Institutional Change and Foreign Market Entry Behaviour of the Firm

A Longitudinal Study of Three Swedish Firms in China

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Abstract

China’s status as the world’s top destination for foreign direct investment and the largest trading nation is likely to attract more international firms seeking market entrance, and increase the speed of expansion by those already present in the market. Its progress in reaching this point has been accompanied by significant changes in laws and regulations. This study sets out to understand the events of foreign market entry to emerging markets experiencing recurring changes in laws and regulations, and asks the research question: How may institutional change in the host market influence the market entry behaviour of the firm over time?

Based on retrospective longitudinal case studies of DeLaval, Elekta and Höganas from 1980 to 2010, the findings show that institutional change taking place in the host market plays a signal role that enables firms to recognise the availability and accessibility of market opportunity. Firms also make market commitment accordingly to capture the market opportunity recognised. Additionally, institutional change comes in different forms (transitional change and turbulent change), and plays out differently in various industries and at various points in time. They also have varying influences on market opportunity in terms of the source through which it is recognised (structural opportunity and relational opportunity), and the direction in which market commitment is made (commitment toward the host market, relationships, and organisational integration).

Furthermore, depending on the point in time, the relations among institutional change, market opportunity, and market commitment may change. While a consistent level of institutional change encourages firms to recognise structural opportunity, the escalation of institutional change over time seems to influence firms to form stronger relationship commitment with local actors and leads to stronger recognition of relational opportunity.

This study’s findings imply that recurring institutional changes in emerging markets have an overarching impact on foreign market entry of the firm, and needs to be understood from a long-term perspective. Foreign firms that have acquired experience in emerging markets over time face less of a threat from ongoing institutional changes. Actively engaging in the host market and remaining alert to information from various sources will enable firms to recognise market opportunity in emerging markets.

Keywords: Internationalisation, regulative institutions, institutional change, market opportunity, market commitment, emerging market, China, case study, longitudinal study

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Abbreviations

AMCHEM — American Chamber of Commerce in China
AQSIQ — Administration of Quality Supervision, Inspection & Quarantine
BMEI — Beijing Medical Equipment Institute
CDF — China Dairy Forum
CDIA — Chinese Dairy Industry Association
CPPD — Communist Party of China Publicity Department
CPPCC — Chinese People’s Political Consultative Conference
CT scan — Computerised Tomography scan
DAC — Dairy Association of China
EUCCC — European Union Chamber of Commerce in China
FAO — Food and Agriculture Organization of the United Nations
FDI — Foreign Direct Investment
GACC — General Administration of Customs
GDP — Gross Domestic Production
LINAC — Linear Accelerator
MEP — Ministry of Environment Protection
MMBEI — Ministry of Machine Building & Electronics Industry
MNC — Multinational Corporation
MOA — Ministry of Agriculture
MOF — Ministry of Finance
MOFCOM — Ministry of Commerce
MOFTEC — Ministry of Foreign Trade and Economic Cooperation
MOH — Ministry of Health
MOHRSS — Ministry of Human Resource and Social Security
MOLI — Ministry of Light Industry
MOMBI — Ministry of Machine-Building Industry
MOT — Ministry of Transportation
MPS — Ministry of Public Security
NEPA — National Environmental Protection Agency
NDRC — National Development and Reform Commission
PBOC — People’s Bank of China
PDCC — Publicity Department, Central Committee of Communist Party
RMB — Renminbi (Currency of People’s Republic of China)
RT — Radiation therapy
SAC — Standardization Administration of the People's Republic of China
SAIC — State Administration for Industry and Commerce
SAT — State Administration of Taxation
SDA — State Drug Agency
SETC — State Economic and Trade Commission
SEZ — Special Economic Zone
SFDA — State Food and Drug Agency
SIDA — Swedish International Development Cooperation Agency
SPC — State Planning Commission
SSDC — Sino-Swedish Dairy Centre
TB — Tuberculosis
UNCTAD — United Nations Conference on Trade and Development
USD — United States Dollar (currency of U.S.A)
VMC — Village Milking Centre
WHO — World Health Organisation
WTO — World Trade Organisation
Beijing, 2005.

The setting was the middle of February, and I was on my first visit to China. Snow was falling only slightly, but the dampness in the air left me feeling much colder. The visit involved a short weekend trip for various purposes — I was aiming for an unofficial job interview, I was keen to meet an old Chinese friend, Sherry, whom I met when we both studied in London, and my parents were looking forward to meeting my mother’s cousin on my grandmother’s side. Although my parents were born in China, none of us had set foot in Beijing before, so it was the first time both for them and for me.

The whole journey was odd yet fun in so many different ways. Back in 2005 it was impossible to take a direct flight between Taiwan and Mainland China¹. We had to first fly south from Taiwan to Hong Kong, and then take a 4.5 hour flight north to reach Beijing. We were staying in the Wangfujing area, which is one of the traditional downtown areas. Buildings in this area are grand, yet also intimate.

The whole city of Beijing can also be described this way: grand, yet intimate. Beijing is vast, and feels gigantic – to walk across one of those big boulevards takes at least two minute or three. Some of the buildings are just magnificent and make you feel so small and insignificant. Beijing is also intimate, both in a positive and a negative way. The city is convenient, with easy access to all kinds of services and goods, and the people, in general, love to help. Beijing can also be crowded, in-your-face, and uncomfortable. In the Forbidden City, there are several gates to walk through before reaching the main building, and the crowds relentlessly push you around from all directions when passing through these slightly narrowed passageways; at times the din and echo of the crowds were simply overwhelming.

The Forbidden City was an iconic symbol in Bertolucci’s movie “The Last Emperor”. If the Forbidden City was the witness of the transition from

¹ Although holiday and weekend charter flights between Taiwan and Mainland China commenced in 2003, it was only in August 2009 that the governments from both side reached an agreement to allow scheduled, cross-strait flights. There was no direct flight across the strait for nearly 60 years, since the Communist Party took over China in 1949. All the transportation was via Hong Kong, Macau, or another place.
the Qing Dynasty to the Republic, then the city of Beijing certainly would be the place to look for traces of this history. Not only will you find buildings and places established in the imperial eras, there is also the mark of the Republic and the People’s Republic, as well as the ultra-modern Olympic-games-related creations from 2008. I have visited Beijing again and again since my first trip in 2005, and every time I found myself asking the same question: “What is the real Beijing?”

Every little piece of these historical traces has contributed to the city of Beijing today. Beijing is full of history, but why does it matter to me? Beijing was the place my grandparents went to university, and it was the place I visited first in China. The history of Beijing comes alive when I perceive and interpret it, and my view has changed since the first time I visited this city. As Beijing continues to create history, both the physical city and an individual person are both part of this everlasting creation process. Without this interactive process, Beijing would be just another city, and it would not matter to me any more than any other city in the world.

The relationship between Beijing and me represents a good analogy of the study of my thesis, in which I intend to understand the relationship between the transformation of China and the market entry and expansion processes of foreign firms, and how the interaction between these respective processes may bring about future changes. Through the evolution of the organisations, the evolution of the environment (i.e. China) and the evolution of the continuous interaction between the two, history is alive and matters.
Chapter 1: Introduction

[Summary] This chapter provides an overview of the events of foreign firms entering an emerging market, and the influence that changes in regulative institutions in the host market may have on the behaviour of the firms. A brief review is made of the economic transition and subsequent institutional changes in China, and the challenges presented to the foreign entrants over time.

1.1. China as a destination for foreign market entry

Jürgen Hambrecht, head of chemical producer BASF, hit out at restrictions on foreign business and complained of overseas companies being forced to transfer business and technological know-how to Chinese companies in exchange for market access. "That does not exactly correspond to our views of a partnership," Mr. Hambrecht told Mr. Wen (China’s Premier) at the weekend meeting in the city of Xi'an.

Mr. Wen responded by telling Mr. Hambrecht to calm down, insisting that China remained open to foreign investment and did not discriminate against foreign companies. "Currently there is an allegation that China's investment environment is worsening. I think it is untrue," Mr. Wen said.

(Financial Times, 2010)

In fact, BASF, the largest chemical company in the world, has always shown confidence in investing in China. It was one of the first Western companies to enter China after China’s economic reform. In an article in the Financial Times twenty-five years ago, BASF showed no objection to sharing know-how to facilitate two joint venture projects:

BASF, which has already been exporting magnetic storage devices to the Chinese, has signed a contract with the China Electronics Import and Export Corporation to help build a plant at Shenzhen in the Guangdong special economic zone. The plant will have capacity to turn out up to 1.8 m floppy discs a year. In a separate deal, the West German company is to help the Chinese build a plant to produce TDI, a material used in making polyurethane plastic foam.
The two deals are worth a total of DM 56 m (14.3 m pounds sterling) to BASF, which has long cultivated business contacts with the Chinese. In both cases, the Germans will provide know-how, plan and supervise construction and deliver key equipment.

(Financial Times, 1985)

Over the past twenty-five years, BASF’s investment in China grew substantially, and one of the projects was the largest single overseas chemical investment in China. BASF was actively looking for opportunities to develop in China, and decided to “make China a place from which we can serve BASF inside and outside China” (Chemical Week, 1994). When China joined the World Trade Organisation (WTO) in 2002, BASF had expressed optimism and confidence toward its operations in China. “China's entry into the World Trade Organization had brought about new market opportunities and fiercer competition for foreign companies. Using new technologies could increase production efficiency and beat rivals in terms of cost, thus securing BASF's stand on the world chemical market” (People’s Daily, 2002).

The economic transition in China and the directions of change seem not to always align with the expectations of foreign firms. Although BASF might have had high hopes and strong confidence in their operations in China in the past, the claim made by Mr. Hambrecht has shown much less optimism. In addition, BASF’s view on knowledge-sharing has also shifted significantly over time; while it had a willing attitude back in 1985, to share knowledge with a Chinese partner at the present is simply frustrating.

New government policy, laws and regulations in the host market can unexpectedly interrupt the strategies of foreign firms and push them out of their comfort zone, and BASF is not alone in its desperation. Recently, an article in the Wall Street Journal pointed out that “for years, companies invested in China because of its potential. Now they are confronting a bracing reality: China is already a crucial market, and it isn’t the easiest place to operate” (WSJ, 2013:17). Although the deregulation and market liberalisation throughout the economic transition in China in the past have in general opened up the country and led international firms to explore the opportunities in the market, some of these changes may turn the market conditions unfavourable for these foreign entrants and affect their operations.

However, the changes in laws and regulations can be observed in most of the markets in the world, and foreign firms do adapt to the host market conditions after their entries. Yet these institutional changes coming from the economic transition in China seemed to catch these international firms off guard. What makes these changes in the regulations and laws of China affect the market entry of the foreign firms differently?
Firms cross national borders and move from one country to another to seek new markets and resources. As every market operates within a distinctive set of regulative institutions as the formal rules, i.e. regulations and rules, firms need to learn the new rules during the foreign market entry process. If these rules are clear, or relatively stable, firms will have less difficulty learning them quickly. However, an emerging economy like China is characterised by lack of transparency and constant changes in regulative institutions. Foreign firms entering China will firstly encounter great challenges in understanding these rules, due to these rules being either presented incompletely or difficult to access. The firms may need to adapt again and again over time when the rules are changed continually.

*Figure 1. Institutional changes and the market entry behaviour of the firm*

*Figure 1* shows the conceptual relation between institutional change and firms’ behaviour when entering emerging markets. The upper solid arrows refer to the recurring institutional changes in the host market, and lower solid arrows refer to the repeated adaptation made by entering firms during the market entry process. These institutional changes and the market entry activities of the firms, as *Figure 1* shows, will form a sequence of evolvement over time (referred to by the hollow arrow). Therefore, the ongoing institutional changes in the emerging market may require entering firms to make more adaptations, which may incur a lot of effort and resources. Nonetheless, China has become an extremely important market for these international firms competing simultaneously in various parts of the world. Therefore, these firms are caught in between recurring institutional changes and having difficulties establishing and operating in the host market.

The complications of foreign market entry to emerging markets warrant scholarly investigation, but they are multifaceted and cannot be examined entirely. What this study intends to understand is how institutional changes may influence the foreign market entry behaviour of the firm in terms of how they recognise market opportunity and make market commitment over time.
1.2. Changes in regulative institutions during China’s economic transition

In the last thirty years, China has transformed from a centrally-planned economy to a planned market system, and emerged to become the second largest economy in terms of the measurement of Growth Domestic Product (GDP) (The World Bank, 2011). China’s contribution to world GDP has grown from a modest five percent in 1980 to a staggering thirty percent in 2010, and is expected to become one of the largest forces in the world economy in the next 50 years (O’Neill, 2001). A double-digit growth rate in China’s economy was observed throughout the 1990s and 2000s, and it has shown great resilience toward several global economy recessions. China’s economy has sustained an impressive eight percent growth rate despite the World Financial Crisis which began in 2008 (Economist, 2010; Financial Times, 2010; WSJ, 2010). In 2012, China surpassed the U.S. to become the world’s biggest trading nation, measured by the sum of exports and imports of goods (Bloomberg, 2013), and maintained its position as the World’s number two destination for foreign direct investment (FDI), attracting an impressive 111.72 billion USD in 2012 (China Daily, 2011; 2013).

China’s economic transition began in 1979 when new laws and regulations on foreign investment were promulgated under Deng Xiaoping. This ended the economic isolation from the Cultural Revolution era that spanned the decade between 1966 and 1976 and led to a nearly bankrupt economy and industries that lagging behind. Designated Special Economic Zones (SEZs) for foreign investors were established upon the initiation of the Open Door Policy. In addition, the Sino-Foreign Equity Joint Venture Law (1980), the Foreign Enterprise Representative Office Regulation (1983), and the Foreign Wholly-Owned Enterprises Law (1986) were introduced to give legal status to international trade and foreign investors (Wu, 2010).

These new laws created the basic framework for foreign investment in China. The entry of international firms and their investments played a key role in assisting China’s economic transition and development (Björkman and Osland, 1998). Strong connections can be observed from the historical figure of inward FDI and China’s GDP growth (Figure 2). The first significant surge in the inward FDI and GDP can be observed in Figure 2 to be between 1992 and 1994 when China has come out from economic sanctions imposed by the U.S. and European countries after the Tiananmen Square Incident in 1989 (Simon, 1990) and resumed further deregulations in

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2 SEZs were designed to “explore new ways to woo foreign investment, absorb foreign technology and management skills, promote exports, and increase employment” (Davidson, 1987). SEZs generally have more autonomous power to provide incentives such as preferential treatment and lower taxation to attract FDI.
industries and market liberalisations. China’s economy has since experienced an impressive growth in GDP and inward FDI.

Both inward FDI and GDP experienced another strong increase between 2002 and 2004 (UNCTAD, 2004) (Figure 2). After fifteen years of negotiations, China joined the WTO on December 10, 2001. This was a milestone for China’s transition from a centrally-planned economy to a planned market system (OECD, 2011). China’s domestic market was opened for foreign investment except in certain sensitive industries. China agreed to provide non-discriminatory treatment to all WTO members, and foreign enterprises would hold equal rights to trade. Efforts were made to revise domestic laws and regulations to be fully compliant with the WTO agreement, e.g., eliminating dual pricing practices, price control, and quota control (Ahlstrom, Young, Nair and Law, 2003); an estimated 148 laws and regulations needed to be revised, and 571 were recommended to be abolished (Ju, 2003). The laws and regulations of international trade and foreign investment are argued to be at the forefront of the development of the Chinese legal system (Lin and Stoianoff, 2004; Silk, Openshaw and Hulme, 1999).

Figure 2. China’s Historical FDI & GDP per capita current USD (1980-2010)

In spite of these efforts, foreign investors in China constantly expressed their frustrations with the lack of transparency in the legislation process and ambiguity when changes occurred (AmCham China, 2012; EUCCC, 2012). While, in principle, the National People’s Congress in China (NPC) establishes the basic laws and the State Council sets up execution details, in

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3 The U.S. and European countries imposed economic sanctions on China after 1989, which nearly pushed China to return to economic isolation and postponed further economic liberations. In 1992, Deng at the age of 87 and officially retired from any formal position after the Tiananmen incident in 1989, visited Shenzhen Special Economic Zones in the southern part of China and showed his endorsement of economic reform (China Daily, 2010; People’s Daily, 2010; Zhao, 1993).
reality there is an observable incoherence. There may be a significant time lag between these two parts of legislation; or State Council and its agencies can issue various normative documents presented in the form of internal notifications, circulations, directives, decisions, and agreements and are executed in the same way as laws. International firms may, during their market entry, be unaware of or unable to access these specific normative documents which could contain serious restrictions on their local operations (Xin, 2006)\(^4\). The annual surveys run by the American Chamber of Commerce in China (AmCham China) has repeatedly identified unclear regulations, bureaucracy, lack of transparency, and inconsistent regulatory interpretation as the top challenges for operating in China.

Furthermore, there are also worries that the business environment in China has become less friendly toward international investors because of the ambiguous protection policy. The Indigenous Innovation Policy in 2005, for example, has excluded international firms from government procurement, which has created an enormous disadvantage for them. The European Chamber of Commerce in China in 2012 reported that forty-two percent of the respondents of its annual survey felt they had been squeezed out, and forty-eight percent believed they had missed business opportunities due to the regulation barriers.

1.3. Why study institutional changes and the market entry behaviour of the firm

The discussions above imply that the market entry processes of foreign firms to emerging markets and the firms’ behaviour will be influenced by the changes in host regulative institutions. Yet how these influences are played out is unclear; some changes seem to encourage the processes of foreign market entry while other changes will cause disruptions to the operations of the firm. Institutional changes occurring at one point in time may influence the market entry of a firm differently than at another point in time.

China offers a unique context to study foreign market entry to emerging markets because of its critical position in the global economy and because it is an important destination for international firms to make investment. China is also a potential fruitful ground for observation because of the dominance of these institutions to which foreign firms have to adapt (Jones, 2010). The relatively fast speed of change during China’s economic transition provides many potential episodes of institutional changes to observe. Ramo (2004:8)

\(^4\) The transparency obligations of the WTO require the Chinese government to notify the WTO of any changes on regulative institutions that may affect economic activities, prior to their effectiveness. China also promised, upon its entry, that it would only enforce those normative documents that were published and readily available.
comments that the speed of changes happening in China is “so fast that it is almost impossible to keep track of what is underway”, and suggests that firms need to “work along and in the margins of this change” to be successful in the Chinese context. As the institutional changes in China are far from over (Peng, 2003), how do foreign firms entering China address and respond to the constantly evolving regulative institutions?

Therefore, this study sets out to explore the events of foreign firms entering emerging markets experiencing recurring changes in laws and regulations. This thesis is organised as follows: Chapter 2 presents a review of the past literature on institutional changes and the behaviour of the firm during foreign market entry. The literature review points out the gaps in the current understanding of the field and leads to a proposed theoretical framework that is explained in detail in Chapter 3. This chapter also includes the development of the concepts and sub-concepts, and describes how they are connected in the framework. Based on the theoretical framework, Chapter 4 describes the methodology and method applied in this study, and outlines the processes of interview and archival data collection and how they are analysed.

The next three chapters (5, 6 and 7) present the historical narratives of three case companies (DeLaval, Elekta, and Höganäs), and describes the processes of their market entries and expansions in China, the changes in regulations and laws that occurred in parallel, and how their market entry behaviours may have been impacted by institutional change.

Chapters 8, 9, and 10 form a three-part case analysis of this study. Chapter 8 presents the individual case analyses of DeLaval, Elekta and Höganäs, including their time sequence maps, and the conceptualisation of the theoretical concepts and their sub-concepts. The cross-case analysis is conducted in Chapter 9, and the theoretical concepts and their links are analysed in two periods of time (1980-2001 and 2002-2010). Chapter 10 employs a cross-period analysis to show how the institutional change evolves from one period to another. Further investigations are made into how the evolvement of institutional change influences the firms’ market opportunity recognition, and their market commitments.

Chapter 11 provides a critical evaluation of the theoretical framework. The discussion begins with the strengths and weaknesses of the framework, and two refinements are suggested in order to improve the framework. Further discussions are made on the observation of market shock, potential influence from firms toward the institutional change, and the time element in the study. Chapter 12 concludes this study with an overview of the research questions and findings, and the implications toward theory, policy, and future research.
Chapter 2: Literature Review

[Summary] This chapter presents a literature review of the host regulative institutions and foreign market entry of the firm. Research gaps on the types of study, how the institution is treated, and the behaviour of the firms during foreign market entry are identified. Time is also identified as an essential element in understanding the dynamics of foreign market entry into an emerging market. The literature review also leads to the research question of this study.

2.1. Foreign market entry and institutional change

The previous chapter illustrates the complexity of the foreign market entry processes in an emerging market where the regulative institutions are continually changing. Foreign market entry and the internationalisation of the firm have long been a prominent topic in international business and management (Buckley, 2002; 2009). Internationalisation describes a process whereby a firm gradually expands to foreign markets and increases international business activities over time. Foreign market entry has been a core subject of the internationalisation of the firm, which includes initial market entry, local market expansion, and global rationalisation (Douglas and Craig, 1989). The activities conducted within the foreign market entry processes include, but are not limited to, the export of goods and services, the establishment of international production, international sales and marketing, and research and development facilities.

Firms entering a foreign market aim to exploit and to strengthen their own competitive advantages (Madhok, 1997), and these entries can be triggered both externally (e.g., industry trend, competitive pressure) and internally (e.g., sales and profit, management initiatives) (Douglas and Craig, 1989). These triggers lead to opportunities being identified in the foreign market before firms pursue international expansion (Johanson and Vahlne, 2009). Opportunities from the foreign market can be incidentally discovered (Kirzner, 1973; Shane, 2000; Schweizer, Vahlne, and Johanson, 2010), or intentionally created (Dew and Sarasvathy, 2007; Sarasvathy, 2001; Schumpeter, 1942). For instance, cost-saving opportunities may arise when firms identify appropriate less-developed countries in which to
relocate the production of standardised product without leaking advanced technology (Vernon, 1966).

In spite of the assumption that international firms possess firm-specific advantages (Dunning, 1980; 1988; 1995; 1997) and superior managerial and organisational capabilities (Buckley and Casson, 1976; 1981) than their domestic counterparts, foreign market entry can still be challenging (Forsgren, 2008; Hymer, 1976). International firms may be at a disadvantage when operating vis-à-vis their local competitors and may suffer from the liability of foreignness due to ignorance of the conditions of foreign market (Zaheer, 1995). The substantial differences existing between firms’ home and host countries, in terms of culture distance (Hofstede, 1980; Kogut and Singh, 1988), psychic distance (Johanson and Wiedersheim-Paul, 1975), and institutional distance (Kostova, 1999; Kostova and Zaheer, 1999), can also prevent international firms from exploiting their own advantages.

To learn from and adapt to the local market is essential in order for international firms to overcome their ignorance and achieve successful foreign market operations (Andersen, 1993; Barkema and Vermeulen, 1998; Erramilli, 1991; Inkpen and Beamish, 1997; Luo, 1997; Zahra, Ireland, and Hitt, 2000). Learning and adaptation in a foreign market will take significant time and resources (Johanson and Vahlne, 1977; Jiang, Beamish and Makino, 2013), given that foreign market entry is seldom a straight-line process (Penrose, 1959; Vissak and Francioni, 2013).

Foreign market entry to emerging markets can be particularly problematic. Firms entering emerging markets generally have difficulties obtaining sufficient and good quality information about these markets (Makino and Delios, 1996; Shenkar, 1990). A firm may take a longer time than expected to become established (Beamish and Wang, 2003) and firms may also not be able to exploit the advantages of transferring managerial practices and capabilities to an emerging market (Achrol, 1991).

Furthermore, emerging markets are characterised by weak and less stable formal institutions (Jansson, 2007; Mayer and Gelbuda, 2006; Tan and Litschert, 1994; Tan and Tan, 2005), which sometimes may inevitably lead the entering firms to rely on connections and relationships at the personal level (Dunning and Kim, 2007; Farh et al., 1998; Lovett, Simmons and Kali, 1990; Park and Luo, 2001; Peng, 1997; Peng, 2003; Peng and Heath, 1996; Peng and Luo, 2000; Redding, 1995; Xin and Pearce, 1996). The regulative institutions of the host countries, e.g., government policy, regulation, and law, can directly impact the market entry processes of the international firms by restricting their activities (Beamish, 1993; Beamish and Wang, 1989; (Henisz and Delios, 2001; 2002), or curtailing their competitive advantages through tariff and non-tariff trade barriers (Jansson, 2007; Kindleberger, 1969). Governments from the emerging markets, in particular, are observed to have stronger involvement in economic exchanges (Marinova, Child and Marinov, 2012). Regulative institutions are frequently used by governments
of emerging markets to reduce the advantages of international firms and protect domestic players (Martínez and Williams, 2012). Foreign entrants may also have incentives to adapt to these regulations to meet the host government’s expectations in order to enjoy preferential treatment or to avoid punishment (Sun, Mellahi and Thun, 2010).

The constant changes occurring in the regulative institutions in an emerging market increase the complications of the foreign market entry processes. The evolving institutions may come from an institutional void in previous stages of the transition, in which market-supporting institutions are not at all in existence (Khanna and Palepu, 1997). As these market experience transitions, institutions are likely to evolve over time. Institutional changes can have a direct effect on the operations of the foreign subsidiaries (Gelbuda, Meyer and Delios, 2008; Cantwell, Dunning and Lundan, 2009; Johanson and Vahlne, 2013). Developing confidence in the host market institutions can be challenging for firms (Child and Möllering, 2003). Furthermore, foreign entrants need to frequently readapt their operations to respond to the recurring changes in regulative institutions.

Constant regulative institutional change may also hinder a foreign entrant’s learning process due to confusing information, lack of time to reflect on the experience, and the fact that accumulated knowledge can become obsolete after dramatic changes (Hadjikhani, 1997; Jansson, 2007). Moreover, they may also feel vulnerable due to these changes and experience difficulty building trust with the local actors (Tsui-Auch and Möllering, 2010). Therefore, the foreign market entry processes may be delayed or disrupted (Figueira-de-Lemos, Johanson and Vahlne, 2011).

Nevertheless, institutional changes may also bring positive aspects to foreign entrants. Institutional changes can create valuable market opportunity in the foreign market (Schumpeter, 1942). Firms that are able to react quickly to the institutional changes may capture these arising market opportunities (Eckhardt and Shane, 2003). In addition, institutional changes may allow firms to escape the pressure to conform from the host institution pressure (Westney, 2009). When the host market frequently experiences institutional changes, the isomorphic pressure felt by the firms may be drastically reduced (Newman, 2000; Thelen, 1999). Firms may be able to apply global practice to these markets since the needs for local adaptation are much less (Yildiz and Fey, 2012).

Even though business managers and practitioners continue to stress the importance of taking into account the changes in regulations and laws in the host market when planning foreign market entry and expansions, there has not been a great number of studies exploring the role of institutional change and its relation with the market entry behaviour of the firm. Moreover, there seemed to be a tendency in the past for the research to treat the activities of foreign firms during market entrance as merely an outcome variable (Barkema, Bell and Pennings, 1996; Barkema and Vermeulen, 1998, Gao
and Pan, 2010; Guillén, 2003; Luo and Peng, 1999). As such, there is a gap in our understanding of the processes of market entry, and of how the activities of the firms may have been influenced by the institutional changes (Santangelo and Meyer, 2011).

For this reason, a study aiming to understand the process of market entry, the firms’ behaviours and activities, and the changes of the host institution over time may help bridge the gap left by the previous studies. The time dimension provides a valuable context in which to investigate the changes and processes (Calof and Beamish, 1995), as both institutional changes and the market entry processes of the firm taking place at one point in time may affect the possible outcome of another event occurring at a later point in time (Jones and Khanna, 2006).

2.2. Literature review of foreign market entry and regulative institutional change in the host country

A review of past research on the role of host regulative institutions in foreign market entry and the internationalisation of the firm showed limited and scattered results. Twenty-six studies are identified from the keywords search in top-tier management journals on the Web of Science as having empirically investigated the relation between host regulative institutions and firms’ internationalisation. These publications cover the time period from 1995 through 2013. Table 1 summarises these studies that have shown how host regulative institutions may affect firms’ market entry and expansions.

The next section will look at five themes from the past literature selected via the keywords search: (1) the type of study, data, firms and markets, (2) the view on changes in the regulative institution, (3) the views on change in the host regulative institutions, (4) the role of the host institutions, and lastly (5) the motivation and activities of the firm in foreign market entry.

Type of study, data, firms and markets

An extreme imbalance exists between quantitative and qualitative research design employed by researchers in past studies. Table 1 shows that two-thirds of the studies have employed a quantitative research design and emphasised the causal relationship between the host regulative institution and the behaviour of the firms when entering a foreign market. Most of the

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5 A search was performed from using two sets of keywords (foreign market entry/ international expansions/ internationalisation + regulative institution/ regulation/ laws/ government). The search results were read and only the studies that included host regulative institution as a variable were included. The choice of the IB and management journals can be seen from the result table.
data are cross-sectional; they are either collected through questionnaires
(Chen et al., 2009; Kostova and Roth, 2002; Meyer et al., 2009; Santangelo
and Meyer, 2011; Eriksson et al., 1997), or obtained from compiling
secondary data (Bevana, Estrinb, and Meyer, 2004; Gao, Murray, and
Kotabe, 2010; Gaur and Lu, 2007; Guler and Guillén, 2010; Jiménez, 2010;
Meyer, 2001; Tan and Meyer, 2011; Tseng and Lee, 2010; Pogrebnyakov
and Maitland, 2011; Quer, Claver, and Rienda, 2011; Salomon and Wu,
2012; Tse, Pan, and Au, 1997; Wu, Li, and Selover, 2012; Xu, Pan, and
Beamish, 2004). A few quantitative studies have included time series data to
analyse the trend of the causal effects of the host regulative institution on the
behaviour of the firm. For example, Guler and Guillén (2010) examine the
foreign market investment behaviour of U.S. venture capital firms and argue
that the firms will be more likely to enter host markets with a better legal
system to protect investors’ rights.

Only seven out of the twenty-six papers in Table 1 have adopted a
qualitative approach to building an understanding of the dynamics between
the host regulative institution and the behaviour of the firm during the
foreign market entry process (Calof and Beamish, 1995; Hong and Nguyen,
2009; Karhunen, 2008; McCarthy and Puffer, 1997; Miozzo and Yamin,
2012; Owens, Palmer, and Zueva-Owens, 2013; Soh and Yu, 2008). All of
them have employed a case study approach and obtained their data through
interviews. Yet, among these qualitative studies, only Karhunen (2008) and
Soh and Yu (2010) have explicitly employed longitudinal data to examine
how the changes carried out in the laws and regulations in the host market
may have continually influenced the adaptation of the strategies and
activities of the foreign entrants.

With regard to where the researchers collected their data, less than one-
third of the studies have chosen to collect primary data (questionnaires or
interviews). Studies using the primary data tend to obtain this data from
either the headquarters or the subsidiary. Only one study has chosen to
investigate data from both the headquarters and the subsidiary (Miozzo and
Yamin, 2012). Through the use of data from both sides, these two authors
are able to demonstrate that regulations in the host market may have an
impact on the level of autonomy that local subsidiaries can enjoy within the
multinational firms.

Furthermore, based on the observations in Table 1, the emerging market
seems to be the primary concern of the past studies. Most of the studies have
included at least one emerging market as the destination for foreign market
entry. The origins of the firms in the study are mostly from the developed
market and newly industrialised counties, e.g. Taiwan (Tseng and Lee,
2010). As such, there seems to be a rather simplistic relationship assumed
between the host regulative institutions and the entering firms. The emerging
markets are assumed to possess underdeveloped institutions that prohibit
international firms from developed markets to exploit their competitive
advantages. Therefore, the firms either choose to enter markets with better-structured regulative institutions, or they must passively adapt to the requirements set forth by the host institutions.

The view on changes in the regulative institution

The review also shows that past studies seem to view both the host regulative institution and the foreign market entry as static, and neglect the aspect of change. Table 1 indicates that most studies have not taken into account potential institution change while examining the host regulative institution. A few studies have included a dimension on regulative institution uncertainty (Santangelo and Meyer, 2011), unpredictability (Tseng and Lee, 2010), development (Gao et al., 2010), stability (Guler and Guillén, 2010) or risk (Jiménez, 2010) to capture the potential changes. Yet none of these studies has explicitly examined the causal relationship between the institutional change and the behaviour of the firms.

There are a few qualitative studies that have examined the changes in regulations in the host market and how these changes may influence the foreign market entry decisions and activities of the international firms. Karhunen (2008) and Soh and Yu (2010) have taken a long-term view to examine the development of the foreign entrants in the hotel industry in St. Petersburg and the mobile telecom industry in China. They argue that these foreign entrants must continually adapt to the institutional changes due to the transitions and liberalisations occurring in host markets.

These two studies provide important insight into how the changes of the regulative institution, apart from the institution itself, can make an impact on the behaviour of the firm during the foreign market entry processes. Many scholars suggest that market-based institutions are gradually established in these transitional economies to attract foreign investment (Meyer, 2001), and it is possible that some of the uncertainty and risky elements of these host institutions that prohibit foreign market entry will be gradually reduced. Additionally, the changes in the host regulative institutions can provide incentives to encourage foreign entrants to adapt certain behaviours and lead them to act similarly with local counterparts (Karhunen, 2008; Salomon and Wu, 2012; Soh and Yu, 2010).

This dynamic view of changes in institutions and foreign market entry can be further supported by North (1990), who argues that institutions are constantly evolving, and that this evolution can be caused by embedded organisations that see the incentive to push for changes. In other words, institutions are continually altered by the choices available to political and economic organisations, which are also influenced by the existing institutions (Hay and Wincott 1998; Thelen and Steinmo, 1992). Therefore, institutional changes are contingent upon past and current institutional frameworks, as well as upon the activities of embedded organisations. This
dynamic view may shed light on the interactions between institutional change and the foreign market entry process over time and advance the understanding of the internationalisation process of the firm. Unfortunately, this dynamic view has not been properly presented in the studies included in the literature review.

The role of host regulative institutions

Four research approaches on the role of host regulative institutions can be identified among the studies presented in the aforementioned literature.

*Host regulative institutions as the source of risk* – Most of the studies have taken the first research approach and treat host regulative institutions as the source of risk that can potentially depreciate the foreign entrant’s firm-specific advantages. The main assumptions of these studies are that the host regulative institutions are generally weak and underdeveloped, while the international firms in the process of entering these markets are the carrier of financial capital and advanced technology. The main conclusions for these studies are that international firms driven by risk-avoidance rationale will select countries with mature institutions (Bevana et al., 2004; Jiménez, 2010; Quer et al., 2011), or choose appropriate entry modes (Chen et al., 2009; Meyer, 2001; Tse et al., 1997; Tseng and Lee, 2010; Wu et al., 2012), and appropriate timing to minimise the risk they may be exposed to (Guler and Guillén, 2010).

Therefore, international firms with superior technology and know-how will make strategic choices on the locations and ownership styles to overcome the hazards posed by the host regulative institutions and to sustain their competitive edge in the process of internationalisation. These studies are either not at all concerned with changes in the host regulative institutions, deeming that the firms’ strategic decisions are made from the best evaluation, or the changes in the host regulative institutions are seen as part of the risk evaluation, so that this specific market will be avoided.

*Host regulative institutions as the source of resources* – Many studies adopt the second research approach and assume that the host regulative institutions are the source of resources that can potentially be exploited by foreign entrants. Host regulative institutions are not only the owners of local resources and possess the power to distribute said resources; they can also present challenges and roadblocks that may prevent international firms from successfully transferring their own resources.
<table>
<thead>
<tr>
<th>Author (Year)/ Journal</th>
<th>Research findings</th>
<th>Regulative institution in host market</th>
<th>Firm’s motivation &amp; activities in F. M. E</th>
<th>View on changes in regulative institution</th>
<th>Type of firms &amp; market</th>
<th>Type of study &amp; data</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Owens, M., Palmer, M, &amp; Zueva-Owens, A. (2013) /IBR</td>
<td>Host regulative institutions will influence international joint venture formation, foreign subsidiaries ownership structure and their expansions. However, these regulative institutions may be negotiated to change</td>
<td>Foreign direct investment legislation &amp; store planning legislation in the host markets</td>
<td>Firms enter foreign market for product sales; IJV formation as entry activities</td>
<td>No discussion on change in host regulative institution.</td>
<td>British retail firms in China, Malaysia, S. Korea, Taiwan, &amp; Thailand</td>
<td>Qualitative, case studies, interview data from HQ</td>
</tr>
<tr>
<td>2 Miozzo, M., &amp; Yamin M. (2012) /LRP</td>
<td>Host regulative institutions are likely to affect service MNE’s market entry and may constrain or facilitate the scope of subsidiaries autonomy and local expansions</td>
<td>General regulations in the host countries and regulatory control</td>
<td>Firms enter foreign market for product sales; centralisation or local responsiveness strategy as entry activities</td>
<td>No discussion on change in host regulative institution.</td>
<td>British service firms in Argentina, Brazil, China &amp; Korea</td>
<td>Qualitative, case studies, interview data from both HQ &amp; subsidiaries</td>
</tr>
<tr>
<td>3 Salomon, R., &amp; Wu, Z. (2012) /JIBS</td>
<td>The distances between host and home’ regulative institutions are positively related to foreign firms’ adoption of local isomorphism strategies to enhance their legitimacy in the host markets</td>
<td>Regulatory distance between home and host country (banking regulation &amp; supervision)</td>
<td>No mention on what firms enter market for; local isomorphism strategy as entry activities</td>
<td>No discussion on change in host regulative institution.</td>
<td>Banks from various nationalities (25) in U.S.</td>
<td>Quantitative, cross-sectional, secondary data</td>
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<tr>
<td>4 Wu, J., Li, SM., &amp; Selover, DD. (2012) /MIR</td>
<td>Host market’s governance lacking public rules and informal networks worry foreign investors and lead them to choose a higher degree of control mode when investing</td>
<td>Political rights, the rule of law, quality of accounting standard, free flow of information, public trust</td>
<td>No mention of what firms enter market for; FDI &amp; FPI as entry activities</td>
<td>No discussion on change in host regulative institution.</td>
<td>FDI data (no firm), various markets (46)</td>
<td>Quantitative, cross-sectional, secondary data</td>
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<tr>
<td>Author(s)</td>
<td>Year</td>
<td>Journal</td>
<td>Summary</td>
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<td>Pogrebnyakov, N., &amp; Maitland, CF.</td>
<td>2011</td>
<td>JIM</td>
<td>The strengths of the host market’s industry regulator and industry licensing are positively related to the timing of these international firms market entry.</td>
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<tr>
<td>Quer D., Claver, E., &amp; Rienda, L.</td>
<td>2011</td>
<td>APJM</td>
<td>Host market’s political risk level may not relate to the flow of inward FDI. However, the size of FDI may reduce political risk encountered in the host country when FDI is with asset-seeking motive.</td>
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<tr>
<td>Santangelo, GD., &amp; Meyer, KE.</td>
<td>2011</td>
<td>JIBS</td>
<td>The lack of host market’s institutions (institutional void) will lead foreign subsidiaries to continue previous planned strategy, while institutional uncertainty will lead firms to adopt less commitment but flexible strategy.</td>
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<td>No.</td>
<td>Author(s)</td>
<td>Year</td>
<td>Journal</td>
<td>Summary</td>
<td>Institutional environment</td>
<td>Firms enter market for</td>
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<td>8</td>
<td>Tan, DC., &amp; Meyer, KE.</td>
<td>2011</td>
<td>/JIBS</td>
<td>The lack of host market’s institutions (institutional void) will lead foreign investors to locate closer to firms with similiar cultural background instead of firms from the same industry to gain trust and knowledge</td>
<td>Institutional void (regulations encountered when established, policies from various levels of government, and legal framework and enforcement)</td>
<td>No mention on what firms enter market for; FDI locations as entry activities</td>
</tr>
<tr>
<td>9</td>
<td>Gao, G. Y., Murray, J. Y., Kotabe, M., &amp; Lu, J.</td>
<td>2010</td>
<td>/JIBS</td>
<td>The host market’s free market mechanism and intermediate development are positively associated with the export propensity and intensity of the foreign subsidiaries</td>
<td>Institutional environment (whether market can determine product price, the degree of local protectionism) &amp; Free market mechanism development (market intermediate development, consumer right protection, and IP right protection)</td>
<td>Firms enter market for export from host market, export propensity &amp; intensity as entry activities</td>
</tr>
<tr>
<td>10</td>
<td>Guler, I., &amp; Guillén, MF.</td>
<td>2010</td>
<td>/JIBS</td>
<td>Host market’s legal protection and the level of political institution stability are positively related to the rate of US venture capital firms’ market entry</td>
<td>Legal institutions (whether country belongs to English legal tradition)</td>
<td>Firms enter market for general investment opportunity; FDI as entry activities</td>
</tr>
<tr>
<td>No.</td>
<td>Authors</td>
<td>Year</td>
<td>Journal</td>
<td>Summary</td>
<td>Entry Mode</td>
<td>Entry Activities</td>
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<td>11</td>
<td>Jiménez, A. (2010) /IBR</td>
<td>Host market’s political risk does not have an influence on the scope of MNC’s internationalisation, but the MNCs operate in markets with higher diversity of political risk, tend to have a wider scope of internationalisation</td>
<td>Economic freedom &amp; protection of property rights</td>
<td>No mention on what firms enter market for; scope of internationalisation</td>
<td>A potential change in host regulative institution is captured by conceptual political risk (from political constraints index)</td>
<td>Spanish MNCs, host countries varied (countries are not mentioned)</td>
</tr>
<tr>
<td>12</td>
<td>Soh PH., &amp; Yu JA. (2010) /APJM</td>
<td>Host market’s restriction on market entry will force foreign entrants that hold know-how to form JV with domestic companies which control market access</td>
<td>Institutional events (deregulations) &amp; entry barriers</td>
<td>Firms enter market for product sales; mode of operation as entry activities</td>
<td>Host regulative institutions change over time</td>
<td>Analysis on industry level (3G mobile)</td>
</tr>
<tr>
<td>13</td>
<td>Tseng., C-H., &amp; Lee, R.P (2010) /IBR</td>
<td>The higher level of the host market’s regulatory unpredictability is likely to lead a firm to opt for partial ownership rather than full ownership when entering the market.</td>
<td>Host institutions predictability (change in tax policy, monetary policy, laws relevant to international business, regulations related to business sectors, tariffs, and enforcement of existing laws)</td>
<td>No mention on what firms enter market for; mode of entry as entry activities</td>
<td>Potential change in host regulative institution is captured as regulative unpredictability</td>
<td>Taiwanese firms investing in 12 markets (both developing &amp; developed markets)</td>
</tr>
<tr>
<td>14</td>
<td>Chen, Y.-R., Yang, C., Hsu, S.-M., &amp; Wang, Y.-D. (2009) /IMM</td>
<td>The host market’s regulative institutions (in the regional level) are positively related with entry firm’s use of wholly-owned entry mode</td>
<td>Entry mode restriction, market liberalisation, tax treatment, financial institutions</td>
<td>Firms enter market for product sales; mode of entry as the entry activities</td>
<td>No discussion on change in host regulative institution</td>
<td>One Taiwanese firm (PFC); entries in various regions of China</td>
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<tr>
<td>Reference</td>
<td>Study Description</td>
<td>Methodology</td>
<td>Findings</td>
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<tr>
<td>Hong, JFL., &amp; Nguyen, TV. (2009) /JWB</td>
<td>Host market’s institutions form the locally embedded knowledge, which is difficult to transfer and MNCs need to adapt special mechanism.</td>
<td>Government regulations</td>
<td>Firms enter market for product sale &amp; manufacture; knowledge transfer as entry activities. No discussion on change in host regulative institution. Japanese MNCs operating in China &amp; Vietnam. Qualitative, case studies, interview data from subsidiaries.</td>
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<td>Meyer, K.E., Estrin, S., Bhaumik, S.K., &amp; Peng, M.W. (2009) /SMJ</td>
<td>Host regulative institutions’ strength will positively relate with firms’ choice of stronger ownership mode of entry. However, if entering firms seek local intangible assets, they will prefer JV as mode of the entry, even with developed host regulative institutions.</td>
<td>Economic freedom as proxy for market support institutions (business freedom, trade freedom, property rights, investment freedom, and financial freedom).</td>
<td>No mention on what firms enter market for; mode of entry as entry activities. No discussion on change in host regulative institution. Foreign subsidiaries (country not mentioned) in Egypt, India, South Africa &amp; Vietnam. Quantitative, cross-sectional, survey data from subsidiaries.</td>
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<tr>
<td>Karhunen, P. (2008) /JIM</td>
<td>The host market’s macro (state) and intermediate (industry) institutional transitions will influence the business operation strategy of the firms embedded in the context. As host market transits from planned system to market system, the division of the practices between local hotel and foreign hotel become less clear.</td>
<td>Macro institutional transition (national, state, industry).</td>
<td>Firms enter market to seek new market; responding business strategies in ownership, product, HRM, supply, sales &amp; marketing as entry activities. Host regulative institution changes over time. Hotel operators in St. Petersburg. Qualitative, processual studies, interview data from subsidiaries.</td>
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<tr>
<td>Reference</td>
<td>Title</td>
<td>Summary</td>
<td>Regulative Distance</td>
<td>Mode of Entry</td>
<td>Institutional Change</td>
<td>Data Source</td>
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<tr>
<td>Gaur, A., &amp; Lu, J. (2007) /JMS</td>
<td>The regulative distance between host and home countries will have an inverted U-shape relationship with subsidiary survival. As regulative distance increases, wholly-owned subsidiaries will have a better chance of survival than other modes of ownership.</td>
<td>Regulative institution distance (fiscal policy, antitrust regulations, political transparency, IP protections, juridical system)</td>
<td>No mention on what firms enter market for; mode of entry as entry activities</td>
<td>Potential change in host regulative institutions may be captured by yearly data, but no implication on institutional change is made</td>
<td>Japanese MNCs in various countries</td>
<td>Quantitative, cross-sectional, secondary data</td>
</tr>
<tr>
<td>Bevana, A., Estrinb, S., &amp; Meyer, K. (2004) /IBR</td>
<td>Host market’s legal system development (both the effeteness and intensiveness) will be positively related to the inward FDI flow.</td>
<td>Privatisation policy, financial market infrastructure, liberalisation, regulations and competition policy, legal system</td>
<td>No mention on what firms enter market for; FDI as entry activities</td>
<td>No discussion on change in host regulative institution</td>
<td>Firms from developed countries (EU14 &amp; Korea, Japan, Switzerland, U.S.) investing in CEE, Russia and Ukraine</td>
<td>Quantitative, cross-sectional, secondary data</td>
</tr>
<tr>
<td>Xu, D., Pan, Y., &amp; Beamish, P (2004) /MIR</td>
<td>To achieve legitimacy, international firms are less likely to adopt high level ownership mode of entry, and will assign less foreign expat when entering market with bigger regulative distance.</td>
<td>Seven items from the institution section of the Global Competitiveness Report</td>
<td>No mention on what firms enter market for; ownership mode as entry activities</td>
<td>No discussion on change in host regulative institution</td>
<td>Japanese firms in various host markets</td>
<td>Quantitative, cross-sectional, secondary data</td>
</tr>
<tr>
<td>Kostova, T., &amp; Roth, K. (2002) /AMR</td>
<td>Host regulative profile negatively relates to local subsidiaries’ commitment to internalise particular practices and may even lead to ceremonial adoptions.</td>
<td>Institutional profile (regulatory rules about the quality of products &amp; services in the country)</td>
<td>No mention on what firms enter market for; practice adaptation as entry activities</td>
<td>No discussion on change in host regulative institution</td>
<td>U.S. firms in 10 host countries</td>
<td>Quantitative, cross-sectional, survey data from subsidiaries</td>
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<tr>
<td>Citation</td>
<td>Summary</td>
<td>Methodology</td>
<td>Location</td>
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<td>Meyer, K. (2001)</td>
<td>Host regulative institution progress will reduce the establishment cost and positively relate with investors’ tendency to use wholly-owned ownership style as mode of entry. No mention on what firms enter market for; mode of entry as entry activities.</td>
<td>No discussion on change in host regulative institution.</td>
<td>German and British firms in CEE (Czech, Hungary, Poland, Russia, Romania)</td>
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<tr>
<td>Eriksson, K., Johanson, J., Majkgard, A., &amp; Sharma, DD. (1997)</td>
<td>There is a cost associated with acquiring the experiential knowledge of local institutions during firms' internationalisation. This knowledge resides in the headquarters and is not related to any specific market. Knowledge of host market institutions (experiential knowledge of government, institutional framework, rules, norms and values). Firms enter market to exploit resources &amp; opportunities; general market commitment, obtaining additional client orders as entry activities.</td>
<td>No discussion on change in host regulative institution.</td>
<td>Swedish service firms, no particular market identified.</td>
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<tr>
<td>McCarthy, D. J., &amp; Puffer, S. M. (1997)</td>
<td>International firms may adopt incremental investment strategies to handle potential change of host institutions and the risks which may occur. Host legal and political institution stability. Firms enter market for product sales and resources; entry strategy as entry activities.</td>
<td>Host regulative institution can change over time.</td>
<td>U.S. firms in Russia</td>
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<tr>
<td>Tse, D., Pan, Y., &amp; Au, K. (1997)</td>
<td>Host gov’t experiences in attracting FDI facilitate firms adopting equity based venture and forming alliances with firms from home countries. When foreign investors attempt to form JV or enter as wholly-owned, they tend to work with higher levels of government. Host gov’t (state, provincial, municipal) experience in using policy to attract FDI. No mention on what firms enter market for; mode of entry as entry activities.</td>
<td>No discussion on change in host regulative institution.</td>
<td>U.S., Japan, Western European &amp; Non-Japanese Asian firms in China</td>
<td></td>
<td></td>
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<tr>
<td>Calof, J., &amp; Beamish, P.W. (1995) /IBR</td>
<td>The host market environment changes, including the change of regulations, and the appearance of new opportunities can act as stimuli that lead to the change of operation mode during firms’ foreign expansions</td>
<td>Firms enter market for product sales; change on mode of operation as entry activities</td>
<td>Host regulative institution may change during expansion</td>
<td>Canadian firms in various markets</td>
<td>Qualitative, case studies, interview data from HQ</td>
<td></td>
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</tbody>
</table>

One stream argues that international firms ought to adopt strategies that provide a fit between their own resources and the host regulative institutions, so that the subsidiaries can be established (Hong and Nguyen, 2009; McCarthy and Puffer, 1997; Meyer et al, 2009; Tan and Meyer, 2011). Another stream of studies focuses on the foreign subsidiaries and suggests that their access to the host regulative institutions will allow them to accumulate local resources and increase their competitiveness within the group (Gao et al., 2010; Miozzo and Yamin, 2012). Therefore, resource-endowed international firms will make strategic choices on activities and organisational configuration, based on the host regulations, in order to sustain their competitiveness in the process of market entry and expansion. The changes in host regulative institutions in these studies are considered to be either a full factor that attracts foreign entrants into the market when the changes open up resources for access, or a push factor if the changes show an unwelcome attitude toward foreign entrants and restrict their entry.

*Host regulative institutions as the source of isomorphism* – A substantial number of studies employ the third research approach and stress that host regulative institutions are the source of isomorphism, and foreign entrants will receive regulative pressure to behave as their local competitors. Host regulative institutions are seen to be powerful and forceful in deciding the behaviour of foreign entrants, while international firms are assumed to be the recipients of pressure and forced to adapt. The main emphases of these studies are whether or not the institutional distances between host and home would affect the market entry strategies of the international firms (Gaur and Lu, 2007; Owens et al., 2013; Pogrebnyakov and Maitland, 2011; Salomon and Wu; 2012), and the knowledge and human resource transfer between headquarters and subsidiaries (Kostova and Roth, 2002; Xu et al., 2004).

Studies adopting an organisational view examined whether the foreign entrants would gradually change their behaviours and become similar to their local counterparts (Karhunen, 2008; Salomon and Wu, 2012; Soh and Yu, 2010). Hence, the foreign subsidiaries of these international firms will adopt activities and seek collaboration with local actors to enhance their legitimacy based on the host regulations of the process of market entry and expansion. Changes in host regulative institutions are considered to be the beginning of a new isomorphic period, but during this period the regulative institutions should be relative stable.

*Host regulative institutions as the source of experience* – A small number of studies have employed this last research approach and see host regulative institutions as a source of experience, which can only be acquired by foreign entrants through frequent business exchanges with local actors. The host regulative institutions are perceived to be different and unfamiliar. As the context-specific experiential knowledge important for market entry is not
available from headquarters, the foreign subsidiaries must take time to interact with host regulative institutions and learn from them. Studies based on this approach attempt to understand the process of foreign subsidiaries gradually adapting to the host regulative institutions (Calof and Beamish, 1995; Eriksson et al, 1997; McCarthy and Puffer, 1997; Santangelo and Meyer, 2011). Through the continuous learning and adaptation, foreign subsidiaries gradually make a commitment to the host market and become embedded in the host regulative institutions.

The motivation and activities of the firm in foreign market entry

Firms are attracted to foreign markets for various reasons. Some of the firms are attracted by the untapped markets and see the potential to expand the offering of their product. Some are drawn to the aspect of cheaper labour and raw material, to lower the cost of production. Some firms may be keen to enter the markets at an early stage so that they can secure first-mover advantages, while some may take cautious steps waiting for the markets to become more mature in order to avoid risk.

To formulate these reasons, firms need to gather information about the specific markets. However, information gathering can be particularly challenging in emerging markets. Additionally, the emerging markets may change unexpectedly and cause information to lose validity. The lack of sufficient information may result in firms having difficulty formulating their reasons to enter these specific markets. Furthermore, firms may need to reformulate their reasons for market entry when the conditions of the emerging markets are altered. Therefore, the reasons behind entering a specific market may also change over time.

Knowing what firms are seeking when entering specific markets may shed light on their market entry behaviour. Yet most of the studies presented in the review do not specify the aim of the foreign market entry, or what these firms seek in the new market. A major reason for the absence of the firms’ motivations during foreign market entry seems to be due to the data employed in these studies. Among these studies, a large number have employed aggregated FDI data, in which the descriptions of industry or firms’ characteristics are simply not presented (Bevana et al., 2004; Gao et al., 2010; Gaur and Lu, 2007; Guler and Guillén, 2010; Jiménez, 2010; Meyer, 2001; Pogrebnyakov and Maitland, 2011; Tan and Meyer, 2011; Tse et al., 1997; Tseng and Lee, 2010; Quer et al., 2011; Salonon and Wu, 2012; Wu et al., 2012; Xu et al., 2004). Other studies do not provide information with regard to the reason of cross-border investments (Hong and Nguyen, 2009; Kostova and Roth, 2002; Meyer et al., 2009). Some studies may identify general market-seeking as a motivation when entering foreign markets (Chen et al., 2009; Eriksson et al., 1997; Owens et al., 2013;
An exception can be seen in McCarthy and Puffer’s (1997) study. These authors point out that resource-seeking American firms entering Russia, in comparison to their market-seeking counterparts, were forced to adopt heavy initial investment and joint venture strategies with various levels of government. Although regulative institutions in the host market can sometimes be supportive, firms can also be trapped by them if governments behave opportunistically. Calof and Beamish (1995) find that changes to laws in the foreign market may enable unexpected opportunities, such as a chance for acquisition, which may lead firms to change their mode of operation to reflect these new aims.

Furthermore, Miozzo and Yamin (2012) distinguish between service firms entering foreign markets with the intention to follow customers and those with the intention to explore market opportunity; these two types of motivations are not exclusive. However, host regulations may either curtail or facilitate the autonomy of subsidiaries, which is essential for firms with the aim of following customers, and will therefore affect their operations. Hence, these studies suggest a possible relation between the aims and motives of firms when entering foreign market and the institutional changes in the host market. Yet the mechanism behind this relationship and how this relationship may evolve over time will require further study.

Firms are also argued to respond to changes in regulative institutions with appropriate behaviours and activities during the foreign market entry. These responsive activities can lead to growth based on the accumulation of resources (Penrose, 1959; 1960), and to changes in the organisational structure (Child, 1972). As the host regulative institutions are continually changing, it is reasonable to assume that the activities of these foreign entrants will change accordingly over time, and lead these subsidiaries to become more complex and differentiated (Johanson and Vahlne, 1977).

Therefore, market entry activities of a firm and its pattern may not be static over time, and can be quite different during the initial market entry stage than during the later expansion stage. Yet the majority of the studies in this review have focused exclusively on firms’ initial market entry stage. For example, the entry location (Tan and Meyer, 2011), the entry decision (Bevana et al., 2004; Guler and Guillén, 2010; Meyer, 2001; Pogrebnyakov and Maitland, 2011), choice of entry mode (Chen et al., 2009; Meyer et al, 2009; Owens et al., 2013; Tse et al., 1997; Tseng and Lee, 2010), ownership structure of the foreign subsidiaries (Gaur and Lu, 2007; Quer et al., 2011; Wu et al., 2012; Xu et al., 2004), and entry strategies (McCarthy and Puffer, 1997) are the predominant topics presented in these studies.

Host regulative institutions seem to have less influence on the activities needing to be coordinated between the headquarters and subsidiaries (Jiménez, 2010). Studies suggest that experiential knowledge acquired from
host regulative institutions must be embedded within organisational routines before it can be utilised (Eriksson et al., 1997). Therefore, it may take a longer time for the influence of host regulative institutions to be reflected in activities executed by headquarters.

Additionally, regulative institutions of the host market seem to play a less influential role than normative and cognitive institutions, with regard to knowledge and routine transfer between the headquarters and their subsidiaries (Hong and Nguyen, 2009; Kostova and Roth, 2002). Yet host regulative institutions do play a role in influencing activities directly executed by the subsidiaries. Calof and Beamish (1995) point out that the regulations of the host market form a key factor in driving foreign entrants to switch their mode of operation during foreign market entry. Consequently, scholars suggest that the initial market entry strategies of the firms are strongly related to the condition of the host regulative institutions (Santangelo and Meyer, 2011), and therefore the more uncertain that firms are toward the specific foreign market, the more likely they are to be flexible in changing their original plan and adapting to the local environment.

Host regulative institutions are found to enhance those activities that are already localised by the foreign subsidiaries (Gao et al., 2010). Foreign subsidiaries are also keen to increase technological collaboration with their domestic counterparts with more mature host regulative institutions (Soh and Yu, 2010). Miozzo and Yamin (2012), Karhunen (2008), and Salonon and Wu (2012) present similar arguments and suggest that host regulative institutions have a strong impact on the capability and tacit knowledge development of the foreign subsidiaries during their foreign market entry processes.

2.3. Institutional change and the market entry behaviour of the firm over time

The literature review and its result do not seem to properly address the process of foreign market entry to emerging markets and, in particular, what BASF experienced in China in the first chapter. First of all, not only ought host regulative institutions be brought forward and treated more explicitly for studies on firms entering emerging markets, as they have a profound influence on firms’ activities,(Hitt et al., 2004; Hoskisson et al., 2000; 2005; Hoskisson, Tihanyi, and Faraci, 2004; Li et al., 2012; Meyer and Peng, 2005; Peng, 2003; Wright et al., 2005), they also must be discussed in a dynamic view to allow changes in institutions to happen. Host regulative institutions are not static over time, and institutional changes in the host market may play a crucial role to explain the market entry behaviour of the firm.
Secondly, the motivations of the firms during their market entry process have not been made explicit. Why would international firms face the risk of lose their firm-specific advantages when entering distinctively different foreign markets? Foreign market entry, as Penrose (1956) argues, is an effective tool for expanding the productivity of the firm and the firm will continue to look for opportunities to do so for growth and long-run profit. An underlying assumption exists that firms need to see opportunities from the foreign market prior to the market entry. In addition, these opportunities may be modified and re-adapted to respond to change in the host regulative institutions.

Lastly, more studies are needed to examine what firms actually do during their foreign market entry processes. Although scholarly attention is paid to the activities of the firm after the initial entry stage and to how the activities may change over time (Benito and Welch, 1994; Benito et al., 2009), most of the studies in the review fail to handle this request. To understand what firms actually do after the initial market entrance is important because these entry activities may change due to stimulation from the host institutions (Hutzschenreuter, Pedersen, Volberda, 2007; Karhunen, 2008; Swoboda, Oleijnik and Morschett, 2011; Welch et al., 1996a, b; Welch et al., 1998), and the discovery of new market opportunities (Calof and Beamish, 1995). Therefore, activities in different stages of the market entry processes may present a different logic (Santangelo and Meyer, 2011).

This study seeks to understand the events of foreign market entry to emerging markets experiencing recurring changes in laws and regulations. Based on the literature review on host regulative institutions and foreign market entry of the firms, I will argue that past studies have provided only scattered knowledge to explain the relationship between the changes within the host regulative institutions, and the market entry behaviour of the firm, including why they are there to begin with and the activities they conduct in the new market. With the business example presented in chapter one, this study arrives at an overreaching research question: How may institutional change in the host market influence the market entry behaviour of the firm? We can bridge the research gap and create effective understanding on foreign market entry to emerging markets by examining the concepts of institutional change, market opportunity and market commitment, and how the relationships among them evolve over time.

Time is an important factor underscoring the exploration of the relationships among these concepts. Time is the basis of an evolving system that carries the sense-making, enactment, and negotiation processes between actors and institutions (Kostova, Roth and Dacin, 2008). Although Peng (2003) explicitly includes the aspect of time when constructing a hypothesis on the institutions and strategies of the entering firms and suggests that the pressure on foreign entrants will grow stronger as the regulative institutions in the emerging markets mature, there have been few empirical examinations
(Karhunen, 2007; 2008). This is likely due to the difficulties associated with including time in the study design, which can be seen by the fact that the majority of the studies in the literature review have been quantitative studies with cross-sectional data.

Francis Bacon said “Truth is the daughter of time”. Time is not unfamiliar for scholars in International Business for understanding the changes in the firms’ behaviour in foreign markets (Johanson and Wiedersheim-Paul, 1975). Time provides a fundamental aspect that allows us to understand the dynamic processes between institutional changes in the host regulative institutions, and the behaviour of the entering firms (Meyer and Gelbuda, 2006).

Consequently, to contribute to filling the gaps in the existing studies, a theoretical framework that integrates literature on institutional change, market opportunity and market commitment, and a longitudinal design with process data is warranted. The next chapter will present the theoretical framework developed to answer the research question of this study.
Chapter 3: Theoretical Framework

[Summary] This chapter explains the theoretical concepts of institutional change, market opportunity and market commitment, and sub-concepts are identified. A theoretical framework with relationships among these theoretical concepts is proposed to understand the events of international firms entering emerging markets experience recurring institutional changes, and answer the research question.

3.1. The institution and institutional change

Governmental regulations and laws form the regulative institutions that restrain and regulate behaviours (Scott, 1995). The institution is the higher social order or pattern (Jepperson, 1991) of the polity and political economy presented through formal and informal rules (Hall and Taylor, 1996). Institutions are created by human beings and organisations to govern how information is perceived and processed and what kind of action can be taken with it. Hence, institutions constrain and reflect the interest and participation of actors to achieve regularity.

Regulative institutions represent the legal aspect of the institution and exert a coercive pressure on the participating organisations through formal mechanisms, including rule-setting, monitoring, and sanction (Scott, 1995). Organisations such as firms may change their organisational structures and behaviours to respond to the regulative institutions (DiMaggio and Powell, 1983; Meyer, 1981; Meyer, Brooks, and Goes, 1990). Regulative institutions are designed to reduce uncertainty in economic transactions and are believed to be relatively stable (North, 1991). In the context that regulative institutions are stable, the changes in the institutions can be traced and there is continuity behind these changes. Stable regulative institutions in general are found in more developed markets, in which the democratic political system and market economy ensure the transparency of these change processes. Firms operating within these markets can easily anticipate the direction and scale of the changes within stable regulative institutions.

However, regulative institutions in emerging markets are weaker and less stable (Jansson, 2007; Meyer and Gelbuda, 2006). These emerging markets begin with institutional void, as market-supporting institutions are simply not in existence (Khanna and Palepu, 1997). In spite of this, market-
supporting institutions will emerge during the economic transitions, though they can be ineffective and inefficient in nature and do not hold any functional means to reduce uncertainty (Hay and Wincott, 1998).

Moreover, the regulative institutions are subject to the changes in the political economic environment (Steinmo, 2008; Thelen and Steinmo, 1992), and should be considered as a “legacy of concrete historical process” rather than simply the outcome (Thelen, 1999:382). The political economic environment may also experience changes in parallel. Hence, the changes in regulative institutions can be difficult to predict in terms of the time at which they will occur, and the directions they will take.

This study refers to the institutional change as a process through which regulations and laws are modified. Institutional change can be carried out at the market level, and can also happen at the industry level. Institutional change can be an interactive process involving multiple actors, such as policy makers and business firms embedded within the system. As institutions shape and constrain organisational behaviour, they are also shaped and constrained by an organisation's choices and changes.

The central theme of the institutional change process is historical contingency and path dependency (Hay and Wincott 1998; Thelen and Steinmo, 1992). This theme implies that institutional change in the present will be dependent on the past context, with context understood as not only the events that occurred, but also the timing, sequence and length of time over which they occurred (Pierson, 2000a; 2000b). Hence, understanding the history of the events leading to the institutional changes becomes the central theme for understanding these changes, and their influence on participating organisations.

Transitional change and turbulent change

Given the above understanding, this study proposes two types of institutional change: transitional change and turbulent change. As demonstrated below and in Table 2, transitional change and turbulent change are distinguished by the origin, aim, orientation, speed and resulting level of expectation of the change.

**Transitional change**

*Transitional change* in regulative institutions involves new laws and regulations that can be traced back to an overall governmental policy and plan, which are issued to facilitate the development of the host market. They reflect a long-term orientation, focused on ensuring the market will follow the prescribed development plan; therefore changes tend to be gradual. As such, the occurrence of the transitional change can be better expected or predicted, as it is most likely to follow a timeline established in the policy and plan.
The long-term aspect of the transitional change does not indicate that these changes are one directional. Indeed, a transitional change that aims to promote industry development may be replaced by another transitional change some time later to prevent over-supply in the industry. Fluctuations in direction occur from time to time due to the changes in governmental policies, which may be revised according to the development of the economy.

**Turbulent change**
In contrast, some institutional change can be considered turbulent. *Turbulent change* occurs in response to market shocks, or certain unexpected incidents that disrupt the market. New laws and regulations that are considered turbulent change are issued with the aim of fixing the situation quickly by controlling the negative impact resulting from these shocks and ensuring a fast recovery. Turbulent change is therefore short-term oriented, and may involve the implementation of many laws in rapid succession. As a result, the market order may be completely altered. Since market shocks cannot normally be anticipated, the occurrence of turbulent change is also not easily expected or predicted. A summary comparison of transitional and turbulent change can be seen in *Table 2*.

**Table 2. Transitional and turbulent change**

<table>
<thead>
<tr>
<th>Origin of change</th>
<th>Transitional change</th>
<th>Turbulent change</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aim of change</td>
<td>Market &amp; industry development</td>
<td>Crisis recovery and rebuilding industry order</td>
</tr>
<tr>
<td>Orientation</td>
<td>Long-term</td>
<td>Short-term</td>
</tr>
<tr>
<td>Speed of change</td>
<td>Gradual and drawn out</td>
<td>Fast and concentrated</td>
</tr>
<tr>
<td>Predictability of change</td>
<td>Expected</td>
<td>Unexpected</td>
</tr>
</tbody>
</table>

Scholars have referred to institutional change that causes turbulence as “revolutionary change” (Marinova et al., 2012), “punctuated equilibrium” (Romanelli and Tushman, 1994; Krasner, 1984) and “institutional upheaval” (Newman, 2000). These are dramatic changes in institutions that, due to crises, abruptly cut short a long period of incremental change, and cause the norms and values that support the legitimacy of the institutions to be invalid. Revolutionary change, punctuated equilibrium, and institutional upheaval describe a drastic and substantial shift in institutional order that creates disruption and leads to total chaos due to the breakdown of the prior institutions. Still, the institutions might not breakdown completely, and the disruptions may drive organisations to seek connections to informal institutions (Roth and Kostova, 2003). Institutions may contain multiple layers that allow transitional and turbulent change to coexist and co-operate.
Additionally, concepts like revolutionary change, punctuated equilibrium and institutional upheaval may suggest that turbulent change in regulative institutions is an all or nothing situation. In other words, there is either a drastic change taking place or no change is occurring at all. Yet, institutional changes are more a process than a single event occurring at an absolute point of time (North, 1991). During the process, the level of change may increase or diminish, and these varying levels of change may have different influences on the behaviour of the firm (Aulakh and Kotabe, 2008; Kriauciunas and Kale, 2006; Newman, 2000).

Therefore, this study argues that transitional and turbulent change; take place in parallel, and the levels of transitional and turbulent change may vary. These levels of transitional and turbulent change are measured by the number and the scope of the changes in laws and regulations occurring in a given time frame. I also propose an analytical model to understand institutional change experienced in a market based on the various levels of transitional and turbulent change. In this analytical model, there are four combinations of transitional and turbulent changes (Figure 3).

Area I institutional change is characterised by a high level of transitional change and low level of turbulent change. This may happen at a time when the host government has relatively strong control over the economic transitions, and the policy-led transitional change is the dominant feature in the market. This combination is called “Rehearsed Change” as it is planned on a long-term basis and there are few surprises (market shocks) in the market. Area II institutional change demonstrates a situation where both transitional and turbulent change is low. There are generally few changes observed in regulative institutions. This is called “Minimal Change” as relatively limited change is carried out in the market. This may happen when an industry is in its infancy stage, or when the government considers that an industry is less important to the economic development and thus allocates little interest and few resources to it.

In Area III institutional change, the levels of both transitional and turbulent change are high. Even though there is recurring turbulent change and market shocks in the market, the government still has firm control over the market through the use of transitional change. As the situation of institutional change is still manageable, this is labelled “Manageable Change”. On the contrary, Area IV institutional change represents a situation where the transitional change is low and the turbulent change is high. This situation may be observed when the host government faces difficulty in controlling the pace of the economic development and the market is constantly in chaos. These changes are chaotic; there are strong market shocks, and drastic changes in regulations and laws are made in an attempt to stabilise the market condition quickly. Therefore, this combination of transitional and turbulent change is called “Chaotic Change”.

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Figure 3 shows the four combinations of transitional and turbulent change.

Figure 3. Four combinations of transitional and turbulent changes

Foreign firms may experience the different combinations of the institutional change described above when entering the emerging market and during their expansions. These combinations of institutional change provide an important basis upon which firms can measure the uncertainty associated with foreign market entry against the potential gain from exploiting the market opportunity.

3.2. Market opportunity

Despite the changes and uncertainty in the emerging markets, firms are attracted to emerging markets for the potential market opportunity. The opportunity can be new availability of markets, raw materials or resources, the creation and demand of a new product or service, new methods of production or new ways of organizing production (Schumpeter, 1934). The perception of the opportunity comes from the information about the imperfection of the market (Alvarez and Barney, 2007), which firms are able to use to take advantage of the situation and identify value and profit (Shane, Locke, and Collins, 2003).

A firm’s foreign market entry and expansion are driven by the perception of market opportunity (Johanson and Vahlne 2009; Schweizer, Vahlne and Johanson, 2010). Market opportunity development requires both recognition and exploitation, and there may be multiple steps of discovery, enactment, evaluation and exploitation at different points in time (Oviatt and McDougall, 2005). Previous studies of foreign market opportunity have generally focused on the exploitation of the opportunity, e.g., the creation of
new venture (Baumol, 1993; Sharma and Blomstermo, 2003). In this stream of thought, market opportunity is suggested to be measured by the associated degree of risk and the level of reward involved (Ellis, 2010).

Still, opportunity recognition plays an important role in opportunity development time (Oviatt and McDougall, 2005). Particularly, when firms attempt to enter a less stable market, i.e. emerging markets, receiving accurate information and properly making an interpretation can be time consuming and costly for foreign entrants (Beamish and Bank, 1987; Hadjikhani and Johanson, 1996; 2000; Shenkar, 1994). Furthermore, firms may have to rely on exploration to learn in an environment with strong turbulence, which produces less certain outcomes (March, 1991). As such, in a less stable foreign market, firms may have difficulties applying the information gathered and determining how it fits with their current operations (Johanson and Vahlne, 1977), or matching existing resources and knowledge (Chandra, Styles and Wilkinson, 2009).

In this study, the emphasis of the market opportunity is placed on the recognition of the opportunity, i.e. the discovery and identification of the opportunity. This study defines the market opportunity as the perception and interpretation of market information that is believed to lead a firm to a desirable situation in the future. The perceived market opportunity is desirable but uncertain in nature since it refers to a future situation and there may be potential changes in the market as well as in the firms (Krueger, 2000; Ward and Chapman, 2003). Upon receiving the information that can lead them to potential growth, e.g., orders of product from a new market, firms will interpret this information based on their prior experience before determining the manner in which to exploit these opportunities (Madhok, 1997).

The perception and interpretation form an interactive process for firms to recognise the market opportunity. Not only must a piece of information be received, but meaning must also be attached to allow the market opportunity to make sense for the organisation (Alvarez, Barney, and Young, 2010). During this interactive process of opportunity recognition, both prior experience and current operations are important. The first-hand experience of the firm will present the strongest influence on their interpretation of the information received from the host market (Johanson and Vahlne, 1977). Firms may also compare with their experiences in a similar market if the first-hand experience of the host market does not exist. Additionally, experience can also be brought in to the firms through hiring local personnel familiar with the market (Forsgren, 2002).

In addition, firms may only be able to recognise market opportunity based on the activities in the current operations. The bounded rationality implies that firms are only able to search for opportunity in what is already known (Hilmersson and Jansson, 2012). But when firms are embarking on a systematical search, they are equipped with a cognitive readiness to capture
market information relating to potential changes (Hohenthal, Johanson and Johanson, 2003).

The recognition of market opportunity is also time and context sensitive (Ardichvili, Cardonzo and Ray, 2003; Zander, 2005). A firm’s perception of market opportunities may be modified during the process of foreign market entry and expansion as a result of acquiring new experience and knowledge from expanding operations (Hayek, 1945; Schumpeter, 1942). As new experiences add to, revise, or correct some previous assumptions, firms may be able to discover market opportunity that had previously been overlooked (Kirzner, 1973; 1997; Shane et al, 2003). In other words, a firm’s previous history will play a key role in how they perceive and evaluate market opportunity (Cattani, 2005; Denrell, Fang and Winter; 2003; Shane, 2000).

Structural opportunity and relational opportunity

The interpretation of the information that leads to the market opportunity is subjective to the individual or the firm, and will be based on personal/firm experience and market experience (Eckhardt and Shane, 2003; Shane, 2000; Shane and Venkataraman, 2000). Therefore, market opportunity is subject to a sense of relativism to the person or the organisation perceiving it, since not everyone may agree with its existence (Stevenson and Jarillo, 1990). Moreover, market opportunity may also need strong collaboration between various organisations to bring it forward and consequently may demand resources and time investment from firms (Johanson and Vahlne, 2006; 2009; Sarasvathy, 2001; Sarasvathy and Dew, 2005).

Yet the source of the information that leads to the market opportunity generally exists outside the firms. Based on the source of the information, this study proposes that two subsets of opportunity can be distinguished. They are structural opportunity and relational opportunity, and they can be distinguished by the origin of the information and the nature of the opportunity, and their characteristics.

Structural Opportunity

**Structural opportunity** refers to the type of market opportunity that firms identify through the information that is available from a public source. A public source can be governmental information, e.g., the announcement of new foreign investment regulations, or market research or intelligence that highlights information, e.g., the growth of a specific segment of the market. The information that leads to recognising the structural opportunity is available to any firm that is searching and becomes aware of it. For example, firms may become aware that a previously closed market will be open for foreign firms to export product due to a recently revised international trade regulation. The perception and the interpretation of the information that leads to the discovery of structural opportunity needs to present something
new for the firms, even though the information itself may have been available for a certain period of time.

Structural opportunity may be recognised by firms observing the market closely, or through systematic search. Both prior experience and current operations will help with the recognition of structural opportunity but they are, however, not necessary. Since the information leading to structural opportunity is equally available to other firms, competing firms may discover this type of market opportunity at the same time. This increased competition may eventually lead to the exhaustion of the structural opportunity after a period of time.

Relational Opportunity

*Relational opportunity* refers to the type of market opportunity that firms identify through information that is available only from exchange partners. These partners can be JV partners, customers, suppliers, competitors, or non-industrial actors such as regulators and academic institutions. The information that leads to the recognition of relational opportunity is therefore only available to the firms that are part of a given network. For example, foreign subsidiaries may gain information about demand of a certain group of customers through their JV partners, or the local partners may suggest alternative solutions to an existing business standard that lead to better margins or more sales. This information may not always be entirely new, but, through the process of collaboration and co-creation over time, the information is now seen differently and leads to the recognition of relational opportunity.

The prior experience and current activities of the firms are essential for them to recognise relational opportunity. Without prior experience with both the host market and ongoing operations, firms may not earn sufficient trust from local actors to allow information sharing or they may not fully understand the information being shared. As both of these take time, the recognition of relational opportunity may not happen at the beginning of the market entry. A summary comparison of structural and relational opportunity can be seen in *Table 3*.

As the information leading to market opportunity is subject to the interpretation of the firm, the identification of structural and relational opportunity is therefore specific to time and context (Jones and Coviello, 2005). The information may be understood differently as the firm’s experience with the market grows (Cohen and Levinthal, 1990). A piece of information may be viewed as an important market opportunity in a later stage of foreign market entry, but was discarded in the early stage of the market entry process because the firm did not have the relevant experience to interpret it.
Table 3. Differences in structural and relational opportunity

<table>
<thead>
<tr>
<th>Origin of opportunity</th>
<th>Structural opportunity</th>
<th>Relational opportunity</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Information obtained from publicly available sources</td>
<td>Information obtained through partners in exchange</td>
</tr>
<tr>
<td>Nature of opportunity</td>
<td>Opportunity identification is open to all in the market</td>
<td>Opportunity identification is only available to firms included in a specific network</td>
</tr>
<tr>
<td>Characteristic of opportunity</td>
<td>Newness</td>
<td>Exclusiveness</td>
</tr>
</tbody>
</table>

In other words, market opportunity of the host market will evolve in different stages of market entry process. Firms may enter a foreign market consisting of a low or high degree of structural and relational opportunity. For instance, firms may identify strong relational opportunity from following existing customers or partners entering a foreign market (Axelsson and Johanson, 1992; Johanson and Mattsson, 1988), while firms aiming to explore new markets to sell product may mainly consider structural opportunity (Reid, 1981).

Firms may gradually identify or grow more structural and relational opportunities from the host market during the market entry process, or they may find that opportunities decline or diminish. The increase or decrease of the opportunity recognition can come from changing market conditions (Benito, Grøgaard, and Narula, 2003; Swoboda, et al., 2011). This may be the result of a shift in customer demand and taste, or the change of laws and industry standards. A firm’s lack of internal resources (Penrose, 1956; 1959) and essential experiences (Johanson and Vahlne, 1977) may also hinder the opportunity development. Therefore, as firms improve their knowledge in the host market, they may have better access to information and a better ability to interpret it properly.

Firms may find unexpected market opportunity during the market entry process. The appearance of different kinds of market opportunity can lead to a change in operation focus (Carof and Beamish, 1995; McCarthy and Puffer, 1997). Firms that gain increasing access to relational opportunities may discover different ways to serve the market, and consequently depart from their initial path and change their market orientations, organisational forms, distribution channels, and product compositions (Hohenthal et al., 2003).

Emerging markets can present strong challenges for market entry firms with regard to perceiving structural and relational opportunity. Due to the asymmetry of information, substantial resources may be invested by entering firms to search for clearer information that leads to new structural opportunity (Johanson and Johanson, 2006). The unfamiliar market conditions and weak institutions may also cause entering firms to feel...
vulnerable and thus have difficulty trusting local actors to establish relationships needed for relational opportunity (Hadjikhani and Johanson, 1996; 2000). As such, it may take a while for entering firms to grow accustomed to the host market, and firms may experience frustration and withdraw in the midst of the opportunity recognition process.

3.3. Market commitment

Firms conduct a sequence of business activities, when entering a foreign market, to achieve horizontal diversification and vertical integration, and these activities include sales, marketing, manufacturing, research and development, as well as organisational creation and administration routines. Executing these business activities requires tangible and intangible resources (Penrose, 1959). As firms do not have unlimited resources, they may need to make sequential moves while entering foreign markets (Wernerfelt, 1984).

Penrose (1956) suggests that the internal resources of a firm are essential in determining the activities carried out when entering foreign markets, e.g., the establishment of subsidiaries. These internal resources of the firms include financial assets, capabilities, organisational processes, firm attributes, information and knowledge that can be controlled by the firms to implement strategies (Barney, 1991). Firms exchange internal resources with other firms in the market in order to obtain the resources that they do not have but that are important for their operations (Håkansson and Snehota, 1989; 1995).

Therefore, firms plan foreign market entry activities based on their existing resources from headquarters, such as financial capital and international experience (Johanson and Vahlne, 1977; Johanson and Wiedersheim-Paul, 1975), and they will gradually increase the resource investment when continually exchanging resources in the host market. Yet once a new subsidiary is established, Penrose argues that the subsidiary will continually develop based on “the opportunities presented in its new environment” (Penrose, 1959: 255-256). Hence, internal resources of the firm may underpin the foreign market entry process, but the market opportunity in the foreign market will influence which business activities firms choose to take (Steen and Liesch, 2007; Chetty and Blankenburg Holm, 2000).

This study defines the market commitment as the sum of the resources invested by firms in the business activities during market entry processes. As the activities taking place during the foreign market entry are historically dependent, the market commitment will also show continuity (Johanson and Vahlne, 1992). However, market commitment of the firm is also time and path dependent. In other words, the resources invested and the activities executed by the firm will not last forever, and the resources and activities
that firms can commit at the present will be restricted by that which they have committed in the past (Ghemawat, 1991). Moreover, making a specific market commitment may exclude other alternatives from happening since firms possess limited resources. As firms may be unable to invest in multiple markets at the same time, choosing the appropriate market commitment at the right point in time becomes an important strategic issue.

Scholars distinguish tangible and intangible market commitment based on the degree and amount of resources invested by the firm in market entry activities (Hadjikani, 1997; Hadjikani and Johanson, 1996). Intangible market commitments in a foreign market are investments with strong irreversibility, e.g., technology transfer, which may have consequences as significant as a large tangible financial commitment. In addition, the intangible commitment also lacks of transferability once the resources are invested. For example, the knowledge investment behind the technology transfer may not be recuperated if the project is not successful.

Commitment toward the host market, relationships, and organisational integration

Based on the activities firms conduct during foreign market entry, this study proposes there are three types of market commitment: commitment toward the host market, commitment toward relationships, and commitment toward organisational integration. These three types of market commitment differ in the aim of the activities, the type of resources involved, and whether they are controlled by the headquarters or subsidiaries. The internationalisation literature tends to focus on the first two types of market commitment, e.g., the commitment toward the host market in Johanson and Vahlne (1977) and the commitment toward relationships in Johanson and Vahlne (2009), and leaves out the third type of market commitment. The discussion of organisational integration can be seen mainly in literature on the management of MNCs, e.g., Birkinshaw (1996; 1997; 1998).

Commitment toward the host market refers to business activities planned and executed by firms to legally and functionally establish subsidiaries and other local units in the host market. Activities contributing to commitment toward the host market include the registration of business and product, purchasing or leasing land for office and factory space, installing machinery and relocating production, etc. Although the activities involved are relatively basic, they are essential for foreign subsidiaries and can take time to complete because of the unfamiliar and frequent changes in institutions in the emerging markets (Hilmersson and Jansson, 2012; Luo and Peng, 1999). Commitment toward the host market may be insufficient or even wasted due to the institutional changes. Resources invested in these activities are
predominantly tangible; mainly the resource invested is financial capital and is allocated by the headquarters (Bower and Gilbert, 2005; McCarthy and Puffer, 1997). However, certain intangible resources, like organisational routines and managerial capability, may also be needed and are transferred to assist the establishment of the subsidiary.

**Commitment toward relationships** refers to the business activities that foreign subsidiaries participate and engage in to increase their reputation and collaboration among local actors. Firms may meet these local actors through casual meetings but over time a mutual relationship is built between the two (Ellis, 2000). Activities contributing to commitment toward relationships include joining trade shows and exhibitions, holding seminars and workshops, participating in industry associations, etc. Subsidiaries can use these activities become acquainted with local suppliers, customers or other non-business actors in order to increase arms-length business exchanges and induce reciprocal behaviour (Andersson, Holm, and Johanson, 2007; Håkansson and Snehota, 1989; Johanson and Vahlne, 1990; Larson, 1992; Powell, 1990; Uzzi, 1996; 1997). Building relationships in unfamiliar emerging markets can be a complex issue that involves both the individual level and the organisational level (Björkman and Kock, 1995; Chen and Chen, 1998; Johanson and Kao, 2010; Peng and Luo, 2000).

The commitment toward relationships is usually planned and executed on the subsidiary level with resources that can be mobilised by the local subsidiary (Forsgren, Johanson and Holm, 2006). Although tangible resources are needed for interacting with local actors, intangible resources such as time, organisational credentials, and knowledge play a more significant role in contributing to this type of commitment (Anderson and Weitz, 1992; Cannon and Perreault, 1999; Dwyer, Schurr, and Oh, 1987; Johanson and Vahlne, 2006; Morgan and Hunt, 1994). The requirements of time and knowledge also means that commitment toward relationships may only take place when foreign subsidiaries have successfully accumulated sufficient knowledge of the host market and institutions (Blankenburg Holm, Eriksson, and Johanson, 1999).

**Commitment toward organisational integration** refers to business activities to forge collaborations between subsidiaries or other units within the firm. Activities contributing to commitment toward organisational integration include establishing permanent regional facilities or setting up temporary joint projects to be shared between nearby subsidiaries. The nature of these activities is collaborative action that leads to economies of scale and information exchange. The resources needed for the commitment toward organisational integration are both tangible, e.g., financial capital to run the newly established organisation, and intangible, such as top managerial capabilities, and information and knowledge. Certain activities may be
orchestrated by the headquarters (Dellestrand and Kappen, 2011; 2012), while some can be initiated by the foreign subsidiaries (Birkinshaw, 1996; 1997; 1998; Birkinshaw and Hood, 1998). Consequently, these organisational integration commitments may, in some cases, substantially increase the autonomy and the status of the local subsidiary (Birkinshaw, 1998). In other cases, however, these commitments may lead to stronger involvement of the headquarters (Ciabuschi, Dellestrand and Martín Martín, 2011; Ciabuschi, Forsgren and Martín Martín, 2012), which may lead to loss of independence for the subsidiary (Mudambi, 1999).

Activities leading to commitment toward organisational integration are likely to take place when foreign subsidiaries are more mature and possess certain influence within the business group as a whole (Bartlett and Ghoshal, 1989; Birkinshaw, 1998; Benito et al., 2003). Additionally, subsidiaries in particular may be keen to initiate collaboration with other units when they are aware that their existing knowledge and resources are not sufficient to take on some opportunities that may help them to grow further. Headquarters may also have some incentive to tap into the knowledge and business relationships that have been gradually acquired by foreign subsidiaries during the market entry process in order to leverage them in other markets. (Forsgren et al., 2006; Vahlne, Schweizer, and Johanson, 2012). A summary comparison of market commitment toward host market, relationship and organisational integration can be seen in Table 4.

Table 4. Commitment toward host market, relationship, and organisational integration

<table>
<thead>
<tr>
<th>Aim of the activities</th>
<th>Host market</th>
<th>Relationship</th>
<th>Organisational integration</th>
</tr>
</thead>
<tbody>
<tr>
<td>To be established legally &amp; functionally in the host market</td>
<td>Increase presence &amp; sustain reputation among the local actors.</td>
<td>Forge intra-firm collaborations between nearby subsidiaries</td>
<td></td>
</tr>
<tr>
<td>Type of resources involved</td>
<td>More tangible (financial)</td>
<td>More intangible (time, knowledge)</td>
<td>Mixed (human resources, experience)</td>
</tr>
<tr>
<td>Unit of control in the activities</td>
<td>HQ level</td>
<td>Subsidiary level</td>
<td>Both HQ and subsidiary</td>
</tr>
</tbody>
</table>

The activities and commitment of the firms during the market entry may be pre-planned. Firms may want to control the progress of market entry, and the resources they are willing to invest. In an extremely similar market or a market where firms can obtain perfect information, the firm will aim to articulate a clear sequence of activities before the market entry process. However, most of the markets are different to certain extent, and firms may need to be flexible in market entry activities and learn to adapt (Mintzberg, 2007; Mintzberg and Waters, 1985).

Changes in the type of market commitment result from learning and the adaption that firms make in the host market (Kaufmann and Jentzsch, 2006).
For instance, a firm may enter a market with the intention to sell a model of a machine, but through interacting with local partners, the firm may quickly realise that customers may prefer a model that is not intended to be introduced to the market. The greater the difference in the foreign market, the more trial-and-error learning may be needed (Forsgren, 2002).

Flexibility in market commitment can be essential for the survival of the subsidiaries when entering an emerging market characterised by unstable and weak institutions (Hadjikani, 1997). Santangelo and Meyer (2011) also suggest the emergent element in the market commitment of the firm is much more relevant during market entry to unfamiliar emerging markets with ever-changing institutions.

Furthermore, firms may not always make the appropriate market commitments during the market entry process. Firms may not fully develop conscious and goal-directed internationalisation strategies before embarking upon their foreign market entries (Johanson and Wiedersheim-Paul, 1975). Firms often learn from correcting their previous mistakes (Kirzner, 1973; 1997). Hence, the market commitment of the firm may decline and diffuse through these corrections (Benito and Welch, 1994; 1997; Benito, Petersen, and Welch, 2009; Bridgewater, 1999; Fletcher, 2001; 2008; Hadjikani, 1997; Hadjikani and Johanson, 1996; Liesch, Welch, and Buckley, 2011; Santangelo and Meyer, 2011; Swoboda et al., 2011; Welch and Welch, 2009; Welch and Wiedersheim-Paul, 1980). Managerial discretions can also change the direction and scope of the market commitment (Pedersen, Petersen, and Sharma, 2003). In particular, firms can make risk-taking entrepreneurial decisions to speed up the foreign market entry process (Johanson and Vahlne 2003; Knight and Cavusgil 2004; Madsen and Servais, 1997; Oviatt and McDougall, 1994; Rennie, 1993).

3.4. A theoretical framework for understanding foreign market entry to emerging markets

This study intends to understand the events of foreign firms entering emerging markets and experiencing recurring changes in laws and regulations. As such, it proposes the research question of how institutional change in the host market may influence the market entry behaviour of the firms, and puts forward a theoretical framework to answer this question. This theoretical framework contains three concepts: institutional change, market opportunity, and market commitment.

The recurring changes in the laws and regulations in emerging markets can attract foreign firms to invest at one point in time but pose challenges in their operations at another point in time. Institutional change, market opportunity, and market commitment can be divided into respective sub-
concepts, and there may be differences in how they relate to each other. Additionally, the laws and regulations, as well as the business activities of the firms, evolve continuously and the level of these evolutions can increase, decrease or remain the same over time.

The above implies that the laws and regulations, as well as the market entry activities of firms are evolving by nature, and are dynamic and complex. This thesis therefore proposes a theoretical framework to disentangle the dynamic and complex relations between institutional change, market opportunity, and market commitment (Figure 4).

Foremost, the theoretical framework presented in Figure 4 consists of institutional change, forming the square that constitutes the boundary of the framework. The institutional change carried out in the host market is a result of the ongoing updates and revisions in laws and regulations over time (North, 1990). Institutional changes take place at the macro level, and these changes can be market specific or industry specific.

Secondly, in the inner rectangle of Figure 4 are two boxes indicating market opportunity and market commitment. Market opportunity and market commitment are connected directly; each is a behaviour taking place at the firm level. Together, market opportunity and market commitment represent the foreign market entry behaviour of the firm that expands across time.

As seen in Figure 4, institutional change and market entry behaviour of the firm (market opportunity and market commitment) form respective boxes. This implies that they are two processes taking place on different levels. The process of institutional change is the consequence of the transitions in the economic system over time (Hay and Wincott 1998; Thelen and Steinmo, 1992). The process of market entry consists of the sequence of market opportunity recognition and market commitment. As it is placed within the institutional change, the framework maintains that the market entry process is gradually established and embedded in the host market (Johanson and Vahlne, 1997; 2009).
The theoretical framework shown in Figure 4 contains no direct arrow between the two boxes to show complexity and dynamics; while the framework indicates an influence from institutional change to the market entry of the firm, the direction and the relation remain to be understood. On the one hand, institutional change occurring at the macro level can possibly influence foreign entrants by permitting or restricting their market entry behaviour. Institutional change may create, delay, or eliminate the market opportunity that foreign entrants can recognise (Eckhardt and Shane, 2003; Levie and Autio, 2011; Schumpeter, 1942). Institutional change also requires firms entering the market to adjust their operations (Meyer, 1981; Meyer et al., 1990) in order to conform to the host regulative institutions (DiMaggio and Powell, 1983; Scott, 1995). Therefore, due to recurring institutional change, the recognition of market opportunity, as well as the implementation of market commitment, may involve explorative and exploitive learning (Holmqvist, 2003; 2004; Levinthal and March, 1993; Levitt and March, 1988), and thus may proceed incrementally (Cyert and March, 1963).

It might also be possible for foreign entrants to contribute to future institutional change. Over time, the commitments firms make and their ongoing adaptations may support them in actively responding to institutional change (Child, 1972; Child, Tse and Rodrigues, 2012; Flier, Bosch, and Volberda, 2003; Lewin and Volberda, 1999). Firms may actively engage in collaboration with local actors (Oliver, 1992; Sturgeon, 2002), and through this collaboration see the incentive and market opportunity to influence institutional change in the future (North, 2005).

The aim of this theoretical framework is to unveil the dynamics and complexity of the observed events, in order to answer the research question proposed in this study. Based on this framework, the next chapter will describe the method and discuss the methodology concerns of this study.
Chapter 4: Methodology and Methods

[Summary] This chapter illustrates the research methods that this study has employed to collect and analyse the data, and the methodological considerations behind these decisions. A case-based qualitative study is adopted to collect longitudinal data, and several analytical strategies are applied to make sense of and analyse the interview and archival data.

4.1. Reasons for conducting case-based qualitative research

The evolving natures of laws and regulations as well as the business activities of firms comprise a dynamic that is challenging to disentangle. This study seeks to understand the events of foreign market entry to emerging markets, and the research question it attempts to answer is: How may institutional change in the host market influence the market entry behaviour of the firm over time? Taking into consideration the empirical context, this study employs a case-based, qualitative research method to observe events and activities carried out between the actors and environments in order to understand the dynamics and changes taking place on various levels over time.

Case-based qualitative study is an appropriate research method to explore less-known phenomena (Yin, 2003). The study undertaken in this thesis can be considered to be explorative research that aims to shed light on the process of institutional change and the market entry of the firm from a long-term perspective, since the literature review presented in Chapter 2 has pointed out there were very few studies examining this the events of foreign firms entering emerging market experiencing recurring institutional changes.

Qualitative case study is also suggested to be best-suited for investigations undertaken in a naturalistic context (Piekkari, Welch, and Paavilainen, 2009). The naturalistic context is an important part of this study as the changes in laws and regulations in China through the economic transition are beyond the researcher’s control. By employing qualitative case study, this research can approach the empirical context with a reflective and holistic view (Alvesson and Kärreman, 2007; Cassell and Symon, 2004;
Furthermore, this study aims to trace the changes in institutions and the market entry of the firm over time, and thereby understand the connection between them. Qualitative case research is argued to be an ideal research tool for processual studies (Langley, 1999; Morgan and Smircich, 1980; Pettigrew, 1990; 2012): It can open up the processes that lead to individual and organised actions (Doz, 2011), it is able to interpret the complexity of context (Birkinshaw, Brannen, and Tung, 2011), and is capable of handling messy relationships and complex structures (Edman, 2009; Karhuene, 2007; Johanson, 2001). In other words, qualitative case research not only can provide rich, contextual information that is needed for conceptualisation, it is also an effective research method for constructing theoretical frameworks and development theory.

There are, however, some criticisms made of case-based qualitative research due to its lengthy and less-than-precise procedures in processing data (Miles, 1979; Miles and Huberman, 1984), and its relatively small samples which are problematic for generalisation (Eisenhardt, 1989; Yin, 2003). The following sections in this chapter aim to address these concerns and explain how the qualitative case study is conducted in this study. First, the role of theory in the data collection process is made explicit and discussed. An abductive approach is employed to handle the tension between theoretical framework and data collection. Second, a pilot study was conducted to form a preliminary understanding of the research interest, as well as the empirical context. The next three sections describe the data collection process of interview and archival data, and how the data sets are analysed and combined. The final section provides the theoretical reasoning on the selection of firms.

4.2. An abductive approach to the research process

To capture the evolving nature of both the regulative institutions and the dynamics of the business activities during entry to emerging markets, this study needs to handle two challenges associated with the data collection: the issue of time that spanned a few decades, and the difficulties in accessing data in emerging markets.

Firstly, as this study looks to understand the changes over time, the time element needs to be preserved in the data collection. While the aspect of time is well recognised in the theoretical framework to study process (Pettigrew, Woodman and Cameron, 2001), and the employment of case studies is effective for uncovering the temporal sequence of events (Monge, 1995), questions regarding how long this research process should last, and how long the data should be traced back remain challenging.
As the research process is hardly linear and simple (Van Maanen, Sørensen, Mitchell, 2007), and unexpected events and accidents may deteriorate the research processes which prolong or shorten the case time and research time (e.g., case company stop outsourcing activities in Dubois and Gadde, 2002). Case time refers to the period of analysis, and the research time is defined by the total time devoted to gathering data (Blaziejewski, 2011). The challenge for this study is that both the case time and research time are difficult to identify prior to the unfolding events.

Secondly, collecting data in emerging markets, such as China, can pose challenges and run the risk of entering grey area in legal matters (Michailova and Clark, 2004). There are indeed ambiguous internal regulations that restrict academic studies conducted in China, and permission from the Chinese government or Chinese academic institutions was not sought in this study. In certain extreme cases researchers may violate “state secrets” and be detained (Nojonen, 2004; Tan and Nojonen, 2011). These uncertainties appear to be a particular threat to qualitative researchers (Tsui, 2004; 2006; Tan and Nojonen, 2011).

Moreover, Chinese society is characterised as high-context (Boisot and Child, 1999) in which personal relationships (guanxi) penetrate and intertwine various levels of society and everyday life (Hutchings, 2004; Tan and Nojonen, 2011; Yang, 1994; 2002; Yeung, 1995). The implication is that accessing information can be restricted unless the guanxi is already established. One might suggest that since this study focuses on Swedish firms in China, it would be less subject to the influence of guanxi networks. However, the managers of these companies are likely to be native Chinese if the company has been operating in China for a long time and is localised. Potential strategies to overcome these issues include going native (Michailova and Clark; 2004) and actively using one’s guanxi to ease the difficulties of accessing data (Hutchings, 2004; Yang, 1994; 2002). However, scholars also warn of the double-edged effect of guanxi, which may end up causing more conflict than good (Tan and Nojonen, 2011). These two challenges suggest that both flexibility and reflexivity are needed when conducting this study. The flexibility enables me, as the researcher in this study, to deal with unanticipated changes that may influence the time and the research setting, and the reflexivity provides me with the tools to incorporate these changes when making the connection between data collection and theoretical construction (Yeung, 1995).

Furthermore, this study adopts an abductive approach in order to strengthen the flexibility and reflexivity of the research needed. Unlike the pure inductive approach, the abductive approach accepts existing theory and allows it to be used as a basis to analyse the empirical data. With an

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6 See Nojonen, 2004
7 For further discussions of my own experience please see the section “Pilot Study”.
abductive approach, I, the researcher, will be able to go back and forth between data collection and theorisation and explore new directions, which provides the flexibility needed for this study. Additionally, an abductive approach encourages the researcher to encounter a confrontation among theory, method, and empirical data, which may take place in the form of complex (Van Maanen et al., 2007), breakdown (Alvesson and Kärreman, 2007), problem (Johanson, 2001), and dilemma (Dubois and Gadde, 2002). Therefore, a researcher’s reflexivity can be put to work in order to make sense of the interrelatedness of data and theory (Kilduff, 2006).

The following figure indicates how the dimensions of time and research setting are handled through the abductive approach in this study (Figure 5). The whole research process started from a broad interest in the internationalisation of firms in a transitional economy. China stood out and became an important part of this broad interest due to its persistence when the World Financial Crisis broke out around the middle of 2008. China seemed to be the last resort for economic growth, and international firms were putting significant resources into their operations in China.

As Figure 5 shows, this research interest then turned into a pilot study on four firms in China across 2009 and 2010. The result of the pilot study led to the formation of a preliminary theoretical framework, a question guide, formal contact with companies in the next stage, and other subsequent activities which can be seen in the following sections.

Still, new (or adjusted) directions emerged through systematically combining the interviews and archival data with the theories throughout the research process. The data collected from the first round of interviews indicates the influences from the external environment on the firms in their market entry processes appear to be more prominent than the primary theoretical framework had anticipated. Therefore, questions regarding changes in the host market and the impact on the firms’ operations were included in the second round of interviews (Figure 5). Likewise, the data from these interviews further suggests the changes in laws and regulations may have played an important role, which led the data collection toward archival documents to understand how the regulative institution changed over time.

Through the back-and-forth combining of empirical data and theory, the case time and research time are defined. As seen in Figure 5, while the research time covers 2009 to 2013, the case time has been adjusted from 2003-2009 (first interview), to the early 1990s to 2010 (second interview) and to 1980 through 2010 (archival data & third interview). These adjustments are made on the abductive logic to allow the relations between changes which happened in the focal firms’ behaviours and the changes which took place in China to be revealed. As such, this study combines past (1980-2010) and real-time observations (2010-2013), and addresses the potential disadvantages of longitudinal studies employing exclusively one
type of data source (Blazejewski, 2011; Pettigrew, 2012). The real-time observations provide the triangulation needed for the retrospective data to overcome the potential memory loss from the informant and outcome bias, while the retrospective data compensates for the historical context absent in the real-time data, and is less emotionally biased, or distorted on important facts (Piekkari, Plakoyiannaki, and Welch, 2010).

4.3. Pilot study

A small pilot study with four companies in China was conducted between 2009 and 2010. This pilot study was based on the research interest of internationalisation of firms in a transitional economy. Through personal contacts and acquaintances, I gained access to four foreign companies in Shanghai, China. The aim of this pilot study was to build more understanding of the operations of the firms in China and to identify suitable topics to formalise the study. My particular interests were the entry and expansion history of these firms, the critical events during their operations in China, their interactions with the local firms, and how they managed potential opportunities and risks that arose in the market (see Appendix 1 Interview Guide for Pilot Studies). I did two rounds of semi-structured interviews with each of them that lasted for 60-90 minutes (Table 5). Three of the four respondents chose to be interviewed in Mandarin Chinese, and the other interview was conducted in English. Interviews took place either in the office of the informant, or in a place chosen by the informant, e.g., coffee shop. All interviews were recorded with the consent of the informants, and later were transcribed.

Securing these interviews was a relatively smooth process, as most of these contacts were obtained through personal connections. However, the interviews themselves were not problem-free. On the first interview with Vincent Zheng, he announced his departure from a foreign venture capital firm and started his own financial advisory firm with immediate effect. I decided to continue the interview, but with the switch, the company he represented was now Chinese. I interviewed him a second time to see the growth of his company. Then, the company Teuco became unavailable after two rounds of interviews as the head of China operations was involved in a car accident and hospitalised for several weeks. As the China team was relatively small, every activity basically stood still and my informant decided to change jobs.
Figure 5. The abductive approach to combine theory and data

<table>
<thead>
<tr>
<th>Theory</th>
<th>Data</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Research interest:</strong> The internationalisation of the firm in an emerging economy (2008-2009)</td>
<td><strong>Pilot study:</strong> 4 companies (3 foreign, 1 Chinese) (2009.12 &amp; 2010.04) (Section 4.3)</td>
</tr>
</tbody>
</table>
| **Redefine theoretical framework to foreign firms in China & changes in operation (2010.09)** | **Swedish firms in China**

1st interview: 11 firms, focus period 2003-2010 (2010.11)

2nd interview: 6 firms, focus period 1990-2010 (2011.02-04) (Section 4.4) |
| **Through the data analysis of firms’ external environment, and firms’ market entry processes, 3 theoretical concepts (institutional change, market opportunity, and market commitment) emerged (2012)** | **Building archival data for Gov’t regulations & industry development (2012) (Section 4.5)** |
| Based on the theoretical concepts and data compatibility, and the quality of the data, 3 case firms were selected to present the empirical evidence of this study (2012) (Section 4.8) | **Data coding (2011-2012) (Section 4.6)** |
| A literature review was conducted to understand previous studies on these 3 concepts (2013) (Chapter 2) | **Data organisation and analysis (2011-2012) (Section 4.7)** |
| **3rd interview: 3 companies (HQ level), focus period 1980-2010 (2013.02-04) (Also in Section 4.4)** | **Manuscript of this study** |
Table 5. Interviews in the pilot studies

<table>
<thead>
<tr>
<th>Firm/Position</th>
<th>Date</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital First Partner</td>
<td>2009.0625</td>
<td>Capital First is a financial advisory firm that aims to assist Chinese companies with interest in external capital to restructure their finance and corporate governance and seek private buyers.</td>
</tr>
<tr>
<td></td>
<td>2010.0428</td>
<td>There were more firms interested in selling during the down-turn as access to capital became difficult. This brought potential business for Capital First. But finding interested buyers also became difficult as they were more aware of the risk.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Most of the private acquisitions do not need gov’t approval, unless it involves national interest. In certain industries, like gaming, foreign capital acquisition is still prohibited.</td>
</tr>
<tr>
<td>Elektroskandia Managing Director</td>
<td>2009.0626</td>
<td>Elektroskandia is a Swedish telecommunication equipment distributor present in China since 1999. It was later acquired by Dutch electronic equipment distributor Hagermeyer, and bought by French Sonopar in 2008.</td>
</tr>
<tr>
<td></td>
<td>2010.0427</td>
<td>Elektroskandia followed long-term customer Ericsson Mobile entering China, and became the supplier to other major mobile telecomm. Recently, it expanded to India using China as the operation base.</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Elektroskandia and Hagermeyer together ventured into various equipment distributions, and considered the distribution channels in China to be extremely fragmented. There were opportunities to enter these areas but some of these ventures turned out to be more challenging than expected due to the regulations and laws in China simply not being ready for these products.</td>
</tr>
<tr>
<td>International Shipping Logistics (ISL) General Manager</td>
<td>2009.0625</td>
<td>ISL is an Italian logistic consultant that entered China as a wholly-owned operation in 2006. It provides logistic arrangements mainly to two Italian clients for their inbound/outbound goods shipping.</td>
</tr>
<tr>
<td></td>
<td>2010.0427</td>
<td>ISL intends to identify more Italian companies in China and provide hassle-free, one-stop logistic services. The market for shipping services is fragmented and lacking coordination between land/sea/air transportations. Business and personal relationships with these carriers are important for securing smooth shipping schedules.</td>
</tr>
<tr>
<td>Teuco Key Account Manager</td>
<td>2009.0629</td>
<td>Teuco is a luxury Italian bathroom product supplier that entered China as a wholly-owned sales subsidiary in 2007. Product was sold through agents in HK &amp; Taiwan prior to that.</td>
</tr>
<tr>
<td></td>
<td>2010.0426</td>
<td>Since its entry, it targeted high-end development projects and established distributors in 1st and 2nd tier cities. It worked on multiple relationships with distributors (some carry multi-brands), developers (promote brand image), architects (they control design), and gov’t official (own funding or share in some large projects).</td>
</tr>
</tbody>
</table>
At the end of the pilot studies, the informants from ISL and Elektroskandia were hesitant to participate in future studies. Confidentiality and anonymity were offered, but these two informants declined to be interviewed in the future.

These pilot interviews were helpful in clarifying the research focus for the next stage. First, not only was there a stronger emphasis from these firms on seizing the opportunities than dealing with challenges, but also these opportunities seemed to evolve continuously throughout the time these international firms were in China. In other words, there seems to be a difference between the opportunities that these companies identified when they entered China, and the opportunities they are attempting to capture at the present time.

For example, ISL’s initial entry in 2006 was to extend service to two long-term Italian clients and provide shipping and logistics arrangements for the transportation of goods between their global factories. During ISL’s four years of operation in China, it became aware of the large presence of Italian companies and was keen to tap into their needs. The general manager of ISL China has since shifted fifty percent of her time from serving the existing two clients to looking for potential business. Similar situations can also be found in Elektroskandia. Throughout the years, it has grown from a shop for Ericsson, to a business serving other telecomm network customers, e.g., Nokia. It also expanded its sales destination to India using China as a base. Moreover, it now works with sister company Hagermeyer to expand its product offering to include safety products, such as chemical suits, breathing masks, oxygen tubes, etc. Therefore, firms seem to learn about the new market opportunities through their ongoing operations in China and subsequently change their activities.

Secondly, not only are the business activities and market opportunities evolving, but the industry, external environment, and government policy have experienced significant transitions throughout the years. Changes in the environment seem to have an impact on market entry and expansion of the firms. For instance, foreign distributors like Elektroskandia were not even permitted to establish in China when it entered the market in 1999. It found a loophole in the regulations, as there was no clause regarding distributing for foreign firms and registering in the Shanghai Special Economic Zone. Even though two years later, after China’s WTO entry, these regulations changed and allowed foreign distributors to obtain proper licenses, there were many areas where the laws and regulations lacked updates and caused difficulties for companies to operate. Regulations for products relating to safety, in particular, were absent. Elektroskandia’s intention to bring the chemical suit to market were scrutinised by much tougher regulations, and eventually caused unsustainable cost. The government finally modified the regulations after frequent communications for a year, but by that time Elektroskandia has decided to abandon this new venture.
Therefore, some findings emerged through these pilot studies. The market opportunities that firms pursue at the present can be rather different from the opportunities that attracted them to China in the first place. Subsequently, different activities are conducted to respond to the changing opportunities. The external environment of the firm seems to have great influence on their operations after the market entry. These findings also suggest that my interest in studying the process of development and change may be better suited to companies with a longer history in China. The longer their stay in China, the more changes they may have experienced. Their long duration of presence in China may allow me to observe not just the changes in the firms’ activities but also the transitions in the market.

An additional realisation from the pilot study arose on the personal level – there is an unavoidable relational cost from using personal relationships to gain access to companies, and this cost can become problematic to managing the quality of the data collection, and may further hinder said quality. The problem of using personal connections (guanxi) to obtain access to data is that you will be in debt for whatever you are asking. There is an invisible line embedded in the social relationship that you should not cross. The reality that I am “sort of” their friend seems to play against my capability to be a researcher as there may be information that “they think” I would know not to share (e.g., “this is a friendly chat”), or a friendly refusal for the availability of further academic investigation (e.g., “I am just helping a friend”).

For example, when these managers who are either friends of mine or those of my friend agreed to be interviewed, it means strings have been pulled and personal favours have been asked. These personal connections may prevent me as a researcher from investigating certain types of topics, and may limit the extent to which I can inquire for information. Moreover, these contacts through personal connections could easily decline further participation, and it would be much harder for me to do anything about it, as my role has been explicitly built into a social context, rather than that of a professional researcher.

Therefore, this realisation has also led me to choose to approach companies for the data collection process via a formal procedure, instead of through personal connections. This gives me better control over the research process and keeps the integrity of the data.

4.4. Collecting interview data

Through the pilot study, the research interest was further narrowed to foreign firms operating in China. More specifically, it is about the changes they made during their operations in China. The insights from the pilot study also suggested that a longer establishment of the firms may enable me to
observe more changes. Hence, the aim for this stage of data collection was to identify foreign firms with a long-term presence in China and conduct interviews with them.

This section documents the process I undertook to collect interview data, and addresses decisions I have made along the way. These interviews have taken place at multiple points of time and in an interactive process in order to achieve the confrontation that the abductive approach suggests. Interview is considered to be one of the most commonly used methods for collecting qualitative data for case studies, and this study has followed the guidelines suggested by Clark and Michailova (2004), Dillman (1978; 2006), Kvale (1996), King (2004a), and Silverman and Marvasti (2008) on interview planning, technique, and quality evaluation. The following sections will explain how I approached these foreign firms in China and established contact, the design of the interview guide for the first round of interviews, and the interview process.

Criteria for approaching foreign firms in China

Some criteria were set to identify suitable case firms. First, Swedish firms were chosen to represent the foreign firms in this study. Studies of Swedish firms make interesting cases, as a relatively small domestic market and strong product development capabilities often spur them to become pioneers in internationalisation. In addition, Swedish firms were among the first to enter China after economic reform was initiated, and the two countries share a special political affinity, as Sweden was the first Western country to establish diplomatic relations with the new China.

The reason to choose one country of origin for the firms was to reduce factors related to culture that may potentially differentiate the behaviour of firms because they are coming from different countries. Besides, psychic, cultural and institutional distances will be also similar for firms coming from the same home market and entering the same market.

A second criterion was set based on the longevity of the firms’ operation in China. Potentially, the longer these firms were in China, the more changes in operations they may have encountered, which may have been made in response to the change in the external environment. The long establishment also indicates that these firms have learned to adjust quickly to the changes in the environment so that they can continue operating. Thus, the annual report and other public records were examined to make sure these Swedish firms have operated in China for more than ten years\(^8\). Firms existing only as representatives were also eliminated, as representative offices under Chinese

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\(^8\) Ten years is an arbitrary figure. However, based on reports of several foreign chambers of commerce in China, foreign firms operating in China for more than ten years are significantly more profitable than those counterparts with less than ten years’ experience.
laws cannot perform direct business transactions or issue invoices. It would be rather unlikely for foreign firms operating in China for a longer period of time to still remain with representative status.

To study only survival firms may present a selection bias. Selection bias to favour survivors would be a serious concern if causal relationships, such as operational change leading to good performance, were the aim of this study (Geddes, 2003). As causality is not sought in this study, selection bias becomes less of an issue. On the contrary, these survivors can indeed serve as the extreme cases that shed light on the phenomenon under research (Yin, 2003).

The third requirement was to pursue firms that were not in the retail or service industries. Retail and service firms tend to have rather different patterns on internationalisation (Goerzen and Makino, 2007; Engwall and Wallenstål, 1988; Evans and Mavondo, 2002). Besides, the Chinese government only allowed foreign investment in these two industries after China joined the WTO in 2001, which makes the operation times of these firms relatively short. Thus, banks, consultancies, hotels and restaurants, airline companies, etc. were excluded.

The last criterion was to approach firms located in either the greater Shanghai or Beijing areas. The main reason for this consideration was to reduce the resources and time spent on logistic coordination. Shanghai and Beijing are two major business hubs for foreign business in China and companies located in these two areas also tend to have longer operation histories.

Establishing contact

During the summer of 2010, contact was made with both the Shanghai and Beijing offices of the Swedish Chamber of Commerce in China, to request membership lists of the Swedish establishments active in this market. A catalogue of Swedish firms operating in China, published by Swedish Trade in 2008, was also obtained. After consolidating these lists and catalogues, and multiple careful screenings based on the selection criteria, 32 Swedish firms were identified with which to make contact.9

On September 20, 2010, an email introduction to my research, with the University of Uppsala heading, was sent out to all 32 of these Swedish firms (Appendix 2 Letter for Interview Request). The aim of this introduction letter was to introduce myself and my research work, and to invite them to participate in this study. I received replies from eight companies expressing

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9 There are around 270 Swedish firms on the lists obtained from Swedish Trade and the Chamber of Commerce. More than one-third of them are representatives, and another third are governmental liaisons (Swedish tourism), retail (H&M, IKEA), or service (Radisson hotel, SAS). Among the rest, only about half of them have been in China for more than 10 years.
their interest. A second attempt at email introduction was sent on October 18, 2010. These emails were sent to firms that did not respond to my first attempt at making contact. A further six companies indicated a willingness to be interviewed. The second contact and a two-to-three week time interval are suggested by Dillman (1978; 2006). The aim of the second contact served as a friendly reminder to these managers to encourage them to respond to my previous attempt.

At the end, fourteen firms replied to the request for an interview. Eleven out of the fourteen accepted my request to interview, which corresponded to roughly a one-third response rate. Among these potential informants, one was located in Beijing and the rest resided in Shanghai. Follow-up contact was made immediately to schedule a convenient time for me to interview them in November 2010.

Question design

A semi-structured interview guide was developed based on a review of literature on internationalisation of firms and foreign market entry (Appendix 3 Interview Guide). The interview guide is divided into two main sections. The first section aims to understand the market entry processes of these Swedish firms and their expansions in China. The second section is devoted to understanding the challenges these firms faced from the external environment and how they responded.

Specific attention was given to the aspect of change in the firms’ operations (e.g., what was the main business when the China subsidiary started and what is it now) and in the external environment (e.g., in the last 5 years, what were the biggest challenges that affected doing business in China). Informants were also asked to identify these changes in a timeline. By design of the question guide, a central theme runs through every section. This theme is to view the internationalisation of the firm and their foreign market entry as a process. There were activities done in the past, there is something ongoing at the present, and there may be a plan for the future. There are built-in, path-dependent assumptions underlining this process view. In other words, the operations and activities that firms conduct at the present may have been influenced by the operations and activities they performed in the past.

Questions were phrased as open-ended, “how” types of questions to allow the informant to freely express their opinions. They were followed by questions like “when did it happen”, “what has happened”, and “who was

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10 The actual interval between two times of interview request was about 28 days. There was an important holiday at the beginning of October (Chinese National Day, a.k.a the “Golden Week”) and, in general, people were given at least one week holiday, and it is normal for a manager in a foreign company to take even more days.
involved” for further probing. Visual and graphic aids, e.g., a time line and network drawings, were also adopted to facilitate the discussion process. A few questions intended for understanding the informant’s opinion included the 7-point Likert Scale.

The interview guide and these questions were reviewed and discussed with academic peers. They were also pre-tested both on academics familiar with the literature and research topic for its theoretical relevance, and on foreign managers working in China for its clarity. Suggestions and advice from the pre-test were incorporated. The length of time needed to conduct this interview was also monitored and adjusted.

This interview guide was intended to serve as a blueprint to guide myself through the first interview with all the informants so that my understanding of each of them would be at a similar level. These rather detailed questions acted as reminders to obtain comparable information. At the same time, this guide was designed to give great flexibility to these informants to speak to what they thought was relevant. It was meant to allow me to probe any emerging topics that arose during the interview process (Uzzi, 1997).

The interview process and experience

Most of the interview data collected in this study was through face-to-face interviews. Face-to-face interviews provide the backbone of the primary data for this study. It is an important tool to gather first-hand descriptive data of the real world through an interactive dialogue between researchers and informants (Kvale, 1996). The immediate and direct communication in the face-to-face interview enables researchers to learn more than just words from informants; body language and emotional cues of the informants may also enrich the data (King, 2004a). Body language and emotional cues, such as facial expressions, can also provide chances for researchers to probe topics outside the predefined interview guide.

Additionally, telephone interviews were used in this study to supplement the face-to-face interviews. Telephone interviews are less restricted by the geographic distance, and can allow communication while either the informants or researchers are traveling. Further questions were also carried out through email exchanges. The benefits of using email exchanges for interviews lies in the fact that the time-delay nature of the communication may facilitate reflexivity from the participants and enable reflections and considerations (Markham, 2008; Morgan and Symon, 2004).

Face-to-face, telephone, and email interview were all employed in this study to collect data. Face-to-face interview was the preferred technique and was adopted in all first and second interviews; it also served as a good means to establish rapport between the researcher and informants. Telephone and email interviews were carried out where conducting face-to-face interviews was prohibited, or where there may have been a need for
follow-up questions or making clarifications. Providing the informants with the option to choose telephone or email as means of communication can significantly increase the likeliness of receiving a response from them. My experience indicates that it was important to be courteous in my response, and empathetic for the needs of these informants, because they will then be more willing to fit my interview appointment into their timetable even when they are traveling.

The validity of the interview data can cause concern due to response bias. Response bias refers to the distortion that happens when respondents deliver information inaccurately because of wrong judgement or faded memory (Mezias and Starbuck, 2003; Starbuck and Mezias, 1996), or because they are seeking social desirability and approval from the researcher (Holstein and Gubrium, 2004). Both forms of response bias can substantially reduce the validity of the interview data and affect the credibility of the research. A common approach to dealing with response bias, which has also been adopted in this study, is to avoid a single informant and use multiple resources for crosscheck purposes (Podsakoff and Organ, 1986; Yin, 2003). Thus, at least two informants were pursued from the same companies, and documents are requested for support whenever they are available. Another approach that has also been employed in this study to reduce response bias is to actively participate in the interview and consciously use “what” and “how” in the dialogues (Holstein and Gubrium, 2004). Through these “what”, “how”, “when”, and “why” questions, the researcher is less of a passive observant, but, rather, actively engaged in addressing the issues and concerns.

Using multiple informants for the same firm, supplementing with archival data, and playing the role of an active interviewer are all particularly relevant to the retrospective data collected in this study. As the informant’s memory may fade away and the actual details for events that happened a couple of years ago may have been forgotten, or the informant may have a biased view on particular issues and not present the whole picture, it can be difficult for a researcher to understand what has indeed happened in the past. I have always used the opportunities to interview the informant’s colleagues to do some cross-checking, and I actively search documents that either support or contradict their statements to make clarifications.

I also found that Chinese informants can be particularly unsure of what answer to give during the beginning of the interview. Thus, more ice-breaking, taking a slower pace, and doing less probing in the first half of the interview generally help to relax these informants.

Although researchers have raised concerns on using voice recording machines for conducting qualitative interviews in China (Tan and Nojonen 2011), I have received no rejections when asking permission and believe it
has not affected the interview quality\textsuperscript{11}. This might be because Swedish firms in general have a relatively open-minded attitude toward academic researchers. It also helped to emphasise that these recordings were to help me remember all the details from the interviews so that I could be more engaged in the conversation. I would also let these informants know that they could stop the recording at any time, should they feel the topic had become too sensitive.

To evaluate the quality of interview data, Kvale (1996) offers six criteria for researchers to make assessments. Kvale’s criteria are followed in this study for purposes of interview quality evaluation. Yet this study finds that the assessment of interview quality can be less straight-forward particularly when taking into consideration the purpose of the individual interview and cultural elements. For example, Kvale’s criterion number one is that answers from informants should be rich and spontaneous. Previous field work in China has indicated that due to cultural reasons, achieving such results is extremely difficult when interviewing Chinese informants (Nojonen, 2004). Similar observations also exist in this study, as one of my informants is a Chinese sales manager who talks about everything in limited detail. Nevertheless, this particular interview is a useful one and provides the necessary facts to fill in the big picture that his superior had spoken about previously. As such, information collected from this particular informant served to fill some gaps and cross-check the information received from other informants. What this shows is that each interview may serve a different purpose, and the quality of evaluation of the interview data ought to be placed upon the whole interview data set collected rather than single interviews.

Three rounds of interviews

During the period from November 2010 to April 2013, 41 interviews were conducted. These interviews were carried out in three separate rounds with different focuses and aims (Appendix 4 Interviews). A breakdown of the three rounds of interviews can be seen at the end of the section (Table 6).

The first round of interviews took place in November 2010 and data was collected from eight Swedish firms\textsuperscript{12}. A total of eleven interviews were made

\textsuperscript{11} On almost every occasion, I stopped recording the interview roughly 10 minutes before its end. I would use this “ending session” to quickly rephrase some of the questions and topics from the conversation to see whether my informants came out with any “off the record” information. There was actually little surprise and my informants have shown consistency with and without the presence of recording machine.

\textsuperscript{12} My initial list contained 11 firms that had indicated they were willing to participate in this round of study. However, the manager from one of them was not able to make time to meet me due to traveling and as a result, no interview was conducted with this specific firm. Another firm declined to be interviewed after a brief introduction was made. One firm, due to confidentiality, could not discuss anything relating to the client but was happy to provide their
with Managing Directors, CFOs, General Managers, and other managers of high position in the local subsidiaries. They are mostly expatriates from Sweden or other European countries, and the rest were Chinese from China and Hong Kong. The majority of the interviews were carried out in the informant’s office in Shanghai and Beijing, with a few exceptions which took place in locations that were convenient for the informants, e.g., hotels and coffee shops. They were mostly conducted in English, though the Mandarin Chinese language option was offered to Chinese managers should they be more comfortable speaking in their native language. All informants except one agreed to be recorded, and the interview time lasted from 45 to 120 minutes. Moreover, eleven supportive interviews were also conducted with industry consultants and academics from local business schools. The supportive interviews served the purpose of building an understanding of the development of the industries, as these informants were mostly either consultants with lengthy experience in a specific industry or professors who had close ties with the industries and taught in local EMBA programs attended by high-ranking business managers.

The aim of the first round of interviews was to understand the firms’ China entry and expansion, their past activities and operations, their present operations, and their plans for the future. There are therefore two reasons for interviewing high-ranking managers. Firstly, it has been argued in previous studies that decision-makers, such as CEOs and general managers, are the people who generally have a better picture about the operations of the company, particularly at the strategic level (Coviello, 2006). Since this study concerns the operations of these foreign firms in China, these high-ranking managers are the people who are aware of this type of information. Secondly, China is a hierarchical society and this is reflected in the business organisations (Tan and Nojonen, 2011). Authority and responsibility are rather concentrated in these high-ranking managers in the Chinese business context. In contrast, positions like purchasing and sales managers may carry limited knowledge and decision-making power in an organisation. The norm for middle management in China is typically to follow the instructions from the top, even though the decisions may contradict the experience the middle managers have with special products, customers or suppliers. As this study intended to uncover the activities and decisions made by these firms during their internationalisation in China, high-ranking managers became the major source of information.

The second round of interviews took place in China in March 2011. Among the eight firms met during the first round of interviews, two became unavailable, due to issues of time and interest. The aim of the second round of interviews was to understand the execution details of the specific view of Swedish firms operating in China. This interview was classified as a supportive interview instead.
activities and operations identified during the first interviews. As each firm identified their own activities, there was no interview guide for this round.

The second round of interviews included not only the high-ranking managers but also the middle managers, e.g., sales managers, and customers. Apart from the interviews with high-ranking managers still being conducted in English, the rest of the informants all preferred to speak Chinese. Although the majority of the interviews were carried out in their offices, there were some that took place in outside venues, such as, restaurants, private homes, and even a dairy farm. Thus, the duration of the interviews ranged from 30 minutes to a few hours, and involved various activities in between.

The office interviews were all recorded with permission. However, there were shorter interviews carried out during lunches, dinner banquets, and other occasions that made recording challenging. There were also times when the informants were clearly uncomfortable talking with the presence of a recording machine. I had to seek refuge with old-fashioned note-taking and wrote down whatever I remembered whenever it was possible. At the end, twelve interviews were completed in the second round of interviews, with an additional five supporting interviews conducted during this period. Following this round, two more firms declined further participation citing reasons of information sensitivity. As a result, only four firms continued to grant access for further inquiries after this round.

The third round of interviews took place during February and April of 2013. By this time, three firms were already identified to be the case firms for this study and requests for interviews were sent to their HQs. In total, four interviews were conducted with these three firms. Three of the four interviews were conducted with the corporate headquarters of the case firms, and in one case, an additional interview was conducted with the regional CEO. All interviews lasted between 30 minutes and one and one-half hours, and they were all conducted in English and recorded. These interviews mostly emphasised a few key issues identified by analysing the data with the theoretical framework. Thus, questions in the interviews were designed for deep probing, e.g., can you tell me what was done when this particular law was issued? The aim of the third round of interviews was to obtain richer information to shed light on the theoretical concepts.

This round of interviews also served the function of crosschecking the data collected in the previous rounds. I also presented preliminary analyses based on previous interviews and invited informants to provide comments and feedback. Through these discussions, the reliability of the data was further strengthened.
### Table 6. A summarised table for the three rounds of interviews

<table>
<thead>
<tr>
<th>Interview round</th>
<th>Time</th>
<th>No of firms interviewed</th>
<th>No of interviews completed</th>
<th>No of sup interview</th>
<th>Level of informant</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st</td>
<td>2010.11</td>
<td>8</td>
<td>11</td>
<td>11</td>
<td>Subsidiary</td>
</tr>
<tr>
<td>2nd</td>
<td>2011.03</td>
<td>6</td>
<td>12</td>
<td>5</td>
<td>Subsidiary &amp; customer</td>
</tr>
<tr>
<td>3rd</td>
<td>2013.02-2013.04</td>
<td>3</td>
<td>4</td>
<td>0</td>
<td>Headquarters</td>
</tr>
</tbody>
</table>

(total) 41 completed interviews

### 4.5. Collecting archival data

This study explicitly utilises historical archives and documents as major sources of data. Historical archives and documents are well recognised in the case study method in both a historical and contemporary context (Easton, 1995; Yin, 2003), and are extensively used in sociology, political science and economic history (Glaser and Strauss, 1967). Despite that management scholars in the early days explicitly applied them in studies (Johanson and Wiedersheim-Paul, 1975; Vernon, 1966), the use of historical archives by modern management researchers has been less substantial (Blazejewski, 2011; Welch, 2000), and mainly seen as supplementary (Rowlinson, 2004).

Historical archives and documents are argued to be well-fitted in IB research (Jones and Khanna, 2006). They can enable longitudinal research to cover a considerably longer period of time to observe process and change, and they can provide the thick descriptions that qualitative studies require (Mintzberg and McHugh, 1985; Mintzberg and Waters, 1985; Pettigrew, 1990; 1997; 2012). Particularly, historical archives can strengthen the time dimension and supply an “ecological view of reality and are characterised by complexity and nonlinear causation” (Burgelman, 2011: 599). As this study aims to explore the complex relation between operations of the foreign firms and evolving conditions in the external environment over time, archival data is deemed to be suitable.

This study follows Farjoun’s (2002: 854) seven suggestions for collecting various types of archival data: (1) obtain accurate data, (2) validate data with multiple sources of evidence, (3) organise the data in intermediate forms, (4) extract the most relevant material, (5) separate evidence from interpretation, (6) read history forward in constructing the narratives, and (7) present in the same fashion to allow the reader to derive a chain of evidence. The archival data collected in this study includes periodicals, newspapers, company archives, meeting notes, public records, governmental announcements, etc.

The archival data collected in this study falls into two categories. The first is for establishing the journeys of the firms to China, and the second is for the events that took place in China during this period of time. The archival
data for the firms includes company histories, annual reports, press releases, and presentations throughout the years, as well as past interviews given by the executive and managers. These documents were obtained mainly from the firms through their corporate websites, and in some cases were requested directly during the interviews. In addition, technical and industrial journals and newspapers in English, Swedish, and Chinese were scanned to identify relevant articles about these firms. These archival materials about the activities of the firms are valuable as they are rich in detail, which allows the researcher to have a better understanding of these past events.

For example, a Chinese news article published by Guangzhou Dairy in 1989 and found through an internet search contained an image in which a manager of one case firm was seen demonstrating the use of a machine to several Chinese technicians. Not only does this image offer solid support for the operations of the firm, it also enriches the story with details in terms the participants, the context, and the activities that took place.

For the archival data for the external environment, which had been redefined as the regulative institutions by this stage of research process, there are the documents stating the Chinese government’s policies, laws and regulations. They were searched for and collected from the State Council Gazette published by the Chinese Central Government. State Council Gazettes were available from 1954 and onward, which more than covered the duration of this study.

These archival materials for the laws and regulations are crucial to construct the regulative institutional environments of the firm, which may provide the researcher contextual information needed to form clues and explanations for the activities firms engage in at certain points in time. For instance, although the Wholly-owned Foreign Enterprise Law was promulgated at the fourth meeting of the sixth National People’s Congress in 1986, the State Council only announced the execution details at the end of 1990. Even though it was possible for foreign firms to enter China as wholly-owned enterprises between 1986 and 1991, it was much less likely for them to obtain approval and become registered.

The archival data for activities of the firms and the laws and regulations are mainly searched via Internet search engines (Table 7). The major historical data obtained for this research can be seen in Appendix 5 List of Archival Data.

Archival data can provide more detailed, less obtrusive, and less contingent information than interview data. Although historical archives and documents can reveal the development of specific events and reveal participating actors and surrounding context, there may be difficulties associated in utilising this data. A weakness of historical data can be the difficulties of verification (Welch, 2000). As this research also includes interview data as well as a cross-check done whenever possible, it is therefore less of a concern.
Table 7. List of internet search engines used in collecting archival data

<table>
<thead>
<tr>
<th>Type of archival data</th>
<th>Search engine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chinese periodical &amp; journals</td>
<td>CNKI (China Academic Journals Electronic Publishing House) &amp; CQVIP (Chongqing VIP Information)</td>
</tr>
<tr>
<td>Chinese news articles</td>
<td>Baidu</td>
</tr>
<tr>
<td>Chinese government documents</td>
<td>State Council Gazettes</td>
</tr>
<tr>
<td>English periodicals &amp; journals</td>
<td>EBSCOhost Business Source Premier, Google Scholar</td>
</tr>
<tr>
<td>General English &amp; Swedish news articles</td>
<td>Google, etc.</td>
</tr>
</tbody>
</table>

4.6. Data coding

All interviews except those few conducted at social functions (e.g., dinner banquets) are recorded. These recordings are transcribed by the researcher (me) into Microsoft Word documents in English. Non-English interviews are translated (also by me) into English during transcription. Together, nearly 300 pages of A4-size interview data were established.

The coding procedure follows the template coding method (King, 2004b). A template is a list of themes in a hierarchical structure, and the interview guide used for the first interview in this study (Appendix 3 Interview Guide) serves as the template for coding. As suggested by King (2004b), the higher-order codes are the main questions from the interview guide (e.g., Can you tell me when your company entered China, and how did it carry out?), while probing questions can serve as the lower-order codes (e.g., Who was the person initiating the decision? What kind of evaluation process had been done before the decision?). A code is a descriptive or interpretive label attached to a section of text to indicate a theme that researchers have identified. Then, the transcripts are coded systematically to identify sections relevant to the research interests.

Two advantages can be identified from applying template coding. Firstly, it provides the researcher the flexibility to rearrange codes when changing scope (King, 2004b). For example, “changes in laws” is initially a lower-order code that is intended to identify specific laws affecting the operations of the firms. It becomes apparent in a later stage that changes in laws and regulations are an issue of much relevancy to this study, and therefore is raised to a higher-order code. Additionally, template coding does not come with heavy prescriptions and epistemology assumptions (King, 2004b). The purpose for the template coding is to develop conceptual themes that are prominent across the cases, which will allow reflexivity and multiple interpretations. These two advantages are aligned with the characteristics of the data and the abductive approach employed in this research.
4.7. Organising and analysing the data

The interview and archival data were systematically combined through narrative, network mapping, temporal bracketing, time sequence mapping, matrix analysis, and quantification strategy. Employing several analytical strategies helps the researcher make sense of the data, particularly when the data in this study contains various sources of evidence and changes are traced in multiple levels across a 30-year period (Clark and Soulsby, 2007; Langley, 1999; Karhunen, 2007; 2008; Pettigrew, 1990; 1997; 2012).

In this thesis, the case narrative and network mapping strategies are employed to organise and present the data (Chapter 5, 6, and 7). The temporal bracketing, time sequence mapping, and quantifying strategy are adopted to analyse data (Chapter 8, 9 and 10). Although narrative strategy and quantifying strategy can be seen as the two opposite ends of a spectrum in process study, they complement each other with different focuses (Langley, 1999). While the narrative strategy offers stories that are anchored in time, the quantifying strategy supplies pattern and mechanism underneath the events. These strategies are both required from the point of the abductive approach, as both inductive and deductive logic can be applied in the process of organising and analysing data in order to establish a link between process and outcome (Pettigrew, 2012).

From employing various analytical strategies together with organising and analysing the data, this study is able to tackle different aspects of the processual data, and allows the underlining process to be revealed in order to answer the research questions.

More specifically, the narrative and network mapping strategies provide the understanding of the process of the market entry and expansion of the firms and the changes in the regulative institutions in China from a longitudinal perspective. The time sequence mapping and temporal bracketing strategies present the activities and events that led to the conceptualisation of the three concepts (i.e. institutional change, market opportunity, and market commitment) and show how they may connect to each other in time. Lastly, the three concepts and their sub-concepts (i.e. transitional and turbulent changes, structural and relational opportunities, and market commitment toward the host market, relationships and organisational integration) are further analysed through data matrices and the quantifying strategy to show their varying levels in different firms and periods. Together, the analysis shows that the relation of the institutional change and the market entry behaviour of the firm is evolving over time.

Narrative strategy

Firstly, a detailed narrative is constructed based on the interview and archival data to tell a detailed story of the internationalisation of the firm.
Narrative\textsuperscript{13} is a form used to explain sequences of activities, actors and events that may be teleologically linked through the narrator’s interpretation (Abell, 1987; 2004). Narratives, among other analytical methods, are the closest presentation of the raw data (Langley, 1999).

Case narratives can serve as the preliminary step to chronologically organising data (Eisenhardt, 1989), a presentation combining clarification and analytical purpose (Pettigrew, 1990), and the end product that demonstrates the deep connections (Dyer and Wilkins, 1991). In this study, narratives of these focal firms are constructed by chronological order. Interview and archival data are combined together to illustrate those activities undertaken by these focal firms during their China market entry and expansion, as well as the changes in laws and regulations in China during that period. The narrative of each firm consists of three plots – the entry phases (e.g., export, process of setting up), the establishment and expansion phase (e.g., sales and manufacture, subsidiaries expansion), and finally, the operation phase (e.g., collaboration with local actors, R&D).

The narratives of these focal firms are presented in Chapters 5, 6 and 7.

Network mapping

Network mapping refers to the visualisation of the connections between focal firms and other actors. A network map presents a snapshot of the network that can be analysed to understand the connections between actors (Hadjikhani, Lee and Ghauri, 2008; Uzzi, 1997), or be part of a series of network maps referring to different points in time in order to trace the changes (Fletcher, 1996; 2008).

In this study, network mapping includes two snapshots of the focal firms in two separate periods (1980-2001, 2002-2010). These snapshots intend to present the ego networks of the focal firms. Thus, the connections with external and internal actors are identified from the interview data, as they demonstrate how firms see themselves. These maps portray the connections that each focal firm perceives at that specific point in time, and the line connecting two actors indicates the existence of an exchange relationship. These network maps attempt to provide a visual understanding of how, and to whom, the focal firm is connected during its internationalisation process. The comparison of these two snapshots can contrast the change in how firms are organised and how they are connected to the outside world.

\textsuperscript{13} This study chooses to use narrative over the term story. Narrative and story, for some scholars are interchangeable (Abell, 2004; Langley, 1999; Pettigrew, 1990). However, for other scholars, narrative is an elaboration of symbolic material while story can contain conflicts, predicaments, trials and crises and call for choices, decisions, actions, and interactions (Gabriel and Griffiths, 2004). In this study, the narrative of the cases is less dramatic than a story but more rich than a narrative.
The presentation of the network map for these firms is included in each section of the individual case narratives presented in Chapters 5, 6 and 7.

Temporal bracketing
A temporal bracketing strategy is applied to separate the data into two successive periods (1980-2001 & 2002-2010). Bracketing, as Langley (1999) argues, can transform shapeless data into a series of discrete but connected blocks. The underlying assumption of the temporal bracketing strategy is that structures including formal and informal rules and norms constrain activities of the actor, while these activities may also serve to constitute those structures over time (Giddens, 1984).

This study employed the temporal bracketing strategy to make sense of the data and separate it into comparative units. The separation of temporal bracketing is normally based on certain discontinuities in the history (Karhunen, 2008), and in this study, I have chosen China’s accession to the WTO in December 2001 to be the delimiting point. After China entered the WTO, laws and regulations relating to foreign investment in China changed substantially, which is believed to have had a substantial effect on the market entry and expansion of the foreign firms (Peng, 2003). Using China’s accession to the WTO as a delimiting point might also appeal to a natural experiment logic, in which the observations of the internationalisation processes of the firms are split into a treatment group (the introduction of deregulations, period 2), and a control group (period 1).

Temporal bracketing is used to facilitate the analysis of time sequence mapping and data matrices in Chapters 8 and 9.

Time sequence mapping
Time sequences present events and activities in their temporal context. A sequence, by definition, refers to “an ordered list of elements” (Abbott, 1990; 1995). Through the time sequence mapping, activities are placed chronologically to allow the sequentiality to be revealed. Time sequences were employed by past studies to trace the internationalisation of firms (Johanson and Wiedersheim-Paul, 1975) and strategy changes in firms (Mintzberg and McHugh, 1985; Mintzberg and Water 1982).

Understanding the flow of events over time is a crucial requirement for the process study, and the time sequence enables the researcher to observe process in action directly and explicitly (Pettigrew, 1997). Furthermore, the time sequence indicates a path dependence of the process, and the events in the past are “alive in the present and may shape the emerging future” (Pettigrew, 1990).

In this study, the time sequence map focuses on the events or activities observed in the empirical data leading to the theoretical concepts. There are
two rules applied when the time sequence map is drawn: (1) a clearly defined concept is to be explained (i.e. institutional change, market opportunity, and market commitment), and (2) the sequence is to be built backward through time from the particular outcome (Buttriss and Wilkinson, 2007). Therefore, each time sequence map consists of three lines corresponding to the three concepts studied in this thesis, i.e. institutional change, market opportunity, and market commitment. After that, the events of these three sequences are traced backward from the present. While the events of the firms are identified through the interview data, the changes in the regulative institutions are identified through the archival data.

The time sequence maps of these three firms are presented in Chapter 8.

Data matrices and concept observations

A data matrix is a way to present qualitative data as well as make an analysis. Matrices are essentially tables that consist of columns and rows representing theoretical concepts and observations from research units. Data matrices were initially introduced by Miles and Huberman (1984) as a device to present data. Yet the decisions of the columns and rows need to rest on theoretical analysis of the data. Hence, data matrices can possess both a descriptive and an explanatory function (Nadin and Cassell, 2004).

Data matrices are frequently adopted by researchers conducting analyses on multiple units of research, e.g., firms (Hong and Nguyen, 2009; Miozzo and Yamin, 2012). In this study, data is analysed through a matrix containing the theoretical constructs and their sub-concepts. Observations are made to identify these events and are presented in Chapter 8: Individual Case Analysis.

The concept of institutional change refers to the process of regulations and laws being modified. Based on the origin, aim, orientation, speed and predictability of these changes, they can be separated into transitional change, and turbulent change. Table 8 shows how transitional and turbulent changes are observed from the case through the data analysis.

Table 8. Observations for institutional change

<table>
<thead>
<tr>
<th>Concept</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td>Long-term oriented changes in regulative institutions based on existing government policy. These changes are expected; they take place gradually, and aim to facilitate the development of the market and industries.</td>
</tr>
</tbody>
</table>
Turbulent change are short-term oriented changes in regulative institutions in order to recover from market shocks or crises. These changes are unexpected; they are implemented quickly, and aim to quickly restructure the market or industries affected by the market shock. A group of regulations and laws issued simultaneously in a relatively short period of time. They are triggered by market shocks or crises, which have caused disruptions throughout the market or industries. These regulations are issued to respond to the market shocks and crises.

The concept of *market opportunity* describes the recognition and interpretation of market information that is believed to lead a firm to a desirable future situation. Based on the origin, the nature, and the characteristics of the market opportunities, they can be divided into two subsets of opportunities: *structural opportunity* and *relational opportunity*. Table 9 shows how structural and relational opportunities are observed from the empirics through the data analysis.

**Table 9. Observations for market opportunity**

<table>
<thead>
<tr>
<th>Market Opportunity (MO)</th>
<th>Concept</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural opportunity</td>
<td>This type of market opportunity is recognised by a firm from receiving and interpreting information obtained through public sources.</td>
<td>Information known through public announcements, such as the promulgation of new laws, or can be collected through observing the market and industries.</td>
</tr>
<tr>
<td>Relational opportunity</td>
<td>This type of market opportunity is recognised by a firm from receiving and interpreting information obtained through exchange partners.</td>
<td>Information only known within a small circle of partners, such as customers or suppliers, or other industrial and non-industrial actors. This information may need to develop further through collaborating with partners.</td>
</tr>
</tbody>
</table>

Firms’ *market commitment* refers to a sequential business activity that firms conducted during the market entry and expansion. Based on their aims, the type of resources involved, and the unit controlling these activities, they can be categorised into three types of market commitment: toward the *host market*, *relationships*, and *organisational integration* (Table 10).
Table 10. Observations for market commitment

<table>
<thead>
<tr>
<th>Market Commitment (MC)</th>
<th>Concept</th>
<th>Observations</th>
</tr>
</thead>
<tbody>
<tr>
<td>Host market</td>
<td>Type of market commitment firms invested to be able to operate in host market legally and functionally.</td>
<td>Business activities that firms undertake to enable and facilitate the establishment and expansion of the foreign subsidiary. Tangible resources like financial capital are normally required, and these activities are likely to be controlled by headquarters.</td>
</tr>
<tr>
<td>Relationships</td>
<td>Type of market commitment firms invested to increase and sustain reputation among local partners.</td>
<td>Business activities that firms undertake to establish and strengthen connections with local partners. Intangible resources like time are normally required, and these activities are likely to be controlled by subsidiaries.</td>
</tr>
<tr>
<td>Organisational integration</td>
<td>Type of market commitment firms invested to contribute to the collaboration between subsidiaries and headquarters.</td>
<td>Business activities requiring the collaboration between local subsidiaries and other subsidiaries in nearby markets, and headquarters. Both tangible and intangible resources may be required, and these activities are likely to be participated in by both subsidiaries and headquarters.</td>
</tr>
</tbody>
</table>

Quantifying data

Quantifying data is a strategy used by researchers to make sense of the qualitative processual data and understand how patterns change over time. It is usually done through systematically recording the frequency of certain events or activities in the data based on the predetermined concepts and characteristics (Clark and Soulsby, 2007; Romaneli and Tushman, 1994). A quantifying strategy assists in data reduction which allows for theoretical conceptualisation (Langley, 1999).

Through the data matrix analysis, observations on the transitional and turbulent changes, structural and relational opportunities, and commitment toward host market, relationships, and organisational integration are made. The occurrences of these observations are counted and recorded. Based on their frequency and the type of activities shown in Chapter 8, a level (low, medium, high, and very high) is assigned to these sub-concepts for period 1 and period 2 in Chapter 9. For example, four laws and regulations were categorised as transitional change for DeLaval in period 1 (revisions of
standards in 1985, 1986 and 1999, and the Shopping Basket Program), but none of these changes explicitly targeted the dairy industry. Therefore, the level was considered low.

The result of data quantification is shown in Table 39 and Table 40 in Chapter Nine: Cross-Case Analysis. Additionally, the levels of these sub-concepts are compared to each other in periods 1 and 2, respectively. These results are further utilised for analysis in Chapter 10: Cross-period Analysis. The levels of these sub-concepts are combined to present the changes across the period. Even if the findings seem to indicate relations, there is no correlation made on the abstract level the data quantification strategy.

Although the quantifying strategy may efficiently reduce the complexity of the processual data to help the researcher to discover patterns of change over time and reach a simple relationship (Namey et al., 2008), Langley (1999) suggests the use of it ought to combine other approaches, e.g., narrative strategy, to allow the contextualisation of the abstract data. In this study, the use of the quantifying strategy has been based on the case narrative and other analysis methods that focus on time and stories. Lastly, even if the findings seem to indicate relations, there is no correlation made on the abstract level the data quantification strategy.

4.8. Three case firms – DeLaval, Elekta, and Höganäs

This study has included three Swedish manufacturing firms, DeLaval, Elekta, and Höganäs, which all have distinguished histories and well-known reputations for providing technologically advanced products and quality services in their respective fields.

DeLaval, Elekta, and Höganäs entered China in the late 1980s and early 1990s. They have experienced similar stages of development in China and all started with random exports directly from Sweden. All of them set up JV subsidiaries in China, and these JVs were switched to wholly-owned enterprises after a few years. Their activities in China have involved sales, manufacturing, and research and design. In addition, they have also initiated collaborative projects with various actors in the last few years, e.g., engaging in local knowledge building and elevation activities. A table with a brief summary of the characteristics of these firms can be found at the end of the chapter (Table 11). DeLaval, Elekta, and Höganäs are all market leaders in their respective industries. Throughout their time in China, they have shifted their business activities significantly in order to address market development and as well as the changes in the government’s regulations.
Table 11. Firm characteristics

<table>
<thead>
<tr>
<th>Company</th>
<th>DeLaval</th>
<th>Elekta</th>
<th>Höganäs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business</td>
<td>Agricultural machinery</td>
<td>Medical equipment manufacture</td>
<td>Basic iron manufacture</td>
</tr>
<tr>
<td>SIC</td>
<td>28300</td>
<td>3310 (U.K.)&lt;sup&gt;14&lt;/sup&gt;</td>
<td>24100</td>
</tr>
<tr>
<td>Major product</td>
<td>Milking machine</td>
<td>Linac, Gamma Knife, software</td>
<td>Iron powder</td>
</tr>
<tr>
<td>Industry</td>
<td>Dairy</td>
<td>Medical device</td>
<td>Automotive</td>
</tr>
<tr>
<td>Export to China</td>
<td>1979</td>
<td>1982</td>
<td>1992</td>
</tr>
<tr>
<td>Rep. Office in China</td>
<td>1985</td>
<td>1995</td>
<td>-</td>
</tr>
<tr>
<td>Current business activities in China</td>
<td>Basic manufacture, sales, sourcing, R&amp;D</td>
<td>Manufacture, sales, sourcing, R&amp;D</td>
<td>Basic manufacture, sales, R&amp;D</td>
</tr>
<tr>
<td>Employee numbers in China subsidiary</td>
<td>120</td>
<td>340</td>
<td>75</td>
</tr>
<tr>
<td>Market share in China</td>
<td>35%</td>
<td>35%</td>
<td>35%</td>
</tr>
</tbody>
</table>

These three firms fit the requirements for the research focus that this study set out to understand. Throughout their market entries and expansions in China, they experienced various modes of operation, and expanded into different business activities. They also encountered changes in the regulative institutions, which affected some of their operations. Strong similarities can also be seen in terms of their long histories in China, which offer rich information for individual, cross-case, and cross-period analysis.

Data quality of these three firms also plays a determining role, as they are all very responsive in accepting academic investigations, and generously supplying the additional data requested. Data quality is utterly one of the most important factors in deciding whether a qualitative case study can achieve success (Dyer and Wilkins, 1991).

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<sup>14</sup> Elekta’s Linac is registered in the U.K., while the Gamma Knife is mainly outsourced to a few Swedish manufacturers.
The Case Narratives and Network Maps of DeLaval, Elekta, and Höganäs

The next three chapters present the market entry and expansion to China of DeLaval, Elekta, and Höganäs. The narratives provide a background for understanding the internationalisation of these case firms, their market entry to China, and continuous expansion within the host market. The beginning of their market entry and expansion to China began in 1980, when China had just experienced economic reform and implemented the Open Door Policy to initiate international trade. These case narratives end in 2010.

The aim of these three case narratives is to present the processes of the market entry and expansion of the case firms, the changes in regulations and laws that occurred in parallel, and how these changes may have had an impact. As such, the case narratives serve as an important basis for the analyses that follows these three chapters.

Additionally, each case narrative contains two network maps: one from the time when the case firm set up a subsidiary in China, and one that presents its status in 2010. These two maps from different points in time provide a visual demonstration of the progress made by these firms over time.
DeLaval, formerly known as Alfa Laval Agri, is a market leader in designing, manufacturing and supplying equipment and systems to dairy farms for milk production and animal husbandry. In 1991, TetraPak acquired Alfa Laval group and merged its own agricultural business with Alfa Laval Agri (ALA). Later in 2000, Alfa Laval Agri changed its name to DeLaval (Jackson, 2005). DeLaval represented roughly 11 percent of the total TetraLaval group’s sales in 2011 (TetraLaval, 2011).

DeLaval is known for technological advancements and quality products in milking system (Jackson, 2005; Edwards, 1949; McDowell, 1930). Its products include equipment for milking, herd management, animal traffic control, feeding, cooling, manure handling, ventilation and energy recovery (TetraLaval, 2011). Milking equipment and systems represent nearly half (48 percent) of the sales activity in DeLaval as indicated in Figure 6. Currently, DeLaval employs 4,077 people and is present in more than 100 markets, with 37 local sales organisations and 16 manufacturing units. DeLaval’s research and development budget is equivalent to 3 percent of its annual net sales, and it has three Research and Innovation (R&I) centres located in Sweden (Hamra Farm, Tumba), the U.S. (Kansas City), and Holland (Groningen).

Figure 6. DeLaval’s sales split 2010
DeLaval was established by Gustaf de Laval in Stockholm in 1879, when he sold his first milk-cream separators to dairy farms. This hand separation machine was a great success for DeLaval and accounted for 70 percent of the company’s sales at that time (Zander and Zander, 2005). DeLaval has been an early exporter since its establishment, as most of these machines were sold to foreign markets due to the relatively small size of the dairy industry in Sweden. In fact, Table 12 shows that DeLaval’s U.S. subsidiary (known as Lavalco) was opened in 1883, which is the same year that DeLaval legally registered in Sweden. DeLaval experienced significant international growth in its first 20 years of operations and established operations in South Africa (1884), New Zealand (1884), U.K. (1886), Canada (1899), and Germany (1901).

**Table 12. Brief introduction to DeLaval**

<table>
<thead>
<tr>
<th>Founded</th>
<th>1879</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakthrough</td>
<td>Invented milk-cream separators (1879), milking machine (1917)</td>
</tr>
<tr>
<td>Major product</td>
<td>Milking machine</td>
</tr>
<tr>
<td>First foreign subsidiary</td>
<td>U.S. (1883)</td>
</tr>
<tr>
<td>First Asian Subsidiary</td>
<td>New Zealand (1884)</td>
</tr>
<tr>
<td>Global operations</td>
<td>37 local sales subsidiaries, 16 manufacturing units, 3 R&amp;D centres</td>
</tr>
<tr>
<td>Employment</td>
<td>4,077</td>
</tr>
<tr>
<td>Sales outside Sweden</td>
<td>99%</td>
</tr>
<tr>
<td>Main competitors</td>
<td>GEA (Germany), Orion (Japan)</td>
</tr>
</tbody>
</table>

DeLaval’s international operations played a crucial role for its long-term growth in the early days, both in terms of group finances and technology development. During the period of 1903-1910, profits from its U.S. subsidiary not only paid the entire dividend to shareholders back home, but subsequently funded further international expansion (Jackson, 2005). Furthermore, DeLaval’s international operations also allowed it to adopt advanced technology from abroad, e.g., better machine tools and production planning from the U.S. and pipeline plants developed in New Zealand. In addition to the milk-cream separator technology that helped to launch the company, DeLaval invented several other important technologies for the dairy industry: lactocrite (1885), the milking machine (1905), the plate heat exchanger for milk pasteurisation (1930), Hydropulse (1966), the Alpro Herd Management System, and the Voluntary Milking System (1998) (DeLaval, 2005).

DeLaval has a long history of providing technologically advanced products, and has been active in the Asia Pacific region since entering New Zealand in 1884 at the early stages of international expansion. DeLaval’s next Asian venture came in the 1970s when it entered Japan. However
Asia’s dairy industry (including Japan’s) grew slowly, as milk was traditionally considered either “a medicine or a special health drink for the sick or persons of weak constitution” (Kiple and Ornelas, 2000). The annual production of raw milk in Japan began to grow after World War II, yet milk was largely produced by small farmers who kept up to three cows alongside their rice field. In 1965, the average number of dairy cows per farm still averaged between three and four, and remained rather low throughout the 1970s. As of 2000, this figure had still only increased to 53 (Japan Dairy Council, 2012).

DeLaval’s main competitor is GEA from Germany. In Asia, Orion from Japan and some local firms also compete in more basic milking system.

DeLaval’s export and the establishment of its sales subsidiary in China

Although China is currently the second largest dairy consumption market in the world, a totally different situation existed there thirty years ago. At the beginning of the 1980s, the dairy industry in China was relatively small and immature. There were dairy processing factories established in Inner Mongolia and Guangdong, and production of milk powder in Shanghai and Beijing since the 1950s, but overall dairy production was small and the industry was practically non-existent (Zhang, 2008).

Poor economic conditions, lack of policy motivation, and the natural diet preferences of the Chinese people were the major factors limiting the development of the dairy industry. The Great Chinese Famine that occurred between 1958 and 1961 is believed to have caused in excess of 15 million deaths. Severe starvation during the Cultural Revolution had also restricted feed sources for cattle. Dairy production and related standards did not receive much attention from the Chinese government during this period. The first dairy standard was issued by the Ministry of Light Industry (MLI) in 1958. However, it took nearly 30 years before the Ministry of Agriculture (MOA) issued an updated version.

Moreover, dairy products had never been an essential part of the traditional Han Chinese diet (Wang et al., 2010; Zhou et al., 2002). A great proportion of Chinese are lactose intolerant, which will lead to discomfort after consuming dairy products, particularly fresh milk (Fuller et al., 2004; DII, 2008a). Subsequently, dairy consumption was extremely low up until the early 1990s (Garnaut and Ma, 1993; Fuller et al., 2006). According to Garnaut and Ma (1993), Chinese were consuming less milk in comparison to other Asian countries until the early 1990s. However by the mid-1990s,

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15 Han Chinese composes about 90 percent of the Chinese population.
consumption of milk began to grow in cities located in China’s coastal area as they experienced economic development, increased urbanisation and exposure to international influences.

DeLaval received its first order from China in 1979, following the country’s economic reform. The import order was placed by Shenzhen Guangming Huaqiao dairy farm for a pipeline milking system with 24 slots. A few more exports to China followed this initial order. Guangzhou City’s dairy and Shanghai Bright’s dairy farm, for example, also acquired DeLaval systems in the early 1980s. As a result, Alfa Laval group opened a sales office in Hong Kong in 1983 and a representative (Rep.) office was established in Beijing in 1985 to collect market information and assess market potential. As the rep. office could not conduct trading business directly, the export operations were arranged through Hong Kong.

During the early 1980s, exports to China represented an insignificant proportion of DeLaval’s total business. Based on these limited exports, developing further market activities in China was seen as challenging and little information was gathered about these customers.

“...we didn’t really know (these details) and we didn’t really follow up unless we had a good reason to do so”

(Interview with Corporate Training & Development Director, DeLaval International AB, 2013).

Yet the consumption of milk in China was projected to grow in the following decade, and the market penetration rate for milking machines in China was extremely low, with less than 0.5 percent of dairy farms equipped with any type of milking machine. The Chinese government had also recently updated regulations on milk quality (Analytical Methods for Milk and Standards for Sterilisation of Milk, 1985; Standards for the Qualifications of Raw and Fresh Milk received from Farms, 1986, Appendix 5). While the abundance of cheap labour in China would suggest that full automation milking systems might not be of interest to local dairy farms at this point in time, a basic milking machine could attract some local customers keen on adapting to advanced technology.

“If you looked at the dairy industry in China even 10 years ago, we didn’t see full automation made any sense as this country had a big labour pool, many of whom were in the countryside.”

(Interview with the Director for Competence Development, DeLaval (Shanghai), 2010)

In 1986 DeLaval acquired a New Zealand milking equipment manufacturer named NuPulse. NuPulse was known for its simple milking systems and believed these might be a good fit for the Chinese dairy industry, given its stage of development at that time. Therefore, although DeLaval had yet to
see clear potential for its more sophisticated systems, it supported NuPulse’s interest in searching for opportunities to expand in China.

NuPulse’s search for Chinese partners began in the northern part of China and also included discussions with Nanjing Light Machinery Manufacturer, but no agreements were reached. However, NuPulse refused to give up and after some negotiations through the Guangzhou government, a JV was eventually formed in 1989, together with Guangzhou’s government-owned Wanbao group (Zhou et al, 2010; Guangzhou Daily, 1989).

Therefore, China became NuPulse’s first foreign market, and at the same time, made Guangzhou the first location for DeLaval to be formally established in China. Wanbao-NuPulse was the first Sino-foreign JV involved in the trade of milking machines in China (Guangzhou Daily, 1989). The JV aimed to import NuPulse’s machines while reducing the cost of its product to Chinese customers by localising certain components. Although a JV form of entry was not necessary for an agricultural machinery company, NuPulse felt the connection with a local government-owned company would help to pursue the potential with local state-owned dairy farms. As seen in Figure 7, Wanbao would focus on making contacts with local dairy farms, and NuPulse would import machines from New Zealand, and try to localise certain components to reduce the cost.

After the establishment of the JV, Wanbao-NuPulse received several new orders from dairy farms in Shanghai, Nanjing, and Hebei. NuPulse also assigned an expatriate manager in Guangzhou to oversee the operations. However, promoting milking machines remained a challenge and sales of NuPulse’s machines were small. Even though NuPulse’s machines were relatively simple, they were still much more expensive than average dairy farms could afford. Dairy farms simply did not understand the benefit of machine milking, and had no incentive to pay for an expensive machine as they had no difficulty finding low cost labour. Milk quality was also not a concern for dairy farms, the government, or the consumer at this stage. Fundamentally, the dairy industry was hardly an industry per se due to the low volume of activities, and the industry association was yet to form.
Figure 7. DeLaval China’s network map in period 1 (snapshot in 1990)

- DeLaval HQ, Sweden
- DeLaval/NuPulse China
- NuPulse, New Zealand
- Guangzhou Govt
- Guangzhou Wanbao
- Customers: State-owned dairy farm, 500-1,000 Cows

Diagram notes:
- Direct control
- Connection
- Organisations belonging to DeLaval
- Organisations not belonging to DeLaval
DeLaval’s wholly-owned subsidiary in Shanghai and the growth of China’ dairy industry

Until the late 1980s and beginning of the 1990s, China’s dairy industry consisted largely of small state-owned dairy farms and processors. The dairy supply chain was not well established, and it was not easy for the general public to access milk or other dairy products.

In 1989, the MOA initiated the “Shopping Basket” program to ensure perishable foods, such as milk, eggs and vegetables would be produced in sufficient quantities and become more easily available to the general population so as to improve their diets. Provinces were encouraged to establish dairy farms, and new policies made land available to people for use in raising a few cows in their backyard. Many people rushed to capitalise on the offer and become backyard dairy farmers. Therefore, the MOA’s shopping basket program also provided a significant stimulus to the dairy industry in China. As can be seen from the figures in Table 13, both the number of dairy cows and the production of milk increased substantially in the 1990s (Zhou et al., 2002).

Table 13. Figures on cows and milk production in China between 1949-2006

<table>
<thead>
<tr>
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<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>No of cows</td>
<td>120,000</td>
<td>480,000</td>
<td>2,942,000</td>
<td>4,420,000</td>
<td>13,600,000</td>
</tr>
<tr>
<td>Milk production (tonne)</td>
<td>200,000</td>
<td>880,000</td>
<td>5,081,000</td>
<td>8,067,000</td>
<td>36,000,000</td>
</tr>
<tr>
<td>Milk Consumption (kg/ per capita)</td>
<td>1.8</td>
<td>1.0</td>
<td>4.8</td>
<td>7.8</td>
<td>9.1</td>
</tr>
</tbody>
</table>

As the market developed, a few dairy conglomerates were formed in the mid-1990s, including: Yili (1993), Sanlu (1995), Bright (1996), Sanyuan (1997), and Mengniu (1999). Among them, Bright (Shanghai) and Sanyuan (Beijing) were state-owned dairy processors with their own dairy farms. Yili and Mengniu (both from Inner Mongolia) and Sanlu (Shijiazhuang) were largely reliant on the milk produced by small backyard dairy farms that owned between two and five cows. During this period, foreign dairy processors, such as Nestlé (1990), Danone (1992), Kraft (1993), Parmalat (1995), and FrieslandCampina (1996), were also attracted by the potential growth in China and entered the market.

The Chinese dairy industry was finally beginning to take shape, and the Chinese Dairy Industry Association (CDIA), and the Dairy Association of China (DAC) were also formed in 1995 and 1999, respectively. Two new laws relating to the agri-food industry were also issued by the Chinese government: the Agriculture Law (1993) and the Food Hygiene Law (1995). The standards for the sterilised and pasteurised milk were also updated in 1999. Although these changes in laws and regulations did not have much...
direct impact on the dairy farming, together with the increasing milk consumption and production, DaLaval began to see the potential growth in the dairy industry based on its experience elsewhere in the world.

Observing the market shift, DeLaval made the decision to fully integrate NuPulse, and bought out its JV partner Wanbao in 1995. Wanbao-NuPulse was renamed DeLaval China (Alfa Laval Agri China at the time) and became a wholly-owned subsidiary controlled directly by headquarters in Sweden. Expatriate managers were sent from Sweden to oversee the subsidiary operations in Shanghai. Through this move, however, DeLaval lost its ties with the Guangzhou government and the state-owned farm customers in that region. Moreover, Wanbao sought collaborations with a Japanese dairy equipment producer to begin its own production of milking machines for the Chinese dairy farms.

DeLaval China moved the subsidiary from Guangzhou to Shanghai, where it employed a staff of 21. DeLaval’s office relocation provided a better chance to access to the growing base of potential customers located in the Northeast of China. In the past, the dairy sector had been crowded in the Southeast coastal regions of China, particularly the Yangtze River Delta and other urban areas like Beijing, e.g., Bright (Shanghai) and Sanyuan (Beijing). Most milk was consumed here, as economic development and urbanisation was occurring faster in these areas than in other parts of the country. Since the cold transportation chains were not established in China at this time, dairy farms needed to be close to the cities to provide fresh, pasteurised milk. However, due to land availability in southeast coastal areas, these urban dairy farms were restricted in size and were facing difficulties with access to feed, issues of animal health, and pollution. Obtaining government permission to expand dairy farming operations in these areas became extremely difficult. Milk production thus gradually migrated to the Northeast of China.

DeLaval chose a suburb location in Shanghai to allow potential expansion, and increased employee numbers in order to be able to interact with local customers directly, and thereby learn their preferences, ways of doing business, and the elements of business transaction considered to be important. DeLaval China’s sales remained low after the relocation. By 1999, their net invoice was just over 1 million euros, and the number of employees had increased to 30 people. The milking machines DeLaval sold were imported directly from Europe, and the operation in China remained as a sales office.

Eventually, the growth of the dairy industry in China began to show in DeLaval’s sales. From 1999 onward, DeLaval’s invoice volume grew nearly 50 percent every year, and reached 16 million euros in 2004. DeLaval’s office moved to a more spacious location to allow the recruitment of more

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16 High Temperature Short Time (HTST) pasteurisation method.
people to handle the growing business. By 2005, DeLaval China employed 128 staff, triple the number in 1999. DeLaval also established a factory for hygiene products, and an assembly factory around 2004 and 2005 to provide better service to the customer. Furthermore, a regional sales office for East Asia was formed in Shanghai in 2002 to oversee sales activities in China, Korea, and Southeast Asia. Yet 90 percent of the business it handled was from China.

DeLaval also gradually expanded its customer base and provided solutions ranging from the basic to the most sophisticated and advanced products in the market. Unlike their counterparts in Europe and the U.S., the local dairy farmers and dairy processors were relatively inexperienced since the entire dairy industry in China was in its beginning stage. The delicate matter of ensuring a stable milk flow from producer to processor provided a strong incentive for DeLaval to work closely with TetraPak and various actors across the dairy supply chain.

*In any developing market with a volatile supply situation and increasing demand, there is greater need for dairy processors to work with DeLaval and producers. There is a very big need for DeLaval to work with TetraPak because we need to understand what dairy processors are looking for. But there is an equal need for Tetrapak to work with DeLaval because dairy processors need a stable supply of quality raw milk.*

*(Interview with the Director for Competence Development, DeLaval (Shanghai), 2010)*

Through these close collaborations, DeLaval was able to participate in several large-scale projects in the north-eastern part of China. Most of the Chinese dairy farms and processors were also aware, from DeLaval’s long-term presence in China, of its reputation for being a total solution provider. Although there were other international players in this segment, such as GEA from Germany and Orion from Japan that had both entered China after 2000, DeLaval remained the market leader with a 50 percent share of the market. DeLaval is consistently aware of the cost structure and strives to become more competitive in production, as Chinese customers are generally more concerned with the cost and value of the product offering than the technology applied. In addition, DeLaval consciously maintained its reputation by adopting a multi-layer customer feedback system in China to ensure customers were satisfied with the products and services received.

The Chinese dairy farm customers ranged greatly in size. At one end of the spectrum there were the medium- to large-sized farms with more than 500 cows that needed high levels of automation. For these medium- to large-sized dairy operations, DeLaval enjoyed a leading position in the mid- to high-end segment of the market. DeLaval had been working with big players in several existing and new farm projects. With the policy encouragement and increasingly intense competition, dairy processors had more incentive to
adopt advanced technology to ensure a stable supply of milk production, as well as to control milk quality and reduce labour costs. Large farms like C.D. Dairy Farm, which has 1,500 cows, require higher automation for milking rather than relying on manual labour.

*DeLaval was the only milking equipment company in China that was able to provide a whole range of products and it emphasised quality and after-sales service... Yes, the cost to install DeLaval’s machine was relatively higher because the machine is imported, but the quality was reliable! I would actually prefer a wholly-imported machine than something assembled in various places.*

*(Interview with the President, C.D. Dairy Farm, 2011)*

In contrast, the lower-end segment was made up of small dairy farmers also known as backyard farmers with between two and five cows. These small backyard cow farmers relied either on manual milking, or very simple machines produced by DeLaval’s domestic competitors. In the early 2000s, nearly 70 percent of the milk production still came from these small dairy farms. Their facilities were basic, and these farmers had very little animal husbandry knowledge. As a result, a large portion of these cows had diseases like Tuberculosis (TB) and the milk quality was not good. These farmers had no means by which to adopt modern technology on their farms; they either relied on hand milking or they had to bring their cows to local village milking centres (VMC).

DeLaval faced much stronger competition in this segment as it was dominated by local milking machine companies with cheap and simple machines. There were approximately 50 regional players and they were competing on price rather than quality. In 2005, DeLaval decided to develop a very basic milking machine called the Mobile Bucket that specifically targeted this large population of small dairy farmers. DeLaval had re-engineered a rather basic, cost effective semi-automatic milking machine that could easily be carried around to milk cows. The Mobile Bucket was locally sourced and manufactured in order to be competitive on price. If small dairy farmers could obtain government subsidies, a machine like this would become affordable.

DeLaval began sourcing activities from China in 2003 in an attempt to reduce the cost of its product. Although DeLaval knew the labour costs were much lower in China, moving goods in and out of China was not easy prior to China joining the WTO. Following China’s accession to the WTO in the end of 2001, and deregulations in import and export, DeLaval began, in 2003, to conduct some sourcing trials from China through its Asian sourcing centre located in Hong Kong. Eventually, DeLaval’s Asian sourcing centre moved to Shanghai in 2005, as the volume had increased and the supply function expanded to service global operations. The sourcing department
grew from two to fifty employees, and covered the supply chain management function.

The materials sourced in China continued to be mostly components made of stainless steel, rubber and plastic that required a lot of manual labour. Essential components such as cow teat cups made of stainless steel required a lot of polishing to ensure smooth contact with the animal’s skin. The labour intensity of such components therefore made them much cheaper to produce in China than elsewhere.

However, developing sourcing in China was not easy. DeLaval considered it a lengthy process involving a lot of planning but still no easy solution to control the quality. First of all, the communication between DeLaval and its suppliers remained a challenging issue. What was considered to be good quality might be perceived differently between DeLaval and its suppliers. Overall, the language, culture, and standards barriers represented the main obstacles for DeLaval to make communication effective. Language and cultural differences slowed down communications; many basic standards used by product designers in Europe were simply unknown to Chinese suppliers. As the components needed to fit into a larger system, quality control became crucial. DeLaval’s sourcing teams had to make frequent communications with local suppliers to make sure the requirements were strictly followed so that all components would interface and function flawlessly.

The purchasing manager of DeLaval in China reckoned that cost savings were the main motivator for sourcing in China.

*The benefit of doing sourcing in China was simply the cost, and they were getting quite expensive in certain segments. But the lower the level of supplier you chose, the more effort you would have to put in. For lower-end suppliers from whom I wanted to achieve 40-60% savings, I also needed to invest a certain amount of my own staff resources to secure the quality.*

*(Interview with the Director of Purchasing & Logistics Asia, DeLaval (Shanghai), 2010)*

Additionally, DeLaval also had to adapt to the local approach to communication in order to reach a price that could be agreed upon by both sides. *Figure 8* demonstrates the views of the purchasing manager of DeLaval in China on how the Chinese way and Swedish way of reaching an agreeable price differ in terms of business practices:
Even though DeLaval had strong intentions to collaborate with the local suppliers, the firm’s sourcing operations in China were not able to achieve product innovation due to the low level of product sophistication. Most of the items sourced in China were components; DeLaval simply showed these suppliers drawings and the suppliers did what DeLaval asked. As the assembly was based in Europe or the U.S., these Chinese suppliers had no knowledge of how these components were used. The supplier-customer collaboration was also difficult to form because of the less frequent purchases. Due to the long transportation time between China and the assembly factories, the stock level in the factories was usually high. As a result, it was difficult for DeLaval to make a regular purchase from their Chinese supplier and hard to establish a healthy supplier-customer relationship.

The melamine poisoning crisis in China’s dairy industry and its influence on DeLaval’s operations

Despite the continued rise in milk consumption, the development of dairy farms in China took a downturn from late 2003 to 2005 (DII, 2006). DeLaval’s sales volume in 2006 fell to a third of what it had been in 2005. Factors on the supply side were against dairy farm operations. Global feed prices and local labour costs had risen several times, while local milk prices remained unchanged. Dairy farms in China were facing the threat of closure and many small farmers slaughtered and sold their cows into the market for meat. Since DeLaval’s operations were closely connected to the development of the dairy industry, they consequently suffered losses.

A key issue adding to the difficulties faced by dairy farms was the availability of cheap imported milk powder. After China joined the WTO in
2001, it abolished its quota system and opened up domestic markets for agricultural product imports, including milk powder, and import tariffs were further reduced in 2004. Therefore milk powder could be easily imported by dairy processors from cheaper sources abroad and reconstituted to liquid milk and sold in the domestic market. The amount of milk powder imports skyrocketed between 2004 and 2005. Consequently, the demand for domestic milk was down, and many dairy farms faced difficulty selling their milk. In conjunction with rising feed and labour costs, gross profits on dairy farms fell sharply and less than 25 percent of them achieved a profit in 2004. The resulting farm closures and downsizing saw liquid milk production in China drop nearly 35 percent.

In addition, milk quality and safety issues that emerged during this period affected consumers’ willingness to purchase domestically produced milk. For example, in 2003-2004 many infants in the Huyang region became seriously ill after consuming poor quality milk powder produced with inadequate nutrition. In 2005, Nestle’s locally produced milk powder was found containing above-standard levels of Iodine. In the same year, Bright Dairy’s plant in Zhengzhou was found repackaging expired milk and selling it back to the market. These milk safety incidents were an indication of problems both in the dairy industry and with quality supervision by regulatory agencies.

The rapid development experienced by China’s dairy industry left many weak links in the dairy supply chain. Due to the fast expansion, many dairy processors did not invest resources in building their own dairy farms but outsourced to VMCs for raw milk supply. These VMCs hosted 20 to 40 small farmers, and the milk from VMCs was collected and delivered to milk stations (Figure 9). Dairy processors like Mengniu and Sanlu signed contracts with these milk stations to guarantee the supply of milk.

Milk stations made money on commissions, and therefore were more concerned with the quantity rather than the quality of the milk passing through them. They also had little loyalty to the dairy processors; they would switch and sell to whichever processor offered the highest price even when they had signed contracts. These milk stations were not regulated; they were not participants in industry associations like DAC or CDIA, and, prior to 2008, were in an administrative grey area. While a few of these milk stations were licensed and monitored by the dairy processors or local governments, most were not. There was no single governmental agency that took responsibility for their existence.
The lack of regulatory control over milk stations also showed that the
government was slow to respond to the fast growing dairy industry. The
regulations on milk quality were lagging behind and Administration of
Quality Supervision, Inspection & Quarantine (AQSIQ) struggled to bring
these standards up to date to cope with the development of the industry.
Between 2004 and 2008, AQSIQ faced public criticism for milk labelling
issues and what type of milk\textsuperscript{17} could be defined as “fresh milk”. Moreover, a
centralised agency, to take responsibility for and oversee the development of
the dairy industry, was lacking. These milk safety incidents were regarded as
individual misconducts and regional issues rather than pan-industry,
nationwide problems. Prior to 2007, there was no national dairy industry
policy at the central government level to include various aspects and actors
in the whole industry. The MOA, MOLI, and AQSIQ were responsible for
dairy farmers, dairy processors, and milk quality, respectively, but there was
insufficient inter-agency liaison. Consequently, both the reaction toward
these incidents and the prevention of future safety issues were hindered.

The Chinese government had attempted to lead the dairy industry to a
healthier development through strengthening the regulations. Therefore, a
few new regulations were issued between 2005 and 2008, including the
Notification for Strengthening Liquid Milk Production Management by State
council in 2005, the Measures to Promote Dairy Industry Healthy
Development and the Notification for Strengthening Labels on Liquid Milk
by the National Development and Reform Commission (NDRC) in 2007,
and lastly the Dairy Processing Industry Policy by the NDRC in 2008. These
regulations aimed to tackle milk quality issues in the upstream of the supply
chain. For example, policy called for a clear labelling system on milk
packages to reduce consumer confusion. The Dairy Processing Industry
Policy in 2008 was also seen as the first holistic industry policy issued by
the Chinese government that specifically targeted the dairy industry.

\textsuperscript{17} The argument is between ultra-heat treated (UHT) and High Temperature Short Time (HTST) pasteurised milk.
Yet, the quality control of milk continued to be an issue in China. Insufficient quality control and inspection, both within industry and from public agencies, led to the melamine-poisoning crisis in late 2008. In August 2008, Sanlu Dairy, one of the biggest milk processors in China and 43 percent owned by Fonterra of New Zealand, became aware that traces of melamine (tripolycyanamide) were found in its raw milk. Melamine was an industrial chemical for making plastic and fertiliser. Milk collectors in milk stations added it to fake the richness of the protein content so that the milk would appear to be higher quality. However, the toxicity of melamine can cause severe kidney damage and renal failure, particularly in infants with a diet consisting largely of milk.

Sanlu formally acknowledged, on September 11, 2008, that melamine substance was found in their milk powder. This discovery soon escalated to become a pan-industry epidemic as the melamine substance was found in the products of 22 dairy processors and about 20 percent of the total milk powder products available in the market (DII, 2008b; Financial Times, 2011; Xinhua, 2008). This epidemic was also a nationwide issue as approximately 300,000 children in China suffered kidney failure, six of whom died as a result (Economic Observer, 2011; DII, 2010).

The central government reacted quickly to the melamine crisis. The State Council led a first-class national food safety emergency recall and provided assistance to families with sick kids. Sanlu Dairy filed for bankruptcy and its chairwoman was jailed for life. Many officials, including the Chief of AQSIQ, resigned and 191 others were sacked. In addition, 96 milk collectors suspected of adding melamine to milk were arrested. Two people associated with the milk station selling the melamine-contaminated milk to Sanlu and other dairy processors were executed, and 19 other individuals were given prison sentences (DII, 2010; Xinhua, 2011).

After the melamine crisis, consumer confidence in China’s milk quality was completely shattered, and many stopped buying domestically produced milk products. The melamine scandal literally threw the entire Chinese dairy industry into turmoil; every actor related to the industry and every part of the supplier chain was affected.

DeLaval’s sales in China were just about to turn around and were showing signs of improvement after the devastating losses of 2006, when fallout from the melamine scandal cast another cloud of uncertainty over its business in 2009. Dairy processors were losing huge sums of money, and they stopped buying milk from dairy farms. Dairy farm projects were temporary halted, and there was not much DeLaval could do:

*The melamine crisis brought down the whole industry and everything went down. DeLaval was also affected... There wasn’t much you could do after the crisis... You could help, you could gradually encourage people, but you*
DeLaval’s business experienced strong uncertainty as big projects in the high-end segment were put on hold. To save the ailing industry, the Chinese government began to issue and update regulations regarding the dairy industry. In total, thirteen regulations were announced between October 2008 and the end of 2010. These new regulations and laws have basically governed everything from dairy farming to dairy processing. Not only did these regulations intend to enforce stricter standards at every stage of the dairy supply chain, they also called for industry focus on developing greater economies of scale. These news laws and regulations have also permanently changed the market landscape, as nearly half of the dairy processors and farms lost their licenses upon government inspections and were forced to close down (Table 14).

Table 14. List of regulations issued after Melamine milk crisis

<table>
<thead>
<tr>
<th>Date</th>
<th>Regulations &amp; Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>2008.09</td>
<td>Activation of National First Class Food Safety Emergency Reaction</td>
</tr>
<tr>
<td>2008.10</td>
<td>Regulations on Supervision and Management to Milk Quality and Safety</td>
</tr>
<tr>
<td>2008.10</td>
<td>Dairy Processing Industry Restructuring and Guidance Scheme</td>
</tr>
<tr>
<td>2008.11</td>
<td>Notification for the Raw Milk Production Procedure</td>
</tr>
<tr>
<td>2008.11</td>
<td>Measures for the Administration of the Raw Milk Production and Collection</td>
</tr>
<tr>
<td>2008.11</td>
<td>Dairy Industry Restructuring and Revitalisation Plan</td>
</tr>
<tr>
<td>2009.02</td>
<td>Food Safety Law of the People’s Republic of China</td>
</tr>
<tr>
<td>2009.03</td>
<td>Notification for Standardisation on Raw Milk Collecting Station Management</td>
</tr>
<tr>
<td>2009.07</td>
<td>Dairy Processing Industry Policy</td>
</tr>
<tr>
<td>2010.03</td>
<td>Good Manufacturing Practice of Dairy Product</td>
</tr>
<tr>
<td>2010.03</td>
<td>National Food Safety Standard for Raw Milk and 66 other products</td>
</tr>
<tr>
<td>2010.09</td>
<td>Notification for Strengthening Dairy Quality</td>
</tr>
<tr>
<td>2010.11</td>
<td>Rules for Examination of Licensing Criteria for Enterprise Producing Formula Milk Powder for Infant Use</td>
</tr>
</tbody>
</table>

By mid-2009, the downturn of the dairy industry had gradually approached an end, especially when the central government had implemented a series of attempts to clean up the mess and strengthen regulations and quality control in the dairy industry. On one hand, the strong intervention by the Chinese government allowed the chaos in the market to calm down effectively and the new order to be installed. On the other hand, the role of the government also became much more prominent in the dairy industry:
After these regulations were in place, the government released large subsidies for dairy farm investments and the market bounced back. Projects that were paused due to the crisis came back on track with significant new investments.

The subsidies from the government and the new regulations and policies somehow influenced the preference of the customers and altered the market conditions. On the one hand, DeLaval’s advanced milking system received strong demand from the dairy farms that were aiming to achieve economy of scale. This strong demand consequently strengthened DeLaval’s position in the market. On the other hand, the Mobile Bucket that DeLaval developed especially for small farmers became extremely unpopular as both the government and dairy processors decided that manual milking was no longer in their best interests. Small dairy farms were encouraged to consolidate and were gradually eliminated from the market during the restructuring process. These changes led DeLaval to withdraw the Mobile Bucket from China, and to export to other emerging markets such as India, where it has attracted many customers.

After the crisis, DeLaval also increased ties with government and extended its involvement in multiple collaborations that had been previously initiated. Over time, DeLaval continued participating in industry associations and was a member of the DAC board of directors. Through these activities, DeLaval can interact with actors outside the dairy industry, such as regulators, governmental agencies, and academic institutions.

DeLaval and TetraPak initiated the China Dairy Forum (CDF) as a platform for industry and non-industry actors to exchange ideas. The first CDF was held in January 2008 in Beijing. Participants included high ranking Chinese government officials from the Chinese People’s Political Consultative Conference (CPPCC), NDRC and MOA, industry representatives such as DAC and CDIA, academics from Chinese Renmin University, and international organisations, such as Food and Agriculture Organization of the United Nations (FAO) and Sweden’s Embassy in China. The CDF presented an important opportunity for DeLaval to interact directly with these governmental and industrial organisations, and also demonstrated that DeLaval could bring expertise in dairy farming and assist in the development of China’s dairy industry. The CDF indeed became an important platform and brought together various actors in the industry to discuss important issues relating to the industry.

The success of the first CDF led DeLaval to hold the second forum in Beijing in November 2008, right after the melamine crisis, and less than ten months after the first session. Governmental agencies used this occasion as a
platform to announce policy changes and the formation of the Dairy Office under the MOA. The Dairy Office was to act as the major regulatory agency overseeing the development of the dairy industry. The Dairy Office also held industry consultations aimed at improving the industry and DeLaval participated in a few of them. Although there may not be any immediate advantages that can be drawn from the closer connections with governmental and industrial organisations, DeLaval believed that even simply obtaining clear and accurate information would be beneficial for its operations. Besides, DeLaval also had opportunities to share their opinions and knowledge with the government when engaging in these activities.

For DeLaval, it is good to work with the government, for getting information and also to give information. The (Chinese) government knew that when they wanted to get information about something, they could not be publicly seen to be asking. They might ask DeLaval and we certainly would provide them with information - but later when they brought out the guidelines, rules and regulations, officially it was the Chinese Government’s information.

(Interview with the Director for Competence Development, DeLaval (Shanghai), 2010)

These activities enable DeLaval to maintain stronger connections with various actors. Building strong connections with these dominant organisations may allow DeLaval to continue to play an important role in providing professional farming knowledge.

Furthermore, DeLaval also worked in collaboration with TetraPak, the MOA, and Sanyuan Dairy (currently known as Capital Agricultural Group, CAG) to launch the second phase of the Sino-Swedish Dairy Centre (SSDC 2). The first phase of the SSDC (SSDC 1) was initiated in 1984 by TetraPak, as a platform for training packaging processors and personnel in the Chinese dairy industry (Dairy Association China, 2009). Jointly funded by the Swedish International Development Cooperation Agency (SIDA) and the Chinese Ministry of Finance (MOF), SSDC 1 ran for 15 years and trained 4,000 Chinese processing personnel, including six who obtained master’s degrees from the Swedish University of Agricultural Sciences (Sveriges lantbruksuniversitet, SLU). SSDC 2 began in 2009 and the core partners include the same members from SSDC 1 (Figure 10). The newly formed Dairy Officer acted as the executive arm of the MOA in this collaboration. The Chinese Agricultural University (CAU) also joined SSDC 2 to act as the counterpart from SLU to facilitate the education programs in China.

SSDC 2 aimed to train 50 mega-farm managers and 500 professional dairy farmers with hands-on dairy farm management knowledge over a five-year period. Apart from the time and coordination work in China and Sweden, DeLaval also donated machines to facilitate hands-on practice during the project. The motivation behind the SSDC 2 was to provide precautions for the trend towards the development of mega dairy farm
projects (more than 10,000 cows) in China after the melamine crisis. From working with customers, DeLaval became aware of a significant shortage of professional dairy farm managers in China. Unlike dairy farms in Europe or the U.S., those in China lacked a long tradition in farming and professional management. Yet both government and industry sought to build increasingly bigger farms to facilitate more professional practice and achieve economy of scale. However, there were simply not enough people in China with the expertise required to run dairy farms of this scale. This lack of knowledge had the potential to disrupt sustainable growth in the industry and lead to future disasters. While many of DeLaval’s new customers were willing to buy the most sophisticated machines, knowledge of how to run such advanced dairy farms was limited. Thus, sales activities alone were no longer sufficient for DeLaval to sustain business growth in China; supporting knowledge elevation and bringing professional training to Chinese dairy farms became essential.

Activities like SSDC 2 not only placed DeLaval in a strategic position to have direct communication with government and access valuable information, they also showed the government their willingness to support the Chinese market. In 2010, DeLaval decided to move its China sales office, along with activities directly interacting with customers, from Shanghai to Beijing. As such, activities including market development, solution management, market intelligence, and PR are now run from Beijing, while sourcing, logistics, product design, and manufacturing activities have remained in Shanghai.

Relocating to Beijing presented three major benefits for DeLaval’s future development in China. Firstly, DeLaval would be closer to other organisations participating in SSDC 2, making their interactions easier. Secondly, as home to major agricultural universities and research centres, Beijing provided better opportunities for recruiting talent. Skilled employees have become the most important resource as DeLaval aims to maintain a high standard of operation covering a wide range of customers. Lastly, a Beijing presence allows DeLaval to be closer to dairy farm customers that have gradually migrated to the northern part of China. An estimated 50 percent of the milk production in China now comes from the northeast and northwest of the country; therefore Beijing offers a closer location to customers and key accounts than Shanghai.

Meanwhile, DeLaval began to conduct design and engineering work in China based on the existing sourcing and assembling capacity in Shanghai. It aimed to bring more engineers and technicians from Sweden to enable some machine developments to be conducted in China both for Chinese customers and other nearby markets in a similar stage, e.g., India.
Figure 10. DeLaval China’s network map in period 2 (snapshot in 2010)
Elekta is a medical technology group focusing on cancer and brain disorder treatment. The world leader in innovative non-invasive or minimally invasive techniques, Elekta provides solutions in image guided radiotherapy (IGRT), stereotactic radiation surgery, and software for cancer treatment. Elekta’s products are divided into three groups: Neuroscience (Leksell Gamma Knife and Stereotactic System), Oncology (Linear Accelerator), and Software, which are responsible for 20 percent, 59 percent, and 21 percent of sales, respectively (Figure 11)\(^{18}\). Elekta’s headquarters is located in Stockholm and the company has been listed on the Stockholm Nordic Exchange since 1994. Elekta employs 2,760 people in 24 countries, of which the U.S., the U.K., and China have the largest employee bases. Elekta’s research and development expenditure is around 8 percent of net sales, with R&D centres currently operating in Sweden, the U.K., Finland, the U.S., Germany, and China.

![Figure 11. Elekta’s sales split 2010](image)

Elekta was founded by Professor Lars Leksell at the Neurosurgery Department of Karolinska Institute in 1972. Professor Leksell invented the Leksell Stereotactic System in 1949, which was a frame that allowed neurosurgical instruments to be positioned on the patient’s brain with precision. In 1968, with the collaboration of Borje Larsson from Uppsala University, he invented the first prototype of the Gamma Knife for cancer research. When Elekta was established, it was designed to be a research

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\(^{18}\) In September 2011, Elekta formed the Brachytherapy division after acquiring Nucletron.
entity to support the research conducted by Professor Lars Leksell (Levin, 2006). In the early days, proceeds from the sales of Leksell Stereotactic Systems were all injected into the development of the Gamma Knife.

The Gamma Knife remained a prototype after the invention. The cost for commercialisation was too high, and there was not enough interest from neurosurgeons and hospitals due to the lack of visualisation technology to guide the precision of the stereotactic procedure. In the early 1980s, a solution was provided from the emergence of digital imaging such as Computerised Tomography (CT) scanning, and interest in the Gamma Knife grew. Finally, the first commercialised Gamma Knife was sold to the University of Pittsburgh in 1986.

The successfully commercialised Gamma Knife became an important product for Elekta’s further expansion. Elekta remained a small organisation with six employees. Elekta’s first foreign subsidiary was established in Atlanta, U.S. in 1983. The U.S. was the largest market for Elekta’s stereotactic system, and Elekta decided to establish a direct presence in the U.S. and was able to build up strong connections with the customers. The successful commercialisation of the Gamma Knife led Elekta to further expand to Asia, establishing a subsidiary in Japan in 1996 (Table 15). Asia and the U.S. became the two most important markets for Elekta in the 1990s and together they contributed 95 percent of annual revenue.

<table>
<thead>
<tr>
<th>Table 15. Brief introduction to Elekta’s business</th>
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<tbody>
<tr>
<td>Founded</td>
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<tr>
<td>Breakthrough</td>
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<tr>
<td>Major product</td>
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<tr>
<td>First foreign subsidiary</td>
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<tr>
<td>First Asian Subsidiary</td>
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<tr>
<td>Global operations</td>
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<tr>
<td>Employment</td>
</tr>
<tr>
<td>Sales outside Sweden</td>
</tr>
<tr>
<td>Main competitors</td>
</tr>
</tbody>
</table>

In 1997, Elekta acquired Philips’ Radiation Therapy (RT) Division and formed the Oncology System. Philips’ RT division was one of the three largest Linear Accelerator (Linac) producers in the world, the other two being Varian (U.S.), and Siemens (Germany). Despite the fact that the Linac and the Gamma Knife were complementary products in cancer treatment, there wasn’t much cost synergy between the two at that time (Levin, 2006). While the Gamma Knife could treat tumours and vascular malformation in the brain, the Linac could deliver treatment to tumours in other parts of the body. The Gamma Knife was mainly manufactured in Sweden, while the Linac, being a more mature product, was produced in factories spread
around the world. The main manufacturer of the Linac was in Crawley, U.K., where Elekta established headquarters for their Oncology Division.

Elekta’s export of the stereotactic system and Gamma Knife to China

Although stereotactic and functional neurosurgery in China began in the early 1960s, the research and practice was completely stopped during the Cultural Revolution and only restarted at the beginning of the 1980s. In 1983, there were only 200 stereotactic neurosurgeons in the whole of China (Xu., 1990).

Elekta began efforts to sell the stereotactic system to China in 1982 and it was adopted by several Chinese hospitals in the mid-1980s (Du et al., 1995). For instance, Tianjin Medical School Hospital has used the Laksell Stereotactic System since 1985 (Meng, 1990). The Chinese Navy General Hospital in Beijing reported more than a thousand clinical operations with the Laksell Stereotactic System between 1987 and 1995 (Du et al., 1996).

However, there were already many similar stereotactic systems available in the market at that time. Even China had created its own version back in 1963, which was modified throughout the 1970s and had achieved hundreds of clinic trials (Wu et al., 2005; Xu et al, 1978). Most of the surgeons who ordered Elekta’s stereotactic systems had trained in Sweden in the past, and thus sales remained few and far between.

At this time, there was no regulation or standard in relation to the devices used in stereotactic and functional neurosurgery in China. There was also no overall regulatory framework for medical devices in general. The Provisional Measures for Devices in Medical Departments was issued in December 1987. Still, the main focus of the act was the usage of these medical devices in hospitals, rather than a regulation for the medical devices. Furthermore, the regulator for medical devices, the State Drug Agency (SDA), was only established in 1994 and was controlled by the State Economic and Trade Commission.

After the Gamma Knife was made available in the market, it attracted substantial interest from Asian countries, and Elekta established a regional office in Hong Kong in the early 1990s to look after sales and operations in the Asia Pacific region. In 1992, Elekta sold the first Gamma Knife to Huashan Hospital in Shanghai. In just three years, an additional 12 units

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19 There was an argument that the first imported Gamma Knife belonged to the Wanjie Hospital, a private hospital in Shandong Province, in 1993. However, Wanjie did not obtain permission from the central government to equip the Gamma Knife, nor it was qualified to do so. Permission from the MOH was only obtained in 1998, five years after the operation had started.
were sold to Chinese hospitals and each unit was worth 3-3.5 million USD at the time.

Given that less than 10 years had passed since the Gamma Knife had become fully commercialised and only 65 units had been sold worldwide, the great appetite from Chinese hospitals was an encouraging sign for Elekta. As one Gamma Knife could provide service to 2.5 million people, Elekta estimated potential sales of more than 100 units in China (South China Morning Post, 1994). Elekta’s director of corporate communication, Sverker Littorin, was quoted in a newspaper interview:

“China had been quick to adopt Elekta’s high-technology products because of its long medical tradition and extensive efforts to treat cancer”…Elekta is optimistic China will be a large market for its neuro-surgery equipment as the country’s medical facilities upgrade their technological capabilities.”

(Director of Corporate Communication, South China Morning Post, 1994)

However, this optimism did not last long. First, a Chinese-made Gamma Knife (the OUR-XGD), also known as the Gyro Knife, appeared in the market in late 1994 (SP LAB, 2011). The Gyro Knife was the result of reverse engineering, done by a group of Chinese, on the imported Gamma Knife, and represented a simplified version of this medical device. Elekta’s Gamma Knife used 201 cobalt gamma rays, while Gyro Knife used only 30 (Wu et al. 2005). Likewise, Elekta’s Gamma Knife came with a heavy price tag of 3 million USD, whereas the Gyro Knife cost only a fraction (one-tenth) of that (Zhang, 2009).

Gyro Knife filed for patent rights in China and obtained certification from the Chinese SFDA to sell to Chinese hospitals in 1995. Gyro Knife possessed several advantages over the Gamma Knife. Its price was especially attractive to cash-strapped hospitals, and, as it was produced locally, hospitals did not need to obtain machine importation permission from the central government.

Second, the Chinese government decided to temporarily ban any further purchase and importation of Elekta’s Gamma Knife in June 1995. The buying behaviour of Chinese hospitals and their appetites for costly medical devices alarmed the central government. In total, thirteen units of the Gamma Knife were sold to Chinese hospitals between 1992 and 1995, accounting for 20 percent of the world’s existing Gamma Knives20. Most of these purchase decisions were made without proper evaluation of the

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20 Regulations on importing larger medical equipment simply did not exist in 1992, and even regulations on hospital management were lacking. Only in 1994 did State Council issue the Regulation of the Medical Institutions and granted the supervision rights of the hospital to the local governments. However, neither the hospitals nor the provincial health departments were good at market-economy styled feasibility studies, which often resulted in either no evaluation, or overly optimistic evaluation of the capability of these expansive machines to attract patients.
potential economic returns and technical requirements of the hospitals. In addition, many hospitals collaborated with external financing and took excessive loans.

As a consequence, hospitals began to promote the miraculous results of the Gamma Knife and encouraged its use on patients whose symptoms might not be suitable for the procedure. Furthermore, the treatment was also extremely expensive for the average Chinese; each treatment cost roughly 3,500 USD while the GDP per capita in China was only 500 USD at the time (Lv et al., 1999). To prohibit this trend, Chinese government agencies, including the Ministry of Health (MOH), the Ministry of Finance (MOF), the Ministry of Human Resource and Social Security (MOHRSS), and the People’s Bank of China (PBOC), issued a notice to stop hospitals from making any purchases at the beginning of June 1995 (Notification for Temporary Postponement of the Gamma Knife).

One month later, a new regulation was issued to regulate large medical devices including the Gamma Knife (Provisional Measures on Large Medical Device Allocation and Administration). Hospitals were strictly required to obtain permission from the MOH prior to making any purchase of large and expensive medical devices (Zhao et al, 2003; Outlook Weekly, 2009). For Elekta, these new regulations resulted in a complete stoppage of sales of the Gamma Knife to China.

Despite this setback, Elekta proceeded with opening a representative office in Beijing in late 1995. While they knew it might be some time before they could again sell the Gamma Knife, the company was not ready to give up on the China market and decided to use this time to focus on improving the MOH’s understanding of their product.

“Our rep. office continued providing information in a less aggressive fashion, explaining the quality and function of the Gamma Knife to the Ministry of Health in order for them to understand our product.”

(Interview with the Board of Directors, Elekta AB, 2013)

The rep. office also began to coordinate training programs and seminars with local neurosurgeons and hospitals, and through these contacts, gained a better understanding of the organisation and culture of the Chinese hospitals.

The Chinese government went on to issue two more regulations in 1996 that covered the administration and registration of all types of medical devices, not just expensive, high-end machines like the Gamma Knife and Linac (Measures for Medical Device Market Admittance Examination, and Measures for Medical Device Administration). In 1998, an independent regulator for medical devices, the SFDA, was formed under the State Council and took over the role previously held by the SDA. In 2000, the

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21 Hospitals controlled by military were exempted from these measures.
SFDA made further updates to the laws and regulations governing the medical device industry, issuing two new regulations, including one for general medical device registration, and another specifically for imported devices (Regulation on the Supervision of Medical Devices, and Regulation on the Imported Medical Registration).

As a result of this series of restrictive laws and regulations, no further Gamma Knife sales were made to Chinese hospitals until 2010, when Elekta finally won a public tender held by the MOH and delivered three new Gamma Knives. During Elekta’s absence, sales of its Chinese competitor, the Gyro Knife, had grown quickly. By 2010, Gyro Knife was estimated to have supplied 90 per cent of the 220 units installed in Chinese hospitals (SPLAB, 2011).

**Elekta’s manufacture in Shanghai and acquisition of BMEI**

In 1997 Elekta’s global headquarters acquired Philips’ RT Division. An assessment of the division led Elekta to believe there was an urgent need to reconfigure Philips’ Linac production chain. Although manufacturing facilities for the Linac body and its R&D centre were both located in Crawley (U.K.), the patient bed was outsourced to a factory in the Netherlands. Elekta decided to stop outsourcing the manufacture of the patient bed and moved the production to China. As the production cost in China was significantly lower than in Europe, this move would increase price competitiveness in the market and provide a better margin to Elekta.

In 1999, Elekta set up an office in Shanghai and in 2000, entered a JV agreement with two formally state-owned electronics manufacturers, Shanghai Jinling and Shanghai Huelong, to establish Shanghai Elekta Oncology Systems (SEOS). Figure 12 describes the make-up of the JV and how it fit into Elekta’s global and China operations. Elekta held a 60 percent share of this JV and provided technical knowledge for the production and sales of the product through exporting to the Oncology headquarters in the UK. The two Chinese partners controlled the remaining 40 percent and were responsible for factory management and contract suppliers.

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22 Elekta was aware its technology had been copied and employed in the Gyro Knife (OUR-XGD) and took legal action to block it from being exported to other countries (Elekta, 1997 annual report). Although Elekta’s legal action against the Chinese-made version of its Gamma Knife and the claim of intellectual property infringement was not granted by the U.S. Federal Court, it did successfully delay sales of the Gyro Knife outside China. To date, Gyro Knife is mainly used by Chinese hospitals and only a few units exist outside China.
Figure 12. Elekta China’s network map in period 1 (snapshot in 2001)
The purpose of the JV and the move away from pure export and sales representation, Elekta argued, was less about the cost savings aspect and rather a change to be in closer contact with the growth in China.

“The real reason for starting this JV was that I wanted to strengthen Elekta’s presence in China. The drive was to tap into China’s production competence.”

(Interview with the Board of Directors, Elekta AB, 2013)

The factory in Shanghai was inaugurated in 2001, but after a year of operation SEOS was still not running smoothly. Elekta soon realised that the managers assigned by its two Chinese partners to manage the factory were spending more time watching Elekta to make sure it did not cheat them, than supervising factory operations. Elekta decided to buy out its JV partners in 2003 and turned SEOS into a wholly-owned subsidiary. Although it had to invest more financial capital and bring in professional management, Elekta was able to gain complete control over operations and build direct contacts with the local suppliers. By 2004, the operations in SEOS had improved. SEOS was fully integrated with Elekta’s global manufacturing and became the sole production base for the operation table for Elekta’s Linac worldwide.

In addition, Elekta began local sourcing activities in China around 2005, initially with the aim of supplying the operations of SEOS. Elekta was aware that China’s WTO entry had given the company an easier process for moving goods across the border. Elekta had begun the local sourcing activities with simpler materials, and gradually expanded the sourcing activities in China in terms of volume and sophistication. China had become an important part of Elekta’s global sourcing chain. Elekta’s sourcing team in China had grown to consist of ten staff, and had become responsible for sourcing for manufacturing in both China, as well as the U.K.

“We started from very basic items, like metallic tube, etc. and now we can source relatively complicated units from China. Our sourcing team in China has grown and become more competent along with these suppliers. It has been an experience of mutual learning.”

(Interview with the Executive Vice President APAC, Elekta Limited, 2013)

Production relocation and sourcing from China enabled Elekta to gain a cost advantage over other international competitors, as none of the other Linac producers had established production in China by the middle of the first decade of the millennium, and helped Elekta to launch Linac in China and compete with Varian and Siemens. Philips’ Linac was actually one of the first Linacs that China purchased, following the initiation of its Open Door Policy. However, increased competition from Varian and Siemens had significantly diminished its market position by the time Elekta took over. Of
the 14 Linacs imported by China in 2002, Elekta had supplied only one, and the remaining thirteen were nearly equally divided between Varian and Siemens. By 2006, Elekta had installed 120 units in China and had become the market leader, particularly in the higher-end segment.

The Linac market in general can be divided into higher- and lower-end segments, depending on the function and precision of the machine. The price threshold for the lower-end segment was around three million RMB (roughly 400,000 USD at that time), while the higher-end products could cost from three to twenty million RMB. The high-end products were dominated by international brands, while the lower-end was mainly controlled by two Chinese manufacturers, Beijing Medical Equipment Institute (BMEI) and Shandong Xinhua Pharmaceutical Co. Both BMEI and Shandong Xinhua possess their own technology through collaboration with local research institutes like Tsinghua University and the China Institute of Atomic Energy. They were run like the old state-owned production units, rather than enterprises that addressed profit and efficiency. Even though their products made up to 80 to 90 percent of the lower-end segment of the market, and the number of Radiation Therapy (RT) centres in China has doubled since the 1990s, they were losing money.

Following the growth in the economy, people were more aware of the threat of cancer, and, most importantly, began to have the financial resources to seek treatment. As seen in Table 16, the Linac market in China exhibited strong signs of growth from the late 1990s on, and the number of RT centres, Linacs, Gamma Knives, Doctors and Medical Physicists in China increased significantly between 1994 and 2006. Yet the average number of Linacs in China had only reached 0.7 units per million people by the end of 2006, which was still far behind the two to three units recommended by the World Health Organisation (WHO) (Yin et al, 2007).

Table 16. The numbers of RT Centres, Linacs, Gamma Knives, Doctors, and Medical Physicists between 1994 and 2006

<table>
<thead>
<tr>
<th>Year</th>
<th>RT Centres</th>
<th>Linac</th>
<th>Gamma Knives</th>
<th>Doctors</th>
<th>Physicists</th>
</tr>
</thead>
<tbody>
<tr>
<td>1994</td>
<td>369</td>
<td>164</td>
<td>6</td>
<td>2764</td>
<td>-</td>
</tr>
<tr>
<td>1997</td>
<td>435</td>
<td>286</td>
<td>13</td>
<td>3440</td>
<td>423</td>
</tr>
<tr>
<td>2001</td>
<td>715</td>
<td>542</td>
<td>33</td>
<td>5113</td>
<td>619</td>
</tr>
<tr>
<td>2006</td>
<td>952</td>
<td>918</td>
<td>78</td>
<td>5247</td>
<td>1181</td>
</tr>
</tbody>
</table>

Although the market for Linacs in China grew significantly, the industry itself had encountered relatively little change. The purchase and use of Linacs and other expensive medical devices were still largely controlled by the government, even after China’s WTO entry. Under the new regulations issued by the MOH in 2004 (Measures for Medical Device Registration), individual Chinese hospitals were given more decision power to submit
proposals for purchasing the Linac and Gamma Knife, based on their needs and financial resources.

The Chinese government announced an allocation and administration plan for both large medical devices (Gamma Knife), and B-class large medical devices (Linac) at end of 2004 and 2005, respectively. Based on these plans, hospitals could submit their applications and their proposals would then be evaluated at the provincial level for the Linac and at the central level for the Gamma Knife. Proposals were likely to be granted if a hospital could demonstrate it possessed the knowledge and technical expertise to operate the machine, had conducted a proper evaluation on the financial returns, and possessed sufficient resources to pay for the purchase. Chinese hospitals had become increasingly financially independent in the previous ten years and were able to self-finance most of the purchases without government grants.

In addition, the market for Linacs and Gamma Knives was rather orderly, both worldwide as well as in China. On the one hand, there were only a few companies, including both international and domestic players, competing in this market. The products and the technology behind them were similar, and the customer base was also rather stable. On the other hand, the high cost of the Linac meant hospitals would normally take a considerable amount of time to make purchase decisions. For many decision makers in these hospitals, a Linac or even a Gamma Knife could be one of the most expensive purchase investment decisions they would ever make during their career. Because these machines were meant to operate for ten to fifteen years, it was important for the hospitals to choose a good quality product as well as a supplier with a good reputation and service attitude.

The purchasing processes for the Linac and the Gamma Knife would normally take 12 to 24 months to complete, and this could give Elekta multiple chances to interact with these hospitals and decision makers. From continuously working with these Chinese hospitals, Elekta gained better understanding of the decision-making processes in the hospitals and was able to identify the stage of the process in which working closely with the hospitals would help the purchases to go through.

“Elekta’s sales team could start establishing contact with a hospital in its planning stage, and also at the ordering stages. Ideally if our sales teams could control every process and contact as early as possible it would be excellent, but you only have limited resources and you have to invest them in the most crucial stage. Currently, 80 percent of the resources are put in the later stage, i.e. after the permission is granted to a certain hospital.”

(Interview with the CEO, Elekta (China), 2011)

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23 The first allocation plan for the Gamma Knife was announced by the MOH and NDRC in 2007. The plan had indicated a total number of 60 Gamma Knives would be allowed to be purchased during the period from 2007 to 2010.
The close collaboration with hospitals and Elekta’s long-term operations in China allowed Chinese hospitals to see Elekta as a trustworthy partner with which to do business. Elekta also built a positive reputation from serving the top tier hospitals with product quality and service in the radiation therapy field.

“Aftersales service is an important index for a hospital to evaluate the satisfaction toward a medical device supplier. Potentially, with good aftersales service, a hospital will tend to purchase a machine from the same distributor/supplier.”

(Interview with a Medical Doctor, Cancer Department, Heyyuan People's Hospital, 2011)

Elekta would be contacted by hospitals when they began to think about purchasing a Linac. Even if Elekta might not be selected as the machine supplier at the end of the process, there was still potential for the hospital to pick Elekta for their next purchase, since there were only a few suppliers in the market. In other words, as the Linac is a rather niche product with limited suppliers and well-defined customers, the market for the Linac was relatively orderly. Frequent exchanges between device producers and hospital customers presented a norm, and thus, reputation played a key role influencing the decisions.

After China’s WTO entry, the profit margins of the domestic Linac producers were further squeezed by inefficient production, lack of rigorous financial control, and bureaucratic management. In contrast to the past, the foreign imported machines became more accessible due to the reduction of the import tax, the continuous appreciation of the Chinese currency, as well as increasingly affluent hospital budgets. These international brands also possess better technology and quality than their domestic counterparts. As a unit of the Linac could expect to function for at least ten to fifteen years, when money became less of an issue these imported machines presented an attractive option.

In 2005, Elekta received an invitation to bid to acquire BMEI. BMEI belonged to state-owned Beijing Pharmaceutical and was the stronger among these two domestic companies. After a merge between Beijing and Shanghai Pharmaceutical, the Chinese government intended to sell off BMEI. For Elekta, the decision to purchase BMEI was considered to be a significant financial and technological investment in China and was supported by headquarters. BMEI also represented a valuable chance for Elekta China to transform its import-led business to one that was built on local manufacturing.
In 2006, Elekta won the bid and successfully acquired 80 percent of BMEI shares, and becoming Beijing Pharmaceutical’s JV partner. After this acquisition, Elekta China's workforce grew to 336, representing one-eighth of the company's total global workforce, and making Elekta China its third largest business unit.

The acquisition of BMEI was strategically important for Elekta’s development in China. Elekta was able to use BMEI’s existing factory to expand capacity, which was a cheaper and faster solution than building a new one. Elekta applied the experience of running SEOS to transform BMEI from a formal research institution to an efficiently operated Linac factory. In addition, Elekta was able to access BMEI’s existing customers and many of them were at the stage to upgrade their Linac. The possibility to sell to these customers would further enlarge Elekta’s market share in China.

Moreover, BMEI's own technological capability was valuable and could help Elekta to develop a new lower-end Linac that would be a better fit for Chinese customers. The R&D integrations took place between BMEI and the Oncology Division in the U.K. right after the acquisition. Additionally, BMEI was an important part of China’s Linac development history. Many of BMEI’s research staff had come from renowned Chinese research institutions and possessed good connections with other academic institutions and government officials. Tapping into these research and government networks would be valuable for Elekta, as they could provide better access to information regarding government policy.

Due to the acquisition of BMEI, there are several strong implications for Elekta’s expansion in China. Elekta’s market share in China was increased to secure a market-leader position. Together with BMEI, Elekta would now control more than 42 per cent of the market for Linacs in China. More importantly, Elekta also considered the value of the positive reputation brought to Elekta from the BMEI acquisition:

“BMEI has brought a lot of positive effects to Elekta... within Elekta, the visibility and significance of China has been dramatically raised after the deal. This purchasing decision has also been a positive push for the medical device industry in China. It indicated that Elekta intends to make long term investment in China.”

(Interview with the CEO, Elekta (China), 2010)

In 2007, BMEI was fully integrated into Elekta’s Linac production network. Not only did BMEI supply important components for Elekta’s existing Linac, it also developed the Elekta Compact, a Linac that targeted the
medium- to lower-end segment. Elekta Compact was positioned as a cost-effective treatment system that satisfied fundamental RT requirements for start-up facilities, and filled the gap in Elekta’s oncology product portfolio. Although China was the initial target market for Elekta Compact, the system has also been sold in other emerging markets, such as India and Mexico. Moreover, it has even attracted attention from clients in European countries, where the financial crisis has left some RT centres facing budget limitations.

After acquiring BMEI, Elekta also increased resources in building external connections. For example, Elekta began providing scholarships to universities with medical physicist programs. These scholarship programs enabled Elekta to connect with local prestigious academic institutions, and also enabled the company to expand the talent pool for recruiting new employees.

China’s SFDA scandals and healthcare reform, and the influence on Elekta’s operations

Between 2005 and 2006, the Chinese State Food and Drug Administration (SFDA), which is the regulatory agency responsible for food, drugs, and medical devices in China, suffered several corruption scandals. The former director of the Department of Medical Devices was found to have received bribes from companies and abused the department’s regulatory powers. These abuses involved influencing the registration process to give permission to unqualified drugs or devices, or to speed up the process to give particular companies advantages over their competitors. These corruptive behaviours were linked to the deaths of several patients receiving treatment with contaminated medical devices and were extensively covered by the media. In 2006, both the former director of the Department of Medical Devices and the director of the SFDA were arrested, and the latter was sentenced to death and executed for his crimes (Xinhua, 2007).

The SFDA corruption scandals had shaken up the whole medical device industry, and caused serious damaged to the reputation of and public confidence in the SFDA. Central government was forced to step in to take control over the failing agency and subsequently merged the agency into the MOH in 2008. Additionally, nine new regulations were issued over a short period of time (2007-2008) to control the damage (Table 17). These new regulations involved the registration of medical devices, quality assurances, reporting of device malfunctions and company liability, and supervision of devices. For example, the MOH instructed all hospitals to adopt a centralised procurement system for medical device purchases in an attempt to ensure the quality of the devices and eliminate under-the-table transactions (Central Procurement Plan for Medical Devices).
### Table 17. List of regulations issued after the Chinese SFDA bribery scandals

<table>
<thead>
<tr>
<th>Date</th>
<th>Regulations &amp; Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>2007.04</td>
<td>Notification for Extension on Medical Device Registration</td>
</tr>
<tr>
<td>2007.06</td>
<td>Central Procurement Plan for Medical Devices</td>
</tr>
<tr>
<td>2007.07</td>
<td>Notification for Evaluation of Medical Device Production</td>
</tr>
<tr>
<td>2007.08</td>
<td>Notification for Quality and Safety Re-examination of Dood and Drugs</td>
</tr>
<tr>
<td>2007.09</td>
<td>Medical Device Supervision Plan (first consultation)</td>
</tr>
<tr>
<td>2007.12</td>
<td>Notification for Alteration on Medical Device Registration</td>
</tr>
<tr>
<td>2008.07</td>
<td>Notification for Strengthening Medical Device Registration</td>
</tr>
<tr>
<td>2008.09</td>
<td>Notification for Managing Medical Device Registration Processes</td>
</tr>
<tr>
<td>2008.12</td>
<td>Monitoring and Reevaluation of Medical Device Malfunction</td>
</tr>
</tbody>
</table>

As seen in Table 17, there were multiple new regulations on obtaining registrations for medical devices, and on the producers of medical devices. It was apparent that the government was attempting to eliminate any potential wrong-doing in the registration process. Not only had the government required stronger inspections of companies and their productions, but the whole registration process for medical devices became much more bureaucratic, slow and unpredictable. Under the new regulations, for Elekta to complete a registration process takes an average of 18 to 24 months, and sometimes even longer. These disruptions have made it difficult for Elekta to plan a product launch in China due to the uncertainty of obtaining a license. Although these changes impact both foreign imported and domestically produced machines, Elekta’s domestic production seemed to suffer greater scrutiny.

“In China, the registration of imported and locally produced machines involves separate procedures, and this process was previously easier for machines made in China than those imported. However, the registration of locally produced machines is getting really tough...But in the long term it should be balanced between the two. As long as the policy is transparent and treating imported and local made fairly, no one will question it.”

*(Interview with the CEO, Elekta (China), 2010)*

The SFDA also decided to overhaul the supervision plan on medical devices and issued a preliminary consultation in 2007 (Medical Device Supervision Plan). This revision plan particularly highlighted stricter regulations on medical device production and registration, and proposed that no medical device could be produced or sold without registration permission.

Under the second consultation of the Medical Device Supervision Plan issued by the SFDA in 2010, the regulatory control over medical devices has raised arguments from international producers. The 2010 consultation indicated that compulsory clinical medical trials in China for both local and imported device would become necessary for obtaining a license. However,
most international medical device producers, like Elekta, had already completed clinical trials in their home markets, and had met international standards covering multiple markets before entering China. These additional clinical trial requirements presented unnecessary hassles, wasted resources, and further delayed product launch in the Chinese market (EUCCC, 2013).

For instance, Elekta’s Compact had received CE (European Conformity) certification by 2008. Facing the potential challenges of obtaining a license in a short time, the first Elekta Compact was installed as a demonstration project in a hospital in the Fujian Province. Elekta has worked with this hospital in the past and both parties reached an agreement whereby the Elekta Compact would be sold to the hospital after the demonstration project. Therefore, bureaucratic obstacles were able to be avoided in order to enable a smoother and faster installation process. After this installation, Elekta Compact obtained a license in China in 2009, and has since sold more than 20 units.

In 2010, China issued a reform bill on the Healthcare System (Opinions on Deepening the Healthcare System Reform), and pledged to bring affordable healthcare to more people and across a wider number of regions. Medical resources were to be distributed to second- and third-tier hospitals located in rural areas. The reimbursement level for medical treatments would also be increased. Previously, only hospitals located in coastal regions were able to afford the expensive machines, but this reform meant that additional resources from the government were distributed to rural hospitals to enable them to purchase premium medical devices.

Therefore, China’s healthcare reform in 2010 brought significant potential to Elekta’s growth. In the past, Elekta relied on a centralised sales team of about twenty staff in Shanghai, Beijing and Guangzhou to handle all the marketing and sales activities. As most of the hospitals that were capable of purchasing the Linac and Gamma Knife were located relatively close together in China’s coastal areas, sales and marketing were manageable with a small team. Occasionally, Elekta also worked with local distributors in an ad-hoc, case-by-case fashion. If a distributor had a customer, Elekta would work with them on the basis of a one-time distribution agreement. With the enlargement of the potential market and the geographically dispersed base of customers after the healthcare reform, serving rural hospitals would be extremely difficult for Elekta, based on the existing team and resources.

Elekta’s previous marketing approaches were no longer feasible under the new conditions, and it needed to start building a distributor network systematically by working with regional distributors that shared similar goals and organisational culture. Exclusive regional distribution rights would be given to these distributors and Elekta would work with them during a hospital’s decision process, while the installation, service and maintenance would remain under Elekta’s control.
“It was a business decision coming from the change of the environment. The demand for Linac started moving from hospitals in big cities to those in second and third-tier cities. In the past, Elekta might only need to contact top the 150 hospitals and it could cover all the potential. But in the next five years, it can be 350 hospitals, and how can we have the coverage for the remaining 200 hospitals? We saw the change of the market and we had to make a decision.”

(Interview with the CEO, Elekta (China), 2011)

China is really big, and it is just not possible to do it all alone...You cannot compare the China market with the market in Europe. There are 83 million people in Germany, and the population of Sichuan province alone is 83 million.

(Interview with the Deputy CEO for Sales & Marketing, Elekta (China), 2011)

As shown in Figure 13, Elekta’s own sales team would continue to collaborate with the top 150 hospitals directly to maintain connections and trace the past progress. Outside these regions, Elekta works with suitable local distributors through exclusive agreements. These distributors were selected based on their organisational culture, financial performance, and positions in their provinces. Furthermore, they were able to receive customer management support from Elekta’s own marketing teams and technology assistance from Elekta’s technicians. Elekta intended to pass on knowledge of customer management to these distributors.

“We hoped to establish long-term partnerships with distributors and let them take care of their respective provinces within a three- to five- year time frame. Establishing this kind of partnership would require a mutual understanding between us, in terms of sales style and technique... Our long-term partners would be more like our representatives, rather than simply handling distribution. We care about their capabilities and the quality of the work. In China, you do not just make one time business; you aim for long term.”

(Interview with the Deputy CEO for Sales & Marketing, Elekta (China), 2011)

At the same time, Elekta continued to engage customers using various approaches. It participated in annual medical exhibitions in China (China Med), and held conferences, seminars and training courses for neurosurgeons. In addition, Elekta managed all after-sale service directly, as it considered this to be a major source of new business opportunities, which not only gave Elekta more chances to interact with customers but also valuable opportunities to understand whether customers were satisfied with Elekta’s product.

Elekta considered its tight connection with hospital customers and the reputation of its products and service as critical to maintaining a market-
leading position in the premium medical device market in China. As Chinese medical doctors and hospitals became increasingly integrated in the world, they participated in international medical conferences, exhibitions and events normally attended by both medical device companies and hospitals. Thus, Chinese customers had many chances to observe interactions and actively seek information. The medical circle is rather small and people generally know each other. Even though a hospital might never have used one of Elekta’s machines or even have had contact with Elekta, for a hospital to be aware of the reputation of Elekta would not be difficult.
Figure 13. Elekta China’s network map in period 2 (snapshot in 2010)

- Elekta HQ Sweden
- Elekta Oncology (U.K.)
- Elekta Asia Pacific (HK)
- Elekta BMEI
- Elekta Sales & Marketing
- Shanghai Elekta Oncology System
- After Sales

Organisations belonging to Elekta:
- Elekta’s distributor
- Elekta’s sales & marketing
- Elekta’s sourcing partners
- Elekta’s universities

Organisations not belonging to Elekta:
- Funding body
- Top 150 hospitals
- Hospitals in China

Direct control
Connection
Chapter 7: Case Firm – Höganäs

Höganäs is the world’s leading supplier of iron powder. Iron powder is commonly used in the automotive industry, with estimates of around 80 percent of the product from the powder metallurgy (PM) industry flowing into automobile parts (IPMD, 2010). Höganäs’ business can be divided into two divisions, the components division and the consumables division, which account for 76 percent and 24 percent of the company’s total sales, respectively (Höganäs, 2012) (Figure 14). Sixty percent of the sales in the components division are in the automotive industry, which makes Höganäs greatly reliant on the development of this sector. Höganäs is a publically listed company on the Stockholm Stock Exchange. In 2010, Höganäs had sales subsidiaries in 15 countries around the world, and agents in another 14. Höganäs’ research and development budget is about two percent of its annual turnover (three percent of its operational expenses) and covers three centres located in: Sweden (Höganäs), the U.S. (Stony Creek), and China (Shanghai).

*Figure 14. Höganäs’ sales split 2010*

Höganäs was founded in 1797 on the west coast of Sweden, initially to exploit coalfields, before expanding into glass work and clay. Höganäs began focusing on iron early in the 20th century and became the leader in reducing iron ore to yield sponge iron powder in 1910 (Höganäs Process). Apart from advanced production technology, Höganäs also possessed great of knowledge of how iron powder is applied. The demand for iron powder grew gradually from the 1950s on, and Höganäs has taken part in developing the powder metallurgy (PM) industry (*Table 18*).
Table 18. Brief introduction to Höganäs

<table>
<thead>
<tr>
<th>Founded</th>
<th>1779</th>
</tr>
</thead>
<tbody>
<tr>
<td>Breakthrough</td>
<td>Invented the Höganäs Process to reduce iron ore to yield sponge iron powder (1910)</td>
</tr>
<tr>
<td>Major product</td>
<td>Iron powder</td>
</tr>
<tr>
<td>First foreign subsidiary</td>
<td>U.S. (1950)</td>
</tr>
<tr>
<td>First Asian subsidiary</td>
<td>Japan (1956)</td>
</tr>
<tr>
<td>Global operations</td>
<td>15 subsidiaries</td>
</tr>
<tr>
<td>Employment</td>
<td>1,619</td>
</tr>
<tr>
<td>Sales outside Sweden</td>
<td>99%</td>
</tr>
<tr>
<td>Main competitors</td>
<td>QMP (Canada), Kobe (Japan), and GKN/Höganäes (U.K./U.S.)</td>
</tr>
</tbody>
</table>

The internationalisation of Höganäs corresponded to the development of the world automotive industry. After World War II, the automotive industry grew particularly quickly in a few industrialised countries, namely the U.S., the U.K., Germany, and Japan. In 1950, Höganäs established its first overseas subsidiary in the U.S., the Hoeganaes Corporation (Capus, 2000). The subsidiaries in the U.K. and Germany were also set up during the late 1960s, followed by those in other major Western European countries (France, Belgium, Italy, and Spain).

Höganäs entered the Japanese market in 1956. In the beginning of the 1950s, Japan showed strong economic growth after recovering from World War II and became an important industrialised country. Japan was Höganäs’ first operation in Asia, and Höganäs’ market entry was through its collaboration with Gadelius, a Swedish trading house that had been operating in Japan since 1907. Throughout the years, Höganäs invested resources in co-development with Japanese customers, and people from its headquarters in Sweden travelled back and forth to Japan. In 1985, a Japanese subsidiary was formally established through a JV with Gadelius (Höganäs Gadelius K.K.) to take over the business activities. In 1994, Höganäs acquired full ownership of the JV and became the market leader, controlling one-third of the Japanese market.

Höganäs Japan also played an important role in the expansion to South Korea and Taiwan in the late 1970s and the beginning of the 1980s. Höganäs followed a similar investment pattern in these two markets: starting by working with agents and distributors, and finally establishing sales subsidiaries in 1990. This pattern was arguably a replication of the strategy that Höganäs implemented in Japan 15 to 20 years earlier, and the experience gained from its Japanese operations was leveraged in entering these two markets.

Currently, 99 percent of Höganäs’ sales are made outside Sweden, and the importance of the Asia region has increased significantly throughout the years. Japan has remained one of the company’s major markets. Höganäs’
major competitors are QMP (Canada), Kobe (Japan), and GKN/Hoeganaes (U.S.). Höganäs also faces a few smaller competitors in the lower-end segment of the metallic powder market and these are mainly from China, such as Angang and Laiwu (Bao Steel).

Höganäs’ China market entry

Höganäs established contact with China right after the country initiated economic reform, with Höganäs’ former Vice President, Sven Hulthén visiting China in 1979 and 1981 with the aim of understanding the conditions of the Chinese PM industry. Hulthén believed both the quality and quantity of China’s iron powder production lagged behind the rest of the world, and to produce components requiring medium- to high-strength steel, e.g., porous bearings, would not be possible (Jin, 1982). Because of Höganäs’ dominant position in powder metallurgy, the Chinese also sent a delegation to visit Höganäs in Sweden in the late 1980s, with the hope of securing a technology transfer. This goal was not achieved, as Höganäs did not wish to transfer any iron powder production technology and was interested only in sharing its knowledge of application.

The automotive industry had been a priority for the Chinese government throughout its economic transition. Laws and policies were laid out to prioritise the resources to support the development of the industry and, at the same time, protect domestic players. Therefore, strict restrictions had been laid upon importing passenger cars to China, e.g., the Notification for Strengthening Car Imports and the Notification for Stricter Control over Car Imports by State Council in October 1985 and October 1987, respectively. Moreover, the State Council further issued the Notification for Strengthening Macroeconomic Regulation and Control over the Healthy Development of the Automotive Industry in December 1985, and the Notification for Stricter Control over Car Production Sites in December 1987 to criticise the blind investments made by provincial governments to increase capacity in car manufacturing. These policies expressed serious concerns that the auto industry showed signs of overheating, and instructed that each individual car production project should exactly follow the guidelines in The 7th Five-Year Plan (1986-1990) established by the NPC.

In March 1994, the Chinese Government announced the Automotive Industry Policy. The Automotive Industry Policy was one of the first comprehensive industry policies that the Chinese government ever issued after beginning the economic reform. This policy addressed major aspects of the auto industry, such as product certifications, industrial organisations, industrial technology development, foreign investment utilisation, import and export regulations, localisation policy, and auto product pricing strategy. Going beyond these, the policy also covered issues of union formation,
traffic education, and urban planning that would be related to the development of the auto industry.

The Auto Industry Policy explicitly spelled out regulations for foreign investment. JV entry mode was required for all multinational automakers as well as part and component makers, with the Chinese partner holding no less than 50 percent of ownership. Each multinational automaker was allowed to form only two JV projects at any time, and there were stringent requirements regarding domestic content. Moreover, the Chinese government firmly controlled which JVs could be formed, what type of production would be allowed, and to whom these vehicles could be sold (Käfling, 2009).

Despite these developments and policy promotions, demand in China’s automotive sector had yet to materialise. There was no private car ownership, and all the automakers sold their cars to government exclusively (Sun et al., 2010). Therefore, although the development of the commercial vehicle segments had started, the production of passenger cars remained limited throughout the 1980s. Still, the potential size of the Chinese market continued to attract interest from Höganäs. Höganäs believed China might become an important market, given its size and development path. Höganäs could see that China was apparently following a similar pattern of economic development to that observed in Japan, South Korea and Taiwan. As these countries had demonstrated in the past, industrialisation would stimulate a strong demand for iron powder, particularly with the growth from the automotive industry.

“We used the same type of experience, concept, and strategy to enter these markets. Then we looked very carefully about China by the end of the 80s, but we had not done any investment in China at that time.”

(Interview with the President in Asia Region, Höganäs (China), 2010)

In 1992, Höganäs was approached by Shanghai Shenjiang Special Steel Corporation to set up a JV plant in China. Shanghai Shenjiang was an enterprise established out of the former Shanghai Bureau for Reform through Labour. The negotiations between Shanghai Shenjiang and Höganäs continued until the middle of 1994, when a final agreement was reached. Höganäs China Ltd. was formed in Shanghai’s Qingpu district with Höganäs owning a 65 percent equity stake.

“Although things started moving in China and people in Höganäs began to realize that China could become a very important market, we were still not very sure how we should approach China at that time. We didn’t want to make our own investment and it was also difficult to do so at that time.”

(Interview with the President in Asia Region, Höganäs (China), 2010)

Soon after the establishment of the JV, Höganäs China collaborated with the Chinese Powder Metallurgy Industry Association, the Powder Metallurgy
Association of China and the General Machine Components Industry Association to hold a seminar on powder metallurgy in Shanghai. This seminar took place in September 1994, and was attended by representatives from most of the steel factories and academic institutions in China (Powder Metallurgy Industry, 1994). Apart from Höganäs China, both the Höganäs headquarters in Sweden and Höganäs’ subsidiary in Taiwan were present at this seminar.

Höganäs’ subsidiary in Taiwan played an important bridging role during its China entry. Because of the similarity in language and culture, the Taiwan subsidiary helped the communication with China and eased the uncertainty from both sides. During the late 1980s and early 1990s, before the JV, there were some unsolicited export orders from China for Höganäs’ iron powder, and these were taken care of by and exported via the Taiwan subsidiary. Höganäs’ Taiwan subsidiary participated in the commercial talks during the negotiations with Shenjiang.

Höganäs’ plan for this JV project was focused on performing simple production, and there was no plan for technology transfer. The molten steel needed for the production was supplied by Shenjiang, which was located nearby. By the end of 1995, the JV plant sat next to Shenjiang’s factory which included a completed water-atomisation processing line. In 1996, Höganäs’ production of iron powder began. A small portion of the product was exported by Höganäs to the nearby market, and rest of the sales to domestic customers were the responsibility of Shenjian (Figure 15). As a result, Höganäs had little contact with local customers.

Additionally, the PM industry in China was relatively backward as a whole, and extremely fragmented during this period. Until 2000, there were roughly forty small- to medium-sized steel companies competing in the lower-end basic product segment. Angang and Laiwu (Bao Steel) were two large domestic players among these local competitors. Yet the quality of their metal powder was not sufficient to make value-added, high-end products, and their production efficiency was far behind Höganäs (He and Li, 2001; Wang, 2000). The Chinese PM industry mostly supplied to infrastructure, industrial construction, and some component markets (compressors for air conditioning units, hand tools, and motorcycles), but rarely sold to the automotive industry.
Figure 15. Höganäs China’s network map in period 1 (snapshot in 1996)

*Shanghai Shenjiang was bought out in 1998 but remained a raw material supplier and distributor of the end product until 2000*
Höganäs faced challenges expanding in the China market despite the fact that it held strong advantages in both product quality and production efficiency. Höganäs’ product was of too good a quality and too expensive for the demand from construction industry. The market that Höganäs depended on, i.e. the parts and components for passenger cars, was simply not ready, as the production of passenger cars in China had yet to take off.

The passenger car segment was relatively ignored for the first 15 years after economic reforms, as the Chinese government has focused exclusively on commercial vehicles, e.g., heavy trucks, lorries and vans. Production of passenger cars in 1980 accounted for only one percent of total automotive production, and this figure grew gradually through the early 1990s.

In 1996, the State Council decided to relax restrictions on the purchase of cars by ordinary citizens and issued the Notification for the Cancellation over Restrictions on Domestically used Economic Passenger Cars. This policy also instructed local governments not to use any by-laws to restrict the purchase and usage of passenger cars. By then, the number of people who were able to afford cars was rising quickly as the coastal cities of China became wealthy. Unlike institutional buyers, these people demanded cheaper cars and newer models. As a result, multinational automakers increased their investment in China and sped up localisation processes to meet the requirement from the government and remain competitive. Yet the multinational auto part and component makers were largely left out of this trend of growth as their market entrance was still restricted by the Auto Industry Policy of 1994.

The resulting growth in the market saw the production of passenger cars reach one-third the total number of automobiles produced in China by the year 2000 (Table 19).

**Table 19. The production of vehicles in China between 1980 and 2008**

<table>
<thead>
<tr>
<th>Year</th>
<th>Commercial Vehicles</th>
<th>Buses &amp; Coaches</th>
<th>Passenger Cars</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>1980</td>
<td>183,853</td>
<td>-</td>
<td>5,418</td>
<td>222,288*</td>
</tr>
<tr>
<td>1990</td>
<td>269,098</td>
<td>23,148</td>
<td>42,409</td>
<td>509,242*</td>
</tr>
<tr>
<td>2000</td>
<td>751,699</td>
<td>709,042</td>
<td>608,445</td>
<td>2,069,186</td>
</tr>
<tr>
<td>2004</td>
<td>1,514,869</td>
<td>1,243,022</td>
<td>2,312,561</td>
<td>5,070,452</td>
</tr>
<tr>
<td>2008</td>
<td>2,074,893</td>
<td>2,232,874</td>
<td>5,037,334</td>
<td>9,345,101</td>
</tr>
</tbody>
</table>

*Off-road vehicles not listed in this table are not included in this total

Despite the market growth, Höganäs’ China operation ran into trouble soon after it started. In 1997, Höganäs’ JV partner, Shenjiang, experienced financial strain when the Chinese Government decided to end subsidies to the state-owned steel manufacturers in preparation to join the WTO (WTO, 2001), and at the same time eliminate factories that caused environmental pollution (First List of the Technology and Equipment Eliminated due to
Severe Pollution in 1997, and Elimination Catalogues on Backward Technology and Equipment, 1999). Many small steel makers like Shenjiang were running old machines and were unprofitable, and had been relying largely on government support for survival. With Shenjiang in financial distress, Höganäs China encountered difficulties with their operations. In 1998, Höganäs decided to acquire the remaining 35 percent of the shares from Shenjiang (Figure 15), and in 1999 Höganäs China became a wholly-owned subsidiary and inaugurated a new mixing station to increase its production capacity. Shenjiang continued to supply molten steel that Höganäs needed for production until it was formally closed down by the Chinese government in mid-2000 (Appendix 5, Decision to Close Down Small Steel Manufacturer, 2000). The bankruptcy of Shenjiang delivered a huge blow to Höganäs’ operations in China, as it lost its main supplier of raw material.

Therefore, even though Höganäs had been carefully planning its market entrance into China, the entry timing of and continuous development on the JV plant was simply not ideal.

“Although it (Höganäs JV in China) was an opportunity to do something, we did lose money. We were too early.”

(Interview with the Chairman, Höganäs, 2011)

Höganäs’ expansion and the growth of the automotive industry in China

The fast growth of the passenger car industry spurred policy changes that caught up with Höganäs. Höganäs’ iron powder received strong demand from auto part and component makers, as it was an essential input for them to make better auto parts and components. In order to meet the growing demand, Höganäs planned to begin their own production in 2002 on the adjacent land acquired from Shenjiang after its bankruptcy. However, this plan to build their own production facility was soon questioned as Höganäs realised that producing iron powder locally was not cost effective, given that energy and raw materials were not cheap in China.

“...and the idea was still to use this site to do some simple production. However, a lot of things started to happen. First was that the Chinese market started moving and moving very fast, and we were very dependent on the automotive industry...This realization of change had gone through a few steps and we began to see China probably not as the place for cheap production but as very interesting market instead.”

(Interview with the President in the Asia Region, Höganäs (China), 2010)
Therefore, the plan to build their own production facility was abandoned in favour of importing basic components and various grades of iron powder from its plants in the U.S. and Sweden. Importation procedures had become relatively easier after China joined the WTO, and tariffs imposed on imported iron power were also reduced. Höganäs would also benefit from the economies of scale where these components were produced.

Under the new approach, Höganäs would make the mixing, based on customers’ demands, in its China facilities after the components were imported. Subsequent to the scaling-down of the production, Höganäs also decided to transform the operation in China to focus on the downstream activities in the supply chain. From 2004, Höganäs increased the staff in logistics, marketing, sales, and customer service in China, and kept the production at a minimum.

Meanwhile, the automotive industry experienced great impact from China’s accession to the WTO. In 2004, a new Auto Industry Policy was issued by the NDRC and substantial changes were outlined. This policy made clear the Chinese government’s expectations for how the auto industry should develop, and at the same time incorporated changes that helped to level the playing field for international firms. The local content requirement that was seen to restrict automaker’s choice of components back in the 1990s was abolished when the government issued the new Measures for the Administration of Import of Automobile Components and Parts Featuring Complete Vehicles in 2005. Multinational automakers were now able to implement global sourcing to reduce cost and to be competitive.

New laws have also provided multinational automakers more control over distribution and sales of their product upon market liberalisation (Auto Brand Sales Regulation and Auto Trading Policy, 2005). For example, local car dealers under the new regulations were obligated to obtain permission from brand owners to sell cars, which provided better protection for both the consumers who purchased the cars, and automakers, so that they had stronger control over their distributors. These changes encouraged multinational automakers to introduce newer car models and to localise parts and components in China. As a consequence, 27 new car models per year, on average, have been brought to China since 2005, which is a big contrast from the past, when there were only three models available between 1991 and 2001.

Furthermore, with the new Auto Industry Policy, multinational auto part and component markets were allowed to establish wholly-owned subsidiaries in China. This change lifted previous restrictions on foreign ownership, opening the China market and attracting a wave of foreign auto part and component makers to set up production in China around 2005 and 2006. Most of these part and component makers entered China to be more competitive and to be closer to the end customers. Haldex, a downstream customer of Höganäs and an international auto system maker, stated that
“without production in China, our price was extremely uncompetitive”  
(Interview with the head of China, Haldex, 2010). In addition to reducing costs, these auto part and component makers also needed to be geographically closer to the end customers in China to forge closer collaborations.

“Setting up production in China also shortened our response time as the lag time for importing product could never satisfy the need of the customer in China. In particular, it was very difficult to do customisation when the production was far away.”

(Interview with the Head of China, Haldex, 2010).

However, the speed of growth in the auto industry caused concern from the Chinese government. The NDRC’s Notification for the Auto Industry Restructuring in 2007 indicated that the Chinese government began to worry that there were signs of overheating, and that the automotive industry had neglected the need for indigenous technology. The policy called for special attention focused on cultivating capability in local auto part and component makers, and suggested more resources and policies in place to facilitate a technology upgrade.

Although the majority of the customers from Höganäs were either transplanted to China or had certain foreign ties, the rest were purely local and they, in particular, needed assistance applying iron powder in production. These local customers required technology assistance to accommodate the demand from automakers to localise the auto supply chain. To address the need from downstream customers, Höganäs established an R&D centre in Shanghai in 2005. Höganäs’ Shanghai Tech. Centre was equipped with a metallography lab similar to its other R&D facilities in Sweden and the U.S. The aim of the Shanghai R&D centre was mainly to support and educate local customers. Between 2005 and 2009, the Shanghai Tech. Centre organised fifteen sessions of PM school, and more than 30 specific training programs targeting individual clients. Approximately 180 people attended these training courses annually.

“We can give our customers general training on how to make those parts and we do that in regular basics, and most of our customers need this training... Basically it is a way to engage our customers. In most of the cases, we know and we have established relationships with customers since years ago.”

“Höganäs knew all the customers. Automotive was not necessary a small community but we have been here for a long time and we were well known. We had business with most of the important ones in the industry and we would continue it. It was a repeated and continued business.”

(Interview with the President in Asia Region, Höganäs China, 2010)
These training activities provided valuable opportunities for Höganäs to interact and work with their customers. Through these activities, Höganäs was able to engage with customers to understand their products and capabilities. Then, Höganäs could make suggestions on either choosing the right material, or finding better solutions for certain applications in order to make their process more efficient or to achieve a particular total cost.

The R&D centre also enabled Höganäs to work with customers during product development on auto parts and components, which could extend over a period of three to four years. During this period, Höganäs interacted with technical, sales, and commercial people parallel from the customer’s side in both business and social events. Through these interactions, Höganäs was able to establish connections with multiple channels from the customer, and these connections were considered to be important particularly in an industry that consisted of repeated business and a long cycle of product development.

Not only was Höganäs’ R&D facility in Shanghai a great support to continued sales, it could also strengthen Höganäs’ position in the higher-end product segment. After China’s WTO entry, major international competitors also entered the market to capture the strong growth of the Chinese automotive industry. QMP (Canada) and GNK (U.S.) entered the China market in 2004 and 2006 respectively. Unlike the local competitors, these companies had product quality that was able to compete with Höganäs. Without continuous support to its customers, Höganäs would be at risk of losing orders to its competitors.

“For Höganäs, our aim was to contribute to our existing customers’ growth more so than developing new business. We tried to see how to make the total market bigger. We helped our customers to upgrade their quality and technology and we also helped them to market what they were doing to their customers.”

“This was the reason we had R&D centre here. We needed to protect and secure our own position, and we needed to make sure they would buy from us to hold our market share.”

(Interview with the President in Asia Region, Höganäs China, 2011)

The Global Financial Crisis and its influence on China’s automotive industry and Höganäs’ operations

Höganäs and its downstream partners in the auto supply chain faced enormous challenges in 2008 when the Global Financial Crisis struck. Auto markets in the U.S. and Europe suffered greatly and the decrease in demand for cars subsequently affected the export of auto components and parts from
China. The Chinese government reacted quickly to the decline of exports and attempted to stimulate domestic consumption to compensate the export decline. Between January and July 2009, five temporary measures were announced to encourage people to buy cars (Table 20). These stimulus policies included tax reductions, subsidies for people in rural areas to purchase cars, subsidies for replacing old cars with new ones, as well as subsidies to encourage the purchase of smaller and more energy efficient cars. The Auto Industry Revitalisation Plan was also issued in March 2009 and it indicated the government’s intentions to stabilise the auto market, push for technology upgrades, and support the development of indigenous innovation.

Table 20. List of regulations issued after the Global Financial Crisis

<table>
<thead>
<tr>
<th>Date</th>
<th>Regulations &amp; Laws</th>
</tr>
</thead>
<tbody>
<tr>
<td>2009.01</td>
<td>Tax Reduction for Cars under 1.6L (for the period 2009-2011)</td>
</tr>
<tr>
<td>2009.03</td>
<td>Promoting Cars and Motorcycles in Rural Area Plan (for the period 2009-2011)</td>
</tr>
<tr>
<td>2009.03</td>
<td>Auto Industry Revitalisation Plan</td>
</tr>
<tr>
<td>2009.07</td>
<td>Promoting Auto Replacement Plan (for the period 2009-2011)</td>
</tr>
<tr>
<td>2010.05</td>
<td>Promoting Energy Efficient Cars</td>
</tr>
</tbody>
</table>

The effects of these temporary policies and governmental support were substantial and the Chinese automotive industry was able to maintain strong growth after the Global Financial Crisis. China’s automotive production exceeded 10 million units in 2009, surpassing other countries to become the world’s largest car producer. China’s dominant position in the global auto market was further strengthened, and international automakers have continued pouring resources and capital into the China market in the last few years.

Thus, Höganäs decided to upgrade the R&D facility in Shanghai to become the Asia Tech. Centre (ATEC) at the end of 2010. Additional resources have been added gradually and collaboration with researchers in the U.S. and Sweden were forged to facilitate the knowledge transfer. Staffing for the centre has increased to fifteen, representing one-fifth of Höganäs’ employees in China. These upgrades enabled ATEC to continue running the PM school and training courses that had been carried out since 2005, and to conduct some basic research locally.

The establishment of ATEC might seem to be a response to the Chinese government’s policies to build a favourable environment for local research and development (Notification for the Auto Industry Restructuring, 2006; Auto Industry Revitalisation Plan, 2009). These policies were intended to change the excessive dependency on imported auto components and systems in car production. Even though China’s passenger car industry had experienced ten years of dynamic growth, little attention had been given to
the development of the auto supply chain. Many customers from Höganäs lacked competence and capable staff, and they did not have the capability to produce quality products. The percentage of parts and components for producing cars in China that are imported from abroad is estimated to be roughly 50 percent.

Therefore, ATEC was urgently needed for Höganäs to support its customers. Höganäs anticipated that over time, the development phase of the passenger cars would come and China would begin to develop something different. In addition, the existence of ATEC enables Höganäs to form and coordinate a working group with the players in the supply chain to promote the development of cars in China.

Ironically, car development in most advanced markets was initiated by Höganäs’ end customers, the automakers. These automakers had the power to push their suppliers to develop better quality and cheaper auto components and systems. The production time period for a new vehicle in China is about one to two years for commercial vehicles, e.g., heavy duty trucks (HDT) or buses, and roughly three to four years for passenger cars. During this period, there is a lot of discussion between the automakers, auto system makers, auto parts and components makers, and Höganäs regarding the direction of the development.

The time frame for car development in China is considerably shorter than the production in Europe, where the development of a new car normally takes five years. Even so, the automakers in China have yet to show their interest in developing a car locally.

“Most of the Chinese car manufacturers are not interested in overhaul development, and most of time what you see in the market is just the modification of the external shape instead of a totally new design. If the car is going to go through an overall new design to a total upgrade, then auto system maker like Haldex will work with car manufacturers and other actors in the supply chain for co-design or co-development.”

(Interview with the head of Haldex China, 2011)

As Höganäs was previously involved in four-year co-development projects with automakers in South Korea to develop a connecting box, it took on the role to drive the development work, as the end customers were not yet prepared to make such a push.

“These car manufacturers rarely do any development in China, as they normally import models developed abroad and directly use them here. These automakers haven’t taken a lead in terms of development. They may have the ambition, but China is not there yet.”

(Interview with the President in Asia Region, Höganäs China, 2011)
This co-development working group consisted of Höganäs’ most important customers and their customers, which represented nearly 50 percent of the industry. Höganäs also had people from headquarters and other subsidiaries joining in the meeting. As Figure 16 shows, the working group was also attended by automakers, as they, too, were interested in better and cheaper components. This working group enabled Höganäs to present its customers and their product directly to the end customers.

In addition, Höganäs had frequent interactions with various players in the auto supply chain through this working group, and become aware of the new trend in developments in the Chinese auto industry. These meetings have seen participation by both technical and sales people, and Höganäs has intentionally kept the discussions on both sides running in parallel so that the discussion would not be overly dependent on one single source. There was also a mixture of social and business events to help build closer connections between individuals and firms. Through these long collaborations with various actors in the auto supply chain, Höganäs was perceived as a trustworthy supplier with long-term interests in the Chinese auto industry.

Apart from the establishment of ATEC and the co-development working group, Höganäs’ Asia Pacific regional headquarters, previously established in 2008, also played a key role in collaborating with subsidiaries in nearby markets and drawing on their knowledge of car development processes in their respective markets. Höganäs set up an Asia Pacific regional headquarters in China to better serve China’s fast growing automotive industry and address the increasing importance of the Asian market, since the sales volumes in the Asia Pacific region had gradually overtaken other regions for Höganäs’ total sales.

Furthermore, that Höganäs assigned a vice president (VP) in this unit served as a bridge between subsidiaries in Asia Pacific and the headquarters in Sweden. This VP was also responsible for managing collaborations with and between nearby markets including Japan, South Korea, Taiwan and Australia. For Höganäs’ operations in this region, this was a significant change from the old days when Japan led the development of the whole Asia market and China was the latecomer (Figure 16).

“We changed. We used to have Japan, Korea, Taiwan, S.E Asia, and China reporting separately to Sweden. Then we had people in Taiwan responsible for Korea, and China. Now we have organised it together and China has become the leading country!”

(Interview with the Chairman, Höganäs, 2011)

Nonetheless, as is visible in Figure 16, Höganäs continued to have these subsidiaries operate independently despite having them integrated and drawing closer collaborations. All subsidiaries in the Asia Pacific region continued to receive raw material directly from production facilities in the
U.S. One main reason behind this strategy was that the potential changes from China and its instability still caused worries for Höganäs.

“We cannot change the political system and we have no influence for that. That means you always have to be prepared for changes. It means that when we have a big investment in China you always have some hesitations. Operation in China definitely carries big risk and you have no way to plan for it but you have to prepare and find ways to react to it.”

(Interview with the President in Asia Region, Höganäs China, 2011)

Höganäs is aware of the government’s involvement in the Chinese auto industry and that the information received in China is not always clear. There is very little Höganäs can do to influence the politics, but they can be a step ahead and prepare to better respond to the changes that may occur in the future.
Figure 16. Höganäs China’s network map in period 2 (snapshot in 2010)
Three-part Case Analysis

The next three chapters (8, 9, and 10) form a three-part case analysis. Chapter 8 presents the individual case analyses on institutional changes, market opportunity and market commitment of DeLaval, Elekta and Höganäs during their entries to China. Events and activities observed in the case narratives are conceptualised according to the three theoretical concepts and their respective sub-concepts (transitional and turbulent changes, structural and relational opportunities, commitment toward the host market, relationships and organisational integration). Three analytical strategies, i.e. temporal bracketing, time sequence mapping, and data matrices, are employed to build understanding of the progress and connection of these concepts over time.

Chapter 9 presents the cross-case analysis of DeLaval, Elekta and Höganäs on the differences of the three theoretical concepts and their respective sub-concepts. Based on the individual case analyses, the frequency and the type of the events and activities that lead to the conceptualisation of these concepts and their sub-concepts are transformed to varying levels and compared. Temporal bracketing is still applied in this part of the analysis. The aim of the cross-case analysis is to discover how the sub-concepts are related.

Chapter 10 presents the cross-period analysis of DeLaval, Elekta and Höganäs on the changing relations among the sub-concepts over time. Based on the cross-case analysis, the levels of the transitional and turbulent change are plotted together to show how institutional change is evolved from these firms over time, and how these evolutions may influence the development of market opportunity and market commitment. The aim of this cross-period analysis is to bring back the time and process dimension of this study and to show the dynamic relation among these concepts.
Chapter 8: Individual Case Analysis

8.1. DeLaval’s market entry to China and the changes in regulative institutions in China’s dairy industry

Period 1 (1980-2001)

Based on the empirical data presented in the case narrative, a time sequence map (Figure 17) is created to show how the observed events lead to the institutional change, market opportunity and market commitment during DeLaval’s market entry and expansion in period 1. In Figure 17, three lines are created to present the three concepts studied, and the observed events associated with these three concepts are marked with a black dot along the lines and with an explanation attached. These events in these three time sequences also corresponded to the analysis in Table 21, Table 22, and Table 23.

From observing the time sequence map in Figure 17, it can be seen that the early part of the institutional change (before 1990) seems to be dominated by laws and regulations relating to the economic transition, e.g., Open Door Policy and EJV Laws, while in the later part (after 1990), the new regulations pertain more to the dairy industry, such as milk standards. The time sequence for market opportunity at the same time also seems to show a progression from perceiving opportunity about the market in general (e.g., the potential of China and export orders) toward focusing more on the industry level (local and foreign dairy processors that emerged).

Yet the progress in the timeline of market commitment seems to speed up gradually and is concentrated primarily in the latter period (from 1990). Since the formation of the JV in 1989, DeLaval began to make more frequent market commitments until the end of this period.

The observations seen in the time sequence map in Figure 17 suggest that institutional change is the antecedent of market opportunity and market commitment in period 1. Without those changes in laws and regulations that opened the Chinese market, there would be no market opportunity to recognise, and consequently no market commitment to make. The Shopping Basket Programs in 1989 also played a similar role that led to the formation of local and foreign dairy processors, and further stimulated the milk production.
Figure 17. The time sequence map of DeLaval’s market entry & expansion in China in period 1 (1980-2001)

- **Institutional change**
  - Economic Reform & Open Door Policy
  - EJV Law
  - Foreign Rep. Office Law
  - Analytical Methods for Milk & Standards for Sterilisation of Milk
  - WOFE Law
  - Standards for the Qualifications of Raw and Fresh Milk Received from Farms
  - Shopping Basket Program

- **Market opportunity**
  - Chinese dairy farms were permitted & able to pay for int’l orders on milking machines
  - DeLaval received unsolicited order
  - Stimulated demand for milk & dairy farming
  - Policy encouraged milk production & consumption
  - Foreign dairy processors entered market
  - Domestic dairy conglomerate began to form

- **Market commitment**
  - Export 1st milking system to China
  - Sales office in Hong Kong
  - Rep. office in Beijing
  - NuPulse JV with Guangzhou Wanbao & sold machine through JV partner
  - NuPulse was integrated in DeLaval and JV with Wanbao was terminated
  - Re-opened wholly-owned sales subsidiary in Shanghai, (renamed as Alfa Laval Agri)
  - Renamed as DeLaval and relocated to current location with larger office capacity

- **Time**
  - 1980
  - 1985
  - 1990
  - 1995
  - 2000
Institutional Change
Although there were changes in the Chinese market in general, there were relatively few laws and regulations issued in this period related directly to dairy products, and even fewer toward the dairy industry. There were announcements of the revision of national standards for milk collection and sterilisation in 1985, 1986 and 1999 (Table 21). The differences between these three standards are small, and they did not have much influence over the development dairy industry.

The Shopping Basket Program initiated by the MOA in 1989, however, had a strong influence on the growth of the dairy industry. The first Shopping Basket Program lasted five years and it promoted milk to be part of the daily diet of the Chinese people, which consequently led to the growth of the milk production industry in the latter period. The Shopping Basket Program, together with two other laws, presented the characteristics of transitional change, as all these laws were oriented toward long-term development of the society or the industry. Yet the dairy industry and dairy products were only part of these transitional changes, and neither of them was created to specifically target the industry per se.

Table 21. Institutional changes during DeLaval’s China entry and expansion in period 1 (1980-2001)

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>Period 1 (1980-2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td>1. Analytical Methods for Milk &amp; Standards for Sterilization of Milk (MOLI, 1985)</td>
</tr>
<tr>
<td></td>
<td>2. Standards for the Qualifications of Raw and Fresh Milk received from Farms (MOLI, 1986)</td>
</tr>
<tr>
<td></td>
<td>3. Shopping Basket Program (MOA, 1989)</td>
</tr>
<tr>
<td>Turbulent change</td>
<td>Limited</td>
</tr>
</tbody>
</table>

While there were some transitional changes in the dairy farming and dairy products, there were no clear turbulent changes observed in this period. There were also no shocks that appeared in the market or industry. This may be due to the fact that dairy production and consumption was still relatively low up until the beginning of the 1990s. Also, the formation of the dairy industry was just at its beginning. Overall, the institutional change in the dairy market and dairy industry was limited.

Market opportunity
For DeLaval, the attraction of China in this period was mainly related to the potential scale of the market. Based on DeLaval’s experience elsewhere in the world, the economic growth of the market, the increase in income level, and the international exposure would generally encourage people to drink
more milk. Consequently, these changes would lead to the development of the dairy farming and dairy processing industry, upon which DeLaval’s product relied. With the economic reform taking place in China since 1979, the local dairy farms showed signs of interest and were financially capable of purchasing milking machines from aboard. The milk production and consumption rose further in response to the MOA’s Shopping Basket Programs in 1989. In addition, both domestic and international dairy processors were entering the market in the 1990s, which indicated that there seemed to be some potential to operating in China.

The information shown in Table 22 represents the characteristics of structural opportunity, as both DeLaval and, potentially, its competitors could benefit from capturing these market opportunities. For example, Wambao continued selling milking machines by collaborating with a Japanese machine producer after breaking up with DeLaval. These opportunities were also something new to the market; some of them were led by policy changes, and some could be recognised by observing the development of the market closely.

Table 22. Market opportunities during DeLaval’s China entry and expansion period in 1 (1980 - 2001)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural opportunity</td>
<td>1. Ongoing economic reform and development provided Chinese dairy farms financial resources to order milking machines from aboard (since 1979)</td>
</tr>
<tr>
<td></td>
<td>2. Economic development stimulated the demand for milk and dairy farming (since 1982)</td>
</tr>
<tr>
<td></td>
<td>3. Policy encouragement led to increased dairy consumption and a growing number of cows &amp; dairy farms and dairy processors (since 1989)</td>
</tr>
<tr>
<td></td>
<td>4. Foreign dairy processors began to enter China (since 1990)</td>
</tr>
<tr>
<td></td>
<td>5. Domestic dairy conglomerates began to form (since 1993)</td>
</tr>
<tr>
<td>Relational opportunity</td>
<td>1. DeLaval receiving unsolicited orders from Chinese indicated there may be potential interest (1979-1985)</td>
</tr>
</tbody>
</table>

There may have been a downside to the structural opportunity in this period, though. The abundance of cheap labour available in China meant that the need for DeLaval’s advanced automatic milking system, in comparison to
NuPulse’s basic machine, might have been limited. This downside may have discounted the structural opportunity recognised by DeLaval in this period.

DeLaval’s relational opportunity is shown in Table 22. Both types of opportunity had some limitations. DeLaval received occasional orders to export milking system to China, and these orders allowed DeLaval to become aware of the market potential in China. Yet the volume of the occasional orders from Chinese dairy farms was relatively small in terms of DeLaval’s global sales; thus DeLaval was not able to gather more information relating to customers and build permanent contacts. Consequently, the lack of permanent contacts also led NuPulse to encounter difficulties in identifying suitable partners with whom to form a JV.

Furthermore, the JV formed by NuPulse should have provided DeLaval access to the local partner’s resources and network. Perhaps the low dairy consumption, as well as the abundant cheap labour in this period seriously prohibited DeLaval from building any concrete relationships with local customers. As such, neither the market entry nor the JV was able to bring out relational opportunities for DeLaval. Therefore, the analysis in Table 22 sees the decision by DeLaval to terminate the JV partnership and restart the operation in Shanghai. Although the change of location might have helped DeLaval to discover new customers, some old customers could have been left out due to geographic distances. Had DeLaval already established frequent sales, brand recognition, or customer loyalty, this move would probably have jeopardised any existing relationships and set the JV effort back to beginning.

Based on these analyses, we see that strong structural opportunity in China was recognised by DeLaval in this period and attracted DeLaval to the market. The relational opportunity, in contrast, was relatively absent.

**Market commitment**

DeLaval’s market commitment in the first period was mainly focused on building establishments to facilitate the operation and expansion in China. However, due to the limitation from the growth in the dairy industry in China, DeLaval’s market commitment seems to be rather scattered (Table 23).

DeLaval’s commitment toward the host market was mainly carried out in establishing legal entities for the JV and wholly-owned operations in China. Throughout this time, the aim of DeLaval was to build a physical presence in China and promote its product, and thus the commitment toward the host market had been made to increase awareness of DeLaval’s products. Financial capital was the main form of resource invested for this purpose. This capital was coming either from other subsidiaries in the region, e.g., NuPulse from New Zealand, or from the HQ from Sweden. There was also some type of managerial capability transfer, as both the JV and wholly-
owned subsidiaries had foreign expatriate managers assigned in China to be responsible for the operation.

Table 23. Market commitments during DeLaval’s China entry and expansion in period 1 (1980 - 2001)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Host market</td>
<td>1. Invested capital to build JV subsidiary (1989)</td>
</tr>
<tr>
<td></td>
<td>2. Invested capital to form wholly-owned sales subsidiary in Shanghai (1996)</td>
</tr>
<tr>
<td></td>
<td>3. Expanded office capacity &amp; increased staff numbers (2000)</td>
</tr>
<tr>
<td>Relationships</td>
<td>1. Built relationships through JV partner with state-owned farms (1989)</td>
</tr>
<tr>
<td></td>
<td>2. Built direct contact with customers through wholly-own subsidiary (1996)</td>
</tr>
<tr>
<td></td>
<td>2. Recipient of resources from HQ to form wholly-owned subsidiary, and rebranding and integration (1995-2001)</td>
</tr>
</tbody>
</table>

DeLaval’s market commitment toward relationships was limited during this period. Although it has attempted to form relationships through the JV with stated-owned Guangzhou Wanbao and connect with local dairy farms, DeLaval did not gain much knowledge about these farm customers, as the customer-facing activities were mainly managed by Wanbao. DeLaval began to interact with local customers directly after forming the wholly-owned subsidiary; however, the dairy industry remained at the beginning stage in this period.

The analysis also observes a rather limited market commitment made toward organisational integration. Despite the NuPulse-initiated market entry, there was mainly only assistance from NuPulse and no knowledge or resources to transfer out of China. Besides, NuPulse also did not have a strong connection with Swedish HQ, as it had only been acquired in the mid-1980s. NuPulse was eventually consolidated into DeLaval and its involvement in China was ended and replaced by management directly from Sweden.

To sum up, DeLaval’s market commitment during the first period of market entry mainly focused on the host market, and financial capital was the main form of resource used in the commitment. The market commitment for relationships and organisational integration in this period was neither extensive nor elaborate.
Period 2 (2002-2010)

A time sequence map from 2002 to 2010 is presented in Figure 18. The three time sequences, i.e. institutional change, market opportunity and market commitment are continued from the previous period, and the events observed from 2002 associated with these concepts are marked with a black dot with an attached explanation. These events also correspond to the analysis in Table 24, Table 25, and Table 26. There is also evidence of market shock in the time sequence map in period 2, i.e. the Melamine Milk Crisis, and it is marked on the map with a dashed-line rectangle.

From observing the time sequence of institutional change in Figure 18, one can see that although this period began with China’s entry to the WTO at the end of 2001 and the market liberalisations that come with it, there was otherwise very little change in laws and regulations at the general market level that influenced DeLaval’s market entry. The majority of the institutional changes targeted the dairy industry explicitly.

Meanwhile, the events of both market opportunity and market commitment seem to closely follow those that took place in institutional change. For example, China’s WTO entry and deregulations on import and export seems to have led to the recognition of opportunity to source from China, and consequently DeLaval began a trial and eventually relocated their Asian sourcing centre from Hong Kong to China in 2005.

However, the turbulent change in regulative institutions triggered by the market shocks seems to follow a rather different pattern. Figure 18 shows that the announcement of these multiple laws were concentrated in a relatively short period of time (2008.09-2010.12). DeLaval continued to recognise market opportunity during these changes, and it also expanded market commitment specifically related to these changes and the causes the drove the changes.

The antecedent role of institutional change can still be observed in this period from Figure 18, and it is even more obvious during turbulent change. Without subsidies and the instruction from policy, the consolidation of dairy farms might not have appeared so quickly after the crisis. Consequently, the SSDC2 may not have come into the picture at this time, and there would also have been less need for DeLaval to relocate its China Sales Office to Beijing.
Figure 18. The time sequence map of DeLaval’s market entry & expansion in China in period 2 (2002-2010)

- **Time**
  - 00
  - 05
  - 10

- **Institutional change**
  - China joined WTO
  - Hygienic Standard for Raw Milk
  - Notification for the Raw Milk Production Procedure
  - Measures to Promote Dairy Industry Healthy Development
  - Notification for Strengthening Labels on Liquid Milk

- **Market opportunity**
  - Import & export deregulation
  - Rising dairy consumption led to more dairy farms & demand of milking system
  - Participated in Industry Association
  - Involved in large farm project
  - Village milking centers emerged
  - Gov’t subsidised small dairy farms to buy milking machine
  - Work with Remin Uni for CDF

- **Market commitment**
  - Sales office for E. Asia
  - Provide solutions for clients’ projects
  - Began Sourcing from China
  - Held membership on the board of CDA
  - Factory for hygiene products
  - Assembling factory
  - Asian Sourcing Centre
  - Introduced mobile bucket milking system
  - 1st China Dairy Forum
  - Mobile bucket export to India
  - 2nd China Dairy Forum
  - Sino-Swedish Dairy Centre phase2
  - China Sales Office moved to Beijing
  - Increased design & engineer work from China

**Notes:**
- Sales office for E. Asia
- Produce solutions for clients’ projects
- Began Sourcing from China
- Held membership on the board of CDA
- Factory for hygiene products
- Assembling factory
- Introduced mobile bucket milking system
- 1st China Dairy Forum
- Mobile bucket export to India
- 2nd China Dairy Forum
- Sino-Swedish Dairy Centre phase2
- China Sales Office moved to Beijing
- Increased design & engineer work from China
Institutional change
China’s WTO entry did not have a particular impact on laws and regulations in the dairy industry since the industry had not experienced strong regulation in the past. Yet the deregulations in importing agricultural products were exploited by dairy processors to import cheaper dairy powder, which disrupted the market. Consequently, the Chinese government issued a few regulations to strengthen the quality of the milk, e.g., Notification for Strengthening Liquid Milk Production Management by State Council in 2005, and Notification for Strengthening Labels on Liquid Milk by the NDRC in 2007.

Moreover, the NDRC issued a comprehensive policy on the dairy processing industry and laid out a five-year plan to restructure the industry. These dairy-industry-oriented policies, regulations, and ongoing updates on quality standards (Table 24) indicated an intention by the Chinese government to create a long-term effect of ensuring a healthy structure of the industry. As such, these changes in laws and regulations were considered to be transitional change.

The turbulent change in regulative institutions was triggered by the Melamine Milk Crisis, which happened in September 2008, and had a significant impact on the dairy industry. In an effort to save the ailing industry and recover from the crisis, the Chinese government issued and revised most of the laws and regulations within a two-year time frame, as shown in Table 24. The areas that the government tackled basically covered every stage of the dairy supply chain including dairy farming, milk quality, milk collection, and dairy processing and sales.

Some of these new regulations and laws may have been implemented with the intention of having a long-term effect on the dairy industry. Referring to Table 24, the Dairy Industry Restructuring and Revitalisation Plan by the NDRC in 2008, the Food Safety Law of the People’s Republic of China by the NPC in 2009, and the Dairy Processing Industry Policy by the NDRC and MIIT in 2009 all aimed to achieve a long-lasting effect. However, the timing of their issuance shows not only a strong connection to the crisis that had just disrupted the market, but also that they came into effect relatively close to each other. While the Food Safety Law of the People’s Republic of China aimed to replace the Food Hygiene Law of the People’s Republic of China of 1995, the Dairy Processing Industry Policy had only been announced about a year earlier. In other words, the updates of these laws and regulations were not expected, but instead were part of a bigger effort to rebuild the industry order. As such, they carry stronger characteristics of turbulent change, and together with other new laws they have permanently altered the market structure at a rapid pace.
Table 24. Institutional changes during DeLaval’s China entry and expansion in period 2 (2001 - 2010)

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td></td>
</tr>
<tr>
<td>2.</td>
<td>Notification for Strengthening Liquid Milk Production Management (State Council, 2005)</td>
</tr>
<tr>
<td>Turbulent change</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Activation National First Class Food Safety Emergency Reaction Team (State Council, 2008.09)</td>
</tr>
<tr>
<td>2.</td>
<td>Regulations on Supervision and Management to Milk Quality and Safety (State council, 2008.10)</td>
</tr>
<tr>
<td>3.</td>
<td>Dairy Processing Industry Restructuring and Guidance Scheme (MIIT, AQSIQ, SAIC, 2008.10)</td>
</tr>
<tr>
<td>5.</td>
<td>Measures for the Administration of the Raw Milk Production and Collection (MOA, 2008.11)</td>
</tr>
<tr>
<td>7.</td>
<td>Food Safety Law of the People’s Republic of China (NPC, 2009.02)</td>
</tr>
<tr>
<td>8.</td>
<td>Notification for Standardisation on Raw Milk Collecting Station Management (MOA, 2009.03)</td>
</tr>
<tr>
<td>10.</td>
<td>Good Manufacture Practice on Dairy Product (MOH, 2010.03)</td>
</tr>
<tr>
<td>13.</td>
<td>Rules for Examination of Licensing Criteria for Enterprise Producing Formula Milk Powder for Infant Use (AQSIQ, 2010.11)</td>
</tr>
</tbody>
</table>
Market opportunity

As China’s accession to WTO membership was expected, DeLaval began to see other market opportunities in China. Deregulations allowed the import and export of material to become easier, and DeLaval could reduce its costs of production by relocating certain sourcing activities to China (Table 25). In addition, the dairy industry began to experience vibrant growth. The numbers for both large and small dairy farms increased in this period, as did the number of village milking centres. The demand for milking systems was much stronger, but there was a limited offering in the market.

However, the analysis in Table 25 shows that the rise of imported milk powder could affect the profit of the dairy farms, and consequently reduce the demand for DeLaval’s product. The Chinese government began to provide subsidies to support local farms and encourage them to adopt automation to ensure the quality of the milk.

Market opportunities such as conducting sourcing from China, or benefiting from government policy, shown in Table 25, mainly stemmed from China’s unique market structure. The change of existing policy, market deregulation, and economic development provided led DeLaval and its competitors like GEA and Orion, to recognise and capture market opportunities. Although these opportunities were not unique to any particular firms, from having operated in China for a long time DeLaval may have benefited by knowing how to access necessary information. The analysis implies that the opportunities present the characteristics of structural opportunity, and they were available for any company possessing awareness of the market in this period.

DeLaval also began to see relational opportunity from working with various partners in this period. As shown in Table 25, DeLaval was seen to participate in existing and new farm projects with dairy processors. DeLaval China was a member of the China Dairy Association board of directors, which allowed it to have frequent contact and interactions with other industry players. It also initiated the China Dairy Forum with Remin University as a platform for industry and non-industry actors to exchange ideas. The Sino-Swedish Dairy Centre phase two (SSDC2) project also enabled DeLaval to work with various actors to provide professional dairy farm management training to the Chinese dairy industry.

These market opportunities are considered as relational opportunities, as they can only be accessed by DeLaval. Information obtained by DeLaval through its partners is not available to other competitors. DeLaval also spent a lot of time and resources to collaborate with these partners to form some of the activities, even though not all of the activities would lead to mature opportunities.
Table 25. Market opportunities during DeLaval’s China entry and expansion in period 2 (2002 - 2010)

<table>
<thead>
<tr>
<th>Market Opportunity (MO)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
</table>
| **Structural opportunity**               | 1. Deregulations after China’s WTO entry allow easier moving of goods across border and reduce sourcing cost (since 2002)  
                                            2. Milk consumption continued rising led to more larger and small dairy farms and increased demand on both advanced and basic milking systems (2002-2005)  
                                            3. Village milking centres emerged as an important market for milking machines (2005-2008)  
                                            4. Gov’t policy to encourage dairy farm consolidation and to reach economy of scale (since 2007)  
                                            5. Gov’t policy to subsidise dairy farmers to purchase milking machines (since 2009) |
| **Relational opportunity**               | 1. Participated and presented on the board of China Dairy Association to build stronger connection with industry players (since 2000)  
                                            2. Collaborated with dairy processors for existing and future dairy farm building project (since 2003)  
                                            3. Collaborated with Remin University to hold China Dairy Forum (Remin Uni, Gov’t, industry association) for industry dialogues (since 2008)  
                                            4. Initiated Sino-Swedish Dairy Centre phase 2 project to provide professional dairy farm education to China (Dairy Office, Capital Agricultural Group, TetraPak, Chinese Agricultural Uni, SLU) (since 2010) |

Perhaps the strong turbulent change in the regulative institutions in this period also encouraged the development of the relational opportunities. Companies may have wanted to stay closer and work together to ensure survival through the period of turbulence.

Overall, DeLaval recognised structural and relational opportunities in the second period. The structural opportunities were mainly a result of the change in regulations and improvement of market conditions. The relational opportunity had been developed over time by DeLaval, and perhaps the strong turbulent change in this period promoted closer collaboration that further developed these opportunities with various partners.
Market commitment
As the dairy industry experienced rapid growth in the second period, the market commitment from DeLaval also increased. Much of DeLaval’s market commitment in this period is based on the market entry activities initiated in the first period, which gradually facilitated market acceptance of its products. For example, DeLaval established the Sales Office for East Asia in its China sales subsidiary. The Asian sourcing centre also relocated from Hong Kong to China. DeLaval’s subsidiary in China continually received resources to set up factories for hygiene products and assembling (Table 26).

Table 26. Market commitment during DeLaval’s China entry and expansion in period 2 (2002 - 2010)

<table>
<thead>
<tr>
<th>Market Commitment (MC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host market</strong></td>
<td></td>
</tr>
<tr>
<td>1. Established sales office for East Asia (2002)</td>
<td></td>
</tr>
<tr>
<td>2. Began sourcing items from China (2003)</td>
<td></td>
</tr>
<tr>
<td>4. Introduced and Reengineered basic machine for small dairy farmers (2006)</td>
<td></td>
</tr>
<tr>
<td>5. Expanded design &amp; engineering work for product aimed for local customers (2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td></td>
</tr>
<tr>
<td>1. Provided a broader range of products to high-end customers and participated in customers’ farm building projects (2002)</td>
<td></td>
</tr>
<tr>
<td>5. Relocated China sales office to Beijing to be closer to gov’t and customers (2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Organisational integration</strong></td>
<td></td>
</tr>
<tr>
<td>1. China becomes the sales office for East Asia (2002)</td>
<td></td>
</tr>
<tr>
<td>2. China becomes Asian sourcing centre (2005)</td>
<td></td>
</tr>
<tr>
<td>4. Initiated Sino-Swedish Dairy Centre phase 2 educational project and collaborated with HQ, TetraPak (2010)</td>
<td></td>
</tr>
</tbody>
</table>

The aforementioned market commitments were mainly presented through the expansion of business activities and functions of the subsidiary in China. Additionally, analysis in Table 26 shows that certain engineering works have been focused in China to provide a better product offering. Although these
market commitments were executed at the local level, they were mainly initiated at the HQ level. As such, they are considered to be commitments made toward the host market.

DeLaval’s market commitment toward relationships significantly increased in this period. These commitments not only cover customers in various segments, but also include other non-business actors in China. The collaborations between DeLaval and its partners are emphasised on crucial issues such as the development of the Chinese dairy industry. For DeLaval, the relationship commitment has provided better access and interpretation on information received in the market. Much of DeLaval’s commitment was engaged in working with partners for network building. As the analysis in Table 26 shows, the resources invested in these commitments toward relationships are mostly time and knowledge, and they are conducted at the subsidiary level.

One can also see, from Table 26 that DeLaval’s commitment toward organisational integration consisted of activities that led to commitment toward the host market and relationships. These relationship commitments are exhibited by certain collaborations between the subsidiary in China, TetraPak in China, and the headquarters in Sweden. For example, to hold activities like the China Dairy Forum and SSDC2 was particularly resource-demanding, and was something that DeLaval’s subsidiary in China simply could not execute alone. As such, there was a need for joint initiatives that allowed resources from local subsidiaries and the headquarters to be combined together. There was also a strong sense of integration to include China in DeLaval’s global operations for global sourcing activities, and for China to become the Sales Office for the region. More expatriates were assigned to China for these functions, and they brought with them experience and an increase in direct communication with headquarters.

A possible outcome of dramatic incidents such as market shocks and turbulent change in the host regulative institutions may be the triggering of closer resource and organisational integration within the firms. As the local subsidiary experiences a new market condition, it may need special assistance to adapt. Additionally, turbulent change can alter the preferences of local customers, and the subsidiary may need knowledge different from that which it had accumulated before the changes were carried out. This particular knowledge may indeed be available from other parts of the firm.

To sum up, the analysis on market commitment suggests that DeLaval substantially increased its market commitment toward the host market, relationships, and organisational integration. Some of these market commitments, though they may be made toward different areas, are connected by the way in which they are executed.
8.2. Elekta’s market entry to China and the changes in regulative institutions in China’s medical device industry

Period 1 (1980-2001)

The time sequence map of Elekta’s market entry in period 1 (Figure 19) is based on observed events and activities in the empirical data. Three timelines are drawn to represent the institutional change, market opportunity and market commitment, and the events are marked with black dots along the lines together with explanations. The events in these three time sequences also corresponded to the analysis in Table 27, Table 28, and Table 29.

One can observe from Figure 19 that the institutional change seems to be concentrated in the latter half of this period. The designated regulatory agency was created in this period (1994), and there were also revisions of regulations on medical devices in 1996 and 2000. The institutional change in the first half of this period was predominantly due to economic transition.

Although Elekta’s China market entry activities are sparse in the time sequence map for this period, there is progress shown in both market opportunity and market commitment. On the market opportunity side, Elekta could see that training for Chinese neurosurgeons had gradually expanded in the beginning of the 1980s, which seemed to correspond to orders of the Laksell Stereotactic System, and, later, the interest and purchase of the Gamma Knife. In responding to these market opportunities, Elekta set up an office in Hong Kong and a rep. office in Beijing to look after this increasing interest and demand. The observations made on Elekta’s past seem to suggest that the institutional change provided a precursor to the market opportunity and market commitment in period 1.

Yet there were also noticeable gaps in Elekta’s market opportunity. The first gap appeared after the sales of the Laksell Stereotactic System and before the sales of the Gamma Knife. This gap was probably due to the subsiding of interest in the Laksell Stereotactic System, and the Gamma Knife having yet to be commercialised. The next gap was seen during 1995 after the Chinese government issued new policies regarding the purchase and import of the Gamma Knife by local hospitals, and led to the suspension of Elekta’s sale of Gamma Knife to China. The market opportunity in China appeared again for Elekta with its plan to relocate the newly acquired Linac and look for cheaper production.
Figure 19. The time sequence map of Elekta’s market entry & expansion in China in period 1 (1980 - 2001)

Time

Institutional change

Market opportunity

Market commitment

80
Economic Reform & Open Door Policy
EJV Law

First stereotactic system export to China

Foreign Rep. Office Law

Training for stereotactic neurosurgeons resumed

Elekta received unsolicited order for stereotactic system

85
WOFE Law

Provisional Measures for Device in Medical Department

Hong Kong Sales Office

1st Gamma Knife sold to Huashan Hospital Shanghai

90
Notification for SDA Responsibility & Organisational Structure
Notification for Temporary Postponing Gamma Knife

Chinese hospitals show interest in Gamma Knife; continued making orders

Rep. office in Beijing

95
Provisional Measures on Large Medical Device Allocation and Measures for Medical Device Market Admittance Examinations Measures for Medical Device Administration Regulation on the Supervision &

Cheaper labour costs in China attracted interest to relocate Linac bed production Potential to work with state-owned company to form JV

Held seminar on Gamma Knife & communicated with MOH

00
Medical Device Regulations on the Imported Medical Device Registration WTO entry

JV plant (SEOS) for Linac bed established in Shanghai.

Economic Reform & Open Door Policy
EJV Law

Foreign Rep. Office Law

Regulation on the Supervision &

Regulations on the Imported Medical Device Registration

WTO entry
Based on the observations shown in *Figure 19*, the possibility exists that some of Elekta’s market commitments may have also enabled the recognition of market opportunity in the latter part of period 1. The rep. office that Elekta established and the ongoing seminars with neurosurgeons and communication with the MOH could potentially have kept Elekta aware of the economic transitions in China and its significantly lower labour costs. The continuous presence in China might also have led Elekta to see that working with local companies might be necessary when establishing the production plant.

**Changes in regulative institutions**

Between 1980 and 1990, the medical device industry appeared to receive relatively little attention from the Chinese government. There was only one regulation issued (Provisional Measures for Devices in Medical Departments); not only was the regulation a temporary measure but it also was aimed toward the hospitals, rather than at the medical device industry. The designated regulator for medical devices (SDA) has only been formed in 1994 (*Table 27*)

*Table 27. Institutional changes during Elekta’s China entry and expansion in period 1 (1980 - 2001)*

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>Period 1 (1980-2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td>1. Provisional Measures for Devices in Medical Departments (MOH, 1987)</td>
</tr>
<tr>
<td></td>
<td>3. Regulation on the Supervision and Medical Devices (SFDA, 2000)</td>
</tr>
<tr>
<td></td>
<td>4. Regulations on the Imported Medical Device Registration (SFDA, 2001)</td>
</tr>
<tr>
<td>Turbulent change</td>
<td>1. Notification for Temporary Postponing Gamma Knife Allocation (MOH et al., 1995.05)</td>
</tr>
<tr>
<td></td>
<td>2. Provisional Measures on Large Medical Device Allocation and Administration (MOH, 1995.06)</td>
</tr>
<tr>
<td></td>
<td>3. Measures for Medical Device Market Admittance Examinations (SDA,1996.01)</td>
</tr>
<tr>
<td></td>
<td>4. Measures for Medical Device Administration (MOH, 1996.09)</td>
</tr>
</tbody>
</table>

The transitional change in regulative institutions for the medical device industry in this period was limited. Two new regulations were eventually issued in the year 2000 by the newly transformed SFDA. These two regulations supervise both domestic and imported medical devices, and have provided a much needed regulatory framework for the fast-developing medical device market.
In contrast, the turbulent change and market shock in this period has posed great challenges for Elekta’s market entry to China. The temporary Gamma Knife ban by the Chinese government in May 1995 was completely unexpected for Elekta. Immediately following this ban, three more new regulations on medical devices were issued within 14 months. These new regulations were announced in a relatively short period of time, and their purpose was for the government to regain control of and restore order to the medical device market. The result of this turbulent change was that the sale of Elekta’s Gamma Knife in China was completely stopped.

Some regulations issued during the turbulent change, however, possessed characteristics similar to those of the regulations for transitional change. For example, the “Measures for Medical Device Administration” covered all medical devices, not just the large medical devices as originally intended by the Chinese government. Some connections can also be seen between the regulations issued during the turbulent change, and those regulations that were part of the transitional change. For example, the “Measures for Medical Device Administration” was announced to replace the 1987 “Provisional Measures for Devices in Medical Departments”. These analyses seem to imply that even the turbulent change in the regulative institution may still need to be based on the framework that the transitional changes had previously set up.

**Market opportunity**
The attraction of China for Elekta during the first period of market entry lay in the size of the potential market. The Chinese market became accessible due to the economic reform and deregulation. The interest of Chinese hospitals in the stereotactic system had given Elekta some idea that China could be a big market with growing demand for specialised medical treatment. This expectation was met, as the newly commercialised Gamma Knife was indeed popular among Chinese hospitals. Chinese hospital orders of the Gamma Knife together made up nearly one-fifth of the existing the Gamma Knife orders between 1993 and 1995.

These opportunities, led by the economic reform and growth shown in Table 28, were not only for Elekta, as the Gyro Knife, a Chinese-copy of the Gamma knife, appeared in the market and was also popular with local hospitals. The Gyro Knife was cheaper and had great appeal, particularly to cash-strapped hospitals. Therefore, some of the structural opportunities recognised by Elekta could also be recognised by its competitors.

Another part of the structural opportunity for Elekta came from relocating the newly acquired Linac production facilities to China (Table 28). Moving the factory from Europe to China provided great savings for Elekta, due to the cheaper labour and production cost in China. This particular structural opportunity may have led Elekta to explore potential relational opportunities
as well. As Elekta was rather unfamiliar with managing both the Chinese work force and the local suppliers needed to supply the materials for manufacturing, forming a JV with two formally state-owned electronic companies in Shanghai could bring potential for Elekta to tap into their network. Then, Elekta could simply be responsible for the technology, and export the completed product back to the oncology division headquarters in the U.K.

Table 28. Market opportunities during Elekta’s China entry and expansion in period 1 (1980 - 2001)

|------------------------|----------------------|
| **Structural opportunity** | 1. Training for stereotactic neurosurgeons resumed (since 1976)  
2. Chinese hospitals began to show interest in Gamma Knife after its commercialisation, and made continuous orders (1990)  
3. Cheaper labour cost to reduce production cost (1999) |
| **Relational opportunity** | 1. Received unsolicited order for Laksell Stereotactic System from Chinese hospitals (since 1982)  
2. Formed JV with local partners and tapped into their supplier networks (2000) |

Otherwise, there is little relational opportunity to be seen for Elekta in this period. On the sales and marketing side, Elekta had mostly relied on the sales office in Hong Kong and a rep. office in Beijing to maintain contact with local hospitals. As the Chinese government has stopped hospitals from purchasing the Gamma Knife, there was limited product promotion that this Beijing rep. office could do. Yet Elekta stayed and continued organising workshops and seminars for neurosurgeons and hospitals with the Gamma Knife.

**Market commitment**

Elekta made relatively limited market commitment in the host market throughout this stage. Elekta chose to export the stereotactic device and the Gamma Knife from Sweden with help from the Hong Kong sales office. There was little direct foreign investment in China; the only physical presence that Elekta established in China was the Beijing rep. office and, in the later stage of period 1, the subsidiary office in Shanghai (Table 29). The Gamma Knife ban by the Chinese government in 1995 literally stopped Elekta’s entry activities until it decided to relocate the factory for Linac’s operation table to China. The SEOS JV, though, had led Elekta to invest knowledge in China to ensure the production quality.
Table 29. Market commitments during Elekta’s China entry and expansion in period 1 (1980 - 2001)

<table>
<thead>
<tr>
<th>Market Commitment (MD)</th>
<th>Period 1 (1980-2001)</th>
</tr>
</thead>
</table>
<pre><code>                    | 2. Established JV production for Linac bed in Shanghai (2000) |
</code></pre>
| Relationships          | 1. Conducted medical seminars on Gamma Knife with neurosurgeons and continued communicating with MOA (since 1996)  
                        | 2. Built JV partnership with local companies (2000) |
| Organisational integration | 1. Export sales were managed through HK sales office (since 1991)  
                        | 2. Recipient of knowledge transfer from HQ to JV plant to produce Linac bed (2000) |

Both the Beijing rep. office and SEOS JV operations enabled Elekta to connect with some local actors. The rep. office continued working with hospitals that had already acquired the Gamma Knife and provided service and assistance. Yet this rep. office was not able to promote the product itself, as the Chinese government had restricted its sale. Through the SEOS JV, Elekta built relationships with partners who assumed the responsibilities of managing the factory and identifying suppliers. However, in the latter case, the commitment toward the JV partners did not result in fruitful returns and Elekta decided to terminate these relationships and operate the production alone.

The analysis also shows there was limited market commitment toward organisational integration in this period. There was sales assistance from the Hong Kong office to push the Gamma Knife into the Chinese market, but it stopped after 1995. Elekta HQ had also invested financial capital and transferred technology to support the establishment of SEOS. However, there was no resource or knowledge sharing from SEOS, as it had just been set up, and was in trouble most of the first two years of its operations.

To sum up, the market commitment made by Elekta in this period, despite the fact that some activities indicated certain resource investment in China, remained limited. One can also observe that market commitment, whether made toward the host market, relationships, or organisational integration, can be affected and disrupted by the change of laws and regulations in the host market.

Period 2 (2002-2010)

The time sequence map of Elekta from 2002 to 2010 is presented in Figure 20. Three time sequences, representing institutional change, market opportunity and market commitment, were extended from the previous
period and the observed events and activities that led to these three concepts in this period are denoted by black dots with an attached explanation. These events and activities are further discussed in Table 30, Table 31, and Table 32. This period also witnessed a market shock, i.e. SFDA Bribery Scandals, and this is marked on the map with a dashed-line rectangle.

The time sequence of institutional change shown in Figure 20 indicates that most of the institutional change occurred after 2006. Prior to this, the institutional change was mainly about the import/export deregulations, and market liberalisation (e.g., the revisions made on medical device registration and administration) that took place after China’s accession to the WTO. However, since the beginning of 2007, the changes in regulations intensified and can be largely attributed to the ongoing scandals in the SFDA. This stream of concentrated institutional change continued until the end of 2008.

In comparison, Elekta’s market opportunity in period 2 appeared to be focused primarily in the early stage when it exploited the continuously growing demand for cancer treatment in China and market deregulations after China’s WTO entry. Its Gamma Knife was able to return to the Chinese market after the government announced a plan to allow hospitals to make new purchases. Then, in the later stage, Elekta saw the potential to expand the reach of the Linac and Gamma Knife to inner China following a government announcement on health-care system reform.

Consequently, Elekta’s market commitment was gradually made through the subsidiary SEOS, and later BMEI. The acquisition of BMEI enabled Elekta to expand different business activities in China, ranging from sales, production and sourcing to research and development.

There are strong links between institutional change and the market opportunity that recognised by Elekta during this period. There were market opportunities made available from the changes in laws and regulations, but there were also occasions where the institutional change appeared to disrupt the recognition of further market opportunity. As the Chinese medical industry was experiencing turbulent change during 2007-2008, the time sequence map for market opportunity appears to be empty at this point in time (Figure 20). Yet market commitment seemed to remain, albeit with a slight slowdown compared to what happened prior to 2007.

This observation seems to suggest that market commitment may also be affected by institutional change, but probably to a lesser extent. Furthermore, the ongoing market commitment may be something that firms hold on to when the host market experiences turbulent institutional change, until they can recognise future market opportunity again.
Figure 20. The time sequence map of Elekta’s market entry & expansion in China in period 2 (2002-2010)

- Time

00

- China joined WTO
- Measures for Medical Device Registration
- Measures for Large Medical Device Allocation and Administration

05

- National B-class Medical Device Allocation and Administration Plan
- Notification for National Allocation Plan on Medical Device
- Notification for the Extension on Medical Device Registration Certificate
- Notification for Medical Device Central Procurement Plan
- Notification for Quality Assessment on Medical Device Producer
- Notification for Execution Plan on Food & Drug Safety Production Quality Revision Draft on the Managerial Regulation on Medical Device
- Notification for the Change on Medical Device Registration
- Notification for the Provisional Regulation on Strengthening Medical Device Registration
- Notification for Cleaning Medical Device Registration
- Measures for the Supervision & Reassessment on Medical Device
- Opinions on Deepening the Healthcare System Reform Notification for the Allocation Plan of the B-class Medical Device
- Nationwide Public Consultation on (Revision Draft) Measures of the Medical Device Supervision and Management

- SFDA Corruption Scandals

10

- Gov’t intended to sell off BMEI
- Notification for the Change on Medical Device Registration
- Measures for the Supervision & Reassessment on Medical Device
- Opinions on Deepening the Healthcare System Reform Notification for the Allocation Plan of the B-class Medical Device

Market opportunity

- Gradual increase of cancer patients and treatment centres in China
- Close contacts with Top 150 hospital in China
- Deregulation on import/export allowed goods to move across border easier
- Tariff and tax reduction for imported medical device

Market commitment

- Dedicated team with top 150 hospitals
- Wholly-owned Subsidiary (SEOS)
- SEOS became part of global supply chain
- Commenced sourcing from China
- China became part of global sourcing
- Participated in trade shows, held seminars
- Acquired BMEI, and maintained existing customer
- Setup scholarship program
- BMEI integration with support from HQs
- BMEI developed Elekta Compact
- 1st Elekta Compact installed in Fujian China
- Elekta Compact sold to other markets
- Collaborated with local distributors in 2nd & 3rd tier hospital
- Develop distributor network

Market opportunity

- Developed distributor network
- Setup scholarship program
- BMEI integration with support from HQs
- BMEI developed Elekta Compact
- 1st Elekta Compact installed in Fujian China
- Elekta Compact sold to other markets
- Collaborated with local distributors in 2nd & 3rd tier hospital
- Develop distributor network
Changes in regulative institutions

Despite the Chinese government agreeing, upon its entry to the WTO, to abolish the quota system for most medical devices, the importation and application of large medical devices like the Linac and Gamma Knife remained under strong control. Nevertheless, the Chinese government set a series of administrative measures to gradually allocate the Linac and Gamma Knife in hospitals. As Table 30 shows, these allocation plans began in 2004 and have been repeated roughly every two to three years throughout the second period.

In general, these administrative measures to allocate the Linac and Gamma Knife have been issued steadily with an expected time frame to complete. The procedures for individual hospitals to apply and submit their proposals are also transparent. Therefore, they are considered to be transitional change, as they are aimed at creating some form of structure in the market.

There are also other regulations considered to be part of the transitional change. For example, State Council’s “Opinions on Deepening the Health-Care System Reform” in 2009 provided an anchor policy for future regulations. Under this reform, more resources would be poured into the hospitals in the second- and third-tier cities to assist them to equip advanced medical devices like the Linac and Gamma Knife. Similarly, State Council’s “Public Consultation on (Revision Draft) Measures of the Medical Device Supervision and Management” in 2010 also aimed to be a comprehensive supervision framework for the medical device industry and market.

Yet the 2010 provision measure on medical devices is a by-product of the turbulent change of 2007 and 2008. After the SFDA’s bribery scandal (2005-2006) and the merging of the SFDA with the MOH, a series of nine regulations were issued within 18 months to restructure the medical device market and industry (Table 30). Most of these new regulations targeted medical device registration and quality assessment, such as, for example, the “Notification for the Change on Medical Device Registration” and the “Notification for Quality Assessment on Medical Device Producers”. Unexpected delays on product registration and license renewal, and bureaucracy hurdles were suddenly experienced by Elekta and other companies.

Among these new regulations issued during this period of turbulent change, the MOH proposed a provisional regulation for medical devices in an attempt to toughen the supervision framework. This provision became the basis for the call for consultation in 2010. What can be seen in this analysis is that a regulation that was originally part of the turbulent change can evolve and become part of transitional change in another period of time.
Table 30. Institutional changes during Elekta’s China entry and expansion in period 2 (2002 - 2010)

<table>
<thead>
<tr>
<th>Institutional Change (RC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Transitional change</strong></td>
<td></td>
</tr>
<tr>
<td>1. Measures for Medical Device Registration (SFDA, 2004)</td>
<td></td>
</tr>
<tr>
<td>2. Measures for Large Medical Device Allocation and Administration (MOH, NDRC, MOF, 2004)</td>
<td></td>
</tr>
<tr>
<td>3. National B-class Medical Device Allocation and Administration Plan (MOH, NDRC, 2005)</td>
<td></td>
</tr>
<tr>
<td>5. Opinions on Deepening the Healthcare System Reform (State council, 2009)</td>
<td></td>
</tr>
<tr>
<td>6. Notification for the Allocation Plan of the B-class Medical Device National wide (MOH, 2009)</td>
<td></td>
</tr>
<tr>
<td>7. Public Consultation on (Revision Draft) Measures of the Medical Device Supervision and Management (State Council, 2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Turbulent change</strong></td>
<td></td>
</tr>
<tr>
<td>1. Notification for the Extension on Medical Device Registration Certificate (SFDA, 2007.04)</td>
<td></td>
</tr>
<tr>
<td>2. Notification for Medical Device Central Procurement Plan (MOH, 2007.06)</td>
<td></td>
</tr>
<tr>
<td>3. Notification for Quality Assessment on Medical Device Producer (SFDA, 2007.07)</td>
<td></td>
</tr>
<tr>
<td>4. Notification for Execution Plan on Food &amp; Drug Safety Production Quality (State Council, 2007.08)</td>
<td></td>
</tr>
<tr>
<td>5. Revision Draft on the Managerial Regulation on Medical Device (MOH, 2007.09)</td>
<td></td>
</tr>
<tr>
<td>6. Notification for the Change on Medical Device Registration (SFDA, 2007.12)</td>
<td></td>
</tr>
<tr>
<td>7. Notification for the Provisional Regulation on Strengthening Medical Device Registration (SFDA, 2008.07)</td>
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<tr>
<td>8. Notification for Cleaning Medical Device Registration Documents (SFDA, 2008.09)</td>
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</table>

**Market opportunity**

In the second period, the market liberalisation after China’s WTO entry and the continuous growth in the Chinese economy led Elekta to recognise substantial opportunity. The import/export deregulation gave Elekta easier access to source systems and components needed not only for production in China, but also for its global operations. Elekta began trial sourcing activities in 2003, and by 2005 these sourcing activities had expanded
significantly. Sourcing from China has enabled Elekta to lower production costs globally and gain a better position against competitors (*Table 31*).

In addition, the price for Elekta’s machine has become more competitive in China, thanks to the reduction of import tariffs and tax. Though the products from Elekta are still more expensive than those from the local competitors, the Chinese hospitals have become more financially resourceful in this period due to the increase in the number of cancer patients, and are also attracted to better quality foreign products (*Table 31*).

*Table 31. Market opportunities during Elekta’s China entry and expansion in period 2 (2002 - 2010)*

<table>
<thead>
<tr>
<th>Market Opportunity (MO)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>1. As the economy grew, the number of cancer patients and treatment centres increased, and the demand for the Linac and Gamma Knife also became bigger (since 2000)</td>
<td></td>
</tr>
<tr>
<td>2. Import/export deregulations allows easier moving of goods across border and gives potential for sourcing (since 2002)</td>
<td></td>
</tr>
<tr>
<td>3. Tariff and tax reduction for import medical devices make foreign made medical devices more attractive (since 2002)</td>
<td></td>
</tr>
<tr>
<td>4. The Chinese gov’t intended to sell off unprofitable medical research institution providing potential to acquire (2005)</td>
<td></td>
</tr>
<tr>
<td>5. The Chinese gov’t announced procurement plan for Gamma Knife after 10 years of import restriction (2007)</td>
<td></td>
</tr>
<tr>
<td>6. Elekta Compact installed in China and was popular among Chinese hospitals (2008)</td>
<td></td>
</tr>
<tr>
<td>7. The Chinese gov’t announced health-care system reforms and subsidies for rural hospitals to purchase expensive equipment like the Linac and Gamma Knife (2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Relational opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>1. Established relationship with top 150 Chinese hospitals to be able to know their decision to purchase the Linac in advance (since 2000)</td>
<td></td>
</tr>
<tr>
<td>2. Access to BMEI’s existing customers so that Elekta can know their needs for upgrade (since 2006)</td>
<td></td>
</tr>
<tr>
<td>3. Gained information regarding policy through BMEI’s connection with other Chinese research institutes (2007)</td>
<td></td>
</tr>
<tr>
<td>4. Initiated scholarship programs with top medical physicist universities to broaden Elekta’s potential talent pool (since 2007)</td>
<td></td>
</tr>
<tr>
<td>5. Elekta began occasional collaboration with local distributors, and later starts to systematically develop distributor network to serve 2nd and 3rd tier hospitals (2010)</td>
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</tbody>
</table>
Opportunities also arose from the new policies and regulations announced by the Chinese government (Table 31). First of all, the MOH announced plans to purchase new Gamma Knives for the Chinese hospitals. This provided a new opportunity for Elekta’s Gamma Knife to re-enter the market again after a 10-year break. The Chinese government also intended to sell off state-owned BMEI and invited global Linac producers to bid. The chance to acquire a strong local competitor and to expand production facilities in China presented a great opportunity for Elekta. Lastly, China announced a reform of the health-care system in 2010, which brought great market opportunities to Elekta. As the government plans to provide resources for rural hospitals to purchase expensive medical devices such as the Linac and Gamma Knife to increase their capability, Elekta can expect increasing demand coming from second- and third-tier hospitals.

Nevertheless, the changing policy from the government can also bring possible disruption to market opportunity. The multiple new regulations issued after the SFDA bribery scandals inevitably caused serious delay on product approval and registration, which has led to strong uncertainty for Elekta and other medical device companies.

The market opportunities listed above are not only for Elekta per se. Opportunity for sourcing, benefits from import tax and tariff reduction, and health-care reform are open to other companies, including Elekta’s competitors. For example, the bidding process for BMEI has involved Elekta and two other international competitors, Varian and Siemens. These market opportunities are structural opportunities that are characterised by their newness and any firm with the awareness may be able to capture them.

There are also considerable market opportunities in this period just for Elekta. For example, their long-term operation in China has enabled Elekta to build strong relationships with the top 150 hospitals. These interactions with hospitals enabled Elekta to better understand the purchase process so that it is able to get in touch with decision-makers at the appropriate time, and also to better allocate resources. Hospitals satisfied with Elekta’s service are also likely to pass along recommendations to other hospitals since the medical circle is tightly connected.

Acquiring BMEI also brought Elekta valuable information on BMEI’s existing customers, who may need machine upgrades in the future, as well as tapped into strategic relationships with research institutes at the central level. BMEI’s strategic connection with academia and government also gave Elekta easier access to the latest information on policy.

Furthermore, Elekta also began systematically building a distributor network after the health-care reform. Many distributors previously worked with Elekta on a case-by-case basis, and through these experiences Elekta got to better know these distributors and is therefore better able to understand whether a match exists between organisational cultures to
determine if there is potential to become long-term partners. Market opportunities like these are exclusive to Elekta as the information needed to recognise these opportunities can only be obtained through these partners (i.e. hospitals or distributors). These market opportunities may also need further collaborations between Elekta and partners in order for them to be realised. Therefore, these market opportunities are categorised as relational opportunity and they are only available for Elekta and its partners.

**Market commitment**

Through the strong structural and relational opportunities, Elekta was able to build a market presence fairly quickly in this period. After taking control of SEOS and investing more capital and management, the operation of the factory became smooth and was fully integrated into Elekta’s global operations. Through SEOS, Elekta also began to build a sourcing team to handle the sourcing activities from China. The sales team for Linac was established and was responsible for maintaining strong contact with the top 150 hospitals in China, and participating in trade shows and exhibitions to promote Elekta’s product.

In addition, Elekta’s market commitment toward the host market can also be seen from its acquisition of BMEI, as this acquisition led it to invest more capital, management, and technology into the operation in China. Elekta’s employee numbers in China tripled in this period. After the acquisition, Elekta also began to invest resources to design a lower-end Linac for BMEI’s customers. The incorporation of BMEI eventually strengthened Elekta’s position in China as the market leader in Linac (*Table 32*).

*Table 32* shows that much of Elekta’s market commitment toward relationships can be linked to the commitment made to the host market. For example, the relationships with the top 150 hospitals, built, over the years, by the sales team, have enabled Elekta to be aware in advance of potential decisions to purchase a Linac. Frequent contact by sales and service teams also allow Elekta to learn of further opportunities that may arise in these hospitals. Further, Elekta built a positive reputation from serving those top tier hospitals and received referrals. Similarly, Elekta carefully maintained the relationships with BMEI’s existing customers after making the acquisition. The analysis seems to show that much of the relationship commitment is built upon the past or existing commitment to the host market.

Furthermore, Elekta’s market commitment toward relationships may help Elekta continually explore opportunities when encountering unexpected regulative institutional change. The close relationships with hospitals enabled Elekta to install the first Elekta Compact, despite the bureaucracy hurdle after the SFDA bribery scandals. Elekta also quickly began to set up
its distributor networks after the initiation of health-care reform, based on previous relationships.

Table 32. Market commitments during Elekta’s China entry and expansion in period 2 (2002-2010)

<table>
<thead>
<tr>
<th>Market Commitment (MC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host market</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Continued investing in SEOS to become major supplier to operation table globally (2003)</td>
</tr>
<tr>
<td>2.</td>
<td>Commenced sourcing activities from China (2005)</td>
</tr>
<tr>
<td>3.</td>
<td>Invested in product promotion through participation in trade shows &amp; exhibitions (2005)</td>
</tr>
<tr>
<td>5.</td>
<td>Designed basic Linac for lower-end segment (2007)</td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Dedicated team served top 150 hospitals (2003)</td>
</tr>
<tr>
<td>4.</td>
<td>Initiated scholarship program with Medical Physicist department in Universities (2007)</td>
</tr>
<tr>
<td><strong>Organisational integration</strong></td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>China served as one of the global sourcing centres</td>
</tr>
<tr>
<td>2.</td>
<td>China’s production plants become part of global production (since 2005)</td>
</tr>
<tr>
<td>3.</td>
<td>Collaboration with division and group HQ to integrate BMEI (since 2006)</td>
</tr>
</tbody>
</table>

There are also stronger market commitments from Elekta toward organisational integration in this period. Many of these commitment activities represent a joint contribution from the local subsidiary and division and group headquarters. The subsidiary in China began to play an active role in resource allocation and knowledge sharing. The SEOS and China sourcing centre have been fully integrated into Elekta’s global supply. Another example can be seen from the decision to acquire BMEI. BMEI’s integration process required participation from the China subsidiary, the headquarters in Sweden, and the Oncology headquarters in the U.K.

To sum up, Elekta has made intensive market commitment in China with regard to all aspects in the second period. There are stronger commitments to the host market and relationships, and the analyses seem to indicate these two aspects of commitment have strong connections and share the same activities. There is a much stronger commitment made toward organisational
integration, and resources are joined, redistributed and shared among various units within the whole firm through these commitment activities.

8.3. Höganäs’ market entry to China and the changes in regulative institutions in China’s automotive industry

Period 1 (1980-2001)

The time sequence map of the market entry of Höganäs between 1980 and 2001 is presented in Figure 21. Three time sequences are created to represent institutional change, market opportunity and market commitment. The events and activities observed from the empirical data are marked along the timeline with a black dot and an attached explanation. These three concepts and corresponding events and activities are further discussed in Table 33, Table 34, and Table 35.

Unlike for DeLaval or Elekta, there were significant changes in the laws and regulations throughout Höganäs’ first period. Most of these changes, shown in Figure 21, particularly before 1990, explicitly targeted the production of passenger cars. There was still some institutional change concerning general economic transitions, but they were obviously outnumbered. After 1990, the only significant institutional changes concerning passenger cars were the Automotive Industry Policy in 1994, and the Notification for Cancellation over Restriction on Domestically Used Economic Passenger Cars in 1996.

The activities for the market opportunity time sequence seem to be scattered and possess less relevance (Figure 21). Höganäs visited China right after the economic reform. Although Höganäs recognised that China was a potentially important market, due to its size and similar development patterns with nearby countries, it ruled out any immediate demand for iron powder. Then, the potential to establish a JV with local firms seemed to appeal to Höganäs, as it had been unsure of how to plan its market entry. However, the negotiations for the JV agreement took nearly a year to complete, which possibly indicates a feeling of uncertainty for Höganäs.

Similarly, the market commitment progressed relatively slowly. Very little progress is observed in the first ten years. While market entry activities began to appear in the mid-1990s, they predominantly took place in the latter period and some of them were actions to save the failing subsidiary.

The observations made from Figure 21 suggest that institutional change and market opportunity seem to appear at different points of time and show less connection. Whether institutional change still acts as a precursor, as in the other two cases, or whether institutional change has somehow prohibited the recognition of market opportunity is still unclear.
Figure 21. The time sequence map of Höganäs’ market entry & expansion in China in period 1 (1980-2001)

Institutional change
- Economic Reform & Open Door Policy
- EJV Law
- Foreign Rep. Office Law
- Notification for Strengthening Macroeconomic Regulation & Control over Healthy Development of Auto Industry
- WOFE Law
- Notification for Stricter Control over Car Import
- Notification for Stricter Control over Car Production Site

Market opportunity
- China’s economic transition & growth could potentially lead to strong auto industry
- China delegation visited Höganäs
- Received unsolicited orders
- Approached by Shenjiang for JV
- Gov’t encouraged development of passenger car
- JV negotiations began
- JV agreement reached
- JV plant completed & began production
- Wholly-owned Subsidiary
- Expand mixing station

Market commitment
- Höganäs delegation visited China
- Agent in Taiwan
- Formed subsidiary in Taiwan, and occasionally exported to China
- Acquired land and planned to begin own production

China's economic transition & growth could potentially lead to a strong auto industry. The government encouraged development of passenger cars and began negotiations for a joint venture. A subsidiary was formed and occasionally exported products to China. Höganäs acquired land and planned to begin its own production.
Changes in regulative institutions

The automotive industry was the focus for the Chinese government after the economic reform. The Chinese government recognised the strategic role the automotive industry could play to lead to the development of the economy. Therefore, on the one hand, the slow development of the passenger car in the 1980s was a result of the firm control from the several policies and regulations issued by the central government. On the other hand, the growth of the passenger car that came in the late 1990s was also contributed to decisions from central government to relax restrictions on average Chinese purchasing cars. *Table 33* lists the changes in laws and regulations during period one that impacted the automotive industry or Höganäs.

*Table 33. Institutional changes during Höganäs’ China entry and expansion in period 1 (1980 - 2001)*

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>Period 1 (1980-2001)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td></td>
</tr>
<tr>
<td>1. Notification for Strengthening Car Import (State Council, 1985)</td>
<td></td>
</tr>
<tr>
<td>2. Notification for Strengthening Macroeconomic Regulation and Control over the Healthy Development of Automotive Industry (State Council, 1985)</td>
<td></td>
</tr>
<tr>
<td>3. Notification for Stricter Control over Car Import (State Council, 1987)</td>
<td></td>
</tr>
<tr>
<td>4. Notification for Stricter Control over Car Production Site (State Council, 1988)</td>
<td></td>
</tr>
<tr>
<td>5. Auto Industry Policy (State Council, 1994)</td>
<td></td>
</tr>
<tr>
<td>6. Notification for the Cancellation over Restriction on Domestically Used Economic Passenger Car (State Council, 1996)</td>
<td></td>
</tr>
<tr>
<td>Turbulent change</td>
<td></td>
</tr>
<tr>
<td>1. The Notification for the 1st List of the Technology and Equipment Eliminated due to Severe Pollution (MOMBI, NEPA, SETC 1997)</td>
<td></td>
</tr>
<tr>
<td>2. The Notification of the Elimination Catalogues on backward Technology and Equipment (SETC, 1999)</td>
<td></td>
</tr>
</tbody>
</table>

The six laws and regulations issued by State Council shown in *Table 33* are all considered to be transitional change because they are foremost connected to the government’s intention to promote and protect the development of the local auto industry. They were made based on a clearly defined governmental plan to develop the automotive industry. For example, the regulations to prevent the importing of the passenger car excessively, and to have control over capacity in production were intended to shield the newly installed local automakers from competitions from both cars made outside and cars made within China. These regulations also reflect the strong will of
the Chinese government to ensure that the order of the industry was kept intact, and that the development would be gradual and long-lasting.

Meanwhile, the government also started to promote local consumption to stimulate the production of passenger cars. The notification of 1996 specifically stated that provincial governments should not use any restriction that could potentially prohibit people from purchasing cars for personal use. The production of passenger cars was driven by these transitional changes in laws and regulations, which consequently influenced the development of the whole industry, including that of Höganäs.

However, Table 33 also shows there was some kind of turbulent change in this period. The Chinese government decided to stop giving subsidies to unprofitable, small steel manufacturers, under the guise of retiring companies causing environmental pollution, and this included Höganäs’ JV partner, Shenjiang. The Chinese government’s decision to stop subsidising Shenjiang affected Höganäs’ JV operations; these institutional changes were not expected by Höganäs, and within three years, Shenjiang was completely closed down. These changes came relatively quickly, and because of them Höganäs not only lost its JV partner and had to invest resources to secure a China subsidiary, but it was also challenged to identify raw material suppliers and potential customers in the local market.

**Market opportunity**

Based on Höganäs’ past experience in the Asia Pacific region, China possessed some general attractions for Höganäs. China could be a place to relocate the lower-end production, and had attracted multinational automakers to do so. If China followed the same development path as Japan, South Korea, and Taiwan, it could potentially develop into a big market, giving its sizable economy. However, there was also great uncertainty associated with China, and on top of the list is that the passenger car industry lagged far behind, and the demand for Höganäs’ iron powder had not yet appeared. Table 34 lists the market opportunities that Höganäs saw based on the information it received and experienced in China.

Firstly, *Table 34* shows there is information that Höganäs recognised and interpreted as market opportunity, or lack of it. On the one hand, Höganäs’ began to receive export orders from China, and although these orders were not significant, they did indicate there was an awareness of and potential demand for Höganäs’ product. Besides, the policy changes in China showed that the Chinese government intended to develop the domestic passenger car industry. The growth of passenger car production could further drive the demand of Höganäs’ iron powder.

On the other hand, other information in *Table 34* indicates these market opportunities may not have been so certain. Höganäs’ visits to China in the early 1980s gave the impression that the production quality of the PM
The industry was lagging behind; PM production was mostly to supply the construction industry, which was not the main interest for Höganäs. Additionally, even though there were signs of development for the passenger car industry in China, this development was tightly controlled by the Chinese government to protect local auto part and component makers, which did not have sufficient technology to apply Höganäs’ product.

Table 34. Market opportunities during Höganäs’ China entry and expansion in period 1 (1980 - 2001)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Structural opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>1. Based on experience in other Asia Pacific countries, the economic transition in China may bring growth to automotive industry (since 1980)</td>
<td></td>
</tr>
<tr>
<td>2. Aware of policy change from Chinese government to encourage passenger car production and consumption in mid-1990s (since 1994)</td>
<td></td>
</tr>
<tr>
<td><strong>Relational opportunity</strong></td>
<td></td>
</tr>
<tr>
<td>1. Received unsolicited export order from China (end of 1980s and early 1990s)</td>
<td></td>
</tr>
<tr>
<td>2. Formed JV with stated-owned Shenjiang and tapped into local customer base (1994)</td>
<td></td>
</tr>
</tbody>
</table>

Although these perceptions on market opportunity mainly came from Höganäs’ own understanding and awareness of the changes in the Chinese market, the information leading to these perceptions, particularly in regard to the new changes in laws and regulations, could be known by any firm that paid attention to the market. Hence, these market opportunities (or the lack thereof) are structural opportunity, and can be recognised by other firms as well.

Secondly, there are market opportunities (or, the market opportunities that are missing) in Table 34 that are characterised as relational opportunity that only Höganäs could recognise. In the case of Höganäs in this period, these market opportunities would have been recognised if the information from (or about) the partners had been present and passed on to Höganäs. The lack of information about export contacts, missing knowledge on the preferences of local customers, and losing a JV partner with which to collaborate and share operations might have led Höganäs to miss valuable market opportunities in China. As the information could not be obtained from any public channel, Höganäs faced difficulties with the identification of relational opportunities.

**Market commitment**
The market entry activities of Höganäs were slow to begin and were mainly concentrated in the latter part of this period. The demand for Höganäs’ product had only appeared during the late 1980s and early 1990s, and the Taiwan subsidiary has taken the responsibility of handling these export
orders. Table 35 lists the three types of market commitment made by Höganäs during this period.

Table 35. Market commitments during Höganäs’ China entry and expansion in period 1 (1980 - 2001)

<table>
<thead>
<tr>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Host market</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Taiwan subsidiary took responsibility for the export orders (early 1990s)</td>
</tr>
<tr>
<td>2.</td>
<td>JV established in Shanghai (1995)</td>
</tr>
<tr>
<td>5.</td>
<td>Acquired land for production (2001)</td>
</tr>
<tr>
<td>Relationships</td>
<td>Engaged in JV partnership and relied on JV partner for raw material and sales (1994)</td>
</tr>
<tr>
<td>Organisational integration</td>
<td>Received resources and assistance from HQ and Taiwan subsidiary to build JV production (1995)</td>
</tr>
</tbody>
</table>

As Table 35 shows, the primary focus of Höganäs’ market entry activities in this period was primarily to establish market presence in China. For example, the investment of a JV plant and construction of a production line and mixing station were essential to enable Höganäs to operate in China legally and functionally. The resources Höganäs invested in these activities are mainly financial capital, as well as management capability. While the headquarters contributed the financial capital, the subsidiary in Taiwan provided assistance to manage and communicate between Sweden and China.

It can also be noted that some of the commitment toward the host market may not have been initially planned. Höganäs had to inject more resources to help the subsidiary survive, including buying out the JV partner when it was unable to perform, and acquiring land to generate its own production when it lost its main supply of raw material. This implies that, even though Höganäs may have attempted to enter China with a less committed mode, such as JV, the continued operation may not have followed that plan. Unplanned and extra resources may have been needed to mobilise, to ensure that further commitment to the host market could be made.

Table 35 also shows that there is limited market commitment made toward relationships and organisational integration. Höganäs’ market commitment toward the JV partner remained rather superficial. Shenjiang played the role of supplying Höganäs with raw material and handling the sale of the product in China. There was little collaboration between the two, not to mention that Shenjiang has stopped being functional rather quickly after the formation of the JV plant. Höganäs also had little interest in and knowledge of the customers served by Shenjiang, as they were mainly in the construction industry.
Furthermore, the market commitment toward organisational integration was mainly one-sided. Resources were transferred from the headquarters and the Taiwan subsidiary to Höganäs’ subsidiary in China. Managers from the headquarters and the Taiwan subsidiary travelled to China to jointly promote Höganäs to the local PM industry. Apart from these collaborations, there was not much that could be shared from the subsidiary in China, since it was too new to have acquired substantial knowledge and was in a constant struggle for survival.

To sum up, Höganäs’ market commitment was mainly focused on the host market and building its presence and operations in China, whereas its market commitment toward relationships and organisational integration had been limited.

Period 2 (2002-2010)

A time sequence map that represents Höganäs’ market entry during 2002 through 2010 can be seen in Figure 22. Three time sequences, i.e. institutional change, market opportunity, and market commitment, were extended from the last period and expanded to include events and activities observed for this period from the empirical data. They are marked with a black dot along the timeline, explained in the text, and further discussed in Table 36, Table 37, and Table 38. This period also witnessed a market shock, i.e. the Global Financial Crisis, which is marked on the map with a dashed-line rectangle.

The time sequence of the institutional change in Figure 22 shows that the changes in laws and regulations regarding the automotive industry appear to be spread across this period. Two major waves of institutional change can be identified by observing the sequence. The first wave of institutional change was led by China’s WTO entry, and the subsequent deregulations in import and export, as well as the market liberalisation included outlining the new Auto Industry Policy in 2004. The wave of institutional change did not only bring about major changes in foreign investment, e.g., car production, but also in foreign ownership of auto part and component manufacturing. The change also enhanced the market order of car sales and distribution.

The market opportunity and market commitment observed in this period seemed to respond to this wave of institutional change positively. Höganäs transformed the focus of its China operation into marketing and sales activities toward customers. Consequently, it scaled down the production in China and began to import iron powder from factories in the U.S. and Europe. Moreover, Höganäs decided to establish an R&D centre in China as it discovered that local customers lacked the capability to apply iron powder and required assistance.
**Figure 22. The time sequence map of Höganäs’ market entry & expansion in China in period 2 (2002-2010)**

<table>
<thead>
<tr>
<th>Time</th>
<th>Institutional change</th>
<th>Market opportunity</th>
<th>Market commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>00</td>
<td>China joined the WTO</td>
<td>Both the production and consumption of passenger car continued to increase</td>
<td>Acquired Shenjiang’s land for production</td>
</tr>
<tr>
<td></td>
<td>Auto Industry Development Policy</td>
<td>Deregulation on import/export enabled transport of goods in &amp; out of China easier</td>
<td>Scaled down production in China</td>
</tr>
<tr>
<td></td>
<td>Measures for the Administration of Import of Automobile Components &amp; Parts Featuring Complete Vehicles</td>
<td>More multinational auto makers enter China</td>
<td>Imported iron powder from US/EU</td>
</tr>
<tr>
<td></td>
<td>Measures for the Automobile Brand Sale</td>
<td>Trend toward localisation</td>
<td>Focused on sales &amp; marketing</td>
</tr>
<tr>
<td></td>
<td>Automobile Trading Policy</td>
<td>Contacts with auto part and component customers, aware of their needs for technology support</td>
<td>Established R&amp;D center in Shanghai</td>
</tr>
<tr>
<td></td>
<td>Notification for the Auto Industry Restructuring</td>
<td>Held seminars and training for customers</td>
<td>Powder Metallurgy school helps customer upgrade technology</td>
</tr>
</tbody>
</table>

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**Global Financial Crisis**

<table>
<thead>
<tr>
<th>Time</th>
<th>Institutional change</th>
<th>Market opportunity</th>
<th>Market commitment</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Notification for Tax Reduction on Purchasing Passenger Car (below 1.6L)</td>
<td>China became one of the most important markets for auto production of Cars</td>
<td>Höganäs Asia Pacific regional HQ</td>
</tr>
<tr>
<td></td>
<td>Notification for Promotion &amp; Motorcycles in Rural Auto Industry Restructuring &amp; Revitalisation Plan</td>
<td>Area</td>
<td>Joined effort from nearby subsidiary and HQ to initiate car development workshop</td>
</tr>
<tr>
<td></td>
<td>Measures for the Replacement of Old Vehicle with New</td>
<td>Collaborated with actors in auto supply chain for car development</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Execution Details for the Promotion of the Energy Efficient Passenger Car</td>
<td></td>
<td>Höganäs Asia Tech Centre in Shanghai</td>
</tr>
</tbody>
</table>
The second wave of institutional change that can be noticed in Figure 22 is made up of the changes which occurred after the Global Financial Crisis. Unlike the turbulent change observed in other cases, Höganäs’ market opportunity recognition and market commitment did not seem to be affected by these changes. Instead, as the institutional change gradually pushed China to become one of the most important markets for car production and consumption, the market opportunity seemed to be strengthened, e.g., Höganäs established a regional HQ in China. There was also more investment in upgrading the existing R&D facilities in China to support ongoing collaboration between Höganäs and various actors in the auto supply chain.

Hence, there seems to be a much stronger connection among institutional change, market opportunity and market commitment in this period than in the past. Market opportunity was recognised through the changes in regulative institutions, and this case firm made further investments in order to capture these opportunities.

**Changes in regulative institutions**

Although the Chinese government agreed to implement market reform and liberalisation of the automotive industry upon its accession to the WTO to provide a fairer environment for international firms, it had no intention of allowing the development of the industry run out of control. For example, the Chinese government’s expectation of how the auto industry should develop was clearly expressed in the new Auto Industry Policy. Moreover, the policy stimulations concerning the automotive industry after the Global Financial Crisis strengthened the view that the Chinese government intended to hold the industry to continually lead the development of the domestic economy. Table 36 lists the laws and regulations issued toward the automotive industry in this period.

China’s WTO entry has foremost brought in deregulations on import and export, and tariff and tax reduction. These deregulations help international firms to move goods across the border, which is particularly important for automakers and other firms in the auto supply chain, as the automotive industry is pretty much a global industry. There were four major changes in laws and regulations, shown in Table 36, after China’s WTO entry, and they include aspects ranging from production of cars and auto parts and components, to research and technology development, to marketing, sales, car finance and distribution. These institutional changes were made in order to structure (or restructure) the automotive industry to achieve the government’s long-term expectations, and there was no sense of urgency. Hence, these changes are considered to be transitional.
Table 36. Institutional changes during Höganäs’ China entry and expansion in period 2 (2002 - 2010)

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td></td>
</tr>
<tr>
<td>1. WTO entry and deregulations on export/import (2002)</td>
<td></td>
</tr>
<tr>
<td>3. Measures for the Administration of Import of Automobile Components and Parts Featuring Completed Vehicles (China Custom, MOF, MOFCOM, NDRC, 2005)</td>
<td></td>
</tr>
<tr>
<td>4. Measures for the Automobile Brand Sale (MOFCOM, NDRC, SAIC, 2005)</td>
<td></td>
</tr>
<tr>
<td>5. Automobile Trade Policy (MOFCOM, 2005)</td>
<td></td>
</tr>
<tr>
<td>Turbulent change</td>
<td></td>
</tr>
<tr>
<td>1. Notification for the Tax Reduction on Purchasing Passenger Cars (below 1.6l) (MOF, 2009.01)</td>
<td></td>
</tr>
<tr>
<td>2. Notification for the Promotion of Cars and Motorcycles in Rural Areas (MIIT, MOF, MOFCOM, MPS, NDRC, SAIC, 2009.03)</td>
<td></td>
</tr>
<tr>
<td>3. Auto Industry Restructuring and Revitalisation Plan (State Council, 2009.03)</td>
<td></td>
</tr>
<tr>
<td>5. Execution Details for the Promotion of the Energy Efficient Passenger Car (below 1.6l) (MOF, MIIT, NDRC, 2010.05)</td>
<td></td>
</tr>
</tbody>
</table>

The Global Financial Crisis began in late 2008 and caused shrinkage on the export market for cars, components and parts. The changes in laws and regulations after the onset of the Global Financial Crisis were fundamentally different from those made prior, even though the attitude of the Chinese government to firmly control the automotive industry may have been the same. From Table 36, one can see that these new laws and regulations issued after the Global Financial Crisis, in contrast to those made after WTO entry, were carried out in a relatively short period of time. They were also intended to have a strong effect through financial incentives. These changes included giving tax breaks and subsidies, with the aim of inducing greater domestic consumption as soon as possible, to substitute for the quickly disappearing export market.

Furthermore, many of these regulations specified a clear period of application. Both the tax reduction and subsidy in the rural areas were valid until the end of 2009, while the replacement subsidy was valid until May 2010. The period for the restructuring and revitalisation plan was specified to be from 2009 to 2011. It is clear that these changes were short-term.
oriented with the goal of rebuilding the industry after the devastation of the market shock and crisis. These turbulent changes indeed paid off as the demand for passenger cars in China was sustained throughout the period of the Global Financial Crisis, and consequently stimulated the production.

**Market opportunity**
Following the market entry process from the last period Höganäs’ wholly-owned subsidiary continued to adjust to achieve better operations in China. Meanwhile, Höganäs observed that the production of the passenger car in China had been growing quickly and consequently the demand for its product has also increased. China’s WTO entry had also enabled the ease of import of iron powder to China and provided options to source iron powder from elsewhere. *Table 37* lists the market opportunities Höganäs recognised in this period.

*Table 37. Market opportunities during Höganäs’ China entry and expansion between in period 2 (2002 – 2010)*

<table>
<thead>
<tr>
<th>Market Opportunity (MO)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Structural opportunity</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>The increasing production of passenger cars stimulated the demand for iron powder (since 2000)</td>
</tr>
<tr>
<td>2.</td>
<td>Deregulation in import procedures enabled Höganäs to source iron powder from abroad (since 2000)</td>
</tr>
<tr>
<td>3.</td>
<td>Market deregulation from China’s entry to WTO attracted international auto part and component makers to enter China (2003/2004)</td>
</tr>
<tr>
<td>4.</td>
<td>Both policy encouragement and market demand drew automakers to increase the trend to localise parts and component in China (since 2004)</td>
</tr>
<tr>
<td>5.</td>
<td>China became one of the most important markets for auto production after the Global Financial Crisis and attracted further investment from multinational automakers (2008/2009)</td>
</tr>
<tr>
<td>Relational opportunity</td>
<td></td>
</tr>
<tr>
<td>1.</td>
<td>Emphasised market and sales activities with local auto part and component customers, and became aware of their lack of technology capability (2003)</td>
</tr>
<tr>
<td>2.</td>
<td>Established R&amp;D centre in Shanghai to assist customers in upgrading technology, saw there was little development work in China (2005)</td>
</tr>
<tr>
<td>3.</td>
<td>Formed development workshop to engage with various actors in the auto supply chain (since 2008)</td>
</tr>
</tbody>
</table>

During this period, the production of the passenger car in China increased substantially, and this continuous growth was noticed by Höganäs, as well as the Chinese government, auto parts and component makers, and automakers. Hence, there are policies from the government to support further growth of
the industry, and to lead to local technology upgrades. Additionally, more auto part and component makers, attracted by the Chinese passenger car industry, entered the market. Moreover, there were also significant strong investments from the automakers to accelerate the localisation of parts and components from automakers. Each of these changes in the industry pushed the demand for iron powder and made Höganäs’ product more attractive.

Due to the changes in import and export regulations, Höganäs also discovered that it is more cost effective to import iron powder from its plants elsewhere than to make its own production locally. Consequently, Höganäs was also able to focus on downstream marketing activities in the auto part and component customer base. All these new changes in the Chinese market, specified in Table 37, could be interpreted by Höganäs as market opportunity. These market opportunities were not unique to Höganäs and could also be recognised by other iron powder suppliers. Indeed, there were other international iron powder firms entering the China market. Therefore, these market opportunities are considered to be structural opportunity that firms can identify through observing the change in the market.

By focusing on downstream marketing activities, Höganäs learned that a good portion of the local auto part and component customers did not have sufficient knowledge to apply iron powder in production. To help these customers, Höganäs established an R&D centre in Shanghai in 2005, and held seminars and workshops for these customers. These seminars and workshops provided a good venue for Höganäs to interact with customers and understand their capabilities. On top of that, Höganäs also attempted to collaborate with various actors in the auto supply chain to engage in the development of a new model of car.

Therefore, Höganäs discovered further market opportunity through the information passed on from the activities listed in Table 37. For example, through the development workshop, Höganäs developed stronger ties with customers through the promotion of their product to the end customers. The potential outcomes of these workshops may be an increase in the dependency of customers on Höganäs, and may strengthen Höganäs’ dominant position in the market. These activities and the information contained were only available for Höganäs, not to any of its competitors. They are relational opportunity and are exclusive to Höganäs.

However, there seems to be a connection between structural and relational opportunities. An observation that can be made from is that deregulations on import procedure seemed to lead Höganäs to focus on downstream marketing activities. Then through these interactions with customers, Höganäs discovered that its customers needed assistance to improve their knowledge and technology; hence, the establishment of the R&D centre. This connection may imply that one type of market opportunity
(e.g., structural opportunity) can possibly bring out another type of market opportunity.

**Market commitment**

After rescuing the China subsidiary from the failing JV operation at the end of the last period, Höganäs tried to figure out a way to operate in China. As the passenger car industry in China began to take off, Höganäs soon saw the demand for its product coming from the automotive industry. In contrast to the last period, Höganäs’ market entry activities during this period became more punctual and were thoroughly planned. The market commitment made by Höganäs in this period is listed in *Table 38*.

*Table 38. Market commitments during Höganäs’ China entry and expansion in period 2 (2002 - 2010)*

<table>
<thead>
<tr>
<th>Market Commitment (MC)</th>
<th>Period 2 (2002-2010)</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Host market</strong></td>
<td></td>
</tr>
<tr>
<td>1. Acquired land to begin production in China (2002)</td>
<td></td>
</tr>
<tr>
<td>2. Scaled down production in China and imported iron powder from abroad (2003)</td>
<td></td>
</tr>
<tr>
<td>4. Established R&amp;D centre in Shanghai (2005)</td>
<td></td>
</tr>
<tr>
<td>5. Invested more resources to upgraded R&amp;D centre in Shanghai (2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Relationships</strong></td>
<td></td>
</tr>
<tr>
<td>1. Focused on auto part and component customers (2004)</td>
<td></td>
</tr>
<tr>
<td>2. R&amp;D centre held training seminars to help customers upgrade technology (2006)</td>
<td></td>
</tr>
<tr>
<td>3. Initiated car development workshop with actors in the supply chain (2009)</td>
<td></td>
</tr>
<tr>
<td>4. Upgraded R&amp;D centre resources to provide development work (2010)</td>
<td></td>
</tr>
<tr>
<td><strong>Organisational integration</strong></td>
<td></td>
</tr>
<tr>
<td>1. Set up Asia Pacific regional HQ in China to coordinate marketing activities in nearby markets (2008)</td>
<td></td>
</tr>
<tr>
<td>2. Strengthened collaborations between Sweden HQ, regional HQ, and nearby subsidiaries for sharing experience and resources (2009)</td>
<td></td>
</tr>
<tr>
<td>3. Upgraded Shanghai R&amp;D to serve customers in the Asia Pacific region (2010)</td>
<td></td>
</tr>
</tbody>
</table>

One of the first market commitments Höganäs made in this period was to import iron powder from abroad and to scale down the local production. This decision alone may be seen as commitment reduction since the planned investment of resources and expansion of local production were put on hold. One can see that Höganäs quickly transformed the subsidiary and placed emphasis on logistic management, marketing and sales, repositioning it as a sales organisation to engage with the customer, which eventually led to
Höganäs investing in the building of research and development facilities in China.

As seen in Table 38, Höganäs’ market commitment toward the host market in this stage was less about legal and ownership matters, but rather about adjusting and finding the appropriate organisational configuration that would allow it to function in the Chinese market. This was an adaptation process in the sense that Höganäs constantly made adjustments to combine the advantage of being an international firm able to leverage global resources, with also being a locally embedded organisation operating in a fast growing local market. Although much of these adaptations are executed at the subsidiary level, the headquarters played a crucial role in making the plans (e.g., sourcing from other plants, resource investing in R&D), and coordinating the resources needed for this transformation.

Moreover, many of these market entry activities, done with the aim of adapting to the local market, also had an implication on building and maintaining relationships with local actors. Höganäs’ R&D centre, and the training programs and seminars it held over the years, can be seen to have played a crucial role in securing Höganäs’ position as the market leader in high-end product, developing a good reputation, and creating trust with the customers in the auto industry. As such, Höganäs was a knowledge provider as well as an iron powder supplier, and its aim was to encourage repeat business rather than identify new customers.

This is the market commitment made toward the relationships. Through this type of commitment, not only does Höganäs enhance credibility with the customers, but also increases the dependence of the customers. Table 38 shows the activities that formed the market commitment toward relationships are predominantly planned and executed by the China subsidiary, and they take the resources of time and knowledge to complete.

Furthermore, Höganäs has also shown market commitment toward organisational integration. The inauguration of Höganäs’ Asia Pacific HQ in China has drawn resource and experience sharing from the subsidiaries in the nearby markets. These activities are planned and executed by both the headquarters in Sweden, the regional headquarters in China, and participating subsidiaries with a mix of resources of time, management, and knowledge.

Lastly, it can also be observed from Table 38 that market commitment toward relationships, as well as organisational integration show certain links with the market commitment made toward the host market. For example, the establishment of the R&D centre in Shanghai can be referred to as market commitment toward the host market, relationships, and organisational integration. This probably implies, that though certain market entry activities may indeed achieve multiple effects in the host market, these effects take place in chronological order and may not be anticipated in the
beginning. For example, the R&D centre in 2005 was originally opened to support Höganäs’ marketing and sales activities to customers in China that were lacking the knowledge required to use the products. However, not only did it tap into the needs of the customers, it also became an essential part of the regional collaborations.

To sum up, the market commitment from Höganäs can be seen in the host market, relationships and organisational integration, and certain activities may present all three types of market commitment.
Chapter 9: Cross-case Analysis

9.1. Foreign market entry processes and firms’ behaviour before China joined the WTO

International firms beginning to enter China after the economic reform may have found that it was not an easy period. The laws on foreign investment had just been promulgated to create legal status for international firms, as China was in a stage of institutional void prior to the reform. The regulative institutions were weak and relatively unstable, as every single regulation and law was written from scratch, as were the concepts of private enterprise, market exchange, and efficiency and profit. In addition, the Chinese government played a dominant role during this period in directing most of the economic activities. As the government was also new to economic reform, its policies were not necessarily coherent and they could change significantly. In other words, not only were the regulative institutions, for facilitating international firms entering the market and doing business, weak, but there were changes in them which created difficulties for foreign entrants to adapt.

Based on the analysis in the previous chapter, Table 39 shows that the level of transitional institutional change for the three firms range from low (DeLaval), to medium (Elekta), to high (Höganäs). Transitional changes in regulative institutions are the result of issuing expected, long-term-oriented governmental policies or regulations that aim to develop industry. DeLaval experienced few new policies, regulations, or even standards during this period. For Elekta, there were policies issued to regulate medical devices as well as the formation of a regulatory agency. Höganäs, in contrast, was exposed to multiple new policies and regulations, and these transitional changes in the regulative institutions were to ensure that the development of the automotive industry would follow the government’s expectations.

In terms of turbulent changes in the regulative institutions, the level also differed between low (DeLaval), medium (Höganäs), and high (Elekta) in this period. Turbulent changes in regulative institutions are unexpected, short-term-oriented policies or regulations that the government announces to recover from crises triggered by market shocks. For DeLaval, there were no market shocks or turbulent changes at all. Elekta suffered market shocks when the government banned the import of the Gamma Knife, which was
followed by a series of new regulations representing high-level turbulent changes. Höganäs was indirectly influenced by market shocks and medium-level turbulent changes when the government stopped giving out subsidies and closed down Höganäs’ JV partner.

Regarding the market opportunity, the analysis summarised in Table 39 indicates the level of structural opportunity that these firms recognised in this period, which ranges from high (DeLaval), to medium (Elekta), to weak (Höganäs). As the information that leads to the recognition of structural opportunity is obtained through publicly available information, firms can receive and interpret the information prior to and during their market entry.

The structural opportunity for DeLaval was high; not only did China’s economic development trend and the government’s general policy after the economic reform seem to encourage more milk consumption, but also more big dairy processors emerged to become potential customers. For Elekta, the structural opportunity was considered to be medium. Although the general trend for hospitals interested in advanced technology looked promising for Elekta, the Chinese government quickly tightened the control over hospital spending and put rules in place to prevent these hospitals from purchasing more devices. In addition, the appearance of Chinese-copied machines in the market hindered potential opportunity for Elekta. The level of structural opportunity for Höganäs was low; there was uncertainty about China as both the automotive industry and the powder metallurgy industry seemed to be slow in development, and the government’s policy showed signs of strong control over foreign investment.

The level for the relational opportunity for all these firms is relatively low. Since the information leading to the recognition of relational opportunity is mainly gathered from exchange partners, the slow progress of market entry experienced by these firms in this period probably hindered the development of connections to the local actors. Even though these firms might have had some contacts with customers prior to their market entries, very few concrete relationships had been built to enable a smoother process. In addition, in spite of all their market entries having been started from collaborations with JV partners, there were troubles in the joint operations and none of these JV partnerships managed to last very long.

In regards to the three types of market commitment, the analysis of Table 39 indicates that these three firms made medium- (DeLaval and Höganäs) to low-level (Elekta) commitment toward the host market, and they all invested relatively little in relationships and organisational integration. Both DeLaval and Höganäs had made multiple attempts to gradually build up their presence in the Chinese market. There were resources committed in establishing JV subsidiaries, and further resources invested to turn the operations into wholly-owned subsidiaries. There were also observable activities in searching for suitable office space and factory land. However,
there were no significant investments for either DeLaval or Höganäs. For Elekta, the direct foreign investment only came in a rather late stage to establish a JV manufacturer. Prior to this investment, all the sales activities were managed by the Hong Kong sales office and by local agents.

Furthermore, all these three firms had a relatively low level of commitment toward relationships and organisational integration, based on the analysis. The JV partners that these firms worked with when entering the market seemed to present only instrumental value for selling product or obtaining a supply of raw material. There was little engagement between these firms and their JV partners, and their relationships were predominantly transactional and served as a mean to access to the market. There was also little commitment from these firms for organisational integration. Although there was resource transference between the headquarters and the subsidiaries in China, e.g., financial capital and human resources, these were mainly one directional activities (from headquarters to subsidiaries) and there was no observable collaboration, or counter-transfer.

A table to summarise the levels of institutional change, market opportunity and market commitment of these firms can be seen in Table 39.

<table>
<thead>
<tr>
<th>Institutional Change (IC)</th>
<th>DeLaval</th>
<th>Elekta</th>
<th>Höganäs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Transitional change</td>
<td>Low</td>
<td>Medium</td>
<td>High</td>
</tr>
<tr>
<td>Turbulent change</td>
<td>Low</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Market Opportunity (MO)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural opportunity</td>
<td>High</td>
<td>Medium</td>
<td>Low</td>
</tr>
<tr>
<td>Relational opportunity</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Market Commitment (MC)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Host market</td>
<td>Medium</td>
<td>Low</td>
<td>Medium</td>
</tr>
<tr>
<td>Relationships</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
<tr>
<td>Organisational integration</td>
<td>Low</td>
<td>Low</td>
<td>Low</td>
</tr>
</tbody>
</table>

Institutional change and market opportunity

There are varying levels of institutional change and market opportunity among these three firms in the period before China joined the WTO. While these firms experienced transitional changes in regulative institutions ranging from a low (DeLaval) to a medium (Elekta) to a high level (Höganäs), the structural opportunity recognised by these firms ranged from a strong (DeLaval) to a medium (Elekta) to a low level (Höganäs). The level of the structural opportunity seemed to run counter to the level of
transitional change. As Table 39 shows, the higher the level of the transitional change existing in the market, the lower the level of the structural opportunity perceived by these firms.

This may seem to be counter-intuitive, as changes in regulations are assumed to be an important source for recognising market opportunities and serve as signals for availability. As well, stronger formal rules should also present a regulated environment, which indicates less uncertainty and thus encourages international firms to pursue market opportunities. However, the transitional changes in regulative institutions may deliver both positive signals for the availability of market opportunities, and negative signals that market entry can be challenging. Thus, a high level of transitional change may mean that there are both attractions and difficulties, and this knowledge may allow firms to evaluate market opportunities more realistically and have fewer false expectations. Therefore, the level of transitional change may have a negative relation on how firms perceive the level of structural opportunity during the market entry processes.

An alternate explanation may suggest an over-the-shoulder effect, in which a high level of transitional change in regulative institutions may indicate intensive government supervision. The stronger the host government involvement in the industry development, the less freedom and potential there will be for foreign firms to exploit their advantage over the local competitors. If the foreign market entry of the firm is underlined by a market exploitation logic, then having someone constantly looking over one’s shoulder might not be the most comfortable feeling and there may be less potential to make a profit. Thus, DeLaval might find the Chinese dairy industry, with little regulative change, to be just like a blank canvas consisting of substantial opportunities for exploitation.

Somewhat less clear is how turbulent institutional changes may relate to structural opportunity. Under the conditions in which firms experienced a low (DeLaval), medium (Höganäs) or high (Elekta) level of turbulent change in regulative institutions, the levels of their structural opportunity ranged from high (DeLaval), to low (Höganäs) to medium (Elekta). One can also observe that whatever the level of transitional or turbulent change in regulative institutions, the level of relational opportunity recognised by these firms seemed to stay the same and remain low throughout this period. As relational opportunity was mostly recognised from existing connections with partners, the absence of prior relationships before these firms entered China might be the cause of this. The analysis may also suggest that the entrances to the China market by these firms were just not facilitated by any long-lasting business connections.

Overall, the level of change in host regulative institutions seems to relate to the level of market opportunities recognised by the firms during their market entry. Particularly, transitional change seems to have a negative
relation with the structural opportunities. Firms experiencing stronger transitional change in regulative institutions seem to recognise fewer structural market opportunities. There is, however, no significant pattern observed in the relation between turbulent change and structural opportunity, and the transitional or turbulent change with relational opportunities.

Institutional change and market commitment

Institutional changes, both transitional and turbulent, do not seem to draw any particular pattern out of the market commitment of the firm in terms of relationships and organisational integration during this period. Table 39 shows that, regardless of the levels of transitional and turbulent change in regulative institutions, the firms invested relatively little in relationships and organisational integration. Perhaps the low level of commitment to relationships is due to these firms simply having too few contacts prior to and at the beginning stage of their market entries; their commitment toward the relationships probably would have remained low regardless of the level of change that existed in the regulative institutions. The low commitments of these firms to organisational integration may be because of their newness to the market and their weak market presence. As they depended on resources transferred from the headquarters, they possessed few resources to share with other units within the group.

The commitments of these firms toward the host market do seem to relate to the turbulent institutional changes. When the level of turbulent change in regulative institutions is generally low (DeLaval) or medium, but indirect (Höganäs), the firms seem to be more willing to invest in building their market presence and achieving a medium level of commitment toward the host market. However, when firms experience a high level of turbulent change in regulative institutions (Elekta), they may take a more cautious approach to investment in the host market which leads to a low level of commitment. This may be because turbulent change can cause severe disruptions for firms to execute market entry plans, and they may become uncomfortable continuing to make further investment.

An alternative explanation can be offered from examining the combination of transitional and turbulent change in regulative institutions. There may be an expectation effect on institutional change when firms are entering a new market. If the transitional and turbulent changes are consistent at the same level (DeLaval), firms may feel their expectations of host regulative institutions are accurate. Then they can decide at what time to invest, how much they are comfortable investing, and what level of commitment they can achieve. In other words, firms may be comfortable gradually increasing their commitment to the host market since their expectations of institutional change of host regulative institutions remain
unchallenged. Even if there are some differences in the expectations of the institutional changes, which were high on transitional and medium on turbulent change (Höganas), firms may have expected that the market entry processes are not going to be easy and prepared accordingly. Then the institutional changes may have less influence toward the commitment to host market.

On the contrary, when the level of transitional change has not been high during the market entry and suddenly turbulent changes arise (Elekta), the expectations run in the opposite direction and firms may feel vulnerable and resort to making as little investment as possible. As they had no preparation for dealing with host regulative institutions, firms may be pushed out of their comfort zones by the escalation of change and may refrain from further market entry activities.

Overall, the levels of institutional change do not seem to have much relation on how the firms commit to relationships and organisational integration, as both types of commitments in this period are relatively low. Yet the commitment toward the host market appears to be affected by institutional change, either by turbulent change alone or by the combination of both types of institutional change. The expectation of the firms toward the regulative institutions of the host market prior to and during the market entry may play a role in influencing the market commitments they are willing to make.

Market opportunity and market commitment

There seems to be a relation between the level of market opportunity recognised by these firms during this period and the level of their market commitment. All these firms had a low level of relational opportunity, and they also had a relatively low level of market commitment to relationships and organisational integration (Table 39). This may be because these firms were in the beginning stage of foreign market entry, and they did not enter China because of existing relationships. On the contrary, they were there to explore structural opportunities and to sell products, i.e. to find new customers or suppliers. While they may have been in the process of learning how the host market functioned, their choices of market entry mode, i.e. JV partnerships, seemed to shield these firms from having direct contact with local suppliers and customers, and consequently delayed the identification of important local actors. Trust between firms takes time to form. Even though the firms switched to wholly-owned operation mode after a few years, they may simply not have had enough time and repeat transactions with customers and suppliers to allow relational opportunities to emerge.

A low level of relational opportunity seems to relate to limited commitment toward organisational integrations, too. Since these subsidiaries
were relatively young, their learning in the host market may have been too market-specific and presented less value for the headquarters or other subsidiaries. Alternatively, these firms did not follow particular customers when entering the foreign market. Therefore, there was little need for exchanging experiences and sharing information with the headquarters or other subsidiaries where these customers originated.

In terms of structural opportunity and market commitment, there does not seem to be a strong pattern that has emerged for interpretation. As the level of structural opportunity ran from high (DeLava), to medium (Elekta), to low (Höganäs), their commitments toward the host market were medium (DeLaval and Höganäs) and low (Elekta), and consistently low toward relationships and organisational integration. It seems that even though these firms recognised various levels of structural opportunity, they might have had difficulties in making an evaluation of the extent of resources needed for these commitments based on the structural opportunities. Particularly since the level of relational opportunity for all of them was low, they might not have had sufficient exchange partners to allow them to feel confident that their market entry would be successful. Therefore, their market commitment may not have reflected the structural opportunity they recognised.

Overall, there are relations between market opportunity and market commitment, particularly between relational opportunity and commitment to relationships and organisational integration. The patterns between structural opportunity and market commitment levels, on the other hand, seem to lead to no particular conclusion.

To summarise the analysis of the period before China joined the WTO, there appear to be relations among institutional changes, market opportunity and market commitment during the early stage of the market entry of the firm. Firms experiencing higher levels of transitional change in the host seem to recognise less structural opportunity. Turbulent change, or the combination of both transitional and turbulent change that firms experience might have an impact on the market commitment made by firms toward the host market. The analysis seems to indicate that transitional change in the host market would act as a warning signal so that firms can recognise less structural opportunity, and as a base for evaluation so the firms can determine the market commitment they are willing to make during the early stage of the market entry process.

Moreover, the level of relational opportunity that firms recognise seems to relate their market commitment to relationships and organisational integration. When firms recognise a low level of relational opportunity during their market entry, they may be unwilling to make a market commitment to relationships and organisational integration.
9.2. Foreign market entry processes and firms’ behaviour after China joined the WTO

China’s accession to WTO membership on December 11, 2001 was a critical moment for its ongoing economic transition and the continuing entries of the foreign firms. Despite that the exact time China would join the WTO was difficult to predict, it was not unexpected after fifteen years of negotiations. The Chinese government implemented major deregulations on procedures of the import and export of goods, and significant tax and tariff reductions within three years of WTO entry. Although the regulations and laws issued during the period of deregulation and market liberalisation caused institutional change, they also opened the market and created more structured and coherent regulative institutions, which were attractive for the operations of foreign entrants.

Both the foreign entrants and the Chinese government acquired significant learning from past experience. Foreign firms gradually adapted to the regulative institutions in China and their evolvements. The firms may not be entirely comfortable with the institutional changes, but these changes are perceived as less risky. Furthermore, the commitments in the previous period can help them build a stronger market presence and possess certain influence over industry and government policy-making. Because of their superior quality and advanced technology, the products of these foreign entrants are increasingly appreciated by the local customers, and these foreign entrants have become market leaders and can voice their interests or concerns toward the government. At the same time, the Chinese government has become more confident about its role in managing the economic transitions, and about the appeal of the China market to foreign firms. The government seems to be more comfortable interacting with international firms and with taking their opinions into account in policy making.

The levels of transitional change in regulative institutions, which refers to the newly issued long-term-oriented regulations and laws, for this period are shown in Table 40, and range from medium (DeLaval) to high (Elekta & Höganas). There are certain general policy changes that reflect the market liberalisation after China’s WTO entry. For DeLaval, new quality standards and policies in regarding to milk production were gradually formed, but the pace was still rather slow. In contrast, governmental administrative plans for the high-end medical device sector, where Elekta’s Gamma Knife and Linac belong, were constantly announced and regularly updated. Deregulations are observed more strongly in Höganas’ passenger car sector, where extensive policies are issued to structure market orders, regulate competition and encourage technology development.

All these firms during this period were exposed to certain unexpected turbulent changes in the regulative institutions that were triggered by market
shocks. There were market shocks for each of these firms – Melamine milk contamination for DeLaval, SFDA bribery scandals for Elekta, and the World Financial Crisis which lead to the decline of car sales for Höganäs. The aftermath of these market shocks has led to the announcement of multiple new regulations to clean-up, supervise, restore and stimulate the industries, and there are also new formations of or downgrades to the regulatory agencies. The level of the turbulent change ranges from very high for DeLaval (13 new regulations spanning across two years), high for Elekta (9 new regulations in around one and one-half years), and medium for Höganäs (5 new policies in the span of two years).

In addition, there are also different levels of market opportunity for these firms, as seen in Table 40. The level of the structural opportunity recognised by these firms ranged from very high (DeLaval) to high (Elekta and Höganäs). To some extent, these structural opportunities were the result of deregulation after China’s WTO entry, e.g., ease of import and export procedures, reduction on tariff and tax, etc., and the rest originated from policy changes in each industry. These firms all benefited from their technologically advanced products and the growing demand from local customers. In particular, DeLaval’s products became extremely attractive for dairy producers after the milk contamination crisis, when these producers were subsidised by the government to upgrade their machinery.

The level of the relational opportunity differs from high (DeLaval and Elekta) to medium (Höganäs). A notable feature is that relational opportunities for all firms are significantly stronger than in the previous period. The increase in relational opportunities may be attributed to the amount of time that these firms have been operating in China, and the growth of their knowledge and confidence toward the local actors in the market. After experiencing a long history of operating in China, all these firms are known by important local customers and suppliers, and other business actors. They are also involved in various networks. In return, they see potential collaborations with these actors to localise their products and increase market penetration. Through these collaborations with partners, DeLaval and Elekta, in particular, are able to launch multiple products in China, or expand their product reach to additional geographic areas. Since these relational opportunities are exclusive for these firms, the analysis may suggest that they have gradually been accepted by local actors and have been rewarded for their determination to stay despite experiencing difficulties.

Furthermore, Table 40 indicates that, in this period, these firms have made significant investments in market commitment in comparison to the last period. Additionally, the activities involved are much more diverse, and they range from financial investment, to technology transfer, to knowledge elevation projects. Their commitments toward the host market are medium (Höganäs), high (DeLaval) and very high (Elekta). All these firms have
focused on building sales organisations and investing in R&D units in China, while both DeLaval and Elekta also established local production or assembling facilities, multiple sales channels, and global sourcing centres. Elekta invested greatly in both financial and organisational resources to acquire BMEI, and this acquisition has subsequently prompted Elekta to assume a market leader position in China.

Medium (Höganäs) to high (DeLaval and Elekta) levels of commitment toward relationships can also be observed. While Höganäs emphasised interaction exclusively with actors in the downstream supply chain, Elekta gradually expanded into BMEI’s customer base as well as building distributor channels for provincial sales. DeLaval continued engaging in industry relations, cooperating with academic institutions, and holding forums and educational projects with government agencies.

In terms of commitments toward the organisational integrations, these firms make medium (Elekta) to high (DeLaval and Höganäs) commitments. There are observable activities from all these firms that have involved local subsidiaries, the headquarters, and other business units from the groups. Collaborations like material sourcing and supply chain management are commonly found in them, and knowledge sharing with customers can also be clearly identified. DeLaval and Höganäs have explicitly built regional headquarters or sales offices into their operations in China, and have assigned them a role in coordinating business activities in the nearby markets.

Table 40 summarises the levels of institutional change, market opportunity and market commitment of these firms during the stage after China joined the WTO.

**Table 40. Institutional change, market opportunity, and market commitment of DeLaval, Elekta, and Höganäs after China joined the WTO**

<table>
<thead>
<tr>
<th></th>
<th>DeLaval P2</th>
<th>Elekta P2</th>
<th>Höganäs P2</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Institutional Change (IC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transitional change</td>
<td>Medium</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Turbulent change</td>
<td>Very high</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Market Opportunity (MO)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Structural opportunity</td>
<td>Very high</td>
<td>High</td>
<td>High</td>
</tr>
<tr>
<td>Relational opportunity</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td><strong>Market Commitment (MC)</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Host market</td>
<td>High</td>
<td>Very high</td>
<td>Medium</td>
</tr>
<tr>
<td>Relationships</td>
<td>High</td>
<td>High</td>
<td>Medium</td>
</tr>
<tr>
<td>Organisational integration</td>
<td>High</td>
<td>Medium</td>
<td>High</td>
</tr>
</tbody>
</table>
Institutional change and market opportunity

Institutional change seems to allow firms to access more market opportunities in this period. The level of the transitional change in regulative institutions seems to run opposite to the direction of the level of structural opportunity. Based on Table 40, the less transitional change firms experienced, the stronger the structural opportunity they seemed to recognise. This pattern has also been observed in the last period. This observation may also be counter-intuitive, as transitional changes like deregulations will lead to easier moving of goods across the broader, and thus contribute to cost reduction and structural opportunity. Yet similar explanations as in the last period can still apply, i.e. transitional changes can be a combination of both positive and negative signals, firms may be able to access the structural opportunity more accurately, and the over-the-shoulder effect, where firms may be more comfortable when government involvement is diminished, may also be seen.

In contrast to the last period, the level of transitional change in regulative institutions in this period seems to have a negative relation with the level of relational opportunity. While the levels of transitional changes are medium (DeLaval) to high (Elekta and Höganäs), the levels of relational opportunity are high (DeLaval and Elekta) and medium (Höganäs) (Table 40). The higher the level of transitional change these firms are exposed to, the lower level of relational opportunity they recognised. The explanation underscoring this relation may be that these long-term-oriented transitional changes reflect the government’s intention to control resource distribution in a particular industry. A high level of transitional change indicates stricter control over the resources that local actors can utilise and the activities in which they can participate. Thus, it will be difficult for foreign firms to find chances to collaborate with these local actors, leading to a subsequent reduction in the relational opportunities they perceive.

An alternate observation suggests that the relatively high level of transitional change experienced by these firms in this stage seems to have less of an effect on their recognition of market opportunity. Both structural and relational opportunity remain relatively strong whatever the levels of transitional changes are. Perhaps Chinese regulative institutions have become relatively mature and stable after China’s WTO entry. Firms are also more experienced and can adapt quickly to these changes after long-term operations in China. Hence, these transitional changes in this period seem to have become background noise and appear to be less influential on the firms’ perception of market opportunities.

The levels of turbulent change in regulative institutions in this period show certain relations with the level of structural and relational opportunities. There seems to be a positive relation between turbulent change and these two types of market opportunity. As the level of the
turbulent change become higher (e.g., DeLaval), the level of market opportunity also becomes higher (Table 40). This relational pattern is somewhat surprising, as those unexpected short-term-oriented turbulent changes triggered by market shocks could potentially cause disruptions in the operations of these foreign entrants. As these changes cannot be expected by definition, firms are unable to make any preparations. However, there are several plausible explanations for this. One suggestion, first of all, is that these foreign firms have acquired sufficient knowledge through their long existence in the host market and have learned how to obtain the necessary information to handle these changes. This information, whether it be obtained through public channels or from partners, helps them in return to identify more structural and relational opportunities.

Secondly, these foreign firms have gradually acquired market leader status and control scarce resources that can help them to overcome the changes. These resources can reside within the host country as well as outside the country but within the business group. The capability to mobilise these resources allows them to be superior to local competitors in dealing with these unexpected changes and continuing to look for market opportunity.

Lastly, these firms may have gradually developed long-term relationships with local actors, and these relationships form a stable safety net on which to rely during turbulent change. Thus, the higher the level of turbulent change, the more these firms and local actors may support each other. Subsequently, as they are closely connected, the level of relational opportunity may rise. Therefore, a high level of turbulent change may relate with a high level of relational opportunity.

To sum up, there seems to be a relation between institutional changes and market opportunities during this period. While the level of structural and relational opportunity may relate negatively with the level of transitional change, its relation with turbulent change appears to be positive.

Institutional change and market commitment

Institutional changes do not seem to have a clear relational pattern with market commitments. While these firms experience medium (DeLaval) to high (Elekta & Höganäs) levels of transitional change, their commitments toward the host market, relationships, and organisational integrations are a mixture of medium to high and very high. These commitments are the activities these firms invest in the host markets, which should be affected by the changes of these long-term-oriented regulations and laws. However, this relation does not seem to exist, from observing Table 40. As transitional change may gradually become background noise for these firms, their
planning for market commitments may have included the consideration of transitional change, and thus less disruption will be experienced.

Another possible explanation for this missing relation could be that these firms have gained enough experience in the host market and became immune to these transitional changes. This does not mean these transitional changes will not affect their operations, but rather that they can quickly adjust to the new regulative institutions. Also possible is that the long-term operation of these firms has somehow enabled them to be part of the host market. As the nature of transitional change in regulative institution is that these new regulations and laws are expected, these firms can be well aware of what is coming and prepare in advance. They can even be part of these transitional changes, as their opinions and knowledge toward the industry development may be highly appreciated by the policy makers.

Turbulent change in regulative institutions, on the contrary, may have played a bigger role in affecting what firms can do in the market. Particularly, when the levels of turbulent change are lower, the commitments toward the host market and relationships seem to be lower, too. Turbulent change, by definition, can unexpectedly alter market conditions to a situation that is dramatically different than before. Therefore, firms facing stronger turbulent changes (e.g., DeLaval and Elekta) should be more affected than their counterparts. Yet their activities are consistent and there does not seem to be any setback on commitment toward the host market and relationships.

A plausible explanation can be suggested to explain this positive relation between turbulent change and commitment toward the host market and relationships. Unlike the previous period, in which these firms had just entered the market, the firms have been operating for a long period of time in the host market and have established a strong presence. The sunk cost for decreasing investment or withdrawing from the market will be too big to be acceptable. Therefore, when their position in the market may be affected by the turbulent changes, they may choose to increase investment either by building an even stronger market presence, or by strengthening their connections with local actors. These commitments are intended to protect their existing assets and market positions during the unexpected turbulent changes. Thus, when the turbulent changes are greater, these firms may be forced to invest more to secure their positions.

In terms of commitments made toward the organisational integrations, it seems that both transitional and turbulent change will need to be considered. When there is a discrepancy between these two types of institutional change (e.g., DeLaval and Höganäs), the commitments toward organisational integrations are higher. This may be because the firms that experience high levels of both transitional and turbulent change (e.g., Elekta) simply do not have spare resources and attention to invest in organisational integrations. Another possible explanation is that firms experiencing differences in the
levels of transitional and turbulent change may be able to reserve unused resources, or there may be slacks that firms can utilise for strategic planning. Successful subsidiaries may take the initiation to gain even stronger roles within the group by working with other subsidiaries in the nearby markets. The headquarters may want to have better control over the operations in a region by placing a regional office or regional headquarters.

Overall, different types of institutional change appear to relate to market commitment differently. While transitional change does not seem to have much impact on market commitment due to the firms’ long history of operations in the host market, the levels of turbulent change do relate to how the firms make commitments toward the host market, relationships, and organisational integrations. The level of turbulent change seems to have a positive relation on the commitments toward the host market and relationships. The market commitment toward organisational integrations, in contrast, appears to relate with combinations of these two types of institutional change. Firms may find spare resources when there is a discrepancy between transitional and turbulent change and strategically integrate subsidiaries in near-by regions.

Market opportunity and market commitment

Firms are observed recognise a high level of market opportunity and make strong market commitments during this period. The relatively high level of structural opportunity may have contributed to these market commitments, but no particular pattern of relation can be identified. Despite that the level of structural opportunity is consistently high for all these firms, their commitments toward the host market and relationships can range from medium (Höganas) to high (DeLaval and Elekta). Perhaps the commitments toward the host market and relationships at this period are investments continuing from the previous period and thus relate with the level of structural opportunity in the past (high for DeLaval, medium for Elekta, and low for Höganas). This explanation seems to suggest that there may be a time lag between the structural opportunity perception and the commitment to the host market and relationships.

In contrast, stronger commitments toward organisational integration appear to relate with structural opportunity when the level of structural opportunity is higher than the level of relational opportunity (e.g., DeLaval and Höganas) (Table 40). It may be the case that when firms perceive lower relational opportunity (in comparison to the structural opportunity), they may initiate intra-organisational cooperation to share experiences and resources from the headquarters or other advanced subsidiaries. These experiences and resources can boost the competence of local subsidiaries,
which may lead to potential collaboration with local actors and subsequently achieve better relational opportunities.

Moreover, the level of relational opportunity alone seems to have a positive relation with the commitment made to the host market and relationships. The pattern seems to show that when the perception of relational opportunity is low, the commitment toward the host market and relationships will also be low (Höganäs). This may suggest that for firms that have been operating in the host market for a long period of time, relational opportunity will play a more dominant role in influencing their willingness to invest time and resources in activities that lead to a stronger market presence and collaborations with local actors. These commitments toward the host market and relationships may, in turn, strengthen their perceptions on relational opportunity in the host market.

Further, there are different aims of these relationship commitments and they seem to relate to how these firms perceive the relational opportunities. The stronger the relational opportunities perceived by the firms, the more activities are devoted to maintain their role in the existing relationships and network. Firms employ activities to actively define the role they need to play in the existing relationships and network so that they can continue to have access to these relational opportunities. However, firms may try to break the expected role and attempt to lead the relationships and network development if the perceived relational opportunities are less satisfying. There seems to be a relation between the level of relational opportunities expected by these firms, and their willingness to play the role expected from other actors in the network.

Overall, the level of market opportunity firms perceive, in particular the relational opportunity, seem to have a relation with the market commitment they make in the host market. Also, there seems to be a connection between the structural opportunity from the last period and the commitment made toward the host market and relationships. This connection may suggest a time delay between the perception of structural opportunity and actual activities these firms execute. In addition, the discrepancy between structural and relational opportunity may be the incentive for firms to make commitments toward organisational integrations. These activities to bring the headquarter-subsidiaries or subsidiaries within the near-by regions closer may allow an inflow of resources and experiences that will help local subsidiaries to achieve better relational opportunity.

To summarise the analysis of the period after China joining the WTO, the observations show that relations are found among institutional change, market opportunity and market commitment. Keeping consistent with the previous period, the levels of transitional change in regulative institutions relate negatively with the level of structural and relational opportunity. The
turbulent change in regulative institutions, however, has a positive relation with both structural and relational opportunities in this period.

Turbulent change also shows positive influence on the market commitment made toward the host market and relationships. When stronger turbulent change is presented, firms appear to make more investment in building market presence, and maintaining relationships with local actors. The market commitment toward the organisational integrations, however, seems to be influenced by a combination of transitional and turbulent change. Firms seem to initiate more collaboration between subsidiaries in the nearby markets when there is a discrepancy between turbulent and transitional change in the regulative institutions.

These observations may suggest a weakening role of transitional change in regulative institutions in the later stages of the market entry of the firm. As they gradually learn from operating in the host market, they may be able to develop effective adaptations to the expected institutional change. In addition, market opportunity, particularly structural opportunity, seems to contain a time-delay effect on the firms’ commitments made toward the host market and relationships. The relation seems to build between structural opportunity from the last period, and these two types of market commitments. The relational opportunity (or the underachievement of it), in contrast, appears to have a relation with the firms’ commitments toward organisational integration. Closer collaborations to enable experience and resource transfer between the headquarters, other subsidiaries and the local subsidiaries may allow the latter to attract better chances to work with local actors and access further relational opportunities.
Chapter 10: Cross-period Analysis

Institutional change, market opportunity and market commitment across the two periods

In the previous chapter, institutional change, market opportunity and market commitment are analysed in two separate periods (before and after China joined the WTO). These analyses show that while some relations among these concepts are consistent in both periods, the rest are rather different. For example, negative relations between the levels of transitional change in regulative institutions and the level of structural opportunity perceived by firms are consistently observed in both periods. Similarly, positive relations can also be traced between relational opportunity and the commitments firms make toward relationships. Yet while the levels of turbulent change in regulative institutions seem to be positively related with both structural and relational opportunity in the latter period, this relation cannot be been seen in the first period. Furthermore, there seems to be a positive relation between the level of structural opportunity perceived by the firms prior to China joining the WTO and the commitments they made toward the host market and relationships in the period after China joined the WTO.

The intriguing question here is why do some relations remain the same while others change in different periods? Are the changes of relation related to the types of institutional change these firms experienced in different periods? To address these concerns, this chapter aims to analyse the levels of institutional change, the levels of market opportunity and market commitment across these two periods.

How do institutional changes evolve across the two periods?

The analytical model discussed in Figure 3 in Chapter 3 consists of four combinations of transitional and turbulent change based on their respective levels. This model is used to analyse how institutional change in these two periods differs, and what consequences these differences may imply. Based on the results of the cross-case analyses (Table 39 and Table 40), the levels of transitional and turbulent change experienced by these firms in the two periods are plotted and shown against the four types of institutional change.
(Figure 23). The arrows in Figure 23 indicate the direction of change in their relative positions.

In Figure 23, one can see that even though both the transitional and turbulent changes that DeLaval experienced became greater from the first to the second period, the level of turbulent change spiked in the second period. This spike is due to the melamine milk crisis and the new laws and regulations that the Chinese government put into place. Therefore, DeLaval moved from Area II Minimal Change in period 1 (DeLaval P1) to the borderline between Area III Manageable Change and Area IV Chaotic Change in period two (DeLaval P2).

Figure 23. The evolution of institutional change during DeLaval’s, Elekta’s, and Höganäs’ foreign market entry processes

![Diagram showing the evolution of institutional change for DeLaval, Elekta, and Höganäs](image)

The turbulent change in the regulative institution that Elekta experienced remained similar for both period one and two. Yet the transitional change grew in the latter period when the Chinese government began to systematically manage the purchase and allocation of the Linac and Gamma Knife. Therefore, in Figure 23 Elekta’s position moves away from the borderline between Area III Manageable Change and Area IV Chaotic Change in period one (Elekta P1), and is placed in Area III Manageable Change in period two (Elekta P2).

For Höganäs, the levels of transitional and turbulent change remained relatively similar in both periods. The Chinese government firmly supervised the development of the auto industry throughout the last thirty years. As such, Höganäs’ position in Figure 23 remains on the borderline between Area I Rehearsed Change and Area III Manageable Change for both period one and two (Höganäs P1 & P2).
There seems to be a tendency that institutional change in China, regardless of the industry in which a firm is located, is evolving, over time, into a manageable style of change. This indicates that, despite turbulent changes reoccurring in the market, there is strong, steady policy support from the Chinese government to oversee the industry development. This observation is also consistent with the general impressions from political science scholars on economic transitions in China (Ramos, 2004), and that the accession to the WTO membership has further strengthened the market economy system.

How do the market entry behaviours of the firm evolve across the two periods?

Based on the analyses in Table 39 and Table 40, one can see that all case firms perceived stronger market opportunity and made more market commitment in China. Firms in general seemed to be positive on the prospect of their market entrance in China in the second period even though there were noticeable increases in transitional or turbulent institutional change, as shown in Figure 23.

Based on Figure 23, it can be seen that the evolvement of institutional change for DeLaval and Elekta presents contrasting characteristics. One can observe that, while DeLaval experienced a significant increase in turbulent change in regulative institutions, the transitional changes that Elekta was exposed to greatly intensified. Yet DeLaval and Elekta seem to have similar patterns of structural and relational opportunities. Both firm perceived a greater increase in their relational opportunities in the second period than in their structural opportunities. The patterns of their market commitment, however, seem to be different. Apart from both firms having made a strong market commitment toward relationships, DeLaval focused more on the aspect of organisational integration whereas Elekta put emphasis on the host market.

In comparison, Höganäs can be seen to encounter similar levels of institutional change in both periods, shown in Figure 23. Different from DeLaval and Elekta, the structural opportunity Höganäs perceived outgrew the relational opportunity. In addition, Höganäs’ market commitment also presents different characteristics; the commitment toward relationships did not increase as much as DeLaval’s or Elekta’s. Mostly, the increase of commitment toward organisational integration exceeded the other two aspects.

The analysis shows that as the institutional change intensified over time, the development of the structural opportunity seemed to be less encouraged. Relational opportunity broadened, in spite of the increasing institutional change. Consequently, the market commitment toward relationships was
also more substantial. In other words, firms pursued more structural opportunity in foreign market entrance when the level of institutional change in the host market was consistent.

The analysis suggests that the pursuit of structural opportunity can lead firms to expand their market presence, and firms may also be keen on introducing collaboration between nearby subsidiaries for cost-saving or competence-creating activities. However, when institutional change increases over time, firms may be prompted to seek allies to support one another. The more firms invest in building relationships with other actors in the host market, the more relational opportunity they may perceive. Furthermore, depending on whether the increase of institutional change is transitional or turbulent, the market commitment that firms make may also show a difference. When the increase over time has been mainly carried out in transitional change, the implication may be stronger supervision imposed by the host government, and therefore firms appear to make a greater commitment to the host market to legitimise their positions. When the levels of turbulent change outgrow the transitional change, the host market may contain a certain level of chaos. Therefore, firms may need to seek internal resources and competence, and transfer these to the host market to support continuing growth.

Nevertheless, the evidence suggests that firms perceive more market opportunity and make further market investment in the latter period even though the institutional change intensified in this period. Firms seem to possess a higher tolerance for the changes in the regulative institutions after operating in the host market for a certain period of time. Possibly, long-established firms not only know better how to obtain necessary information but also may be able to interpret the information with greater accuracy. As information is an essential element leading to structural and relational opportunity, firms with longer histories in the host market may have a stronger possibility of continually identifying market opportunity when encountering substantial market shocks and institutional changes.

Following the same logic, firms with long-term operations in the host market appear to be able to sustain their market commitment even when the institutional change has escalated over time. They are better equipped with knowledge on how the host market functions, and have stronger control over their local operations. As such, firms are able to make decisions on market commitment in the appropriate direction and corresponding to the type of institutional change that is increasing. These choices enable firms to invest resources more effectively, which is crucial for survival when host markets are in chaos.

Overall, the cross-period analysis indicates that the element of time underpins the relations among institutional change, market opportunity and market commitment during the foreign market entry processes. As the
observations of these three concepts come from the two periods that are connected in time and part of a longer process, they also form a sequence and appear in order. The time element and its implication denote a path dependency existing in this current study. What happened in the past has an explicit impact on both the institutions in the host market and a firm’s behaviour in the present.

In summary, the findings in the cross-period analysis show that the level of institutional change that firms experience, either transitional or turbulent change, may increase or remain constant over time. In the case of these three Swedish firms in China, the institutional changes they experienced have gradually moved toward Manageable Change, which is characterised by medium to high levels of transitional and turbulent change.

Additionally, foreign firms that experienced similar institutional change across the period seem to recognise stronger structural opportunity than their counterparts that suffered from intensifying institutional change. Yet these firms that experienced increased institutional change may recognise stronger relational opportunity in the latter period. Furthermore, firms are observed to be increasing their market commitments in relationship over time, in spite of the institutional change.

Therefore, foreign firms may become more resilient toward the institutional change taking place in the host market over time. They are observed to adapt to the changes in host regulative institutions much more easily in the latter period of the foreign market entry and expansion. As such, they can continually perceive market opportunity and make market commitment even when the level of institutional change has escalated.
Chapter 11: Discussion

[Summary] This chapter critically examines the quality of the theoretical framework. The results from the analysis and empirical observations are used to evaluate the strengths and weaknesses of the framework, and two refinements are then suggested to provide improvement. The discussions are further extended to observations on market shock, the potential for firms to influence institutional change, and lastly, the relation of the concepts over time.

11.1. A brief overview of the results from the analysis

This study explores the process of foreign market entry to an emerging market experiencing recurring changes in laws and regulations, and asks the research question: How may institutional changes in the host market influence the market entry behaviour of the firm over time? To answer this question, I propose a theoretical framework consisting of three concepts, including institutional change, market opportunity, and market commitment (Figure 4). Based on the individual case analysis, I argue that institutional change taking place in the host market plays a signal role that enables firms to recognise market opportunity and to implement market commitment during their market entry process.

Moreover, this study also develops seven sub-concepts (transitional and turbulent change, structural and relational opportunity, and market commitment toward the host market, relationships, and organisational integration) to disentangle the main concepts and form the base of the analysis to reveal the relations among these main concepts. This study finds varied effects from the sub-concepts in the cross-case analysis, and suggests they may promote or prevent the relations among the three main concepts. While the levels of structural and relational opportunity seem to negatively relate to the level of transitional change, the relation with turbulent change appears to be positive. Meanwhile, the levels of market commitment toward the host market and relationships seem to only relate to turbulent change, and this is in a positive way. Market commitment toward organisational integration, on the other hand, appears to relate to the difference between the turbulent and transitional changes. The greater the difference between the
turbulent and transitional changes, the higher the level of the market commitment toward organisational integration. Finally, the level of the market commitment toward organisational integration also positively relates to the difference between the structural and relational changes. The level of the market commitment toward the host market and relationships relate positively to the relational opportunity.

Additionally, the cross-period analysis points out that, depending on the point in time, the relations among institutional change, market opportunity, and market commitment may change. While institutional change seems to intensify over time, the market opportunity and market commitment seem to increase as well. The escalation of institutional change over time appears to have led firms to recognise stronger relational opportunity, and make further market commitment toward relationships.

11.2. The fit of the theoretical framework

Based on the empirical analysis and results, the strengths and weaknesses of the theoretical framework are critically evaluated. Two refinements are therefore suggested to improve the fit of the initial theoretical framework.

The strengths of the theoretical framework

The theoretical framework and the concepts proposed in this study do seem to fit the research question. This framework provides an important link between the market entry behaviour of the firms and the external environment in which they are embedded. Empirically, this framework argues that foreign firms enter China after recognising market opportunity signalled by the institutional change carried out previously, and make market commitment that corresponds to the market opportunity identified. The simplistic nature of this theoretical framework allows easy application for analysing the events of foreign market entry to an emerging market.

A historical view is permitted in this theoretical framework, in which both institutional change and the behaviour of the firm are bound by their path dependence, and show continuity. While institutional change is based on the changes that have taken place in the past, firms also recognise market opportunity and make market commitment based on their previous experiences and existing operations. Empirically, this study found that new regulations are most likely to be based on the revisions of past regulations, and both the market opportunity recognised and market commitment made by these foreign entrants are based on their current operations in China.

Moreover, this theoretical framework also focuses on the institutional change, rather than the institution itself. Processes are included in this
framework and can be observed on the one hand as the changes in the regulative institution, and on the other hand, as the new market opportunity and market commitment made during market entry. Empirically, both the regulative institutions in China and the market entry and expansion of the foreign entrants are constantly progressing. The empirical data also shows the relation of these two processes evolves from one point in time to another. As the relation evolves, there is the possibility for the market entry behaviour to influence the institutional change.

Finally, the sub-concepts and their judgement criteria are clearly explained to enable the theoretical framework to be applied more precisely and thoroughly. These sub-concepts are all observed in the empirical data, and the connections among them are analysed, which lends strong support to the reasoning behind the theoretical model.

Together, the theoretical framework proposed in this study indeed answers the “how” research question by considering what type of market opportunity the firm will recognise, and what type of market commitment the firm will make.

The weaknesses of the theoretical framework

Some difficulties and inconsistencies in applying this theoretical framework were also identified in studying the empirical data. To begin with, the simplistic nature of the theoretical framework may cause difficulties in understanding the consequences of the influence empirically. For example, the empirical observations found that institutional change, though it has acted as a signal for market opportunity in most of the cases, may also occasionally lead to the decline of market opportunity (e.g., Elekta’s sale of the Gamma Knife to Chinese hospitals was abruptly stopped when the Chinese government introduced new regulations).

Additionally, and probably more importantly, this current theoretical model is unable to indicate or explain the evolving relationship between institutional change and the market entry behaviour of the firm over time. As empirical observations reveal, certain relations between sub-concepts are only sustained at one point in time and not at another. For instance, the relation between turbulent change and structural and relational opportunities is only found in the latter period.

Likewise, the relation between institutional change, market opportunity and market commitment is also observed to shift over time. Firms are observed to recognise stronger market opportunity and increase market commitment even though the institutional changes have escalated over time. It seems that the length of time that firms have operated in the host market and their acquired experience may play roles in the differences in how these concepts and sub-concepts are connected. However, the theoretical
framework in the current form lacks a mechanism to reflect these differences.

Refinement (1) – institutional change as the message for access

The first weakness outlined above is the difficulty in predicting the direction of the influence when applying the theoretical model to examine the empirical data, as the empirical observations provide evidence that the influence from institutional change can lead firms to recognise the appearance and disappearance of the market opportunity.

Looking more closely, the issue is not that the market opportunity disappears, per se, but rather is not available to the firms anymore. For example, the empirics show that when the Chinese government prohibited local hospitals from purchasing the Gamma Knife, it did not end the demand for advanced treatment of brain abnormalities in China. The market opportunity remained, which can be observed from the continuous growth of Elekta’s local competitor (i.e. the Gyro Knife), but access to the market opportunity was closed for Elekta.

In other words, the message that firms can recognise from any institutional change is not only the availability of the market opportunity, but the accessibility for them as well. Similar to this thought, Schumpeter (1942) has suggested that government regulations can be the prime reason leading to the decline of investment opportunity. Jones (2010:34) also pointed out that foreign firms in China are operating “at the discretion of the Chinese government”, and when the laws and regulations change, these firms may lose out on the possibility of continually capturing the market opportunity. The institutional change may not demolish the existing market opportunity, but it can debar the firm from accessing it.

To address this weakness, I therefore suggest an adjustment on the role that institutional change plays in this model. The signal that firms recognise from the institutional change can contain both availability and accessibility of the market opportunity. However, some institutional change may only contain either the availability or the accessibility, and can lead firms to recognise that the market opportunity may be temporarily closed for them. This refinement also implies that market opportunity is “temporally constrained” (Zander, 2007: 1146), and may only be open for a limited period of time.

The empirical observations also lend support for this refinement. During the period that Elekta was not able to sell its Gamma Knife, its continuous communications with the MOA eventually led to another institutional change which allowed it to access the Chinese market after 10 years.
Refinement (2) – a potential role for acquired experience

The second refinement, in comparison, is a much bigger issue with the theoretical framework, for which a revision may be needed. The empirical observations show that the length of time that firms operate in the host market makes a difference on how their behaviour is influenced by the institutional change. One can assume that the longer the firm has operated in the host market, the more learning it has gained, and hence, the stronger the host market experience it has acquired. Yet there is no place in this current framework to reflect the acquired experience of the firm.

What are these experiences that firms acquire over time in the host market? These acquired experiences are about how the host market functions and evolves, and a firm learns from observations, interactions, and various successful and unsuccessful attempts to deal with changes during the time those firms have been established in the market (Johanson and Mattsson, 1988; Johanson and Vahlne, 1990). The experiences reside in the individual, and cannot be transmitted (Penrose, 1959). As such, it may take time for these acquired experiences to become part of the organisation’s routines (March, 1991).

Over time, a firm will gradually acquire more experiences in the host market and both a general improvement in skill and efficiency and new development of special activities can be expected (Penrose, 1959). Moreover, the increase of experiences can produce “changes in knowledge acquired and changes in the ability to use knowledge” (ibid, 48). These changes may enable firms to interpret information in a different way that leads them to recognise market opportunity that may have been missed in the past. These changes may also facilitate a firm’s choice to make a commitment that is more appropriate to the host market. Consequently, firms seem to be better adjusted to the changes occurring in the regulative institutions in the host market.

In other words, firms have acquired experience over time during the market entry process, which has allowed them to be more competitive through better interpretation of information and better decision-making. The important role of the acquired experiences leading to an increase of host market knowledge in foreign market entry is well acknowledged in past literature (Beamish, 1993; Erramilli, 1991; Forsgren, 2002; Johanson and Vahlne, 1977; Makino and Delios, 1996). The empirical observations and the results of the analysis point out the effects of the acquired experiences, even though these effects were not included in the theoretical framework, and were not empirically studied. Still, the theoretical framework may not explain the empirical data consistently if the acquired experience is not included. Therefore, I suggest an extension be added to the initial theoretical framework to reflect the role of the experience acquired by a firm over time. The revised framework that includes the acquired experience (marked by the
dashed line) can be seen in Figure 24 below. The acquired experience is positioned as a shield, which equips firms to work through the institutional change.

*Figure 24. The revised conceptual framework of the firm’s foreign market entry process to emerging markets*

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**Experience with institutional change**

When firms are relatively new to the host market, they are easily influenced by the institutional change due to their lack of experience. Institutional change represents a downside risk (Chen et al., 2009; Meyer, 2001; Tse et al., 1997; Tseng and Lee, 2010; Wu et al., 2012), and even the transitional change intended to facilitate the development of the market may be interpreted as unwelcome signals, or as the forcing of conformity (Karhunen, 2008; Owens et al., 2013; Salomon and Wu, 2012; Soh and Yu, 2010; Weick, 1979). When firms experience turbulent change in the early stage of the market entry process, they may not know how to handle the challenges they present and may decide to slow down or postpone the market entry until they can better make sense of these changes.

Yet when firms gradually acquire experience in the host market, the institutional change may present less of a threat to them, as they may be more able to anticipate what is going to happen based on their past experience (Chang, 1995). The influence of the institutional change still exists, but the firms’ perception of the uncertainty may be that it is less threatening, due to the experience acquired in the host market, (Figueira-de-Lemos et al., 2011; Henisz and Delios, 2001; Sun, et al., 2010). Even the turbulent change may allow firms to recognise market opportunity when they have been in the host market for a longer time and have more experience. The empirical observations also indicate that influence from institutional change seems to cause less of a concern for firms when they are in the later stages of the market entry process.
Experience with market opportunity

The experiences firms acquire over time will lead to changes in the knowledge acquired from the host market. The changes in the knowledge may allow them to interpret information differently, as well as allow them access to more accurate information (Benito et al., 2009). What information firms can access and how it is interpreted will determine the recognition of structural and relational opportunities.

As firms first enter a host market, they may have difficulty differentiating the valuable information from the background noise. Properly processing the information they receive may also be challenging. In other words, the structural opportunity that firms recognise in the early stage of market entry may be less concrete than that in the later stage simply because firms may not have much experience in the host market at the early stage. Relational opportunity is also difficult to recognise as it requires collaboration between partners. Yet when firms first enter the market, they simply may not have the experience interacting with local actors.

When firms acquire experience over time in the host market, their knowledge toward the host market changes (Shrader, Oviatt, and McDougall, 2000). The consolidation of these experiences can contribute to the firms’ growth (Eriksson et al, 1997; Levitt and March, 1988; March, 1991), and they are in a better position to recognise relational opportunity (Johanson and Vahlne, 2009). Their interpretation of the information leading to the structural opportunity may also hold stronger validity (Mintzberg et al., 1998). Empirically, the observations show that there is a time lag between the recognition of structural opportunity and the actions of the firms. Additionally, firms recognise more relational opportunity after acquiring experience over time in the host market.

Experience with market commitment

Increasing experience will also lead firms to develop the ability to use their knowledge differently in order to adapt to the host market (Hong and Nguyen, 2009; McCarthy and Puffer, 1997; Meyer et al, 2009; Miozzo and Yamin, 2012; Tan and Meyer, 2011). As such, firms with experience may be able to make market commitments and invest resources in activities that are considered to be more appropriate to the host market, or do so with better efficiency (Santangelo and Meyer, 2011).

When firms enter a foreign market, they are likely to have a plan about what they intend to invest in. Since they do not have much experience in the host market, many of these plans may encounter difficulties that the firms do not envision. Empirically, these case firms, in the beginning of their market entry, all went through multiple changes in the modes of operation to deal with the difficulties that arose from the initial plan. While these changes are not observed in their later stage, the firms do show signs of adaptation and
flexibility toward the host market (Calof and Beamish, 1995; McCarthy and Puffer, 1997). The observations imply that the experiences the firms acquire through the process of entering China allow them to invest resources in those activities better corresponding to the characteristics of the host market.

**Experience with the process of market entry over time**

Since these experiences increase over time, firms in the latter period of the market entry process will be equipped with more experiences and will be able to achieve better performance under the influence of institutional change (Delios and Beamish, 2001; Henisz and Delios, 2004; Luo and Peng, 1999). Therefore, if the institutional change remains the same or decreases over time, their market entry behaviour will grow stronger than it was at the time when they first entered the market. For example, the market opportunity and market commitment for Höganäs have both increased while the institutional change for its period 1 and 2 remained the same.

Even though the institutional change may escalate, firms with experience may continue recognising new market opportunity and making commitment. For example, despite that the institutional change increased from period 1 to period 2, both DeLaval and Elekta recognised high levels of market opportunity and made stronger investments in period 2. The experience these two firms acquired over time seemed to allow them to grow even in a very chaotic environment.

11.3. Market shocks and the potential for firms to influence institutional changes

The empirical observations I made in this study show that turbulent change in regulative institutions seems to be triggered by market shocks, e.g., the Melamine Poisoning Crisis in 2008 and the turbulent change in laws and regulations in dairy industry that were implemented right after the crisis. Without this crisis, the institutional change in the dairy industry may have taken place at a slower speed, which can be seen from the gradual policy update and revision occurring in 2007 and early 2008. Similar observations where market shocks trigger turbulent change can also be found in the medical device industry and automotive industry.

This raises the question of what these market shocks are. In this study, market shocks are certain events with negative consequences that the market was unprepared for. Market, in this context, refers to the composition of various actors, including consumers, firms, and the government. When market shocks occur, these unexpected events affect the confidence of the consumer, and consequently disrupt and alter the relations among these actors.
In a market like China, limited power is given to non-government organisations, and given their interest in maintaining social stability the government is quick to address such issues. The government’s intention to control disruptions as quickly as possible will result in the turbulent change in the regulative institutions: each of these laws and regulations are aimed at restoring order to a particular area of the industry. Hence, the broader the disruptions that the market shocks cause, the more extensive the following turbulent change in regulative institutions may be.

Emerging markets are characterised by fast-growing markets with unstable institutions (Jansson, 2007), and the combination of speedy growth and a weak supporting system tends to result in more frequent market shocks. Market shock and related turbulence have also been observed in Iran (Hadjikani and Johanson, 1996), Russia (Johanson and Johanson, 2006); Central and Eastern Europe (Newman, 2000), and China (Peng, 2003). These shocks are generally exogenous to the firms and cannot be controlled by them (Yim, 2008). After the market shocks, firms may find themselves facing adjustments on both sides; they need to meet a new demand and preference from consumers, and they will need to conform to new regulations from the government.

Prior to the market entry, firms may rely on the selection of suitable entry mode to reflect their concerns over the possibility of market shocks and turbulent institutional change (Chen et al., 2009; Dunning, 1980; 1988; 1997; Dunning and Lundan, 2008; Meyer, 2001; Tse et al., 1997; Tseng and Lee, 2010; Wu et al., 2012). Yet when foreign entrants are established in the host market, they may strategically leverage their advantages to respond to the institutional change (Hong and Nguyen, 2009; McCarthy and Puffer, 1997; Meyer et al, 2009; Miozzo and Yamin, 2012; Tan and Meyer, 2011).

The empirical observations show that firms form stronger collaborations with other customers (DeLaval, Elekta, & Höganas), distributors (Elekta), and academic and governmental agencies (DeLaval) in the host market after the market shock and corresponding turbulent change. These collaborations took the form of seminars, workshops, and educational projects. These observations seem to imply that these experienced firms may be able to accommodate institutional change when continually expanding in the market.

Furthermore, market shocks may open up the possibility of allowing firms to work directly and closely with governmental agencies (e.g., DeLaval) and exercise their influence toward future institutional change (North, 1991). In the aftermath of market shocks, the government in the host market may need to quickly find ways to fix the problems and to restore the confidence of the consumers toward the market (and the government). As such, the government may be more keen to work with foreign firms with advanced knowledge than they would be on other occasions. Foreign
entrants therefore can play an active role in introducing new knowledge (e.g., codes or standards) or technology (e.g., machines) obtained through global operations to the host market.

In other words, instead of being a passive subject in the host market (DiMaggio and Powell, 1983; Peng, 2003; Scott, 1995), foreign entrants may actively influence the potential institutional changes by collaborating with local actors (Blumentritt and Nigh, 2002; Boddewyn and Brewer, 1994; Boddewyn and Doh, 2011; Oliver, 1992; Rodrigues and Child, 2008; Steinmo et al., 1992). Occurrences like severe market shock may demonstrate the inefficiency of the existing regulative institutions, and the political organisations may be keen to seek external knowledge when rebuilding the regulative institutions.

For the collaboration between firms and the host government to take place, some requisites may need to be met (Child and Tsai, 2005; Child et al., 2012). Firstly, firms may need to acquire sufficient experience from the host market before these collaborations can take place. They need to be able to identify who to work with and how to work with them. Secondly, firms may need to have a good reputation in the host markets, which allows local actors to trust them. They cannot be seen as behaving opportunistically, and they cannot be seen to obviously benefit from their participation. After all, these changes in regulative institutions still have to come from the government and show continuity with the past (Thelen, 2000).

Lastly, there is a need for urgency. Market shock alone may not be sufficient to prompt a willingness in the host government to work with firms. The host government may be more motivated to seek assistance from firms when the condition of the particular industry is more devastated than the government can handle. Therefore, an industry having been subjected to less regulatory control can be a major reason behind the host government’s desperation. The empirical observations show that, despite market shocks being experienced in the medical device and automotive industries, these industries have also gone through numerous transitional changes. The dairy industry is contrary to this, and since the Chinese government did not play a dominant role in controlling the industry’s development in the past, it may be more willing to open up the policy-making processes to allow firms to join in.

11.4. Tracing influence over time

This study shows how institutional change may trigger firms to recognise market opportunity and make market commitment, and analyses the changes in the level of one concept across the two periods and the consequences on other concepts. This study, however, has not sought out the detailed
connections between the change of a particular law or regulation and a specific decision or activity that firms made when entering the host market, either at a specific point in time or over time.

Detailed connections between the change in laws and regulations and the decisions of the firms have not been included due to the limitations associated with employing interview data in a retrospective longitudinal study. Had this study been conducted with interview data linked to recent events, or with detailed archival data (e.g., meeting minutes) covering historical events, it would have been possible to investigate the behaviour of the firm following the implementation of a particular law. This study, however, did not have access to such archival data that documented past communications and decision processes within firm. As such, attempting to make these types of connections would have more likely resulted in a study of how firms rationalise their actions.

Therefore, the use of mixed data in studying historical events has allowed this study to make sense of the past, rather than make claims of past causes and consequences and the impact they have on the present (Tosh, 1984). Yet, the observations of the structures and processes of the institutional change and foreign market entry in time and space do provide sufficient understanding needed to answer the research question (Gaddis, 2002). The empirical findings of this study reveal that events from the institutional change process consistently occurred prior to the events in the market entry process, and traces of these connections persist across various industries and at various points in time. As such, it is still possible to argue there is a logical connection between these concepts over time (Abell, 1987).

Nonetheless, there are limitations associated with the type of the data employed and the design of the study. To compile the historical data requires subjective interpretations by the researcher, which is a common issue associated with historical studies. The history is viewed through the present eyes. Besides, no two people will interpret the same piece of history in the same way. Subjectivity is an issue ingrained in qualitative research as researchers are deeply involved in data collection, analyses and interpretation. Yet this subjectivity is exactly what an abductive approach needs. The systematic combination and confrontation between the empirical data and theory are only possible through the researcher’s eyes. In this study, the subjectivity does take part in the process of understanding the events being studied.

11.5. Limitations of the study

This study has offered a critical evaluation of the importance of institutional change in foreign market entry to emerging markets, and has involved
conducting three case studies in a retrospective longitudinal approach. There are a number of limitations that need to be considered based on the methodology adopted in this study.

A retrospective, longitudinal, multiple-case study design is explicitly adopted to investigate the market entry processes of three Swedish firms. Unlike single-case study design, these cases may not be able to be investigated further due to time and resource limitations. However, the current multiple-case study better represents the various levels of institutional change carried out in different industries in the emerging market. Based on the analyses of this study, there is evidence to argue that the levels of institutional change are not a homogenous phenomenon for different industries despite the fact that they are in the same market during the same period of time.

Conducting a real-time longitudinal study may offer advantages to tracing the connections between activities over time. However, the time and resources needed would have significantly surpassed those available in the current study. Some turbulent changes can span a rather long period of time and be composed of multiple episodes. Real-time longitudinal studies may also encounter unexpected disruptions for various unrelated reasons, e.g., refusal of access after changing management.

Additionally, the context of China may hinder the applicability of this study. One may argue that China’s transition is unique, and there may be a boundary issue in this study, as the market entry process to other emerging markets could be significantly different. China is indeed unique as it has experienced extensive changes in a relatively short period of time. Therefore, it enables the researcher to observe changes and events that may take a much longer time to be carried out in more stable markets.

However, China is not unique with regard to the concept of institutional change; changes in regulative institutions happen in every market. China is also not unique in terms of attracting firms seeking market opportunity and making market commitment during the market entry process. China is not the first foreign market that firms attempted to enter and it will not be the last, either. Some of the firms in this study began their internationalisation more than a hundred years ago, and they are continuing to enter other foreign markets as long as there is market opportunity.
Chapter 12: Conclusion

China’s status as the world’s top destination for foreign direct investment and largest trading nation is likely to attract more international firms seeking market entrance, and increase the speed of expansion by those already present in the market. Its progress in reaching this point has been accompanied by significant changes in laws and regulations. This study sets out to understand the events of foreign market entry to emerging markets experiencing recurring changes in laws and regulations, and asks the research question: How may institutional change in the host market influence the market entry behaviour of the firm over time?

Based on the findings of three retrospective longitudinal case studies, this work reaches the following conclusions:

- The recurring institutional changes influenced the market opportunity recognition of the firms, and the implementation of the market commitment.

- Institutional change comes in different forms, and plays out differently in various industries and points in time. It also has varying influences on market opportunity in terms of the source through which it is recognised, and the direction in which market commitment is made.

- The escalation of institutional change over time seems to influence firms to form stronger relationship commitment with local actors and leads to stronger recognition of relational opportunity.

Theoretical implications

The recurring institutional changes in emerging markets potentially seems to pose more impact on the foreign market entry of the firm, and need to be understood from a rather long-term perspective. An over-emphasis on the mode of entry and short-term orientation in the theory of market entry is challenged by the findings of this study. From employing a longitudinal
approach, this study points out that, though the entry mode discussion is important, it considers a relatively short period of time in the overall foreign market entry process. As such, the situation is likely to be modified quickly due to recurring institutional change in the host market and the resulting newly recognised market opportunities. The observations in this study also indicate that the influence institutional change has on the market entry process can occur at multiple points in time, and in both the early and later stages. Therefore, a long-term-oriented foreign market entry theory may provide a more holistic view of the progress of market entry and expansion, and include events and activities that may be otherwise overlooked.

Additionally, information that leads to market opportunity recognition can be received from different sources at different points in time. This information indicates not only the existence but also the accessibility of market potential. As such, the source of the information, the content of the message and the time frame in which it is received all play an important but overlooked role in the opportunity recognition process.

Lastly, there are different types of institutional change, and the influences they have on the behaviour of the firm are not identical. Planned institutional changes have a significantly different influence than institutional changes that are implemented to address a market shock. Furthermore, institutional changes occurring in a market at one point in time can have varying influences on different industries, or can increase or decrease over time. These findings have particular implications for the institutional theory applied in the field of management research and suggest that institutions may be more fluid and less uniform than previous research has indicated. The historical observations also question the applicability of isomorphism on the behaviour of the firm in emerging markets experiencing dynamic changes. This study points out that firms do not merely conform to the regulative institutions, but instead they seek to actively adapt, integrate, and even become involved in future institutional change.

Managerial implications

Although institutional change can sometimes appear unsettling, firms should be aware of the influence they have on market opportunity recognition. Turbulent changes, in particular, may look threatening but can lead to opportunities that, while not yet apparent in the wider market, may be recognised through interaction with local partners. Foreign entrants may therefore benefit from increased contact and collaboration with local contacts during times of turbulence, and from being on the lookout for opportunities that may arise. As local partners are a prerequisite for relational opportunity, their value may be greater than that which is apparent at the time partnerships are being formed.
For firms and their managers entering and operating in emerging markets, it is also important to take a long-term approach and allow some flexibility in their strategies. Given initial unfamiliarity with the dynamics of an emerging market, there may be limitations to what a firm can plan prior to entry, and it is likely that some pre-planned activities will not suit the conditions of the host market. Firms and their managers should not interpret the incompatibility of their strategies with the host market as failures, but rather as opportunities to accumulate experience. Managers may only be able to understand where they are today through looking back at what has happened in the past. Through actively engaging in the host market and remaining alert to information from various sources, firms may find they are in the right place at the right time to recognise market opportunity.

Recommendations for future research

This study shows that foreign market entry to an emerging market is multifaceted, particularly when examined from a long-term perspective. During an extended entry process, not only the host environment, but also the dynamics between the local subsidiary and the headquarters of its parent company, can change. While local subsidiaries may become increasingly embedded in the host market (Andersson, Forsgren, and Holm, 2001; Forsgren et al., 2006), the headquarters often remains at a distance (Beugelsdijk and Mudambi, 2013).

Future research may explore the dynamics between local subsidiaries and their headquarters during periods of institutional change and see how these dynamics may affect the perception of market opportunity and subsequent market commitments. There could be discrepancies between how institutional changes affect the opportunity perception of local subsidiaries and that of their headquarters that lead to disagreement on the action to be taken in the host market. Researchers can try to understand how the local subsidiaries and their headquarters perceive and react to the same institutional changes. Understanding how they resolve disagreements stemming from differences in judgement could also prove valuable.

Another suggestion for future study can involve investigating the impact institutional changes have on the managers of foreign entrant firms, and whether a difference can be observed between foreign expatriate and local managers. Although local managers have the advantage of local knowledge and may experience less uncertainty from institutional change, foreign managers may have a better understanding of how to seek assistance from the headquarters and mobilise the additional resources needed to overcome these changes (Gertsen and Söderberg, 2011). Questions to be asked in this stream may include: How differently would foreign expat and local managers perceive the institutional changes and the opportunities recognised
from them? Would other factors such as their backgrounds, and tenure in the host market or with the firm affect their response to institutional changes?

Furthermore, more studies are needed to examine the involvement of foreign entrant firms in the institutional changes that take place in the host market. This study has shown that in certain circumstances, foreign firms are able to interact with local business and political actors and thereby influence changes in future regulative institutions. However, some questions remain. How active can these foreign entrants be in such pursuits? What do these processes involve? What benefits may come out of these active involvements? Scholarly interests on co-evolution between firms and their environments have been called upon (Cantwell et al., 2009; Child, et al., 2012; Rodrigues and Child, 2008), but more study is needed to understand the process of this unique phenomenon.

Lastly, research in other emerging markets would be beneficial in order to determine if similar patterns are observed. One obvious market for study would be India, which, as the world's second largest market, likewise poses significant growth potential for many international firms. Institutional change and market turbulence are also factors that complicate the process of market entry for foreign firms in India. However one significant difference is the political system, which can be expected to influence the process of institutional change. Another is the interconnectedness of these markets and events occurring in the rest of the world. While China's growth has largely been based on export manufacturing, India's is built on domestic consumption. Studying the market entry of foreign firms in India and emerging markets in other parts of the world will help to identify market-specific variables that have an impact on institutional change and the process of market entry by foreign firms.
**Appendix 1 Interview Guide for Pilot Studies**

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<th>Interview firm:</th>
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<td>Respondent name:</td>
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**Firm identification data**

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<th>Country of origin:</th>
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<td>Main product:</td>
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<td>History of the firm</td>
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<td>Firm type:</td>
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<td>History in China</td>
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<td>Mode of entry:</td>
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<td>Greenfield wholly-own  Licensing  Joint venture</td>
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<td>No. of employee:</td>
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**Firm financial data**

| Turnover of the firm (whole): |  |
| turnover of the Chinese unit: |  |
| No of country w business operation: |  |

**Firm market position data**

| Market position (in the world): |  |
| Market position (in China): |  |
| Main competitors: |  |
Questions:
1. Can you tell me how you firms entered China?

2. Can you identify any critical events (or persons) that lead to current operations and explain why they were important?

3. Can you name the 2 most important business partners for your firm’s operation in China? And how?

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<th>Name</th>
<th>Type of Relationship</th>
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4. Can you name the 2 most important non-business partners for your firm’s operation in China? And How?

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<th>Name</th>
<th>Relationship</th>
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5. In your opinion, does the presence of your firm have influence on the local firms, and how? Or, is your company influenced by the local firm?

6. What are the resource your company investing in China? And how are they important?

7. What are the things that lead your company wanting to operate in China? Where and how do you aware of those information?

8. What may be the things that make your company feel comfortable while operating in China?
Appendix 2 Letter for Interview Request

September 20, 2010

Dear Mr. _____________________:

My name is Pao Kao, and I am a PhD student in the Department of Business Studies at Uppsala University in Sweden, under the supervision of Professor Martin Johanson and Associate Professor Desirée Holm. I have obtained your contact information from the Swedish Trade Council in China and am writing to inquire about the possibility of an interview with your company for my thesis research in the field of International Business.

The study I am conducting focuses on the experiences Swedish firms have had in entering and operating in the China market. Theory tells us a key motivation for a firm to enter a foreign market involves the pursuit of business opportunities that will allow the company to grow. From that perspective, an emerging market like China can offer significant potential, whether the opportunity involves pursuit of the domestic market or manufacturing/sourcing activities that improve competitiveness in other markets. On the other hand, doing business in an environment like China may also present unique challenges due to unfamiliarity with or a lack of clarity in the business culture, policies and regulations. To succeed, a company needs to learn how to identify and pursue quality opportunities, and at the same time deal with the challenges arising from the business environment. Having conducted a thorough review of literature, I now aim to gain a better understanding of this process through interviews with companies active in China.

I will make a one month visit to China in November for the purpose of conducting these interviews and would be grateful for the opportunity to have your company participate in my research then. The interview should last one hour, during which time I would ask questions relating to your company’s experiences in entering and developing your business in China. There will be no need to disclose any financial specifics or other information your organization deems confidential. Furthermore, all participants are ensured confidentiality and the opportunity to review and approve content in advance of it being used in the papers constituting my thesis work.
Your participation will not only make an invaluable contribution to my thesis, but will also advance International Business studies at Uppsala University by providing a better understanding of success factors for Swedish firms operating abroad.

Thank you in advance for your time and consideration of this request. I look forward to your reply and welcome the opportunity to speak with you soon. In the event I should contact another individual in your organization, your feedback in that regards would also be greatly appreciated.

Best regards,
Pao Kao
Appendix 3 Interview Guide

Interview flow

Research Intro  Interview Intro/Confidentiality  Background Info  Buzi Opp Indntification/Development

Closing remark  Actors/Network  Challenges/Uncertainty

Research & researcher introduction

I am a PhD student from the Department of Business Studies in Uppsala University. My research is part of the MNCs Internationalisation Project in which we aim to understand how firms discover and develop business opportunity when internationalising.

My research aims to understand the experiences Swedish firms have had in entering and operating in the China market. We know a key motivation for a firm to enter a foreign market involves the pursuit of business opportunities that will allow the company to grow. From that perspective, an emerging market like China can offer significant potential. On the other hand, doing business in an environment like China may also present unique challenges due to unfamiliarity with or a lack of clarity in the business culture, policies and regulations. To succeed, a company needs to learn how to identify and pursue quality opportunities, and at the same time deal with the challenges arising from the business environment.

Interview Introduction & Confidentiality Concern

Your firm is chosen and fit into our research criteria because I am looking for companies that have operated in China for more than 5 years, which indicate they have basic understanding of China and exhibit they are taking China as part of their long term strategy in pursuing business opportunity.

The information collected through this interview will be used for research purpose only. Your name and the information about your company data will remain confidential. The collected data may be used in academic publishing. If any direct quotation will be included, I shall request confirmation from you in advance.

The interview will be recorded and it is solely for the purpose to process information. It will help me not to miss any important information.
Personal Background & Ice Breaking Questions
Some theories suggest a successful market entry and how strategy is implemented depends on experienced managers and their teams’ competence.

Can you briefly tell me something about yourself, e.g., your background, and what bring you to China? Do you previously have experience with this market before coming to China?

Can you briefly tell me a bit more about your current position, what you do, who you normally contact, and how you enjoy the work here?

Business Opportunity Identification & Development
Can you tell me when your company enter China, and how did it carry out?

- Who was the person initiate the decision?
- What kind of evaluation process has been done before the decision?
- Who establish the Chinese subsidiary?
- How many employees when the company started?
  - And now? (____% of global work force)
- How much was the initial investment?
  - What is the turnover of the business in China currently? (___% whole company turnover)

Can you tell me what are reasons leading your company here?

- What was the main business when the China subsidiary started?
- And now?
- Who are your main suppliers?
- Who are your main customers?
- Who are the main competitors?

How do you evaluate the current business in China?

- What is the market position for your company in China?
- Is it profitable?
  - If yes, since when? (in ____year)
  - If not, when will it be profitable in your expectation? (next ____ years)
- What are the advantages of your company? Any disadvantages?
- What is your expectation for the company in China for the next 5 years?
- Has your company’s business model change to adapt to the Chinese market?
  - How?
  - What?

How do your company’s business activities in China change since it began?

- Which area will you see the growth coming from?
• Do you see any other business opportunity for your company that is not in the initial plan?
  o What are those opportunities?
  o How did you discover these opportunities?

How do you evaluate the business environment in China, in relating to your business?

Challenges
Can you tell me some of the challenges your firm has experienced in doing business in China
  • in general, and
  • specific to some of the businesses you are pursuing?

In your opinion, in the last 5 years, what are the biggest challenges affecting doing business in China? (Preferable it happened when you were in this position).

Challenges

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<th>Time</th>
<th>2005</th>
<th>2006</th>
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Issue
• How do you (or someone within the company) become aware of this challenge?
• How would your business be affected by this challenge?
  o Does it affect your suppliers? How?
  o Does it affect your customers? How?
• How do you try to reduce the impact?
• How does this challenge impact on your competitors?
• How is the situation for this challenge now?
Working through the Challenges

Can you tell me, with whom outside your company (person, company, gov, organisation) that you have worked to solve this challenge? (5 most important)

Can you draw a picture of your company and these companies you interacted with during this particular challenge?

- How do you know this particular organisation?
  - If you know it personally, where do you know it from?
- When do you start working with this particular organisation?
- What kinds of activities does this particular organisation do with (for) you?
- During this challenge, how often do you meet with this particular organisation?

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<td>Not frequent</td>
<td>Very frequent</td>
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<td>○ Do you have to adapt your business from working with this organisation?</td>
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<td>○ How do you evaluate your relationship work with this organisation?</td>
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<tr>
<td>○ How close is the relationship for this particular organisation to your company when you together working for this challenge?</td>
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<td>○ How important is this particular organisation helping your company in facing this challenge?</td>
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• How satisfied are you from working with this particular organisation?

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• How likely would you work with this particular organization in the future?

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</table>

  o Reason for above questions?

• Can you tell me what kind of resource has your company invested in working with this particular organisation to solve the challenge?

  o In terms of money? (of _____ % annual budget?)
  o In terms of personal? (Staff number, level)

Navigate through the challenges

• How satisfied are you in terms of solving this challenge?

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</table>

• In your opinion, how much has your company learned through this challenge?

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<td>Very much</td>
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• In your opinion, have this challenge affected your company to pursue the business opportunity identified initially?

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<tbody>
<tr>
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Overall, in your opinion, would this challenge happen again in the future?

• If so, would you do anything different from previous time?

In your opinion, does your personal relationship have helped you in resolving the challenges for your company in China?

Have these following issues made any impact toward your business operation?

• World Financial Crisis (2008 --)
• Labour Law Reform (2007)
• RMB currency infatuation (2006--)
• Intellectual property protection
• Human resource management
• Promote Chinese Indigenous policy
## Appendix 4 Interviews

**List of the major interviews with case firms**

<table>
<thead>
<tr>
<th>Number</th>
<th>Case</th>
<th>Date &amp; Time</th>
<th>Informant position, &amp; Company</th>
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<tbody>
<tr>
<td>1</td>
<td>DeLaval</td>
<td>20101103/1400</td>
<td>Competence Development Director, DeLaval (Shanghai) Milking System Co. Ltd</td>
</tr>
<tr>
<td>2</td>
<td>DeLaval</td>
<td>20101104/1000</td>
<td>President China, Alfa Laval (China) Ltd Shanghai Representative</td>
</tr>
<tr>
<td>3</td>
<td>DeLaval</td>
<td>20101108/1300</td>
<td>Director of Purchasing &amp; Logistics Asia, DeLaval (Shanghai) Milking System Co. Ltd</td>
</tr>
<tr>
<td>4</td>
<td>DeLaval</td>
<td>20101117/0930</td>
<td>Competence Development Director, DeLaval (Shanghai) Milking System Co. Ltd</td>
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<tr>
<td>5</td>
<td>DeLaval</td>
<td>20101024/1530</td>
<td>Managing Director of China, DeLaval (Shanghai) Milking System Co. Ltd</td>
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<tr>
<td>6</td>
<td>DeLaval</td>
<td>20110314/0930</td>
<td>Sales Manager, DeLaval (Shanghai) Milking System Co. Ltd</td>
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<tr>
<td>7</td>
<td>DeLaval</td>
<td>20110322/1115</td>
<td>Agricultural Consultant, Ag Investment</td>
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<tr>
<td>8</td>
<td>DeLaval</td>
<td>20110325/0900</td>
<td>Sales Manager, DeLaval (Shanghai) Milking System Co. Ltd</td>
</tr>
<tr>
<td>9</td>
<td>DeLaval</td>
<td>20110325/1030</td>
<td>President, D.C. Dairy Corp. (DeLaval’s Customer)</td>
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<td>10</td>
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<td>Corporate Training &amp; Development Director, DeLaval International AB</td>
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<td>CEO China, Elekta (China) Co. Ltd</td>
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<td>13</td>
<td>Elekta</td>
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<td>Deputy CEO for Sales &amp; Marketing, Elekta (China) Co. Ltd</td>
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<td>14</td>
<td>Elekta</td>
<td>20110318</td>
<td>Medical Doctor, Heyyuan People's Hospital</td>
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<td>15</td>
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<td>20130213/1600</td>
<td>Executive Vice President APAC, Elekta Limited</td>
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<td>16</td>
<td>Elekta</td>
<td>20130425/1500</td>
<td>Board of Directors, Elekta AB</td>
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<td>17</td>
<td>Höganäs</td>
<td>20101115/0900</td>
<td>Senior VP, Head of Haldex China, Haldex China</td>
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<td>18</td>
<td>Höganäs</td>
<td>20101116/1630</td>
<td>President Asia Region, Höganäs (China) Co. Ltd</td>
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<tr>
<td>Number</td>
<td>Interview date &amp; Time</td>
<td>Informant, Position, &amp; Company</td>
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<td>Senior VP, Head of Haldex China Haldex China</td>
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<td>22</td>
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<td>VP Höganäs AB</td>
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**List of the interviews from firms that did not include in this study**

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<tr>
<td>1</td>
<td>20101109/0930</td>
<td>Managing Director China Qmatic (Shanghai) Technologies &amp; Trading Co., Ltd</td>
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<td>2</td>
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<td>CFO China Electrolux (China) Home Appliances Co., Ltd</td>
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<td>3</td>
<td>20101025/1000</td>
<td>President in China Sandvik (China) Holding Co., Ltd</td>
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<tr>
<td>4</td>
<td>20110304/0900</td>
<td>CFO China Electrolux (China) Home Appliances Co., Ltd</td>
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<td>5</td>
<td>20110307/1400</td>
<td>VP, Business Infrastructure Sandvik Mining and Construction Trading (Shanghai) Co., Ltd.</td>
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<td>6</td>
<td>20101118/1300</td>
<td>Chief of R&amp;D Ericsson R&amp;D (China)</td>
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**List of supporting interviews**

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<td>20101103/1100</td>
<td>Jie Chen, Associate Professor Fudan School of Management</td>
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<td>3</td>
<td>20101111/1500</td>
<td>Chief Representative Resident Partner Advokatfirman Vinge KB</td>
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<td>4</td>
<td>20101112/1000</td>
<td>Pei Sun, Associate Professor Fudan School of Management</td>
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<td>5</td>
<td>20101115/1100</td>
<td>Regina Huang, Associate Professor East China University of Science and Technology</td>
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<tr>
<td>6</td>
<td>20101116/1000</td>
<td>Doctoral Seminar in Fudan School of Management</td>
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<td>7</td>
<td>20101116/1300</td>
<td>George Xue, Professor, Fudan School of Management</td>
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<td>20101125/1830</td>
<td>Vice President, Public Relation China International Capital Corporation Limited</td>
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<td>9</td>
<td>20110228/1400</td>
<td>Teemu Naarajärvi, Programme Manager Nordic Centre Fudan University</td>
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<td>20110310/1130</td>
<td>Regina Huang, Associate Professor East China University of Science and Technology</td>
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Appendix 5 List of Archival Data

**Chinese Laws and Regulation**

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<td>1979.07</td>
<td>Law of the People’s Republic of China on Chinese-Foreign Equity Joint Ventures</td>
<td>中华人民共和国中外合营经营企业法。</td>
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<td>1983.03</td>
<td>Measures for the Administration of Registration of Resident Office of Foreign Enterprises</td>
<td>关于外国企业常驻代表机构登记管理办法</td>
<td>State Council</td>
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<td>1985.09</td>
<td>Analytical Methods for Milk and Standards for Sterilisation of Milk</td>
<td>中华人民共和国国家标准牛乳检验方法和消毒牛乳</td>
<td>MOLI</td>
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<td>1985.10</td>
<td>Notification for Strengthening Car Import</td>
<td>加强汽车进口管理的通知</td>
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<td>1985.12</td>
<td>Notification for Strengthening Macroeconomic Regulation and Control over the Healthy Development of Automotive Industry</td>
<td>加强宏观管理促进汽车工业健康发展的报告的通知</td>
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<td>1986.04</td>
<td>Law of the People’s Republic of China on Foreign-funded Enterprises</td>
<td>中华人民共和国外资企业法</td>
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<td>1986.09</td>
<td>Standards for the Qualifications of Raw and Fresh Milk Received from Farms</td>
<td>中华人民共和国国家标准生鲜牛乳收购标准</td>
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<td>1987.10</td>
<td>Notification for Stricter Control over Car Import</td>
<td>进一步严格控制轿车进口的通知</td>
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<td>1987.12</td>
<td>Provisional Measures for Device in Medical Department</td>
<td>卫生事业单位仪器设备管理办法暂行</td>
<td>MOH</td>
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<td>1988.05</td>
<td>Shopping Basket Program</td>
<td>菜篮子工程</td>
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<td>国务院关于严格控制轿车生产点的通知</td>
<td>State Council</td>
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The English names of these laws and regulations are mainly translated by Chinese government or official publishers, if they are available on the internet. For the rest, it is the translation by the author.
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<td>Automotive Industry Policy</td>
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<td>Notification for SDA Responsibility and Organisational Structure</td>
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<td>Notification for the Cancellation over Restriction on Domestically used Economic Passenger Car</td>
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<td>The Notification for the 1st List of the Technology and Equipment Eliminated due to Severe Pollution</td>
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<td>The Notification of the Decision to Close Down Small Steel Manufacturers</td>
<td>State Council</td>
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<td>Concerning People's Republic of China’s Decision to Join World Trade Organisation</td>
<td>关于中华人民共和国加入WTO的决定</td>
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<td>中华人民共和国对外贸易法</td>
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<td>Measures for the Administration of Foreign Investment in Commercial Sectors Procedures</td>
<td>外商投资商业领域管理办法</td>
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<td>医疗器械注册管理办法</td>
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<td>汽车产业发展政策</td>
<td>MIIT, NDRC</td>
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<td>Measures for the Large Medical Device Allocation and Administration</td>
<td>大型医用设备配置与使用管理办法</td>
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<td>Measures for the Administration of Import of Automobile Components and parts Featuring Complete Vehicles</td>
<td>构成整车特征的汽车零部件进口管理办法</td>
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<td>2005.03</td>
<td>National B-class Large Medical Device Allocation Administration Plan</td>
<td>全国乙类大型医用设备配置规划指导意见</td>
<td>MOH, NDRC</td>
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<td>Automobile Trade Policy</td>
<td>汽车贸易政策</td>
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<td>Notification for Strengthening Liquid Milk Production Management</td>
<td>加强液态奶生产经营管理的通知</td>
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</tbody>
</table>
Reference


Birkinshaw, J., Brannen, M.Y., Tung, R.L., 2011. From a distance and generalizable to up close and grounded: Reclaiming a place for qualitative methods in


Chemical Week, 1994. BASF prepares major styrenics venture at Nanjing. *Chemical Week*, 155 (8), S16.


EUCCC, 2012. The European Business in China Business Confidence Survey 2012. Available at:
http://www.euccc.com.cn/upload/media/media/14/European_Chamber_Business_Confidence_Survey_2012_EN%5B559%5D.pdf [Accessed July 25, 2012].


Hutchings, K., 2004. Behind the bamboo curtain: problems and pitfalls in researching Australian expatriates in China, in: Clark, E., Michailova, S. (Eds.),


Johanson, M., 2001. Searching the known, discovering the unknown: the Russian transition from plan to market as network change processes. Published doctoral dissertation. Företagsekonomiska institutionen, Uppsala universitet, Uppsala


People’s Daily, 2002. International Chemical Giant to Increase Investment in China. People’s Daily. Available at:


Zhou, G., Zuo, G., Cai, W., 2010. Lan ci en, the person started the milking machine in China (蓝慈恩 开中国挤奶机先河). *China Dairy Cattle* 7, 43–44.

DOCTORAL THESES
Department of Business Studies, Uppsala University


38 Smith, Dag, 1989, *Structure and Interpretation of Income Models.* Uppsala: Department of Business Studies


82 Nordin, Dan, 2000, Två studier av styrning i kunskapsintensiva organisationer. Uppsala: Företagsekonomiska institutionen.
87 Silver, Lars, 2001, Credit Risk Assessment in Different Contexts – The Influence of Local Networks for Bank Financing of SMEs. Uppsala: Department of Business Studies.
89 Johanson, Martin, 2001, Searching the Known, Discovering the Unknown. The Russian Transition from Plan to Market as Network Change Processes. Uppsala: Department of Business Studies.
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118 Persson, Magnus, 2006, Unpacking the Flow - Knowledge Transfer in MNCs. Uppsala: Department of Business Studies.


