.99
Industry growth in number of firms	1.15	-5.82*	-0.68	-18.98**
Institution specific determinants				
Stages of institutional transitions			1.12***	2.22**
Regional institutional differences	1.25***	0.47		
Number of investments	405 (192)	405 (213)	405 (323)	405 (82)
Nagelkerke R^2	0.32	0.22	0.33	0.33
Correctly classified (%)	70.8%	71.1%	70.6%	78.3%
Model Chi square (x^2)	46.130***	33.083***	83.866***	17.574

Significant level: *** $p<0.01$, ** $p<0.05$, * $p<0.10$

Subsections 6.3.3 and 6.3.4 present the results as to the potential moderating effects of two institution specific determinants: 1) the stage of institutional transition and 2) regional institutional differences. The results show that the explanatory powers of firm and industry specific determinants have changed. Thus, **hypothesis *10a* is supported**.

6.4. FDI Establishment Mode Strategy of Nordic Firms

This section (section 6.4.) presents and interprets the results of binary logistic regression for FDI establishment mode strategy of Nordic MNEs in China. This section starts with a discussion of the findings as to the impacts of control variables on FDI establishment mode strategy (subsection 6.4.1.). The discussion of control variables is followed by interpreting the signs and significant levels associated with independent variables (subsection 6.4.2.). Then, the results associated with moderating effects of two institution specific determinants, stage of institutional transition and regional institutional differences within China, are discussed (subsection 6.4.3 and subsection 6.4.4). The discussion of the moderating effects focuses on the significant determinants.

6.4.1. Control Variables

The coefficients associated with FDI ownership mode strategy are positive at $p<0.05$ level in both model 4a and 4b, suggesting that Nordic MNEs opting for WOS ownership mode strategy are more likely to choose greenfields over acquisitions establishment mode strategy. Inconsistent with the expectation, the regression analysis (model 4a and 4b) shows that resource-intensive industry is not a significant determinant of FDI establishment mode strategy of Nordic firms. The coefficients associated with industry restriction are not significant across both models. Furthermore, both models 4a and 4b indicate that cultural distance between home and host countries do not explain FDI establishment mode strategy of Nordic MNEs operating in China, which contradict with the expectation.

6.4.2. Independent Variables and Hypotheses Testing

The binary logistic regression analysis shows that international experience is not significantly related to FDI establishment mode strategy (model 4a), hence, **hypothesis *H1b* is not supported**. Host country experience was found to be negatively and significantly associated with the preference of greenfield investments over acquisitions in both model 4a and 4b ($p<0.01$), suggesting that Nordic MNEs with more international business experience in China are more likely to opt for acquisitions over greenfields. Thus, **hypothesis *H2b* is supported**. The coefficients related to the degree of product diversification are not significant in both model 4a and 4b, and hence, **hypothesis *H3b* is not supported**. Parent firm size is significantly associated with the preference of Nordic firms to choose acquisitions over greenfields establishment mode strategy at $p<0.01$ level (model 4a and 4b), hence, **hypothesis *H4b* is supported**.

Surprisingly, all three industry specific variables, industry R&D intensity, industry sales' growth, and industry growth in terms of the number of firms, are not significantly related to FDI establishment mode strategy, thus, **hypothesis *H5b, H6b, and H7b* are not supported**. Institution specific determinants are significantly associated with FDI establishment mode strategy. While the later stage of institutional transition is negatively related to greenfield establishment mode strategy ($p<0.05$), regional institutional differences (SEZs and/or OCCs versus other regions within China) are found to be positively and significantly associated with greenfields ($p<0.01$) (model 4a and 4b). Thus, both **hypothesis *H8b* and *H9b* are supported**. Table 17 provides the results of binary logistic regression for FDI establishment mode strategy.

Table 17. FDI Establishment Mode Strategy (Main Effects) (Greenfields=1)

Variables	**Model 4a (with international experience)**	**Model 4b (without international experience)**
Control variables		
WOS ownership mode strategy	0.73**	0.72**
Resource intensive industry	0.28	0.29
Industry restrictions	0.41	0.35
Cultural distance	-0.28	-0.38
Firm specific determinants		
International experience	0.01	
Host country experience	-0.14***	-0.13***
Degree of product diversification	-0.02	-0.01
Firm size	-0.01***	-0.01***
Industry specific determinants		
R&D intensity of the industry entered	0.12	0.18
Industry sales growth	0.81	0.79
Industry growth in number of firms	2.84	2.26
Institution specific determinants		
Stages of institutional transitions	-0.46**	-0.50**
Regional institutional differences	1.17***	1.05***
N = 405	405 (greenfields=293)	405 (greenfields=293)
Nagelkerke R^2	0.24***	0.24***
Correctly classified (%)	77.5%	77.6%
Model Chi square (x^2)	64.576***	67.518***

Significant level: *** $p<0.01$, ** $p<0.05$, * $p<0.10$

6.4.3. Moderating Effects of Stage of Institutional Transition

In order to analyze whether the influence of the firm and industry specific variables on FDI establishment mode strategy in China have changed for investments made in different stage of institutional transition, the author divides the entire sample into two periods: the early stage of institutional transition (1982–2001) and the later stage of institutional transition (2002–2012). The results of binary logistic regression are presented in table 18.

Control variables: None of the control variables explain FDI establishment mode strategy of multinationals in both the time periods. WOS ownership mode strategy is positively associated with greenfields establishment mode strategy at $p<0.05$ level for investments made during the later stage of institutional transition (2002–2012) (model 5b). Resource-intensive industry is positive and significant associated with FDI greenfields establishment mode strategy for subsidiaries formed in the later stage of institutional transition (2002–2012) ($p<0.10$) (model 5b). However, both WOS ownership mode strategy and resource-intensive industry provide no significant prediction for FDIs made in the early stage of institutional transition in China.

Independent variables: Interestingly, the impacts of firm specific variables on FDI establishment mode strategy tend to be different in the early and the later stage of institutional transition. While the degree of product diversification is negatively associated with greenfield establishment mode for investments made during the time period of 1982–2001 ($p<0.10$) (model 5a), host country experience and parent firm size result in the preference of acquisitions establishment mode strategy for foreign affiliates formed in the period of 2002–2012 ($p<0.01$ and $p<0.01$, respectively) (model 5b). Thus, the three firm specific determinants, host country experience, the degree of product diversification, and parent firm size, are significant determinants of FDI establishment mode strategy for one of the time periods.

For industry specific determinants, industry growth in terms of the number of firms is positively associated with greenfields investments for the period of 1982–2001 ($p<0.01$) (model 5a), however, the impact of the same variable on the preference of greenfields is not significant for period 2002–2012 (model 5b). The institution specific determinant, regional institutional differences, is found to be positively related to greenfields as opposed to acquisitions investments for both the early and the later stage of institutional transitions ($p<0.05$). Thus, the impacts of regional institutional differences within China remain the same for both time periods.

The discussions presented above concern the moderating effect of stage of institutional transition on FDI establishment mode strategy. The results of binary logistic regression depict that the impacts of some firm and industry specific determinants (host country experience, degree of product diversification, parent firm size, and industry growth in terms of the number of firms) have changed in different stages of institutional transitions.

6.4.4. Moderating Effects of Regional Institutional Differences

One of the important features of China's institutional transition is that the development of market oriented economy in different regions within China has been uneven. Thus, it is interesting to analyze whether the influence of firm and industry specific variables has changed for investments in different parts of China. The whole sample is therefore divided into two sub-samples: investments made in SEZs and/or OCCs and other regions within China. The results are presented in table 18.

Control variables: WOS ownership mode strategy increases the preference of Nordic MNEs to use greenfields investments over acquisitions for subsidiaries located in SEZs and/or OCCs ($p<0.01$) (model 6a). However, the relationship between FDI ownership mode choice and FDI establish mode strategy is not significant for subsidiaries established in regions within China other than SEZs and/or OCCs (model 6b). The other three control variables, resource-intensity industry, industry restrictions, and cultural distance, explain FDI establishment mode strategy neither for subsidiaries located in SEZs/OCCs nor in other regions within China.

Independent variables: For the independent variables, the most interesting ones are firm specific determinants. The influence of firm specific determinants on FDI establishment mode strategy has changed for investments made in SEZs and/or OCCs and other locations within China. While host country experience increased the probability of acquisitions for period 1982–2001 ($p<0.01$) (model 6a), degree of product diversification and parent firm size encouraged acquisitions for investments made after 2001 ($p<0.10$ and $p<0.01$, respectively) (model 6b). Thus, the impacts of three firm specific determinants have changed: host country experience, degree of product diversification, and parent firm size.

Surprisingly, all the three industry specific determinants are significant neither for investments made in SEZs and/or OCCs nor for subsidiaries located in other regions within China. More specifically, stage of institutional transition is a significant determinant of FDI establishment mode strategy for 1982–2001 period

(p<0.10) (model 6a), this relationship is not significant for later stage of institutional transition (2002–2012) (model 6b). Thus, the impact of institution specific determinant has also changed. To summarize, the impacts of some firm specific determinants have changed (host country experience, degree of product diversification and parent firm size), however, the influence of industry specific determinants have not changed. Thus, **hypothesis *H10b* is partially supported**.

Table 18. FDI Establishment Mode Strategy (Moderating Effects) (Greenfields=1)

Variables	Model 5a (1982 – 2001)	Model 5b 2002 - 2012	Model 6a (SEZs and OCCs)	Model 6b (Other locations)
Control variables				
WOS ownership mode strategy	0.68	1.07**	0.96***	0.47
Resource intensive industry	-0.46	1.12*	0.12	1.46
Industry restrictions	0.14	0.82	0.62	-0.07
Cultural distance	0.69	0.19	0.20	1.34
Firm specific determinants				
International experience	0.01	0.01	0.01	0.01
Host country experience	-0.01	-0.23***	-0.15***	-0.16
Degree of product diversification	-0.06*	0.01	0.01	-0.14*
Parent firm size	-0.01	-0.01***	-0.01	-0.01***
Industry specific determinants				
Industry R&D intensity	0.19	0.34	0.22	0.23
Industry sales growth	0.82	0.55	0.64	3.26
Industry growth in number of firms	9.31***	2.43	2.75	4.99
Institution specific determinants				
Stages of institutional transitions			-0.51*	-0.57
Regional institutional differences	1.27**	1.15**		
Number of investments	405 (192)	405 (213)	405 (323)	405 (82)
Nagelkerke R^2	0.18	0.36	0.15	0.40
Correctly classified (%)	80.4%	74.3%	79.4%	79.7%
Model Chi square (x^2)	23.959**	51.976***	29.267***	24.771**

Significant level: *** p<0.01, ** p<0.05, * p<0.10

6.5. FDI Subsidiary Survival of Nordic Firms

This section (section 6.5.) focuses on presenting and interpreting the results relating to FDI subsidiary survival of Nordic firms. This section starts with the discussion about the results associated with control variables (subsection 6.5.1). Then, the signs and significant level of coefficients associated with independent variables are presented (subsection 6.5.2). In the last part of this section, the author presents and discusses the results of binary logistic regression associated with

moderating effects of two institution specific determinants: stage of institutional difference and regional institutional differences (subsection 6.5.3 and subsection 6.5.4.).

6.5.1. Control Variables

As indicated in table 19, of the four control variables, subsidiary age is positively and significantly associated with subsidiary survival in both model 7a and 7b ($p<0.01$). Thus, the finding associated with subsidiary age is consistent with the expectation. The relationship between resource-intensive industry and FDI subsidiary survival in China is not significant in both models. Although the signs associated with industry restrictions and cultural distance between home and host country are consistent with the expectations, the relationships are not significantly associated with FDI subsidiary survival of Nordic MNEs in China.

6.5.2. Independent Variables and Hypotheses Testing

The coefficient associated with international experience is not significant in model 7a, suggesting that the level of international experience of Nordic MNEs provides no significant prediction for subsidiary survival of Nordic MNEs operating in China. Thus, **hypothesis *H11* is not supported**. The coefficients associated with host country experience are positive and significant in both models at $p<0.01$ level (model 7a and 7b), suggesting that host country experience increased the probability of Nordic firms to survive in China. **Hypothesis *H12* is supported**. The coefficients related to degree of product diversification are negative and significant in both model 7a and 7b in table 19 ($p<0.05$ and $p<0.10$, respectively), suggesting that Nordic MNEs operating in multiple product markets are less likely to survive in Chinese market. Hence, **hypothesis *H13* is supported**. Parent firm size is positively and significantly associated with subsidiary survival at $p<0.05$ level (model 7a and 7b), and hence, **hypothesis *H14* is supported**.

The coefficients associated with industry R&D intensity are not significant for both models, and hence, **hypothesis *H15* is not supported**. Although the sign associated with the coefficient of industry sales' growth is positive, it is not significant in both model 7a and 7b. Thus, **hypothesis *H16* is not supported**. Industry growth in terms of the number of firms is positive and significant at $p<0.05$ level, suggesting that MNEs operating in competitive industries are more likely to survive in China, thus, **hypothesis *H17* is supported**. The binary logistic regression showed that later stage of institutional transition encouraged subsidiary sur-

vival of Nordic MNEs (p<0.01) (model 7a and 7b), hence, **hypothesis *H18* is supported**.

Surprisingly, the coefficients associated with regional institutional difference are not significant across the models in table 19, and hence, **hypothesis *H19* is not supported**. The binary logistic regressions depicted that both FDI ownership and establishment mode strategy exerted significant influence on subsidiary survival. The regression analysis showed that WOS are more likely to survive than JVs in China (p<0.01) (model 7a and 7b). Thus, **hypothesis *H20* is supported**. Model 7b indicated that FDI establishment mode strategy is negatively related to subsidiary survival, suggesting that acquisitions are more likely to survive than greenfields investments in China. Thus, **hypothesis *H21* is supported**.

Table 19. FDI Subsidiary Survival (Main effects) (Subsidiary Survival = 1)

Variables	**Model 7a (with international experience)**	**Model 7b (without international experience)**
Control variables		
Resource intensive industry	-0.70	-0.38
Industry restrictions	-0.78	-0.80
Cultural distance	-0.38	-0.01
Subsidiary age	0.91***	0.86***
Firm specific determinants		
International experience	0.01	
Host country experience	0.28***	0.27***
Degree of product diversification	-0.09**	-0.06*
Parent firm size	0.01**	0.01**
Industry specific determinants		
Industry R&D intensity	-0.53	-0.52
Industry sales growth	0.56	0.32
Industry growth in number of firms	6.49**	6.34**
Institution specific determinants		
Stages of institutional transitions	3.77***	3.73***
Regional institutional differences	0.12	0.32
FDI entry modes		
WOS ownership mode strategy	1.512***	1.55***
Greenfields establishment mode strategy	-0.76	-1.22**
N = 405	405 (Surviving sub.= 308)	405 (Surviving sub.= 308)
Nagelkerke R^2	0.76***	0.73
Correctly classified (%)	92.6%	91.7%
Model Chi square (x^2)	257.779***	250.454***

Significant level: *** p<0.01, ** p<0.05, * p<0.10

6.5.3. Moderating Effects of Stage of Institutional Transitions

In addition to analyzing the main effects of firm, industry and institution specific determinants on FDI subsidiary survival, the author has attempted to address the moderating effects of early versus later stage of institutional transition on FDI subsidiary survival. Thus, the whole sample is divided into two time periods: early stage of institutional transition (1982–2001) and later stage of institutional transition (2002–2012). The results are shown in table 20.

Control variables: Of the four control variables, subsidiary age is positively and significantly associated with FDI survival for investments made in both time period ($p<0.01$) (model 8a and 8b). Thus, the impacts of subsidiary age have not changed. Unexpectedly, the other three control variables, resource-intensive industry, industry restrictions, and cultural distance between home and host country, are not significantly related to subsidiary survival of Nordic MNEs operating in China.

Independent variables: There are great variations for the impacts of firm specific determinants on subsidiary survival for investments established in China during early versus later stage of institutional transition. While international experience is positively associated with subsidiary survival in period 1982–2001 ($p<0.05$) (model 8a), host country experience increased the probability of subsidiary survival for investment made after 2002 ($p<0.05$) (model 8b). Degree of product diversification is negatively and significantly related survival for subsidiaries established during 1982–2001 at $p<0.01$ level (model 8a), whereas parent firm size increased the probability of subsidiary to survive for period 2002–2012 ($p<0.10$) (model 8b). Thus, the influences of all four firm specific determinants have changed for the two stages of institution transition.

For the industry specific determinant, the impact of industry growth in terms of the number of firms has changed. While industry growth in terms of the number of firms is positively associated with subsidiary survival for period 2002–2012 ($p<0.05$) (model 8b), the same variable is not a significant variable for early stage of institutional transitions (1982–2001) (model 8a). The sign associated with regional institutional differences within China is positive and significant at $p<0.10$ level in model 8a, suggesting that subsidiaries that were formed in early stage of institutional transition (1982–2001) are more likely to survive if they were located in SZEs and/or OCCs. However, regional institutional differences provided no significant prediction for subsidiary survival of Nordic MNEs operating in later stage of institutional transition. Moreover, the positive relationship of WOS ownership mode strategy and subsidiary survival is significant in period 1982–2001 ($p<0.01$) (model 8a), but not significant for investments made during 2002–2012

(model 8b). The binary logistic regression analysis shows that FDI establishment mode strategy is not a significant determinant for subsidiary survival of Nordic firms established in both time periods.

As can be seen from the discussion above, the explanatory power for both firm and industry specific determinant have changed (international experience, host country experience, degree of product diversification, parent firm size and industry growth in terms of the number of firms), and thus, **hypothesis *H22a* is supported.**

6.5.4. Moderating Effects of Regional Institutional Differences

In addition to analyzing the moderating effects of stages of institutional transition, it is interesting to further analyze whether the influence of the firm and industry specific determinants on subsidiary survival have changed for investments made in SEZs and/or OCCs versus other cities within China, as the market economy development has been uneven across provinces and cities in China. The whole sample was divided into two sub-samples: subsidiaries established in SEZs and/or OCCs and investments made in other regions in China.

Control variables: Subsidiary age is significant for investments made in both regions ($p<0.01$) (model 9a and 9b), suggesting that the impacts of length of operations affects subsidiary survival in both SEZs and/or OCCs and other locations in a similar way. Thus, the impacts of subsidiary age on subsidiary survival have not changed for subsidiaries established in SEZs and/or OCCs versus other regions in China. Surprisingly, the rest of the three control variables, resource-intensive industry, industry restrictions and cultural distance between home and host country, are not significantly related to subsidiary survival.

Independent variables: Of the firm specific variables, the results show that parent firm size increased probability of subsidiary survival for investments made in both SEZs and/or OCCs and other regions within China ($p<0.10$ and $p<0.05$, respectively) (model 9a and 9b). Thus, the impacts of parent firm size remained the same. While international experience and degree of product diversification are significant determinants of subsidiary survival in locations other than SEZs and/or OCCs ($p<0.10$ and $p<0.05$, respectively) (model 9b), host country experience is an important variable for predicting survival of subsidies established in SEZs and/or OCCs ($p<0.01$) (model 9a). Of the industry specific determinants, although industry growth in number of firms is positively and significantly related to survival of subsidiaries established in SEZs and/or OCCs ($p<0.10$) (model 9a), it provided no significant prediction for FDIs made in other regions within China.

Nordic subsidiaries established during later stages of institutional transition in China have a greater probability of survival in SEZs and/or OCCs and other regions within China ($p<0.01$ and $p<0.05$, respectively) (model 9a and 9b). Thus, the impact of institution specific determinant remained the same. Moreover, the regional institutional differences within China have moderated the impacts of FDI ownership mode strategy on subsidiary survival. While WOS of Nordic MNEs are more likely to survive in SEZs and/or OCCs ($p<0.05$) (model 9a), it is not significant determinant of subsidiary survival for investments made in other parts of China (model 9b). FDI establishment mode strategy provided no prediction for the post-entry subsidiary survival of Nordic MNEs.

A detailed analysis of binary logistic regression show that the impacts of some firm and industry specific determinants of FDI subsidiary survival (international experience, host country experience, degree of product diversification and industry growth in terms of the number of firms) have changed for foreign subsidiaries established in SEZs and/or OCCs and other regions of China. Thus, **hypothesis *H22b* is supported**.

Table 20. FDI Subsidiary Survival (Moderating Effects) (Subsidiary Survival =1)

Variables	**Model 8a (1982 – 2001)**	**Model 8b (2002 – 2012)**	**Model 9a (SEZs and OCCs)**	**Model 9b (Other locations)**
Control variables				
Resource intensive industry	-2.32	-0.98	-0.63	-1.50
Industry restrictions	-0.51	-0.17	-1.00	0.83
Subsidiary age	1.50***	0.78***	1.02***	0.73***
Cultural distance	-0.01	-0.09	-0.35	-1.21
Firm specific determinants				
International experience	0.09**	0.01	-0.01	0.05*
Host country experience	0.15	0.25**	0.38***	0.22
Degree of product diversification	-0.43***	-0.04	-0.07	-0.23**
Parent firm size	0.01	0.01*	0.01*	0.01**
Industry specific determinants				
Industry R&D intensity	-1.35	-0.85	-0.64	-0.75
Industry sales growth	1.31	-1.869	1.29	-0.71
Industry growth in number of firms	-16.99	11.97**	7.43*	4.73
Institution specific determinants				
Stages of institutional transitions			3.89***	3.19**
Regional institutional differences	2.86*	0.36		
FDI entry mode strategy				
WOS ownership mode strategy	4.86***	0.86	1.35**	1.39
Greenfields establishment mode strategy	0.55	-0.95	-0.35	-0.88
Number of investments	405 (192)	405 (213)	405 (323)	405 (82)
Nagelkerke R^2	0.91	0.57	0.80	85.5%
Correctly classified (%)	97.9%	89.5%	93.9%	0.69
Model Chi square (x^2)	195.741***	73.345***	223.179***	43.720***

Significant level: *** $p<0.01$, ** $p<0.05$, * $p<0.10$

7. DISCUSSION AND CONCLUSIONS

The main research question of this dissertation is: ***What are the firm, industry, and institution specific determinants of FDI entry mode strategy and subsidiary survival in China***? This dissertation analyzed the determinants of FDI ownership and establishment mode strategy, as well as subsidiary survival of MNEs from SMOPECs operating in China from 1982 to 2012. Building on transaction cost economics, resource- and institution-based view of the firm, this study analyzed the determinants of FDI entry modes and subsidiary survival at multiple levels, i.e. firm, industrial, and institutional level. In the empirical part of the analysis, the developed hypotheses were tested on a sample of 405 Nordic subsidiaries in China.

In this chapter (chapter 7), the author attempts to summarize the key research findings and present theoretical and empirical contributions along with managerial and policy implications. Further on, limitations and future research avenues will be also discussed in this chapter. The author starts with a summary of the major findings from empirical analysis of the present research (section 7.1.). Then, the theoretical and empirical contributions of this dissertation project are discussed (section 7.2.). Along with the theoretical and empirical contributions, the managerial and policy implications are discussed (section 7.3.). In the last section of this chapter, the author discusses limitations and provides fruitful future research avenues (section 7.4.).

7.1. Summary of Findings of the Dissertation

In this section (section 7.1.), the author summarizes the key findings of this dissertation project associated with FDI ownership mode strategy (subsection 7.1.1.), establishment mode strategy (subsection 7.1.2.) and subsidiary survival (subsection 7.1.3.). Then, the author compares the key findings with similar early empirical studies (subsection 7.1.4.).

7.1.1. Summary of Findings of FDI Ownership Mode Strategy

Several hypotheses were supported in this dissertation. As expected, **international experience** (H1a) was positively related to the preference of Nordic MNEs to use JVs over WOS in China. This finding consistent with the notion that general international experience is less relevant and useful for MNEs entering into emerging markets than into developed countries (Li & Meyer 2009). The empirical analysis confirmed that **host country experience** (H2a) indeed increased the

probability for Nordic MNEs to opt for WOS as opposed to JVs ownership mode strategy. This finding is consistent with the TCE and RBV arguments that firms with sufficient experience in a host country tend to opt for WOS as opposed to JVs. The **Degree of product diversification** was found to be positively associated with JVs as opposed to WOS (H3a). This result is in line with both TCE and RBV of the firm that more diversified firms do not possess sufficient product-specific knowledge in all industries where they operate to carry out foreign subsidiary alone, and thus, they are more likely to opt for JVs as opposed to WOS. The results of this dissertation further confirmed that Nordic MNEs entering into **high sales' growth industry** were more likely to use WOS as opposed to JVs (H6a). Further on, the positive impact of the **later stage of institutional transition** on WOS ownership mode strategy received support (H8a). **Regional institutional differences** within China (SEZs and/or OCCs versus other cities) indeed encouraged Nordic MNEs to opt for WOS as opposed to JVs (H9a).

However, several hypotheses were not supported in this dissertation. For firm specific determinant, **parent firm size** provided no significant prediction for FDI ownership mode strategy (H4a). Insignificant impact of parent firm size is also found in a recent China-based study by Lee (2010). **Industry R&D intensity** was found to be positively associated with JVs as opposed to WOS (H5a), which is inconsistent with the hypothesis. This can perhaps be explained that high-tech Nordic MNEs would still prefer JVs to access market knowledge possessed by local firms. Inconsistent with the hypothesis, **industry growth in terms of the number of firms** was a non-significant determinant of FDI ownership mode strategy (H7a).

Further on, the findings of the present study confirmed that there have been some **changes** in the influence of firm, industry, and institution specific determinants (H10a). International experience, parent firm size, and industry growth in terms of number of firms were more important determinants for the period of 2002–2012. Further on, international experience, host country experience, industry R&D intensity, and industry sales' growth were key determinants of ownership mode strategy for FDIs made in SEZs and OCCs.

7.1.2. Summary of Findings of FDI Establishment Mode Strategy

Of the nine independent variables, four of them received support in this dissertation. First, consistent with both TCE and RBV of the firm, **host country experience** was found to be positively associated with acquisitions (H2b). Second, as expected, **parent firm size** indeed increased the probability of Nordic MNEs to opt for acquisitions as opposed to greenfield establishment mode strategy (H4b).

Third, the positive impact of the **later stage of institutional transition** and acquisition establishment mode strategy was confirmed by the results of this research (H8b). Fourth, Nordic MNEs entering into **SEZs and/or OCCs** were more likely to choose greenfields over acquisitions establishment mode strategy (H9b). Further on, the findings of the present study confirmed the moderating effects of two institution specific determinants on establishment mode strategy: stage of institution transition and regional institutional differences (H10b).

However, there were some surprising but interesting results related to FDI establishment mode strategy. For firm specific determinants, the results of the binary logistic regression did not support the positive relationship between **international experience** and greenfield investments (H1b). This can be explained that host country experience is more important than general international business experience in determining multinationals' success in transition economies like China (Li & Meyer 2009).

The results of this dissertation showed that although the sign associated with the **degree of product diversification** was negative, it was not significantly related to FDI establishment mode strategy (H3b). TCE argues that the a high degree of product diversification increases the probability of choosing acquisitions, as more diversified MNEs usually possess advanced management control systems which reduce management costs of acquisitions (Hennart & Park 1993). However, given different national and organizational culture in China, more diversified MNEs may still find post-acquisition integration as a challenge in China. Further on, **industry R&D intensity** was not a significant determinant (H5b). Both **industry sales' growth** (H6b) and **industry growth in terms of the number of firms** (H7b) were non-significantly associated with FDI establishment mode strategy. Thus, the impacts of industry specific variables as predicted by TCE were not confirmed by the present study. Table 21 presents a summary of the findings regarding FDI entry mode strategy.

Furthermore, this study found that the predictive powers of firm and industrial variables have been **changed** (H10b). The degree of product diversification and industry growth in terms of number of firms were significantly related to FDI establishment mode strategy for the period of 1982–2001, whereas host country experience and parent firm size were more important determinants for the period of 2002–2012. Host country experience significantly influenced establishment mode strategy for FDIs established in SEZs and OCCs, whereas the coefficients associated with the degree of product diversification and parent firm size were significant for investments made in other cities in China.

Table 21. Summary of Findings as to FDI Entry Mode Strategy

Independent variables	**FDI ownership mode strategy (WOS = 1)**	**Finding**	**FDI establishment mode strategy (greenfields = 1)**	**Finding**
International experience	H1a (-)	Supported	H1b (+)	Not supported
Host country experience	H2a (+)	Supported	H2b (-)	Supported
Degree of product diversification	H3a (-)	Supported	H3b (-)	Not supported
Parent firm size	H4a (+)	Not supported	H4b (-)	Supported
Industry R&D intensity	H5a (+)	Not supported	H5b (+)	Not supported
Industry sales growth	H6a (+)	Supported	H6b (+)	Not supported
Industry growth in number of firms	H7a (+)	Not supported	H7b (+)	Not supported
Later stage of institutional transitions	H8a (+)	Supported	H8b (-)	Supported
Regional institutional differences within China	H9a (+)	Supported	H9b (+)	Supported

7.1.3. Summary of Finings of FDI Subsidiary Survival

Several hypotheses were supported in our analysis. The positive relationship of **host country experience** (H12) and subsidiary survival was confirmed by our study. Further on, our results indicated that the **degree of product diversification** (H13) indeed decreased the probability of subsidiary survival of Nordic MNEs in China. The binary logistic regression showed that **larger Nordic MNEs** (H14) was more likely to survive in China. Consistent to the expectation, **later stage of institutional transition** (H18) was found to be positively and significantly associated with subsidiary survival. In line with the hypothesis, **industry growth in terms of the number of firms** (H17) in the industry entered increased the probability of Nordic MNEs to survive in China.

There are several interesting results associated with subsidiary survival. Our study indicates that **international experience** (H11) was not significantly associated with subsidiary survival. It has been argued that transition economies differ widely from developed economies, and thus, Western MNEs may not be able to directly exploit their managerial and organizational capabilities to transition economies (Meyer & Peng 2005; Li & Meyer 2009). Furthermore, the results indicated that **industry R&D intensity** (H15) was not a significant determinant of subsidiary survival. This may be explained that technological knowledge developed in MNEs' home country cannot be easily transferred to subsidiaries established in transition economies, where the business environments are widely different from Western economies.

The impact of **industry sales' growth** (H16) was not significant. Luo (2001) argued that MNEs may benefit from industry sales' growth at the expense of stability. Although the regression coefficient of **regional institutional differences** within China (H19) was positive, it was not a significant determinant of subsidiary survival.

For analysis of subsidiary survival, the empirical part of this dissertation also included both FDI ownership and establishment mode strategy into the analysis as independent variables. It was expected that **WOS ownership mode strategy** is more likely to survive than JVs with local firms (H20). The probability for **greenfield establishment mode strategy** to survive was expected to be lower than for acquisitions (H21). The empirical results supported both of the hypotheses. Table 22 in the below summarizes the findings as to the impacts of firm, industry, and institution specific determinants as well as FDI entry mode strategy on FDI subsidiary survival.

Interestingly, there have been some **changes** in the influence of different variables on subsidiary survival (H22a and H22b). While international experience and the degree of product diversification were significant determinants of subsidiary survival for the period of 1982–2001, host country experience, parent firm size, and industry growth in terms of number of firms were more important for firms to survive in the period of 2002–2012. Host country experience was a more crucial factor for predicting subsidiary survival in SEZs and OCCs, whereas international experience and the degree of product diversification were more relevant variables for FDIs made in other cities in China.

Table 22. Summary of Findings as to FDI Subsidiary Survival

Independent variables	**FDI subsidiary survival (surviving subsidiary = 1)**	**Finding**
International experience	H11 (+)	Not supported
Host country experience	H12 (+)	Supported
Degree of product diversification	H13 (-)	Supported
Parent firm size	H14 (+)	Supported
Industry R&D intensity	H15 (+)	Not supported
Industry sales growth	H16 (+)	Not supported
Industry growth in number of firms	H17 (+)	Supported
Later stages of institutional transitions	H18 (+)	Supported
Regional institutional differences	H19 (+)	Not supported
WOS ownership mode strategy	H20 (+)	Supported
Greenfield establishment mode strategy	H21 (-)	Supported

To summarize, of the nine independent variables, host country experience and later stage of institutional transition exerted significant influences on all three dependent variables. Host country experience increased the probability of Nordic MNEs to opt for WOS ownership mode strategy, acquisitions establishment mode strategy (i.e. full acquisitions), and subsidiary survival. Later stage of institutional transitions were positively associated with WOS ownership mode strategy, acquisitions establishment mode strategy (i.e. full acquisitions), and subsidiary survival. Several variables explained two of the three dependent variables. The degree of product diversification increased the probability for Nordic firms to opt for JVs ownership mode strategy and subsidiary survival. Parent firm size was positively associated with acquisitions establishment mode strategy and subsidiary survival. Further on, regional institutional differences within China were found to encourage Nordic MNEs to opt for WOS ownership and greenfields establishment mode strategy (i.e. WOS greenfields). The rest of the independent variables were found to be significant determinant for only one of the three dependent variables. International experience increased the propensity of Nordic MNEs to opt for JVs as opposed to WOS ownership mode strategy. Inconsistent with our expectation,

industry R&D intensity increased the probability for Nordic MNEs to choose JVs as opposed to WOS ownership mode strategy. Industry growth in sales was positively associated with WOS ownership mode strategy. Industry growth in terms of number of firms increased the probability for Nordic subsidiaries to survive in China.

7.1.4. Comparing Findings of This Dissertation with Existing Similar Studies

It is of great interests to compare the results associated with FDI entry mode strategy found in this study with early similar studies by Dikova and van Witteloostuijn (2007) and Arslan (2011). Both of Dikova and van Witteloostuijn (2007) and Arslan (2011) analyzed FDI ownership and establishment mode strategy together. While Dikova and van Witteloostuijn (2007) addressed EU firms operating in selected ten CEE countries, Arslan (2001) analyzed FDIs made by Finnish firms operating in CEE, Asia and Latin America. The focus of Dikova and van Witteloostuijn (2007)'s study was on "institutional advancement" and how it interacted with technological intensity and international strategy to influence on FDI ownership and establishment mode strategy. Building on IBV, Arslan (2011) addressed the impacts of "institutional distance" and "market conforming values" on FDI entry mode strategy. These two studies included several control variables at firm and industry level, which allowed the author the present research to compare the results.

As can be seen from table 23 in the below, there are both **similarities** and **dissimilarities** associated with the findings of this study and the studies by Dikova and van Witteloostuijn (2007) and Arslan (2011). Both of this study and the study by Dikova and van Witteloostuijn (2007) found that regional institutional differences encouraged greenfields establishment mode strategy. Further, the positive relationship between the later stage of institutional transitions and the preference of WOS over JVs was found in both the present study and Arslan (2011). Moreover, parent firm size was found to be negatively associated with acquisitions establishment mode strategy in this study and the study by Arslan (2011). In this study, Industry growth in terms of the number of firms as a proxy to industry competition was found to be non-significantly associated with FDI entry mode strategy. A similar finding was found in the study Dikova and van Witteloostuijn (2007).

There are some inconsistent findings between this study and the studies by Dikova and van Witteloostuijn (2007) and Arslan (2011). The most striking examples are international experience and host country experience. While this dissertation found that international experience results in the preference of JVs as opposed to WOS ownership mode strategy, whereas Dikova and van Witteloostuijn (2007)

found a positive relationship between international experience and WOS. For the host country experience, this study found a positive impact on WOS, however, a negative effect was found in the study by Dikova and van Witteloostuijn (2007). However, Arslan (2011) found non-significant effects of both international and host country experience on FDI ownership mode strategy.

Further on, industry R&D intensity was found to be a significant determinant of FDI ownership mode strategy in this study, whereas Dikova and van Witteloostuijn (2007) indicated that it was an important determinant of FDI establishment mode strategy. This study found that industry sales' growth was a significant determinant of FDI ownership mode strategy, however, Dikova and van Witteloostuijn (2007) found that it was non-significant for both dimensions of FDI entry mode strategy. The present research found that the later stage of institutional transitions results in the preference for acquisitions over greenfields investments, whereas Arslan (2011) found that the same variable was not a significant determinant of FDI establishment mode strategy. For regional institutional differences within China, while this study found that it would encourage WOS, the study by Dikova and van Witteloostuijn (2007) found that greater institutional advancement in selected CEE countries increased the preference of JVs over WOS ownership mode strategy.

The different results found in the present study and the study by Dikova and van Witteloostuijn (2007) and Arslan (2011) can be partly explained by different FDI home countries included in the studies. For example, in addition to Scandinavian countries Dikova and van Witteloostuijn (2007) also included other EU countries such as the Greece, Luxemburg, Netherlands, and Spain into their empirical analysis. Arslan (2011)'s study placed emphasis on Finnish FDIs made in selected CEE, Asian and Latin American countries, whereas in the present study the focus is on Nordic countries in China. As referred in the study by Benito et al. (2002), Nordic MNEs demonstrated different internationalization patters. For example, Norwegian multinationals experienced a higher rate of internationalization during 1990s than firms originating from other Nordic countries such as Finland and Denmark.

Table 23. Comparison of FDI Entry Mode Strategy Findings of This Study with Similar Existing Studies

	This study		Dikova & Van Witteloostuijn (2007)		Arslan (2011)	
Research design	**Nordic firms operating in China 1982 – 2012**		**EU firms operating in CEE before 2002**		**Finnish firms operating in CEE, Asia and Larin America 1990 - 2006**	
FDI entry mode strategy	**OWNMODE**	**ESTMODE**	**OWNMODE**	**ESTMODE**	**OWNMODE**	**ESTMODE**
International experience	Negative	Not significant	Positive	n.a.	Not significant	Positive
Host country experience	Positive	Negative	Negative	n.a.	Not significant	Negative
Degree of product diversification	Negative	Not significant	n.a.	n.a.	n.a.	n.a.
Parent firm size	Not significant	Negative	n.a.	n.a.	Not significant	Negative
Industry R&D intensity	Negative	Not significant	Not significant	Positive	n.a.	n.a.
Industry sales growth	Positive	Not significant	Not significant	Not significant	n.a.	n.a.
Industry growth in number of firms	Not significant	Not significant	Not significant	Not significant	n.a.	n.a.
Later stage of institutional transitions	Positive	Negative	n.a.	n.a.	Positive	Not significant
Regional institutional differences	Positive	Positive	Negative	Positive	n.a.	n.a.

OWNMODE: Ownership mode strategy; ESTMODE: Establishment mode strategy; Positive: increase WOS or Greenfields; Negative: increase JVs or acquisitions; n.a.: the reviewed studies did not include the respective variable into analysis

It is also interesting to compare findings related to subsidiary survival with two recent China-based studies by Papyrina (2007) and Kim et al. (2010), both focusing on subsidiary survival of Japanese firms. Papyrina (2007) found that international experience was positively associated with subsidiary survival, whereas both Kim et al. (2010) and present research found non-significant relationship. All three studies found that host country experience was positively associated with subsidiary survival. Furthermore, both Papyrina (2007) and the present research found a positive relationship between parent firm size and subsidiary survival, however, Kim et al. (2010) found non-significant relationship. Similar to the findings of this dissertation, Papyrina (2007) found that R&D intensity measured at the industry level was not a significant determinant of subsidiary survival. Moreover, both the present research and Papyrina (2007) revealed that later stage of institutional transition in China increased positively the probability of subsidiary survival.

To summarize, there are both **similarities** and **dissimilarities** in the determinants of MNEs' survival for Japanese and Nordic firms operating in China. This perhaps can be explained that the present study analyzed FDIs made by Nordic MNEs, whereas the study by Papyrina (2007) and Kim et al. (2010) focused exclusively on Japanese foreign investments. The findings of the present dissertation confirmed the notion that FDIs behaviours of MNEs from SMOPECs would

differ from those originating in largest economies such as Japan (Laanti et al. 2009). Table 24 in the below summarizes and compares the findings from the present research with the studies by Papyrina (2007) and Kim et al. (2010).

Table 24. Comparison of Subsidiary Survival Findings of This Study with Similar Existing Studies

	This study	**Papyrina (2007)**	**Kim et al. (2010)**
Research design	**Nordic firms in China 1982 – 2012**	**Japanese firms in China established before 2001**	**Japanese firms in China from 1979 to 2001**
International experience	Not significant	Positive	Not significant
Host country experience	Positive	Positive	Positive
Degree of product diversification	Negative	n.a.	n.a.
Parent firm size	Positive	Positive	Not significant
R&D intensity	Not significant	Not significant	n.a.
Industry sales growth	Not significant	n.a.	n.a.
Industry growth in number of firms	Positive	n.a.	n.a.
Later stages of institutional transitions	Positive	Positive	n.a.
Regional institutional differences	Not significant	n.a.	Not significant

Positive: increase subsidiary survival; Negative: increase subsidiary divestment; n.a.: the reviewed studies did not include the respective variable into analysis

7.2. Theoretical and Empirical Contributions

This section (section 7.2.) presents and discusses the theoretical and empirical contributions of this dissertation. This section starts with a discussion as to the theoretical contributions (subsection 7.2.1.). Then, the author presents empirical contributions of the present study (subsection 7.2.2.).

7.2.1. Theoretical Contributions

This dissertation analyzes determinants of FDI entry mode strategy and subsidiary survival at three levels: firm, industrial, and institutional level. In order to analyze the determinants at multiple levels, the author built on three theories: transaction costs economics, resource-based view, and institution-based view. The choice of these three theories is justified that the three theories differ in their level of analysis, which suits the goal of the present dissertation. Furthermore, existing empirical studies have mainly applied one of the theories to address FDI entry mode strategy and subsidiary survival. However, the same constructs can be linked with

more than one of the three theories. For example, parent firm size, R&D intensity, as well as international and host country experience has been linked with both of TCE and RBV (Zhao et al. 2004; Brouthers & Hennart 2007; Slangen & Hennart 2007). The two institution specific determinants included in the present dissertation, 1) the stage of institutional transition and 2) regional institutional differences, can be also related to TCE. Since this dissertation addressed the impacts of various determinants by combining arguments from more than one of the three theories, it significantly contributes to China-based FDI literature and FDI literature in general.

Another theoretical contribution is related to the **moderating effects**. To some extent, IB studies have ignored the potential moderating effects and it has been mentioned that the potential moderating effects can explain partly the mixed findings found in extant FDI literature (Zhao et al. 2004; Slangen & Hennart 2007). Since the observed Nordic firms were established during a long time period from 1982 to 2012 and in various regions and cities in China, this research design allowed the author to analyze whether the impacts of firm and industry specific determinants have changed across different stages of institutional transition and across different regions within China. The empirical findings revealed that these two institution specific determinants indeed altered the explanatory power of both firm and industry specific determinants on FDI entry mode and subsidiary survival. Thus, it can be said that the predictive power of TCE and RBV variables have changed for investments made in different stages of institutional transition and in different regions within China.

A last theoretical contribution is that this dissertation analyzed the **same variables** on FDI ownership, establishment mode strategy and subsidiary survival. Most of early studies have analyzed the above mentioned phenomenon in isolation. Some studies analyzed either FDI ownership mode strategy or FDI establishment mode strategy, while other studies addressed subsidiary survival. Perhaps the only exceptions were the study by Dikova and van Witteloostuijn (2007) and Arslan (2011), analyzing on both FDI ownership and establishment mode strategy in a single study. Thus, this dissertation contributes to TCE, RBV and IBV literature by addressing the impacts of the same variables on FDI ownership and establishment mode strategy and subsidiary survival.

7.2.2. Empirical Contributions

First, since this research used a sample of Nordic firms operation in China, it is expected that the findings of this dissertation will be generalized to other small and open economies, such as Austria, Belgium, Ireland, Israel, the Netherlands,

New Zealand, Portugal, and Switzerland (Dick & Merret 2007; Laantti et al. 2009). It has been argued that these small and open economies would face similar challenges when entering to foreign markets (Laantti et al. 2009). Thus, MNEs originating in small and open economies tend to opt for different strategies for entering to foreign markets. This dissertation provides evidence as to the determinants of FDI entry mode strategy and subsidiary survival in China.

A **second** empirical contribution is related with the sample used in this study. This study uses a comprehensive dataset of 405 Nordic manufacturing firms in China. The data is a part of large databank focusing on Nordic foreign investments around worldwide collected over several years based mainly from the annual reports and press releases of the investing firms, but also complemented with data gathered from articles in leading local business magazines, Thomson one databank, China statistical yearbook and direct contacts with several of the investing companies. The sample size of 405 investments is clearly larger than several China based studies such as Luo (2001) (sample size 174), Shi et al. (2001) (sample size 218) and Claver and Quer (2005) (sample size 129), which analyze FDIs made by parent firms headquartered in Triad Nations (U.S., Europe and Japan). Moreover, this study uses the same dataset to analyze FDI entry mode strategy and subsidiary survival together. Most of early studies have used different samples to analyze FDI behaviours of Nordic firms, and hence, it is difficult to draw conclusion about what are the shared determinants of FDI entry mode strategy and subsidiary survival.

Finally, in the empirical part of analysis, the author used the same sample to analyze FDI entry mode strategy and subsidiary survival together. Since early China-based studies have focused their analysis either on FDI ownership mode strategy (Luo 2001; Shi et al. 2001; Claver & Quer 2005) or FDI subsidiary survival (Papyrina 2007; Kim et al. 2010), most of the above mentioned studies used different samples to address FDI behaviors of MNEs. Thus, it is difficult to draw conclusions from early studies as to what are the shared determinants of FDI ownership, FDI establishment mode strategy and subsidiary survival. Thus, this research filled in this gap by bringing the three fields of research and analyzing the shared factors.

7.3. Managerial and Policy Implications

Along with the theoretical and empirical contributions, this research also provides useful implications to managers of MNEs from Nordic and/or other SMOPECs. Along with the managerial implications, this research also offers important impli-

cations to both home and host country government policy makers. This section (section 7.3.) first discusses the managerial implications (subsection 7.3.1.). Next, the policy implications for both home and host governments are presented (subsection 7.3.2.).

7.3.1. Managerial Implications

This research provides useful implications to managers of MNEs from Nordic and other SMOPECs, aspiring to enter into Chinese market. **First of all**, since this research included firm specific determinants into analysis, the findings of this dissertation provided managers of MNEs originating in Nordic and other SMOPECS an opportunity to understand what firm characteristics need to be evaluated and assessed before setting up subsidiaries in China. It is interesting for managers to note that host country experience played a more important role than that of international experience in determining FDI entry mode strategy and subsidiary survival. While host country experience would encourage WOS ownership, acquisitions establishment mode strategy and FDI subsidiary survival, international experience was a significant determinant of only for FDI ownership mode strategy (international experience increased the preference of JVs over WOS). Further on, degree of product diversification encouraged JVs ownership mode strategy, parent firm size increased the probability of Nordic MNEs to opt for acquisitions as opposed to greenfields.

Second, the analysis of industry specific determinants allowed managers of MNEs from Nordic and other SMOPECs to notice differences in manufacturing industries in China in terms of growth in sales and number of firms and how these differences have influenced FDI entry mode strategy and subsidiary survival. The findings pointed out that while industry sales growth results in the preference of WOS as opposed to JVs ownership mode strategy, industry R&D intensity was positively associated with JVs as opposed to WOS ownership mode strategy. Moreover, although industry growth in number of firms provided no significant prediction for FDI entry mode strategy, it encouraged post-entry subsidiary survival in China.

Third, this research included two institutional specific determinants, stage of institutional transition and regional institutional differences between SZEs and/or OCCs and other regions within China. The findings of this dissertation revealed that both of the institution specific determinants are important for FDI entry mode decisions and subsidiary survival. Specifically, later stage of institutional transitions results in the preference of WOS ownership and greenfields establishment mode strategy and FDI subsidiary survival. Subsidiaries established in SEZs

and/or OCCs are more likely to be WOS ownership and acquisitions establishment mode strategy. Thus, managers of MNEs originating in Nordic and SMOPECs get to know what institution specific variables are important to be evaluated and assessed before making their FDI entry strategies in China.

Last but not least, this dissertation provided useful implications to managers as to how the choices of FDI entry modes have influenced on FDI subsidiary survival. The present research found that WOS ownership and acquisitions establishment mode strategy (i.e. full acquisitions) encouraged FDI subsidiary survival. Thus, manages gain important insights about what determines FDI entry mode strategy and how the choices of FDI entry modes have influenced on post-entry subsidiary survival.

7.3.2. Policy Implications

This dissertation offers useful implications to **policy makers in China**. It has been widely acknowledged that Chinese government has strongly encouraged high-tech Western firms to make direct investments to China (Hale & Long 2010; Tang et al. 2012). However, early empirical studies including Papyrina (2007) and Kim et al. (2010) reported that nearly one third of the foreign subsidiaries operating in China have been divested. Since this dissertation included subsidiary survival into analysis, it provided host governments important information as to the dynamics of FDIs in China. Moreover, the findings of this dissertation helps host government policy makers to understand what are the key determinants would encourage survival of foreign subsidiaries in China. Particularly, the empirical analysis of this dissertation revealed that stage of institutional transition increased the probability of subsidiary survival of Nordic MNEs. As China continuously transit from a centrally planned economy to a market oriented economy, the likelihood for subsidiaries to survive is high. Thus, the findings of this dissertation confirmed the importance of the economic and political transitions in China.

A further implication to policy makers in host country is associated with the impacts of FDI entry mode strategy on subsidiary survival. This research found that WOS ownership and acquisitions establishment mode strategy (full acquisitions) would encourage subsidiary survival of Nordic MNEs. As China gradually removed restrictions on foreign direct investments, there have been an increasing number of both WOS and cross-border acquisitions in China. The findings of this dissertation provided evidence that WOS are more likely to survive than JVs, and acquisitions are more likely to survive than greenfields investments. However, it should be noted by host government in China that JVs are a preferred way for

receiving advanced technology if the co-owner related risk can be effectively managed.

This research not only offers useful insights to policy makers in China, it also provided important implications to **policy makers from Nordic countries and other SMOPECs**. One of the major concerns for policy makers from more developed economies such as Nordic economies as to how to retain their manufacturing activities in their home country. One of the major drawbacks for increased foreign direct investments by MNEs from developed to less developed countries is concerned with the loss of jobs at the FDI sourcing countries (Mudambi 2008). Thus, as there is an increasing trend for Nordic and other SMOPECs MNEs to invest in China (see appendix 3), it is likely that the demand for low skilled labor force from those countries is decreasing. However, it has been argued that FDIs would provide MNEs with increased efficiency and capabilities associated with production and employment practices (Driffield 2006).

7.4. Study Limitations and Future Research Avenues

This dissertation is not without limitations like the most of the research. **First of all**, this dissertation applied TCE, RBV and IBV as the main theoretical foundations to address both FDI entry mode strategy and subsidiary survival. However, industry R&D intensity as an important construct in both TCE-based and RBV-based studies exerted limited explanatory power to explain FDI ownership and establishment mode strategy and subsidiary survival in the present research. This study found that industry R&D intensity actually increased the preference of JVs as opposed to WOS, which contradicted with the theory. Moreover, the findings in this research found that industry R&D intensity was not significantly associated with FDI establishment mode strategy and subsidiary survival. This surprising result can be partly explained by the measurement issues. As indicated by Slangen and Hennart (2007), R&D intensity at the industry level is unlikely to accurately capture a firm's technological skills and capabilities. Thus, future studies applying the same construct are suggested to proxy the R&D intensity at either the transaction or firm level.

Second, the institution specific determinants included in the empirical analysis of this dissertation were stages of institutional transitions and regional institutional differences between SEZs and/or OCCs and other regions within China. However, institutions in the host country are a multi-dimensional construct and consist of both formal and informal institutions (North 1990). In the empirical part of this dissertation, due to the nature of the secondary data, the author did not analyze the

impacts of formal and informal institutions on FDI entry mode strategy and subsidiary survival. Future research is therefore encouraged to address the impacts of both formal and informal institutions on FDI choices and decisions in China, using survey-based data.

Third, this research addressed FDI ownership (WOS versus JVs) and establishment (greenfields versus acquisitions) mode strategy. In addition to FDI entry mode strategy, MNEs have also used non-equity modes such as exports, licensing/franchising, and contractual JVs for entering into Chinese market (China Statistic Yearbook). Thus, it is of great interesting for future research to analyze the impacts of firm, industry and institution specific determinants on choices between equity and non-equity modes. Also, in this research, the author analyzed FDI ownership and establishment mode strategy separately. Thus, the interrelationships between FDI ownership and establishment mode strategy have not been fully addressed in this study. As indicated by Brouthers and Hennart (2007), this is not established practices. There is ample evidence that managers make the choices of ownership structure and establishment modes simultaneously. Thus, future studies are suggested to analyze multilevel determinants of FDI entry modes at four levels: JVs greenfields, WOS greenfields, partial acquisitions, and full acquisitions.

Fourth, the empirical analysis included a sample of manufacturing industries. Early studies pointed out that FDI behavior of service firms are different from manufacturing firms. For example, Brouthers and Brouthers (2003) found that asset specificity and internal uncertainty were significant determinants of FDI ownership mode strategy for service firms, whereas external uncertainty was an important determinant for manufacturing firms. Thus, future research is encouraged to include service firms into their empirical design. **Finally**, this study included Nordic multinationals into analysis, which can be considered as a limitation of the study. However, this study is one of the first to address firm, industry and institution specific determinants of FDIs made by Nordic MNEs. Similar studies have mainly focused their analysis on investments made by MNEs from Triad Nations (U.S., Europe and Japan). Thus, this study provides important managerial implications to managers of MNEs from Nordic and/or other small and open economies.

REFERENCES

Agawal, S. (1994). Socio-cultural distance and the choice of joint ventures: a contingency perspective. *Journal of International Marketing* 2:2, 63–80.

Agawal, S. & Ramaswami, S. (1992). Choice of foreign market entry mode: impact of ownership, location and internalization factors. *Journal of International Business Studies* 23:1, 1–27.

Alvarez, S.A. & Busenitz, L.W. (2001). The entrepreneurship of resource-based theory. *Journal of Management* 27:6, 755–776.

Amemiya, T. (1981). Qualitative response models: a survey. *Journal of Economic Literature* 19:4, 1483–1536.

Anand, J. & Delios, A. (2002). Absolute and relative resources as determinants of international acquisitions. *Strategic Management Journal* 23:2, 119–134.

Anderson, E. & Gatignon, H. (1986). Modes of foreign entry: a transaction cost analysis and propositions. *Journal of International Business Studies* 17:3, 1–26.

Andersson, T. & Svensson, R. (1994). Entry modes for direct investment determined by the composition of firm specific skills. *Scandinavia Journal of Economics* 96:4, 551–560.

Armstrong, C.E. & Shimizu, K. (2007). A review of approaches to empirical research on the resource-based view of the firm. *Journal of Management* 33:6, 959–986.

Arregle, J.L., Hebert, L. & Beamish, P.W. (2006). Mode of international entry: the advantages of multilevel methods. *Management International Review* 46:5, 597–618.

Arslan, A. (2011). *Institutional Distance–Market Conforming Values in the Host Country and Foreign Direct Investment Choices of Multinational Enterprises*. University of Vaasa. Department of Marketing. PhD thesis.

Arslan, A. & Larimo, J. (2010). Ownership strategy of multinational enterprises and the impacts of regulative and normative institutional distance: evidence from Finnish foreign direct investments in Central and Eastern Europe. *Journal of East–West Business* 16:3, 179–200.

Arslan, A. & Larimo, J. (2011). Greenfields investments or acquisitions: Impacts of institutional distance on establishment mode choice of multinational enterprises in emerging economies. *Journal of Global Marketing* 24:4, 345–356.

Arslan, A. & Larimo, J. (2012). Partial or full acquisition: influences of institutional pressures on acquisition entry strategy of multinational enterprises. In M. Demirbag & G. Wood (Eds.). *Handbook of Institutional Approaches to International Business*. United Kingdom: Edward Elgar. 320–343.

Arslan, A. & Larimo, J. (2013). Determinants of foreign direct investments ownership mode choice: evidence from Nordic investments in Central and Eastern Europe. *Journal for East European Management Studies* 18:2, 232–263.

Arslan, A. & Wang, Y. (2015, forthcoming). Acquisition entry strategy of Nordic multinational enterprises in China: an analysis of key determinants. *Journal of Global Marketing*.

Barkema, H. G., Bell, J.H.J. & Pennings, J.M. (1996). Foreign entry, cultural barriers, and learning. *Strategic Management Journal* 17:2, 151–166.

Barkema, H.G. & Vermeulen, F. (1998). International expansion through start-up or acquisition: a learning perspective. *Academy of Management Journal* 41:1, 7–26.

Barney, J. (1986). Strategic factor markets: expectations, luck, and business strategy. *Management Science* 32:10, 1231–1241.

Barney, J. (1991). Firm resources and sustained competitive advantage. *Journal of Management* 17:1, 99–120.

Barney, J. (2001). Is the resource-based "view" a useful perspective for strategic management research? Yes. *Academy of Management Review* 26:1, 41–56.

Barney, J. (2002). *Gaining and Sustaining Competitive Advantage*. Upper Saddle River, New Jersey: Prentice Hall.

Barney, J.B., Wright, M. & Ketchen Jr., D.J. (2001). The resource-based view of the firm: ten years after 1991. *Journal of Management* 27:6, 625–641.

Barney, J.B., Ketchen Jr. D.J. & Wright, M. (2011). The future of resource-based theory: revitalization or decline? *Journal of Management* 37:5, 1299–1315.

Belderbos, R. & Zou, J. (2009). Real options and foreign affiliate divestment: a portfolio perspective. *Journal of International Business Studies* 40:4, 600–620.

Beamish, P.W. & Jung, J.C. (2005). The performance and survival of joint ventures with partners of asymmetric size. *Management International* 10:1, 19–30.

Benito, G.R.G., Larimo, J., Narula, R. & Pedersen, T. (2002). Multinational enterprises from small economies: internationalization patterns of large companies from Denmark, Finland, and Norway. *International Studies of Management & Organization* 32:1, 57–78.

Benito, G.R.G., Petersen, B. & Welch, L.S. (2009). Towards more realistic conceptualisations of foreign operation modes. *Journal of International Business Studies* 40:9, 1455–1470.

Blodgett, L.L. (1992). Factors in the instability of international joint ventures: an event history analysis. *Strategic Management Journal* 13:6, 475–491.

Borys, B. & Jemison, D.B. (1989). Hybrid arrangements as strategic alliances: theoretical issues in organizational combination. *Academy of Management Review* 14:2, 234–249.

Brouthers, K. D. (2002). Institutional, cultural, and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 33:2, 203–221.

Brouthers, K.D. (2013). A retrospective on: institutional, cultural, and transaction cost influences on entry mode choice and performance. *Journal of International Business Studies* 44:1, 14–22.

Brouthers, K.D. & Brouthers, L.E. (2000). Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences. *Strategic Management Journal* 21:1, 89–97.

Brouthers, K.D. & Brouthers, L.E. (2001). Explaining the national cultural distance paradox. *Journal of International Business Studies* 32:1, 177–189.

Brouthers, K.D. & Brouthers, L.E. (2003). Why service and manufacturing entry mode choices differ: the influence of transaction cost factors, risk and trust. *Journal of Management Studies* 40:5, 1179–1204.

Brouthers, K.D., Brouthers, L.E. & Werner, S. (2003). Real options, international entry mode choice and performance. *Journal of Management Studies* 45:5, 936–960.

Brouthers, K.D. & Nakos, G. (2004). SME entry mode choice and performance: A transaction cost perspective. *Entrepreneurship Theory and Practice* 28:3, 229–247.

Brouthers, K.D. & Hennart, J.F. (2007). Boundaries of the firm: Insights from international entry mode research. *Journal of Management* 33:3, 395–425.

Brouthers, K.D., Brouthers, L.E. & Werner, S. (2008). Transaction cost-enhanced entry mode choices and firm performance. *Strategic Management Journal* 24:12, 1239–1248.

Brouthers, K.D. & Dikova, D. (2010). Acquisitions and real option: the greenfield alternative. *Journal of Management Studies* 47:6, 1049–1071.

Buckley, P.J. & Casson, M.C. (1976). *The Future of Multinational Enterprise*. London: Macmillan.

Canabal, A. & White, G.O. (2008). Entry mode research: past and future. *International Business Review* 17:3, 267–284.

Chan, C.M., Makino, S. & Isobe, T. (2010). Does subnational region matter? Foreign affiliate performance in the United States and China. *Strategic Management Journal* 31:11, 1226–1243.

Chang, Y.C., Kao, M.S., Kuo, A. & Chiu, C.F. (2012). How cultural distance influences entry mode choices: the contingent role of host country's governance quality. *Journal of Business Research* 65:8, 1160–1170.

Chang, S.J. & Rosenzweig, P.M. (2001). The choice of entry mode in sequential foreign direct investment. *Strategic Management Journal* 22:8, 747–776.

Chari, M.D.R. & Chang, K.Y. (2009). Determinants of the share of equity sought in cross-border acquisitions. *Journal of International Business Studies* 40:8, 1277–1297.

Chen, S.F.S. (2005). Extending internalization theory: a new perspective on international technology transfer and its generalization. *Journal of International Business Studies* 36:2, 231–245.

Chen, S.F.S. (2008). The motives for international acquisitions: capability procurements, strategic considerations, and the role of ownership structure. *Journal of International Business Studies* 39:3, 454–471.

Chen, S.F.S. & Hennart, J.F. (2002). Japanese investors' choice of joint ventures versus wholly owned subsidiaries in the US: the role of market barriers and firm capabilities. *Journal of International Business Studies* 33:1, 1–18.

Chen, S.F.S. & Zeng, M. (2004). Japanese investors' choice of acquisitions vs. startups in the US: the role of reputation barriers and advertising outlays. *International Journal of Research in Marketing* 21:2, 123–136.

Chen, H.Y. & Hu, M.Y. (2002). An analysis of determinants of entry mode and its impact on performance. *International Business Review* 11:2, 193–210.

Cheng, Y.M. (2008). Asset specificity, experience, capability, host government intervention, and ownership-based entry mode strategy for SMEs in international markets. *International Journal of Commerce and Management* 18:3, 207–233.

Chiao, Y.C., Lo, F.Y. & Yu, C.M. (2010). Choosing between wholly-owned subsidiaries and joint ventures of MNCs from an emerging market. *International Marketing Review* 27:3, 338–365.

Child, J. & Tse, D.K. (2001). China's transition and its implications for international business. *Journal of International Business Studies* 32:1, 5–21.

Child, J. & Tsai, T. (2005). The dynamic between firms' environmental strategies and institutional constraints in emerging economies: Evidence from China and Taiwan. *Journal of Management Studies* 42:1, 95–125.

China Statistical Yearbook (1983–2013). Beijing: National Bureau of Statistics of China.

Cho, K.R. & Padmanabhan, P. (1995). Acquisition versus new venture: the choice of foreign establishment mode by Japanese firms. *Journal of International Management* 1:3, 255–285.

Cho, K.R. & Padmanabhan, P. (2001). The relative importance of old and new decision specific experience in foreign ownership strategies: an exploratory study. *International Business Review* 10:6, 645–659.

Cho, K.R. & Padmanabhan, P. (2005). Revisiting the role of cultural distance in MNC's foreign ownership mode choice: the moderating effect of experience attributes. *International Business Review* 14:3, 307–324.

Christoffersen, J. (2013). A review of antecedents of international strategic alliance performance: synthesized evidence and new directions for core constructs. *International Journal of Management Reviews* 15: 1, 66–85.

Chung, J. & Beamish, P.W. (2005). The performance and survival of joint ventures with parents of asymmetric size. *International Management* 10:1, 19–30.

Claver, E. & Quer, D. (2005). Choice of market entry mode in China: the influence of firm-specific factors. *Journal of General Management* 30:3, 51–70.

Clarke, J.E., Tamaschke, R. & Liesch, P.W. (2013). International experience in international business research: a conceptualization and exploration of key themes. *International Journal of Management Review* 15:3, 265–279.

Coase, R. H. (1937). The nature of the firm. *Economica* 4:16, 386–405.

Coase, R.H. (1960). The problem of social costs. *Journal of Law and Economics* 3:1, 1–44.

Contractor, F.J. & Kundu, S.K. (1998). Mode choice in a world of alliances; analyzing organizational forms in the international hotel sector. *Journal of International Business Studies* 29:2, 325–357.

Contractor, F.J., Lahiri, S., Elango, B. & Kundu, S.K. (2014). Institutional, cultural and industry related determinants of ownership choices in emerging market FDI acquisitions. *International Business Review* 23:5, 931–941.

Crook, T.R., Ketchen, D.J., Combs, J.G. & Todd, S. (2008). Strategic resources and performance: a meta-analysis. *Strategic Management Journal* 29:11, 1141–1154.

Cui, L. & Jiang, F. (2009). FDI entry mode choice of Chinese firms: a strategic behavior perspective. *Journal of World Business* 44:4, 434–444.

Davis, L.E. & North, D.C. (1971). *Institutional Change and American Economic Growth*. Cambridge: the University Press.

Delios, A. & Henisz, W.J. (2000). Japanese firms' investment strategies in emerging economies. *Academy of Management Journal* 43:3, 305–323.

Delios, A. & Beamish, P.W. (2001). Survival and profitability: the roles of experience and intangible assets in foreign subsidiary performance. *Academy of Management Journal* 44:5, 1028–1038.

Delios, A. & Makino, S. (2003). Timing of entry and the foreign subsidiary performance of Japanese firms. *Journal of International Marketing* 11:3, 83–105.

Delios, A., Xu, D. & Beamish, P.W. (2008). Within-country product diversification and foreign subsidiary performance. *Journal of International Business Studies* 39:4, 706–724.

Demirbag, M., Glaister, K.W. & Tatoglu, E. (2007). Institutional and transaction cost influences on MNEs' ownership strategies of their affiliates: evidence from an emerging market. *Journal of World Business* 42:4, 418–434.

Demirbag, M., Tatoglu, E. & Glaister, K.W. (2008). Factors affecting perceptions of the choice between acquisition and greenfield entry: the case of Western FDI in an emerging market. *Management International Review* 48:1, 5–38.

Demirbag, M., Tatoglu, E. & Glaister, K.W. (2009). Equity-based entry modes of emerging country multinationals: lessons from Turkey. *Journal of World Business* 44:4, 445–462.

Demirbag, M., Apaydin, M. & Tatoglu, E. (2011). Survival of Japanese subsidiaries in the Middle East and North Africa. *Journal of World Business* 46:4, 411–425.

Dhanaraj, C. & Beamish, P.W. (2004). Effect of equity ownership on the survival of international joint ventures. *Strategic Management Journal* 25:3, 295–305.

Dhanaraj, C. & Beamish, P.W. (2009). Institutional environment and subsidiary survival. *Management International Review* 49:3, 291–312.

Dick, H. & Merrett, D. (2007). *The Internationalisation Strategies of Small Country Firms*. Cheltenham: Edward Elgar.

Dierickx, I. & Cool, K. (1989). Asset stock accumulation and sustainability of competitive advantage. *Management Science* 35:12, 1504–1511.

Dikova, D. (2012). Entry mode choices in emerging economies: the moderating effect of institutional distance on managers' personal experiences. *Journal of East–West Business* 18:1, 1–27.

Dikova, D. & van Witteloostuijn, A. (2007). Foreign direct investment mode choice: entry and establishment modes in transition economies. *Journal of International Business Studies* 38:6, 1013–1033.

Dikova, D., Rao, S.P. & Witteloostuijn, A. (2010). Cross-border acquisition abandonment and completion: the effect of institutional differences and organizational learning in the international business service industry, 1981–2001. *Journal of International Business Studies* 41:2, 223–245.

DiMaggio, P. & Powell, W. (1983). The iron cage revisited: Institutional isomorphism and collective rationality on organization fields. *American Sociological Review* 48:2, 147–160.

Dobbin, F. & Dowd, T.J. (1997). How policy shapes competition: early railroad foundings in Massachusetts. *Administrative Science Quarterly* 42:3, 501–529.

Dow, D. & Larimo, J. (2009). Challenging the conceptualization and measurement of distance and international experience in entry mode choice research. *Journal of International Marketing* 17:2, 74–98.

Drogendigk, R. & Slangen, A.H.L. (2006). Hofstede, Schwartz, or managerial perceptions? The effects of different cultural distance measures on establishment mode choices by multinational enterprises. *International Business Review* 15:4, 361–380.

Duanmu, J. L. (2011). The effect of corruption distance and market orientation on the ownership choice of MNEs: evidence from China. *Journal of International Management* 17:2, 162–174.

Dunning, J.H. (1993). *Multinational Enterprises and the Global Economy*. Wokingham: Addison-Wesley.

Dunning, J.H. & Lundan, S.M. (2008a). *Multinational Enterprises and the Global economy*. Cheltenham: Edward Elgar.

Dunning, J.H. & Lundan, S.M. (2008b). Institutions and the OLI paradigm of the multinational enterprise. *Asia Pacific Journal of Management* 25:4, 573–593.

Ekeledo, I. & Sivakumar, K. (2004). International market entry mode strategies of manufacturing and service firms: a resource-based perspective. *International Marketing Review* 21:1, 68–101.

Elango, B. & Sambharya, R.B. (2004). The influence of industry structure on the entry mode choice of overseas entrants in manufacturing industries, *Journal of International Management* 10:1, 107–124.

Erramilli, M.K. (1991). The experience factor in foreign market entry behavior of service firms. *Journal of International Business Studies* 22:3, 479–501.

Erramilli, M. K. (1996). Nationality and subsidiary ownership patterns in multinational corporations. *Journal of International Business Studies* 27:2, 225–246.

Erramilli, M. K. & Rao, C.P. (1993). Service firms' international entry mode choice: A modified transaction cost analysis approach. *Journal of Marketing* 57:3, 19–38.

Erramilli, M.K., Agarwal, S. & Kim, S.S. (1997). Are firm-specific advantages location specific too? *Journal of International Business Studies* 28:4, 735–757.

Erramilli, M.K., Agarwal, S. & Dev, C.S. (2002). Choice between non-equity entry modes: an organizational capability perspective. *Journal of International Business Studies* 33:2, 223–242.

Fang, E. & Zhou, S. (2010). The effects of absorptive and joint learning on the instability of international joint ventures in emerging economies. *Journal of International Business Studies* 41:5, 906–924.

Foss, K. & Foss, N.J. (2005). Value and transaction costs: how property rights economics furthers the resource-based view. *Strategic Management Journal* 26:6, 541–556.

Foss, N.J. & Knudsen, T. (2003). The resource-based tangle: towards a sustainable explanation of competitive advantage. *Managerial and Decision Economics* 24:4, 291–307.

Gatignon, H. & Anderson, E. (1988). The multinational corporation's degree of control over foreign subsidiaries: an empirical test of a transaction cost explanation. *Journal of Law, Economics, and Organization* 4:2, 305–336.

Gaur, A.S. & Lu, W. (2007). Ownership strategies and survival of foreign subsidiaries: impacts of institutional distance and experience. *Journal of Management* 33:1, 84–110.

Geringer, M.J. & Hebert, L. (1991). Measuring performance of international joint ventures. *Journal of International Business Studies* 22:2, 249–263.

Ghauri, P. & Gronhaug, K. (2002). *Research Methods in Business Studies: A Practical Guide*. Harlow: Financial Times Prentice Hall.

Gil, A., Nakos, G., Brouthers, L.E. & Brouthers, K.D. (2006). Country-specific strategy and new venture formation in Central and East Europe. *International Business Review* 15:1, 1–13.

Gomes-Casseres, B (1989). Ownership structures of foreign subsidiaries: theory and evidence. *Journal of Economic Behavior and Organization* 11:1, 1–25.

Gomes-Casseres, B (1990). Firm ownership preferences and host government restrictions: an integrated approach. *Journal of International Business Studies* 21:1, 1–22.

Goodnow, J. & Hanz, J.E. (1972). Environmental determinants of overseas market entry strategies. *Journal of International Business Studies* Spring, 33–60.

Geyskens, I., Steenkamp, J.B.E.M. & Kumar, N. (2006). Make, buy, or ally: a transaction cost theory meta-analysis. *Academy of Management Journal* 49:3. 519–543.

Grant, R. (1996). Toward a knowledge-based theory of the firm. *Strategic Management Journal* 17: Winter Special Issue, 109–122.

Hair, J.F., Anderson, R.E., Tatham, R.L. & Black, W. (1998). *Multivariate Data Analysis*. 5th ed. Upper Saddle River: Pearson Prentice Hall.

Hale, G. & Long, C. (2012). *Foreign Direct Investment in China: Winners and Losers*. Singapore: World Scientific Publishing.

Hart, S. (1995). A natural resource-based view of the firm. *Academy of Management Review* 20:4, 986–1014.

Harzing, A.W. (2002). Acquisitions versus greenfield investments: international strategy and management of entry modes. *Strategic Management Journal* 23:3, 211–227.

He, C.F., Wei, Y.H.D. & Xie, X.Z. (2008). Globalization, institutional change, and industrial location: economic transition and industrial concentration in China. *Regional Studies* 42:7, 923–945.

Hennart, J.F. (1988). A transaction costs theory of equity joint ventures. *Strategic Management Journal* 9:4, 361–374.

Hennart, J.F. (1989). Can the new forms of investment substitute for the old forms? A transaction costs perspective. *Journal of International Business Studies* 20:2, 211–233.

Hennart, J.F. (1991). The transaction costs theory of joint ventures: an empirical study of Japanese subsidiaries in the United States. *Management Science* 37:4, 483–497.

Hennart, J.F. (2000). Transaction Costs Theory and the Multinational Enterprise. In C. Pitelis & R. Sugden (Eds.). *The Natural of Transnationals*. 2nd ed. London: Routledge. 72–118.

Hennart, J.F. (2009). Down with MNE-centric theories! Market entry and expansion as the bundling of MNE and local asset. *Journal of International Business Studies* 40:9, 1432–1454.

Hennart, J.F. (2012). Emerging market multinationals and the theory of the multinational enterprise. *Global Strategy Journal* 2:3, 168–187.

Hennart, J.F. & Park, Y.R. (1993). Greenfield vs. acquisition: the strategy of Japanese investors in the United States. *Management Science* 39:9, 1054–1070.

Hennart, J.F., Larimo, J. & Chen, S.F. (1996). Does national origin affect the propensity of foreign investors to enter the United States through acquisitions? *Proceedings of the University of Vaasa* Discussion paper no. 189. Vaasa: University of Vaasa.

Hennart, J.F. & Reddy, S. (1997). The choice between mergers/acquisitions and joint ventures: the case of Japanese investors in the United States. *Strategic Management Journal* 18:1, 1–12.

Hennart, J.F. & Larimo, J. (1998). The impact of culture on the strategy of multinational enterprises. Does national origin affect ownership decisions? *Journal of International Business Studies* 29:3, 515–538.

Herrmann, P. & Datta, D.K. (2006). CEO experiences: effects on the choice of FDI entry mode. *Journal of Management Studies* 43:4, 754–778.

Hill, C.L., Hwang, P. & Kim, W.C. (1990). An eclectic theory of the choice of international entry mode. *Strategic Management Journal* 11:2, 117–128.

Hofstede, G. (1980). *Culture's Consequences: Internal Differences in Work-related Values*. Newbury Park: Sage.

Hofstede, G. (1991), *Cultures and Organizations: Software of the Mind*, London: McGraw Hill Book.

Hofstede, G. (2001). *Cultures and Organizations: Software of the Mind*. 2nd ed. New York: McGraw Hill.

Hollensen, S. (2014). *Global Marketing*. 6th ed. United Kingdom: Pearson Education.

Hoskisson, R.E., Eden, L., Lau, C.M. & Wright, M. (2000). Strategy in Emerging Economies. *Academy of Management Journal* 43:3, 249–267.

Hosmer, D.W. & Lemeshow, S. (1989). *Applied Logistic Regression*. New York: Wiley.

IMF (International Monetary Fund) (1993). *Balance of Payments Manual*. 5th ed.

Jakobsen, K. (2008). *Foreign market entry in transition economies: Entry timing and mode choice*. Copenhagen Business School. PhD thesis.

Jakobsen, K. & Meyer, K.E. (2008). Partial acquisition: The overlooked entry mode. In J. Dunning & P. Gugler (Eds.). *Foreign Direct Investment, Location and Competitiveness*. Amsterdam: Pergamon Press. 203–226.

Johanson, J. & Vanlne, J.E. (1977). The internationalization process of the firm. A model of knowledge development and increasing foreign market commitment. *Journal of International Business Studies* 8:1, 23–32.

Kennedy, P. (1998). *A Guide to Econometrics*. Cambridge (Mass): MIT Press.

Kim, T.Y., Delios, A. & Xu, D. (2010). Organizational geography, experiential learning and subsidiary exit: Japanese foreign expansions in China, 1979-2001. *Journal of Economic Geography* 10:4, 579–597.

Klein, B., Frazier, G.L. & Roth, V.J. (1990). A transaction cost analysis model of channel integration in international markets. *Journal of Marketing Research* 27:2, 196–208.

Kogut, B. (1988). Joint ventures: theoretical and empirical perspectives. *Strategic Management Journal* 9:4, 319–332.

Kogut, B. & Singh, H. (1988). The effect of national culture on the choice of entry mode. *Journal of International Business Studies* 19:3, 412–432.

Kostova, T. (1996). *Success of the Transnational Transfer of Organizational Practices Within Multinational Companies*. University of Minnesota. PhD thesis.

Kraaijenbrink, J., Spender, J.C. & Groen, A.J. (2010). The resource-based view: a review and assessment of its critiques. *Journal of Management* 36:1, 349–372.

Kumar, N. (2003). Investment on the WTO agenda: a developing countries perspective and the way forward for the cancun ministerial conference. *Paper Presented at the Cancun Ministerial Conference, WTO, Cancun, Mexico*.

Kuo, A., Kao, M.S., Chang, Y.C. & Chiu, C.F. (2012). The influence of international experience on entry mode choice: difference between family and non-family firms. *European Management Journal* 30:3, 248–263.

Laanti, R., McDougall, F. & Baume, G. (2009). How well do traditional theories explain the internationalisation of service MNEs from small and open economies? – Case: national telecommunication companies. *Management International Review* 49:1, 121–144.

Larimo, J. (1993). *Foreign Direct Investment Behaviour and Performance: An Analysis of Finnish Direct Manufacturing Investments in OECD Countries*. University of Vaasa. Department of Marketing. PhD thesis.

Larimo, J. (1997). *Mode of entry in foreign direct investments: behaviour of Finnish firms in OECD markets*. *Proceedings of the University of Vaasa* Discussion Papers no. 232. Vaasa: University of Vaasa.

Larimo, J. (2000). Choice of organizational structure in foreign markets: the impact of ownership and location specific determinants on foreign direct investment behavior of Nordic firms. *Paper presented at AIB meeting, 17–20 November, Phoenix, AZ.*

Larimo, J. (2003). Form of investment by Nordic firms in world markets. *Journal of Business Research* 56:10, 791–804.

Lee, Y.H. (2010). A resource-based perspective of entry mode choices of electronic components industry into China. *International Conference on Future Information Technology and Management Engineering* 540–545.

Li, J.T. (1995). Foreign entry and survival, the effects of strategic choices on performance in international markets. *Strategic Management Journal* 16:5, 333–351.

Li, P.Y. & Meyer, K.E. (2009). Contextualizing experience effects in international business: a study of ownership strategies. *Journal of World Business* 44:4, 370–382.

Liang, X., Musteen, M. & Datta, D.K. (2009). Strategic orientation and the choice of foreign market entry mode. *Management International Review* 49:3, 269–290.

Lopez-Duarte, C. & Garcia-Canal, E. (2002). Adverse selection and the choice between joint ventures and acquisitions: evidence from Spanish firms. *Journal of Institutional and Theoretical Economic*s 158:2, 304–324.

Lopez-Duarte, C. & Vidal-Suarez, M.M. (2013). Cultural distance and the choice between wholly owned subsidiaries and joint ventures. *Journal of Business Research* 66:11, 2252–2261.

Lu, J.W. (2002). Intra- and inter-organizational imitative behavior: institutional influences on Japanese firms' entry mode choice. *Journal of International Business Studies* 33:1, 19–37.

Lu, J.W. & L. Hebert (2005). Equity control and the survival of IJVs: a contingency approach. *Journal of Business Research* 58:6, 736–745.

Lu, Y., Karpova, E.E. & Fiore, A.M. (2011). Factors influencing international fashion retailers' entry mode choice. *Journal of Fashion Marketing and Management* 15:1, 58–75.

Luo, Y.D. (2001). Determinants of entry in an emerging economy: a multilevel approach. *Journal of Management Studies* 38:3, 443–472.

Luo, Y.D. (2007). Are joint venture partners more opportunistic in a more volatile environment? *Strategic Management Journal* 28:1, 39–60.

Luo, Y.D. & Peng, M.W. (1999). Learning to compete in a transition economy: experience, environment, and performance. *Journal of International Business Studies* 30:2, 269–295.

Luostarinen, R. & Gabrielsson, M. (2006). Globalization and marketing strategies of born global in SMOPECs. *Thunderbird International Business Review* 48:6, 773–801.

Ma, X.F., Tong, T.W. & Fitza, M. (2013). How much does subnational region matter to foreign subsidiary performance? Evidence from Fortune global 500 corporations' investment in China. *Journal of International Business Studies* 44:1, 66–87.

Madhok, A. (2006). How much does ownership really matter? Equity and trust relations in joint venture relationships. *Journal of International Business Studies* 37:1, 4–11.

Makino, S. & Neupert, K.E. (2000). National culture, transaction costs, and the choice between joint venture and wholly owned subsidiary. *Journal of International Business Studies* 31:4, 705–713.

Mata, J. & Portugal, P. (2000). Closure and divestiture by foreign entrants: the impact of entry and post-entry strategies. *Strategic Management Journal* 21:5, 549–562.

Mehta, R., Polsa, P., Mazur, J., Xiucheng, F. & Dubinsky, A.J. (2006). Strategic alliances in international distribution channels. *Journal of Business Research* 59:10, 1094–1104.

Menard, C. & Shirley, M.M. (2005). *Handbook of New Institutional Economics*. Netherlands: Springer.

Menard, C. & Shirley, M.M. (2008). *Handbook of New Institutional Economics*. Berlin: Springer.

Meschi, P. X. & Riccio, E.L. (2008). Country risk, national cultural differences between partners and survival of international joint ventures in Brazil. *International Business Review* 17:3, 250–266.

Meyer, K.E. (2001). Institutions, transaction costs, and entry mode choice in Eastern Europe. *Journal of International Business Studies* 32:2, 357–367.

Meyer, K.E. & Nguyen, H.V. (2005). Foreign investment strategies and subnational institutions in emerging markets: evidence from Vietnam. *Journal of Management Studies* 43:1, 63–93.

Meyer, K.E. & Peng, M.W. (2005). Probing theoretically into Central and Eastern Europe: transactions, resources, and institutions. *Journal of International Business Studies* 36:6, 600–621.

Meyer, K.E. & Tran, Y.T.T. (2006). Market penetration and acquisition strategies for emerging economies. *Long Range Planning* 39:2, 177–197.

Meyer, K.E., Estrin, S., Bhaumik, S.K. & Peng, M.W. (2009). Institutions, resources, and entry strategies in emerging economies. *Strategic Management Journal* 30:1, 61–80.

Meyer, K.E. & Wang, Y. (2015, forthcoming). Transaction Costs Perspectives on Alliances and Joint Ventures: Explanatory Power and Empirical Limitations. In J. Larimo, N. Nummela & T. Mainela (Eds.). *Handbook of International Alliances and Network Research*. United Kingdom: Edward Elgar.

Morschett, D. Schramm-Klein, H. & Swoboda, B. (2010). Decades of research on market entry modes: what do we really know about external antecedents of entry mode choice? *Journal of International Management* 16:1, 60–77.

Mudambi, R. (2008). Location, control and innovation in knowledge-intensive industries. *Journal of Economic Geography* 8:5, 699–725.

Mudambi, R. & Mudambi, S.M. (2002). Diversification and market entry choices in the context of foreign direct investment. *International Business Review* 11:1, 35–55.

Newbert, S.L. (2007). Empirical research on the resource-based view of the firm: an assessment and suggestions for future research. *Strategic Management Journal* 28:2, 121–146.

North, D.C. (1990). *Institutions, Institutional Change and Economic Performance*. Cambridge: Cambridge University Press.

Norton, P.M. & Chao, H. (2001). Mergers and acquisitions in China. *The China Business Review* 28:5, 46–53.

OECD (Organization for Economic Cooperation and Development) (1996). *Benchmark Definition of Foreign Direct Investment*. 3rd ed. Paris.

Oliver, C. (1997). Sustainable competitive advantage: combining institutional and resource-based views. *Strategic Management Journal* 18:9, 697–713.

Padmanabhan, P. & Cho, K.R. (1995). Methodological issues in international business studies: the case of foreign establishment mode decisions by multinational firms. *International Business Review* 4:1, 55–73.

Padmanabhan, P. & Cho, K.R. (1996). Ownership strategy for a foreign affiliate. An empirical investigation of Japanese firms. *Management International Review* 36:1, 45–65.

Padmanabhan, P. & Cho, K.R. (1999). Decision specific experience in foreign ownership and establishment strategies: evidence from Japanese firms. *Journal of International Business Studies* 30:1, 25–41.

Papyrina, V. (2007). When, how, and with what success? The joint effect of timing and entry mode on survival of Japanese subsidiaries in China. *Journal of International Marketing* 15:3, 73–95.

Park, Y.R., Lee, J.Y. & Hong, S.H. (2011). Effects of international entry-order strategies on foreign subsidiary exit. The case of Korea Chaebols. *Management Decision* 49:9, 1471–1488.

Pallant, J. (2007). *SPSS Survival Manual: A Step by Step Guide to Data Analysis Using SPSS for Windows*. Buckingham: Open University Press.

Pan, Y. G. & Chi, P.S.K. (1999). Financial performance and survival of multinational corporations in China. *Strategic Management Journal* 20:4, 359–374.

Palenzuela, V.A. & Bobillo, A.M. (1999). Transaction costs and bargaining power: entry mode choice in foreign markets. *Multinational Business Review* 7:1, 62–75.

Pan, Y. & Tse, D.K. (2000). The hierarchical model of market entry modes. *Journal of International Business Studies* 31:4, 535–554.

Pan, Y., Li, S. & Tse, D.K. (1999). The impact of order and mode of market entry on profitability and market share. *Journal of International Business Studies* 30:1, 81–103.

Papyrina, V. (2007). When, how, and with what success? The joint effect of timing and entry mode on survival of Japanese subsidiaries in China. *Journal of International Marketing* 15:3, 73–95.

Peng, M.W. (2001). The resource-based view and international business. *Journal of Management* 27:6, 803–829.

Peng, M.W. (2002). Towards an institution-based view of business strategy. *Asia Pacific Journal of Management* 19:2-3, 251–267.

Peng, M.W. (2003). Institutional transitions and strategic choices. *Academy of Management Review* 28:2, 275–296.

Peng, M.W. (2006). *Global Strategy*. Cinncinnati: South-Western Cengage Learning.

Peng, M.W. (2009). *Global Strategy*. 2nd ed. Mason: South-Western Cengage Learning.

Peng, M.W. & Heath, P.S. (1996). The growth of the firm in planned economies in transition: institutions, organizations, and strategic choice. *Academy of Management Review* 21:2, 492–528.

Peng, M.W., Tan, J. & Tong, T. (2004). Ownership types and strategic groups in an emerging economy. *Journal of Management Studies* 41:7, 1105–1129.

Peng, M.W. & Zhou, J.Q. (2005). How network strategies and institutional transitions evolve in Asia. *Asia Pacific Journal of Management* 22:4, 321–336.

Peng, M.W., Sun, S.L., Pinkham, B. & Chen, H. (2009). The institution-based view as a third leg for a strategy tripod. *Academy of Management Perspectives* 23:3, 63–81.

Peng, M.W., Wang, D.Y.L. & Jiang, Y. (2008). An institution-based view of international business strategy: a focus on emerging economies. *Journal of International Business Studies* 39:5, 920–936.

Peng, M.W. & Meyer, K.E. (2011). *International Business*. London: Cengage Learning EMEA.

Pennings, J.M., Barkema, H.G. & Douma, S. (1994). Organizational learning and diversification. *Academy of Management Journal* 37:3, 608–640.

Penrose, E.T. (1956). *The Theory of the Growth of the Firm*. Oxford: Oxford University Press.

Peteraf, M.A. (1993). The cornerstones of competitive advantage: a resource-based view. *Strategic Management Journal* 14:3, 179–191.

Polsa, P., So, S.L.M. & Speece, M.W. (2005). The People's Republic of China: markets within the market. In A. Pecotich & C.J. Schultz (Eds). *Handbook of Markets and Economics: East Asia, Southeast Asia, Australia, New Zealand*. New York: Sharp M.E. 107–199.

Porter, M.E. (1980). *Competitive Strategy*. New York: Free Press.

Priem, R.L. & Butler, J.E. (2001). Is the resource-based "view" a useful perspective for strategic management research? *Strategic Management Review* 26:1, 22–40.

Puck, J.F., Holtbrugge, D. & Mohr, A.T. (2009). Beyond entry mode choice: explaining the conversion of joint ventures into wholly owned subsidiaries in the

People's Republic of China. *Journal of International Business Studies* 40:3, 388–404.

Quer, D., Claver, E. & Rienda, L. (2007). The impact of country risk and cultural distance on entry mode choice. *Cross Cultural Management: An International Journal* 14:1, 74–87.

Rajan, K.S. & Pangarkar, N. (2000). Mode of entry choice: An empirical study of Singapore multinationals. *Asia Pacific Journal of Management* 17:1, 49–66.

Rugman, A. & Verbeke, A. (1990). *Global Corporate Strategy and Trade Policy*. London: Routledge.

Rumelt, R.P. (1984). Towards a strategic theory of the firm. In. R. Lamb (Ed.) *Competitive Strategic Management*. Englewood Cliffs: Prentice-Hall. 556–570.

Saunders, M., Lewis, P. & Thornhill, A. (2007). *Research Methods for Business Students*. 4th ed. London: Prentice Hall.

Scott, W.R. (1987). The adolescence of institutional theory. *Administrative Science Quarterly* 32:4. 493–511.

Scott, W. R. (1995). *Institutions and Organizations*. Thousand Oaks: Sage.

Scott, W.R. (2008). *Institutions and Organizations: Ideas and Interests*. Thousand Oaks: Sage.

Scott, W.R. (2008). Approaching adulthood: the maturing of institutional theory. *Theory and Society* 37:5, 427–442.

Sharma, V.M. & Erramilli, M.K. (2004). Resource-based explanation of entry mode choice. *Journal of Marketing Theory and Practice* 12:1, 1–18.

Shaver, J.M. (1994). *The influence of intangible assets, spillovers and competition on foreign direct investment survival and entry time*. University of Michigan. PhD thesis.

Shaver, J.M. (2013). Do we really need more entry mode studies? *Journal of International Business Studies* 44:1, 23–27.

Shi, Y. Z., Ho, P.Y. & Siu, W.S. (2001). Market entry mode selection: the experience of small Hong Kong firms investing in China. *Asia Pacific Business Review* 8:1, 19–41.

Shi, W.L., Sun, S.L. & Peng, M.W. (2012). Sub-national institutional contingencies, network positions, and IJVS partner selection. *Journal of Management Studies* 49:7, 1221–1245.

Silverman, B.S., Nickerson, J.A. & Freeman, J. (1997). Profitability, transactional alignment, and organizational mortality in the U.S. trucking industry. *Strategic Management Journal* 18: Summer Special Issue, 31–52.

Simon, H.A. (1955). A behavioral model of rational choice. *Quarterly Journal of Economics* 69:1, 99–118.

Simon, H.A. (1956). Rational choice and the structure of the environment. *Psychological Review* 63:2, 129–138.

Slangen, A.H.L. (2011). A communication-based theory of the choice between greenfield and acquisition entry. *Journal Management Studies* 48:8, 1699–1725.

Slangen, A.H.L. & Hennart, J.F. (2007). Greenfield or acquisition entry: a review of the empirical foreign establishment mode literature. *Journal of International Management* 13:4, 403–429.

Slangen, A.H.L. & Hennart, J.F. (2008). Do multinationals really prefer to enter culturally distant countries through greenfields rather than through acquisitions? The role of parent experience and subsidiary autonomy. *Journal of International Business Studies* 39:3, 472–490.

Slangen, A.H.L. & Tulder, R.J.M.V. (2009). Cultural distance, political risk, or governance quality? Toward a more accurate conceptualization and measurement of external uncertainty in foreign entry mode research. *International Business Review*. 18:3, 276–291.

Somlev, I.P. & Hoshino, Y. (2005). Influence of location factors on establishment and ownership of foreign investments: the case of Japanese manufacturing firms in Europe. *International Business Review* 14:5, 577–598.

Steensma, H.K. & Lyles, M.A. (2000). Explaining IJV survival in a transitional economy through social exchange and knowledge–based perspectives. *Strategic Management Journal*, 21:8, 831–851.

Sun, H.H. (1999). Entry modes of multinationals corporations into China's market: a socioeconomic analysis. *International Journal of Social Economics* 26:5, 642–659.

Tabachnick, B.G. & Fidell, L.S. (2007). *Using Multivariate Statistics*. 5th ed. New York: Pearson Education.

Tan, D. (2009). Foreign market entry strategies and post entry growth: acquisitions vs. greenfield investments. *Journal of International Business Studies* 40:6, 1046–1063.

Tang, S., Selvanathan, E.A. & Selbanathan, S. (2012). *China's Economic Miracle: Does FDI Matter*? United Kingdom: Edward Elagr.

Taylor, C. R., Zou, S. & Osland, G.E. (1998). A transaction cost perspective on foreign market entry strategies of US and Japanese firms. *Thunderbird International Business Review* 40:4, 389–412.

Teece, D.J., Pisano, G. & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal* 18:7, 509–534.

Teng, B.S. (2004). The WTO and entry mode choice in China. *Thunderbird International Business Review* 46:4, 381–400.

Tihanyi, L., Griffith, D.A. & Russell, C.J. (2005). The effect of cultural distance on entry mode choice, international diversification, and MNE performance: a meta-analysis. *Journal of International Business Studies* 36:3, 270–283.

Tsang, E.W.K. (2000). Transaction cost and resource-based explanations of joint ventures: a comparison and synthesis. *Organization Studies* 21:1, 215–242.

Tsang, E.W.K. (2006). Behavioral assumptions of and theory development: the case of transaction cost economics. *Strategic Management Journal* 27:11, 999–1011.

Tsang, E.W.K. & Yip, P.S.L. (2007). Economic distance and survival of foreign direct investments. *Academy of Management Journal* 50:5, 1156–1168.

Tse, D. K., Pan, Y.G. & Au, K.Y. (1997). How MNCs choose entry mode and form alliances: the China experience. *Journal of International Business Studies* 28:4, 779–805.

UNCTAD (2013). *World Investment Report. Global Value Chains: Investment and Trade for Development*, Switzerland: United Nations Publications.

Vermeulen, F. & Barkema, H. (2001). Learning through acquisitions. *Academy of Management Journal* 44:3, 457–476.

Verbeke, A. (2009). *International Business Strategy*. Cambridge: Cambridge University Press.

Verbeke, A. & Greidanus, N.S. (2009). The end of opportunism and trust debate: bounded reliability as a new envelope concept in research on MNE governance. *Journal of International Business Studies* 40: 9, 1471–1495.

Wang, H.L. & Schaan, J.L. (2008). How much distance do we need? Revisiting the national cultural distance paradox. *Management International Review* 48:3, 263–277.

Wei, Y.Q., Liu, B. & Xia, M.L. (2005). Entry modes of foreign direct investment in China: a multinomial logit approach. *Journal of Business Research* 58:11, 1495–1505.

Welch, L.S. & Luostarinen, R.K. (1988). Internationalization: evolution of a concept. *Journal of General Management* 14:2, 32–55.

Wernerfelt, B. (1984). A resource-based view of the firm. *Strategic Management Journal* 5:2, 171–180.

Wetherill, G.B. (1986). *Regression Analysis with Applications*. London: Chapman and Hall.

Williamson, O.E. (1975). *Markets and Hierarchies: Analysis and Antitrust Implications: A Study in the Economies of Internal Organization*, New York: The Free Press.

Williamson, O.E. (1985). *The Economic Institutions of Capitalism: Firms, Markets, Relational Contracting*, New York: The Free Press; London: Collier Macmillan Publishers.

Williamson, O.E. (1998). Transaction costs economics: how it works, where it is headed. *De Economist* 146: 1, 23–58.

Williamson, O.E. (2000). The new institutional economics: taking stock, and looking ahead. *Journal of Economic Literature* 38:3, 595–613.

Williamson, O.E. & Ghani, T. (2010). Transaction costs economics and its use in marketing. *Journal of the Academy of Marketing Science* 40:1, 74–85.

Wilson, B.D. (1980). The propensity of multinational companies to expand through acquisitions. *Journal of International Business Studies* 11:1, 59–65.

World Bank Survey (2006*), Governance, investment climate, and harmonious society: competitiveness enhancements for 120 cities in China*, Poverty Reduction and Economic Management, Financial and Private Sector Development Unit East Asia and Pacific Region; Report Number 37759-CN.

Wright, M., Filatotchev, I., Hoskkison, R.E. & Peng, M.W. (2005). Strategy research in emerging economies: challenging the conventional wisdom. *Journal of Management Studies* 42:1, 1–33.

Wright, P.M., Dunford, B.M. & Snell, S.A. (2001). Human resources and resource-based view of the firm. *Journal of Management* 27:6, 701–721.

Xu, D. & Meyer, K.E. (2012). Linking theory and context: Strategy research in emerging economies after Wright et al. (2005). *Journal of Management Studies* 50:7, 1322–1346.

Yan, A. (1998). Structural stability and reconfiguration of international joint ventures. *Journal of International Business Studies* 29:4, 773–795.

Yan, Y. & Zeng, M. (1999). International joint venture instability: a critique of previous research, a conceptualization, and directions for future research. *Journal of International Business Studies* 30:2, 397–414.

Yeung, Y.M., Lee, J. & Kee, G. (2009). China's special economic zones at 30. *Eurasian Geography and Economies* 50:2, 222–240.

Yin, R.K. (2003). *Case Study Research: Design and Methods*. 3rd ed, Thousand Oaks: Sage.

Yiu, D. & Makino, S. (2002). The choice between joint venture and wholly owned subsidiary: an institutional perspective. *Organization Science* 13:6, 667–683.

Zajac, E.J. & Olsen, C.P. (1993). From transaction cost to transactional value analysis: implications for the study of interorganizational strategies. *Journal of Management Studies* 30:1, 131–145.

Zejan, M.C. (1990). New ventures or acquisitions: the choice of Swedish multinational enterprises. *The Journal of Industrial Economies* 38:3, 349–355.

Zhang, Y., Zhang, Z.G. & Liu, Z.X. (2007). Choice of entry modes in sequential FDI in an emerging economy. *Management Decision* 45:4, 749–772.

Zhao, H.X., Luo, Y.D. & Suh, T. (2004). Transaction cost determinants and ownership-based entry mode choice: a meta-analytical review. *Journal of International Business Studies* 35:6, 524–544.

Zhou, C.H., Delios, A. & Yang, J.Y. (2002). Locational determinants of Japanese foreign direct investment in China. *Asia Pacific Journal of Management* 19:1, 63–86.

Zhou, J.Q. & Peng, M.W. (2010). Relational exchanges and arm's length transactions during institutional transitions. *Asia Pacific Journal of Management* 27:3, 355–370.

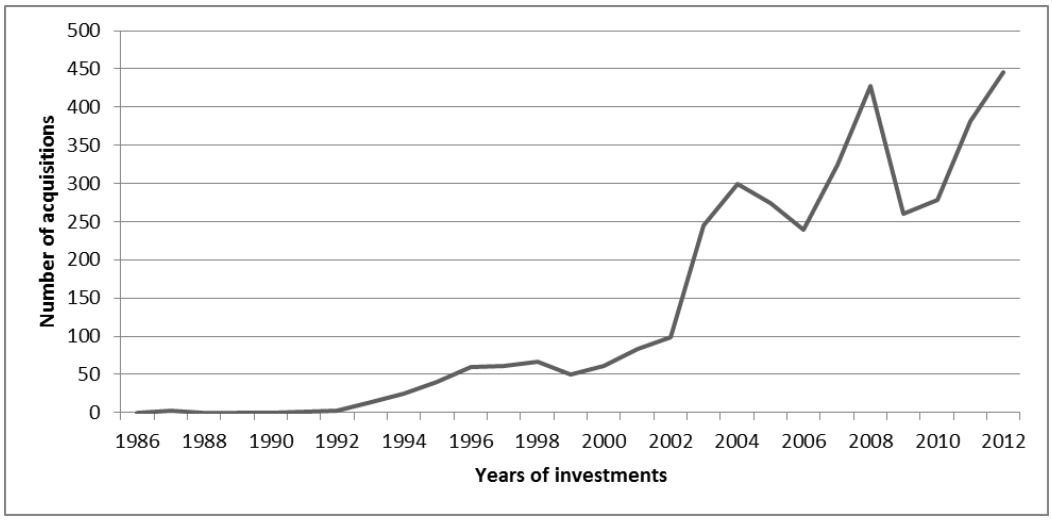
Zhou, K.Z., Tse, D.K. & Li, J.J. (2006). Organizational changes in emerging economies: drivers and consequences. *Journal of International Business* 37:2, 248–263.

APPENDICES

Appendix 1. FDIs in China by Country of Origin 1997–2012 (10,000 US dollar).

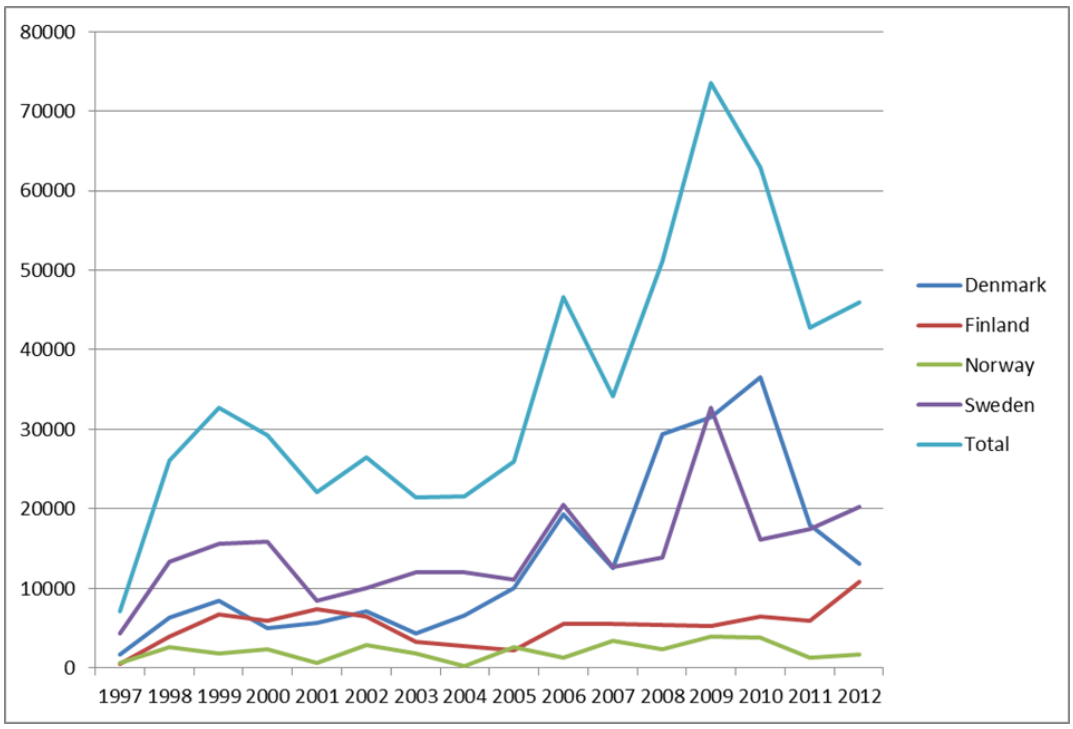
Country	**2012**	**2011**	**2010**	**2009**	**2008**	**2007**	**2006**	**2005**	**2004**	**2003**	**2002**	**2001**	**2000**	**1999**	**1998**	**1997**
Worldwide Total	11171614	11600985	10573235	9003267	9239544	7476789	6302053	6032459	6062998	5350467	5274286	4687759	4071481	4031871	4546275	4525704
Asia Total	**8669559**	**8951427**	**7759215**	**6064531**	**5634512**	**4211735**	**3508487**	**3571889**	**3761986**	**3410169**	**3256997**	**2961326**	**2548209**	**2683231**	**3133102**	**3427589**
Hong Kong	6556119	7050016	6056677	4607547	4103640	2770342	2023292	1794879	1899830	1770010	1786093	1671730	1549998	1636305	1850836	2063200
Japan	735156	632963	408372	410497	365235	358922	459806	652977	545157	505419	419009	434842	291585	297308	340036	432647
Singapore	630508	609681	542820	360484	443529	318457	226046	220432	200814	205840	233720	214355	217220	264249	340397	260641
South Korea	303800	255107	269217	270007	313532	367831	389487	516834	624786	448854	272073	215178	148961	127473	180320	214238
Taiwan	284707	218343	247574	188055	189868	177437	213583	215171	311749	337724	397064	297994	229658	259870	291521	328939
Marco	50556	68043	65524	81471	58161	63700	60290	60046	54639	41660	46838	32112	34728	30864	42157	39455
Malaysia	31751	35828	29433	42874	24696	39725	39348	36139	38504	25103	36786	26298	20288	23771	34049	38183
Brunei	15109	25582	30956	34812	34042	37688	29421	16039	9605	5260	1736	10	n.a.	18	183	9
Philipines	13221	11185	13806	11101	12687	19532	13434	18890	23324	22001	18600	20939	11112	11728	17927	15563
UAE	12963	7140	11003	10273	9381	10080	14022	9203	8565	6958	3230	595	407	221	175	559
Tailand	7772	10120	5134	4866	12921	8948	14482	9590	17868	17352	18772	19421	20357	14832	20538	19400
Indonesia	6378	4607	7684	11172	16725	13441	10068	8676	10452	15013	12164	15964	14694	12917	6897	7998
Saudi Arabia	4987	2394	48397	11365	27524	12265	816	937	701	355	1314	1513	2556	256	30	n.a.
India	4406	4217	4931	5520	8805	3404	5239	2140	1948	1593	3057	1197	1044	49	557	38
Cambodia	1660	1737	1035	1337	292	634	212	276	2069	1252	1374	930	194	248	290	545
Turkey	1556	1485	986	1864	729	984	1345	2216	745	1270	243	337	148	385	99	190
Israel	1250	4394	2596	1757	2649	2495	803	633	2330	1573	952	3096	1491	327	712	697
Syprus	863	667	1756	1015	2139	2317	618	774	160	83	107	495	297	189	425	15
Kazakhstan	555	1127	155	2240	663	159	333	233	196	70	276	33	73	n.a.	12	8
Iran	410	787	1786	1912	2702	745	640	420	429	55	8	99	20	n.a.	56	38
Burma	384	1021	352	339	330	326	736	374	878	351	1676	226	230	1101	511	268
Lebanen	371	215	249	115	245	97	687	421	304	124	20	585	25	20	n.a.	n.a.
Vietnam	316	129	203	592	207	73	1366	127	114	331	251	148	56	13	1414	154
Yemen	287	888	2079	442	484	151	149	70	286	26	16	79	n.a.	20	n.a.	n.a.
Bangladesh	227	495	18	93	65	145	642	885	749	306	n.a.	226	n.a.	43	17	n.a.
Laos	200	588	945	243	670	300	n.a.	n.a.	425	40	515	104	307	n.a.	112	39
Pakistan	183	971	570	380	1452	248	618	768	454	343	137	299	102	189	119	12
North Korea	155	84	1122	151	193	92	85	129	273	238	374	158	956	368	510	1185
Uzbekistan	155	457	n.a.	n.a.	n.a.	n.a.	n.a.	1	15	0	20	71	n.a.	n.a.	n.a.	11
Jordan	120	631	640	87	341	520	132	894	937	622	49	67	25	n.a.	12	n.a.
Syria	95	89	810	188	136	148	73	96	64	39	4	50	n.a.	11	8	7
Iraq	93	99	212	140	324	27	150	311	549	7	150	n.a.	18	202	7	n.a.
Bahrain	79	n.a.	105	360	205	190	120	6	380	101	48	n.a.	66	n.a.	17	10
Mongolia	25	n.a.	325	231	141	94	322	134	15	18	76	10	526	6	103	740
Sri Lanka	20	68	143	147	40	7	225	61	526	112	268	102	n.a.	n.a.	n.a.	50
Kuwait	n.a.	25	47	54	63	29	10	45	89	10	20	2107	1067	248	59	2758
North America Total	**382585**	**358156**	**401372**	**367672**	**395780**	**339027**	**368699**	**372996**	**497759**	**516135**	**142689**	**509685**	**478579**	**461608**	**432943**	**368816**
Canada	43497	46832	63485	86177	54328	39658	42416	45413	61387	56351	58798	44130	27978	31442	31652	34412
United States of America	259809	236932	301734	255499	294434	261623	286509	306123	394095	419851	542392	443322	438389	421586	389844	323915
Europe Total	**629050**	**587654**	**592183**	**549529**	**545937**	**436511**	**571156**	**564310**	**479830**	**427197**	**404891**	**448398**	**476539**	**479713**	**430933**	**443899**
Austria	21626	10478	12531	8857	13255	8234	14943	7630	9761	9450	6727	5778	2259	2317	2113	7461
Belgium	3821	12101	3838	5660	5586	9584	7916	5384	8209	11059	12428	2002	5616	8322	2804	3326
Bulgaria	747	1441	1837	380	30	258	311	23	577	234	214	89	381	10	171	154
Czezh Republic	2071	732	748	161	3579	1490	1897	552	3363	1245	1569	487	975	1407	507	498
Danmark	13048	18021	36537	31552	29376	12514	19341	10043	6571	4282	7109	5638	4946	8491	6266	1681
Estonia	9	4	22	83	63	42	n.a.	53	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Finland	10891	5949	6452	5294	5410	5589	5544	2172	2801	3239	6465	7371	5983	6765	3930	495
France	65242	76853	123820	65365	58775	45601	38269	61506	65674	60431	57560	53246	85316	88429	71489	47465
Germany	145095	112896	88840	121657	90049	73397	197871	153004	105848	85697	92796	121292	104149	137326	73673	99263
Greece	140	215	451	897	1309	235	17	184	2819	177	617	731	1289	3	30	n.a.
Hungary	615	1309	2369	2026	1748	2109	3152	4545	4996	2366	2073	2153	1065	1204	1073	567
Iceland	882	4	6	85	101	600	220	15	50	0	28	36	24	1	n.a.	10
Ireland	11192	13091	6638	10125	19829	6103	2402	973	456	1061	1322	129	76	305	n.a.	30
Italy	24576	38779	39609	35168	49326	34792	34999	32201	28082	31670	17674	21998	20951	18744	27457	21504
Luxembourg	22702	51450	24550	16060	13283	8246	9466	14200	2878	17543	1353	2878	2344	422	1151	100
Norway	1751	1290	3847	3988	2409	3424	1319	2624	178	1861	2899	622	2410	1859	2592	646
Poland	357	701	1243	1084	1109	920	825	749	318	364	367	367	464	354	94	94
Portugal	48	1334	1058	1175	829	823	990	413	3322	415	976	2602	340	831	867	489
Romania	456	517	404	385	3205	3044	1779	5710	3058	1527	2059	1020	772	642	1441	377
Russia	2992	3102	3497	3177	5997	5207	6720	8199	12638	5430	3865	2976	1623	1954	1936	1800
Slovakia	429	486	32	11	16	109	90	97	207	1175	69	1145	46	10	180	8
Spain	34717	27070	25449	30285	20890	21324	23517	19690	15075	9181	9224	3389	3400	1754	5383	3881
Sweden	20250	17502	16105	32712	13917	12636	20447	11145	12070	12030	9980	8439	15924	15580	13342	4284
Switzerland	87280	55474	26130	30169	24259	29932	19663	20588	20312	18134	19980	20544	19403	24709	22882	21567
The Netherlands	114358	76137	91449	74128	86216	61666	84104	104358	81056	72549	57175	77611	78948	54168	71882	41380
Ukraine	280	622	790	462	409	1855	467	126	1386	279	109	238	24	24	46	65
United Kingdom	40960	58152	71032	67902	91401	83094	72610	96475	79282	74247	89576	105166	116405	104449	117486	185756
Latin America Total	**1018357**	**1250460**	**1352563**	**1468433**	**2090344**	**2011799**	**1416262**	**1129333**	**904353**	**690657**	**1487227**	**630891**	**461658**	**320447**	**456213**	**198139**
Argentina	830	732	94	1241	1266	1113	686	1089	3080	1889	1030	1638	1389	177	128	181
Bahamas	3731	3961	5592	9868	35141	13493	8394	7467	4800	8787	8990	5960	6776	4301	8077	498
Bolivia	15988	31005	35584	55754	125520	70958	53548	9701	3129	2446	1611	1214	5	392	53	53
Bolivia		189	460	338	99	129	306	164	134	290	607	70	707	38	510	1109
Brazil	5760	4304	5725	5248	3879	3164	5560	2461	3070	1671	1536	390	393	338	2021	116
Chile	2075	1679	146	323	466	719	560	636	339	801	1189	133	44	208	483	557
Columbia	3	1	5	14	10	5	35	n.a.	10	47	n.a.	1234	50	228	n.a.	n.a.
Ecuador	1	3	203	26	49	100	10	76	10	53	27	136	n.a.	29	87	21
Honduras	n.a.	260	301	n.a.	214	168	131	290	539	69	106	108	73	90	287	143
Mexico	1487	453	1525	91	385	566	1234	710	2129	555	731	182	93	33	198	17
Panama	3281	3845	2481	1797	3539	2580	5956	4291	3592	3283	4646	5785	4263	8951	6990	7547
Paraguay	2013	n.a.	234	301	215	58	158	142	830	60	107	117	30	500	70	26
Peru	16	87	2	4	267	527	73	338	445	90	112	27	7	272	861	229
Venezuela	128	209	358	198	237	209	98	276	n.a.	128	203	500	37	565	86	17
Africa Total	**138787**	**164091**	**127992**	**130969**	**166788**	**148683**	**121735**	**107086**	**77568**	**61776**	**56462**	**32977**	**28771**	**19606**	**15876**	**8237**
Algeria	571	29	40	n.a.	904	379	658	101	206	183	108	23	40	35	n.a.	n.a.
Kameroon	n.a.	21	87	181	218	-18	65	n.a.	590	73	16	n.a.	n.a.	6	n.a.	n.a.
Egypt	567	552	803	1090	758	678	127	532	396	334	182	146	67	16	14	n.a.
Kenya	209	235	48	202	99	80	300	n.a.	106	0	7	30	n.a.	40	n.a.	n.a.
Libya	180	121	5	25	10	96	21	25	15	0	16	n.a.	n.a.	7	12	492
Namibia	n.a.	n.a.	875	n.a.	50	1295	371	644	80	391	70	75	199	635	190	324
Nigeria	1253	1999	500	33	5504	1211	2000	856	1583	2083	646	384	652	200	326	2
South Africa	1605	1323	6647	4120	2560	6916	9481	10635	10940	3245	2593	836	919	590	860	131
Uganda	511	488	18	18	52	45	63	197	n.a.	0	15	30	12	26	15	n.a.
Zambia	629	1	407	50	n.a.	100	539	289	385	109	15	n.a.	10	n.a.	n.a.	n.a.
Zimbabwe	n.a.	66	39	39	101	219	346	24	325	0	180	n.a.	63	15	n.a.	n.a.

Appendix 2. Growth in Number of Foreign Acquisitions in China 1986–2012.



Source: Thomson one databank

Appendix 3. Nordic FDIs in China over 1997 to 2012 (10,000 US dollar)



Source: National Bureau of Statistics of China (data available at www-site: data.stats.gov.cn)

Appendix 4. VIF Tests

Dependent variable: FDI ownership mode strategy							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Control and independent variables	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	-.040	.156		-.258	.796		
Greenfields establishment mode strategy	.140	.058	.125	2.425	.016	.842	1.188
Resource-intensive industry	-.226	.068	-.204	-3.337	.001	.592	1.688
Industry restrictions	-.136	.076	-.093	-1.790	.074	.820	1.219
Cultural distance	.097	.052	.092	1.868	.063	.914	1.095
International experience	-.003	.001	-.229	-2.730	.007	.315	3.177
Host country experience	.011	.008	.101	1.466	.144	.470	2.126
Degree of product diversification	-.002	.004	-.033	-.466	.641	.448	2.232
Parent's firm size	4.844E-007	.000	.006	.102	.919	.663	1.508
Industry R&D intensity	-.088	.039	-.137	-2.228	.027	.588	1.700
Industry sales growth	.267	.121	.116	2.215	.027	.812	1.232
Industry growth in number of firms	-.388	.315	-.070	-1.233	.218	.697	1.435
Stages of institutional transitions	.221	.038	.338	5.816	.000	.657	1.522
Regional institutional differences	.171	.066	.134	2.604	.010	.835	1.197

Dependent variable: FDI establishment mode strategy							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Control and independent variables	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	.592	.140		4.245	.000		
WOS ownership mode strategy	.118	.049	.132	2.425	.016	.792	1.263
Resource-intensive industry	.042	.063	.042	.662	.508	.575	1.740
Industry restrictions	.078	.070	.060	1.109	.268	.816	1.226
Cultural distance	-.042	.048	-.045	-.879	.380	.907	1.103
International experience	.001	.001	.076	.872	.384	.309	3.238
Host country experience	-.026	.007	-.258	-3.701	.000	.486	2.059
Degree of product diversification	-.004	.004	-.073	-1.005	.316	.449	2.227
Parent's firm size	1.277E-005	.000	.175	2.965	.003	.680	1.471
Industry R&D intensity	.019	.036	.033	.525	.600	.580	1.723
Industry sales growth	.126	.111	.062	1.136	.257	.804	1.244
Industry growth in number of firms	.393	.289	.079	1.362	.174	.697	1.434
Stages of institutional transitions	-.068	.036	-.116	-1.859	.064	.605	1.652
Regional institutional differences	.233	.059	.205	3.912	.000	.855	1.169

FDI subsidiary survival							
	Unstandardized Coefficients		Standardized Coefficients			Collinearity Statistics	
Control and independent variables	B	Std. Error	Beta	t	Sig.	Tolerance	VIF
(Constant)	-.692	.129		-5.386	.000		
Resource-intensive industry	-.028	.045	-.029	-.627	.531	.574	1.743
Industry restrictions	-.076	.050	-.061	-1.542	.124	.813	1.230
Cultural distance	-.027	.034	-.030	-.791	.430	.895	1.118
Subsidiary age	.071	.004	.970	19.282	.000	.502	1.994
International experience	.002	.001	.168	2.617	.009	.307	3.253
Host country experience	.012	.005	.127	2.442	.015	.467	2.141
Degree of product diversification	-.008	.003	-.153	-2.846	.005	.441	2.265
Parent's firm size	-6.121E-006	.000	-.087	-1.982	.048	.662	1.511
Industry R&D intensity	-.031	.026	-.056	-1.199	.231	.580	1.725
Industry sales growth	.119	.079	.060	1.499	.135	.794	1.259
Industry growth in number of firms	.376	.205	.078	1.832	.068	.694	1.442
Stages of institutional transitions	.332	.032	.590	10.397	.000	.394	2.540
Regional institutional differences	.029	.043	.027	.684	.495	.820	1.220
WOS ownership mode strategy	.122	.035	.142	3.523	.000	.777	1.287
Greenfields establishment mode strategy	-.047	.038	-.049	-1.245	.214	.826	1.211