FACTORS DETERMINING LOCATION CHOICE OF FOREIGN DIRECT INVESTMENT IN CHINA: A PERSPECTIVE FROM AN INLAND PROVINCE

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Abstract

This study aims to formulate a conceptual framework regarding foreign direct investment (FDI) location choice made by multinational enterprises (MNE) and to investigate factors determining FDI location choices, through empirically testing the framework and associated hypotheses in the research setting of one of China’s inland regions. FDI has been widely recognised as a major driving force of globalisation, which is a powerful catalyst for achieving national economic development and global integration of MNEs. In respect to the various key issues of MNE’s FDI, the location choice is complex, multidimensional, and critical and it affects the economic growth of host countries, as well as the efficiency and effectiveness of the MNE’s investment abroad. Considering that the emerging economies, such as China, have achieved dramatic development on FDI flows, this new phenomenon of FDI location in emerging economies challenges the existing FDI location theories, which were built in the setting of developed countries. The existing literature also suggests that more attention should be paid to the examination of FDI locational determinants, as the existing literature in this field has been dominated by research into FDI location at a cross-national level. At the sub-national level regional differences in terms of FDI location choice can be examined at great length. It is, therefore, expected to bring forth more accurate and concrete evidence regarding the sensitivity of FDI decisions to locational determinants.

To address the research gap of FDI location choice, this study develops a conceptual framework regarding FDI location choice by MNEs based on an integration of various FDI theories. Hypotheses derived from the framework are empirically tested using data collected through a postal questionnaire survey. The survey was conducted during the period from December 2006 to March 2007 in Gansu - an inland province of China. All foreign-invested enterprise firms in Gansu were included in the sample and the survey resulted in 106 firms returning valid responses. The conclusions drawn from this study suggested that an investing firm’s FDI location choice is made based on the consideration of a series of factors, including the firm’s capability, location factors from host region, strategic motives, and internalisation factors. This study contributes to the literature of FDI location choice by constructing a conceptual framework that can explain foreign direct investment location choice of MNEs in a setting of an inland.
region of a developing country. The empirical evidence from the study supports the contention that firm size, international experience, cost factor, investment incentives, agglomeration, investment risk and other factors in regards to the firm’s strategic motives, play a critical role in FDI location choice in China’s inland regions.
This study could not have been completed without the guidance, help and support of a number of people. I would like to express my heartfelt gratitude and appreciation for the encouragement and support of many individuals before, and during, the course of my study, which enabled me to first attempt, and then complete this study.

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### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Full Form</th>
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<tbody>
<tr>
<td>CEO</td>
<td>Chief Executive Officer</td>
</tr>
<tr>
<td>CSY</td>
<td>China Statistical Yearbook</td>
</tr>
<tr>
<td>DEFDI</td>
<td>FDI Flows to Developed Countries</td>
</tr>
<tr>
<td>DIFDI</td>
<td>FDI Flows to Developing Countries</td>
</tr>
<tr>
<td>EJV</td>
<td>Equity Joint Venture</td>
</tr>
<tr>
<td>EU</td>
<td>European Union</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
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<tr>
<td>FIE</td>
<td>Foreign Invested Enterprise</td>
</tr>
<tr>
<td>FIP</td>
<td>Foreign Invested Project</td>
</tr>
<tr>
<td>GDP</td>
<td>Gross Domestic Product</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>JV</td>
<td>Joint Venture</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational Enterprise</td>
</tr>
<tr>
<td>SSB</td>
<td>State Statistical Bureau (China)</td>
</tr>
<tr>
<td>NIC</td>
<td>Newly Industrialised Country</td>
</tr>
<tr>
<td>OECD</td>
<td>Organisation for Economic Cooperation and Development</td>
</tr>
<tr>
<td>OLI</td>
<td>Ownership, Location and Internationalization</td>
</tr>
<tr>
<td>PLC</td>
<td>Product Life Cycle</td>
</tr>
<tr>
<td>SEZ</td>
<td>Special Economic Zone</td>
</tr>
<tr>
<td>TNC</td>
<td>Transnational Corporation</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Conference on Trade and Development</td>
</tr>
<tr>
<td>UNCTC</td>
<td>United Nations Council for Transnational Corporation</td>
</tr>
<tr>
<td>WB</td>
<td>World Bank</td>
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<tr>
<td>WFDI</td>
<td>Global FDI</td>
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<tr>
<td>WFOE</td>
<td>Wholly Foreign-owned Enterprise</td>
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<td>WTO</td>
<td>World Trade Organisation</td>
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CHAPTER 1 INTRODUCTION

1.1 Overview of the Study

Over the last three decades, the changing global economic and political environment has led to a dramatic increase in international activities by multinational enterprises (MNEs). This rapid growth in international business activities and transnational operations by MNEs has attracted strong research interest, given the fact that MNEs have played an essential role in promoting and shaping patterns of economic development and cross-nation flows of goods, capital, and technology (Dunning, 2003; Gilpin, 2001). Among the various economic activities undertaken by MNEs, their foreign direct investment (FDI) has been widely recognised as a key driving force of globalisation, a major catalyst for achieving global economic integration, and a key to the national development of many developing countries. FDI has become one of the most important sources of external financing for many countries, especially developing countries (UNCTAD, 2001; 2007). For example, in 2006, FDI inflows accounted for half of all net capital flows to developing countries (World Bank, 2007).

It is well recognised that FDI inflows from MNEs can play a significant role in a host country’s economic growth in the form of capital information, employment achievement, export promotion, and technology transfer (Kohpaiiboon, 2003; Ramamurti, 2004; UNCTAD, 1992). In comparison with other capital investment forms, the importance of FDI lies in the nature and duration of the commitment that it undertakes in the host country (Barrell & Holland, 2000), its purpose in establishing pan-commercial relations, and in exerting a noticeable managerial influence and control over a foreign affiliated company in order to achieve the investing firms’ strategic objectives. In the meantime, FDI is a tool which enables host countries to break through their objectives and existing organisational gaps through the introduction of new techniques, both managerial and technological (Janicki & Wunnava, 2004). This potential contribution of FDI to the welfare of both host economies and investing firms is of great interest to academics, business practitioners, and policy makers. As a result,
the rapid growth of FDI and its magnitude in many economies during the last three decades has sparked numerous theoretical and empirical studies.

Among the various key issues related to FDI, location choice is a complex, multidimensional, and critical one, as it affects the economic growth of host countries, and the efficiency and effectiveness of MNEs’ business activities abroad (Galan, Gonzalez-Benito, & Zuiga-Vincente, 2007; Li & Park, 2006; Wei & Liu, 2001). It has long been suggested that the location choice of FDI is a key decision to be made by MNEs in terms of their foreign investment activities (Buckley & Casson, 1976; Nachum & Zaheer, 2005; Porter, 2004). It has also been suggested that the internationalisation process of multinational corporations (MNCs), and the rationale of their foreign location choice, are at the core of international business research (Dunning, 1998; Eden & Lenway, 2001; Flores & Aguilera, 2007). Location choice of FDI has been explained by using various research methods and theoretical approaches, and has been based mainly on the perspectives of the motives and rationale of the FDI under study (Liu & Song, 1997; Luo, 2002; Pan, 2003).

These studies on FDI location choice provide contrasting results, not only regarding the existence of a significant link between location choices of FDI and determinants such as economic growth, trade, domestic capital formation, and productivity, but also regarding the direction of such a relation (Liu, Siler, Wang, & Wei, 2000). It is, however, difficult to find a single theory, or perspective, that can easily explain all aspects of FDI behaviours (Seyf, 2001). As emphasized by Braunerhjelm and Svensson (1996), the theoretical basis of FDI location choice appears rather fragmented, being comprised of bits and pieces from different fields in an attempt to elucidate the location decisions of firms. As a result, a lack of consensus in terms of relative importance and the impacting direction of potential determinants on FDI location choices has arisen from the wide differences in theoretical perspectives, research methodologies, statistical analytical tools, and sample selections prevalent in the research area. All this not only points to obvious weaknesses in conceptual framework and statistical analysis, but also leaves scholars rather perplexed in regards to the level of confidence that should be placed in the findings of any particular study of FDI location choice. Thus, deeper theoretical and empirical research on FDI location choices is very necessary in order to
provide a more solid basis on which MNEs can decide on a suitable location choice for their investment.

On the other hand, the lack of a consensus in theoretical frameworks regarding FDI location choice has resulted in a diverse body of empirical studies. First, the main body of FDI location choice studies is conducted using macro-economic data, with these studies having considered only a small number of explanatory variables in the attempt to establish a statistically significant relation between a particular variable, or a small set of variables, and FDI inflows to host countries, with other important explanatory variables such as the strategic motives of an MNE’s investment ignored to a large extent. Second, existing studies on FDI location choice have been conducted almost exclusively at a national level. Very few researches have focused on the examination of FDI locational determinants at a sub-national level, and even less work has been carried out in the case of emerging economies.

The diverging nature of the theoretical and empirical lacuna of FDI location choice has cast doubt on the effectiveness of existing theories of FDI location choice, which were built in the research setting of developed countries during in the 1960s and 1970s. In particular, since the 1980s, emerging economies such as China and India have achieved dramatic progress in terms of FDI inflows. This new phenomenon of FDI location in emerging economies may challenge the existing FDI location theories (Dunning, 2001). Therefore, the question of how multinational enterprises locate their FDI activities still remains unsettled, being a new frontier and a renewed focus of international business research (Dunning, 2003; Meyer, 2004). The purpose of this paper is to empirically examine the determinants of FDI location choice at a regional level in China, with a focus on an inland province, in order to shed new light on the emerging issues of location choice of foreign investors in the setting of an emerging economy.

This study also aims to provide empirical evidence regarding the main determining factors affecting FDI location choice in an inland region of China, by testing a new conceptual framework proposed in the study. An understanding of the determinants of FDI location choice at a sub-national level not only enriches the previous studies, which mainly focused on the inter-country spatial distributions of FDI, but also provides a theoretical rationale for policy-makers at regional levels in host countries who seek to
influence the location choice of foreign investors. This policy implication of the study is of most interest for China, and particularly at the present time, because the Chinese government has been trying hard to attract FDI into China’s interior regions since 2000 as a way of promoting economic growth in those regions, and improve regional discrepancies in economic development in light of the previous successful experience of FDI preferential policies and FDI-led growth in China’s coastal regions.

1.2 The Problem Situation of the Study

A significant volume of FDI location literature has been developed using various theoretical approaches that have attempted to provide an explanation for the rapid growth of global FDI during the last three decades. These theoretical approaches range from the mainstream economic theories (Caves, 1971; Hymer, 1960, 1976; Kindleberger, 1969; Vernon, 1966), internalisation theory (Buckley, 1985; Rugman, 1981), transaction cost theory (Anderson & Gatignon, 1986; Buckley & Casson, 1976; Caves, 1982; Williamson, 1985), and to eclectic paradigm (Dunning, 1998). This FDI location literature has also been the subject of periodic review by researchers such as Buckley, Devinney, and Louviere (2007) and Dunning (1993a), with attempts to develop a synthesis between the two streams of theories regarding FDI behaviour and MNEs operations having been made. Based on existing theoretical studies in the FDI literature, the main research gaps found in the literature regarding FDI location can be summarised as follows.

First, most studies on FDI location choice are principally confined to the research setting of developed countries such as the United States (US) and countries from European Union (EU), as existing FDI theories and empirical findings are mainly based on the context of these developed countries (e.g., Ambos; 2005; Bartik, 1985; Blackborn, 1972; Chung & Alcacer, 2002; Coughlin, Joseph & Arromdee, 1991; Friedman, Gerlowski & Silberman, 1992; Grosse & Trevino, 1996; Hill & Munday, 1992; Pedersen & Petersen, 2004; Quer & Claver, 2007; Woodward, 1992). It is not surprising that most research projects have been focused on developed countries, given the fact that most FDI has involved outflows from, and inflows to, developed economies during the earlier period of FDI. As suggested by Dunning (2001), the theoretical rock
of FDI location choice has been built on the research setting of developed countries. As a result, less is understood about the determinants that drive FDI in emerging economies, such as China and India (Batra, 1997; Child & Tse, 2001), even though China’s dynamic and complex environment; which is attributable largely to structural transformation, institutional uncertainty, a unique business culture, and regional economic discrepancies; furnishes a very rich research setting for deciphering the FDI location choices of MNEs (Buckley, 2004). Since the 1980s, FDI flows to developing countries have sustained a dramatic growth, mainly due to the momentum from economic globalisation. In the case of China, FDI flows into China started to boom in the early 1990s. This new phenomenon of FDI flows to emerging countries may impose a challenge on the existing theory of FDI location choice and needs extensive research attention.

Second, while investigating FDI location choice, most studies have considered FDI location to be the choice between different countries. Thus, intra-country choice of FDI location has, to a large extent, been ignored (Meyer & Nguyen, 2005; Porter, 1996). Just as differences between countries are important determinants of where MNEs decide to locate their activities overseas, there is reason to suggest that regional distinctions within a country, especially a large country such as China, may also influence the FDI location choice of MNEs (Chadee, Qiu & Rose, 2003; Wei, Liu, Parker, & Vaidya, 1999). It is usual that different regions in a country will possess unique characteristics that provide distinctive sources of competitive advantage for MNEs’ FDI activities and influence FDI locational distribution between regions.

Actually, FDI strategies, more specifically location choice, often need to be considered and adjusted to the firm-level characteristics and environmental characteristics of the sub-national regions in which an investment is made. Theoretically, sub-national environments in an individual emerging and transitional economy can evolve at different rates, leading to considerable variances across regions within national boundaries. Different sub-national regions can be equally attractive in terms of economic and political dimensions at the national level, but qualitatively different in terms of regional characteristics at the sub-national level. It is suggested that little is known about the consequences of FDI location choice among sub-national regions within an individual emerging and transitional economy (Meyer & Nguyen, 2005). Thus,
research on FDI location choice should evolve from a cross-national level examination to a sub-national level examination of FDI locational determinants (Shaver & Flyer, 2000; Zhou, Delios, & Yang, 2002). A focus at sub-national level allows for a more in-depth analysis of regional differences and, therefore, will be able to offer more accurate empirical findings regarding the determinants of FDI locational decisions by MNEs. The characteristics of the regions in the host countries may play a critical role in FDI location choice and need to be further explored.

More specifically, large emerging countries such as China and India possess distinctive physical, economic, and political attributes, and have diverse economic and physical landscapes between different regions within their national borders. FDI location choice by MNEs has to accommodate environmental conditions that vary between different regions in the host country. In fact, since China adopted an open-door policy in 1979, the lion’s share of FDI in China has flowed into the coastal regions. Up to 2006, 86.85% of cumulated FDI stock in China was located in the eastern coast regions (SSB, 2007). Thus, MNEs entering an emerging market like China have to face strategic decisions regarding where and how to set up their operations. This is because many factors, such as cultural distance, business atmosphere, local government policies, foreign business treatment, stage of economic development, and the degree of openness, vary substantially across different regions within a large host country.

Third, existing empirical studies of FDI location choice were mainly conducted using economic theories and macro-economic data. It appears that most of these studies relied on country-level and/or industry-level data to explain firm-specific behaviour of MNEs’ location choice, due to the difficulties in collecting data at the firm level (Swan & Ettlie, 1997; Trevino & Grosse, 2002), even though mainstream FDI theory views the investment decision as an attempt to exploit firm-specific resources in international markets and, thus, such a decision is based on the perspective of the firm (Caves, 1971; Hymer, 1976). In essence, FDI behaviour is a firm-level decision that evolves from the firm’s idiosyncratic strategic objectives in the prevailing international business environment. By attempting to explain firm-specific behaviour using country-level and industry-level data, researchers have made assumptions of dependent and independent variable homogeneity that are known to be unwarranted (Trevino & Grosse, 2002).
Thus, there is a pertinent need to explore FDI behaviours using firm-level data, which can more effectively elucidate an MNE’s perspective on FDI location choice.

In summary, there are some significant gaps in the existing research on FDI location choices, which present research opportunities for the present study. More specifically, a central research question regarding FDI location choice can be proposed as: Once an investing firm decides to locate its facilities in China, what factors determine its location choice in an inland region, and why the facilities are set up in this particular region rather than in another? This study will empirically examine factors determining FDI location choice from a firm-level perspective, which represents a significant lack in the existing studies of FDI location choice (Pan, 2003). A conceptual framework will be proposed to address the lacuna in the existing FDI literature. Based on this framework, the influences of these factors perceived by MNE executives in terms of encouraging, or discouraging, investment in the inland region of China are compared and contrasted. Findings from this study can provide theoretical guidelines and a rationale for policy makers to attract more FDI. The extension of such FDI studies from emerging countries can provide further insights into FDI location issues in order to broaden the generalisability of FDI location theory.

1.3 Research Site

It has been argued that, although practical relevance and data accessibility are important for the study regarding FDI locations, it is more important to seek research settings that could allow effective theory development, as they provide an environment that is markedly different from the one in which any of the existing theories were developed (Shenkar, 2004). Child et al. (2003) further suggests that identifying research settings allows for the juxtaposition of multiple theories. Considering that existing theories regarding FDI location choice were built in the developed countries, the present study uses China, which is a large emerging country, as a suitable research setting for FDI location choice. China is the largest singular transitional and emerging economy in the world. Its transition continues to be planned by the central government and this preserves the active involvement of governmental institutions in business activities such as FDI behaviour.
The dramatic environmental changes occurring in China offer a valuable research setting, because of the related economic reforms. Briefly, since the end of the 1970s, China has been implementing its economic reforms and has opened its doors to the world, with the objective of transforming its economy from being centrally planned to being market driven. Extensive reform programmes have been carried out, including the removal of barriers to international trade, the liberalisation of the service industries and financial sectors, and the entry of China into the WTO at the end of 2001. China’s economic reform during the last three decades has advanced its integration with the world economy, facilitated its status as the world’s factory, maintained its strong external payments position, liberalised the markets for goods and services, and intensified industrial competition. Economic development in China has been high during the past three decades. As a result of the economic reforms, China’s per capita income has more than quadrupled since 1981, and real growth in GDP has averaged almost 10% per year. In 2007, the annual GDP and trade volumes of China ranked fourth and third, respectively, in the world due to this high growth rate (SSB, 2008). The economic development of China has, however, not been smooth, but has had fluctuations. Some dramatic changes on the economic indices occurred in the last few years in areas such as GDP. For example, GDP in 2007 increased by 65.5% in comparison with GDP in 2002 (SSB, 2008). The Chinese economy remains the main bright spot in Asia, a major source of international economic dynamism, and remains one of the most attractive FDI host countries in the world (UNCTAD, 2006). Theoretically, this means there is a pertinent need to explore FDI issues in China over time, because of the dramatic business environment changes there.

With the rapid economic development in emerging economies, many MNEs have seen their opportunities to lie in the developing countries, especially in China, rather than in developed countries. FDI inflows to China have been impressive. Of the World Top 500 companies, 450 have invested in China (SSB, 2006). China has been absorbing enormous FDI inflows over the past three decades, with an accumulated amount of US$700 billion by the end of 2006 and continues to host the largest number of foreign affiliates in the world (UNCTAD, 2007). On average, more than US$100 million in foreign capital is now invested every day in the country, which implies that China is one of the most attractive locations for foreign investors. From the survey by UNCTAD
carried out in 2006, China and India are still ranked as the most attractive FDI destinations for the next three years (UNCTAD, 2007). According to Adams, Gangnes, and Shachmurove (2006) and Chen, Chang and Zhang (1995), FDI has been playing a critical role in China in improving productivity and achieving high economic growth.

Considering the dramatic increase of FDI inflows into China in the last three decades, there is a pertinent need to articulate in what ways new observations of FDI in China, challenges, or supports, existing FDI location theory. From a research perspective, after a long period of hard times, China has also perceived the large changes in its economic environment (Luo, 1999; Zhang, Zhang, Men, & Huang, 2004; Zhang, Zhang, & Liu, 2007), and it is particularly true that many new changes have occurred as a result of China entering the World Trade Organisation (WTO), with this possibly challenging the existing international business theories (Dunning, 2001). Thus, the dynamic Chinese environment offers a rich setting for empirical tests of environmental, structural, and organisational determinants of FDI location choice.

Generally, in the past the environment in China was typically regarded as one full of dynamism, complexity, and opportunity. Naughton (1995) argued that emerging economies such as China have a highly complex economic structure and complex institutional environment during structural transformations. This distinctiveness in China’s economic environment generates uncertainties for the international firms that operate there (Luo, 2000; Peng, 2000). Compared with other emerging economies such as India and countries in Eastern Europe and the former Soviet republics, MNE operations in China have been more sophisticated both in scale and scope, allowing for examination of a diverse range of issues. This kind of economic transition, on the one hand changes fundamental managerial assumptions, criteria, and decision making, and on the other hand represents a genuine transformation of business (Child & Tse, 2001; Zhang et al., 2004). Thus, research findings from China can be used to extend and re-examine the application of FDI theories.

More specifically, the economic landscape in China is evolving quickly and differently, and these changes have had profound effects on the location preferences of MNEs over the last three decades. These critical changes in the economic environment will have an influence on the characteristics of different regions in China, which in turn will affect
FDI location choices by MNEs. Within an emerging market of large size, such as in China, investing firms often face various environmental complexities and business practice specificities in different regions (Tan, Zhang, & Xia, 2008). Factors unique to particular regions within China are presumed to contribute to the locational preferences of MNEs (Dunning, 1998), which leads to a rather uneven FDI distribution in China at the regional level.

Considering the critical role that FDI plays in the economic development of China, the following questions are becoming more significant: Why are FDI inflows distributed into inland regions of China at such a small level in comparison with coastal regions? What are the determinants of FDI locations in the inland regions of China? None of the existing studies have focused on this FDI issue, even though locational determinants, such as manufacturing density, population and infrastructure, local government incentives, and the level of economic development in other host countries, have all been found to influence MNEs’ location decisions (Chadee, Qiu, & Rose, 2003).

Thus, China is a suitable research site for FDI studies at the sub-national level. Child and Tse (2001) has suggested that China’s large market and geographic size lends traction to the study of the sub-national location choice decisions, just as it does for investigations of FDI strategy in large developed economies, such as the United States. Shenkar (2004) also argued that detailed research in a particular region will promote research into international business serving as a macro-micro bridge, which will enhance its theoretical contributions. In addition, as noted by some researchers (Sethi, Guisinger, Phelan, & Berg, 2003), the determining location specific factors and their influence on FDI inflows also need to be examined over time, since factors drawing FDI to a particular location can change and, as a result, new investments may be in other geographical locations. This argument is particularly relevant to China, given its dynamic economic conditions during the last three decades. Research (e.g., Jiang, 2005) also suggests that the timing of FDI has significant impacts on FDI determinants. The changes in investment environments and other conditions in China are continuing, as the political, legal, and economic reforms in China are continuous, which casts doubt on existing empirical FDI studies and calls for new research in this area.
More particularly, this study focuses on the inland China province of Gansu, as this particular region has two underlying distinct characteristics in terms of economic development and factor endowment in comparison with various other provinces in China. These distinctions are that Gansu is relatively under-developed, but is highly rich in natural resource endowments (more details are provided in Chapter 2). The study also addresses the lacuna in related FDI location literature in the following areas. First, few studies on FDI location choice in China focuses on an individual province, with none examining inland provinces. Considering the success of coastal provinces in attracting FDI inflows and a large number of related studies, to the author’s knowledge, this study is the first to explore the FDI location choice in the setting of an inland province of China. Second, Gansu province is a typical interior province of China and only received a small amount of FDI, even during China’s FDI boom period. There is a need to shed light on to what extent the theories of FDI location explain motives of FDIs and locational characteristics in this particular research setting.

1.4 Significance and Scope of the Study

The changing scene of international business activities during the last three decades has affected the geographical location of FDI and MNE activities, and has led firms to realign their FDI strategies (Makino, Beamish, & Zhao, 2004). The dramatic increase in FDI flows over the years, and its growing importance in the transition processes of emerging economies, have necessitated detailed research on FDI location choice in this relatively new area of international business studies. Moreover, among issues related to MNEs’ business activities, FDI location choice is the one of critical importance, as the location of MNE investments has a profound effect on the operations and profitability of MNEs (Delios & Beamish, 2005; Makino et al., 2004), and this has increasingly become one of the most important organisational considerations for MNEs (Mudambi, 2003). Thus, the issue of FDI location choice deserves further research attention.

The context of FDI location choice; both spatial and temporal; is so crucial that scholars have to specify the applicability of theory regarding FDI location (Buckley & Lessard, 2005). The process of internationalisation of MNCs and the rationale of their foreign location choice are at the core of international business research (Dunning, 1998; Eden
Moreover, it has been argued that location decisions have distinctive content in international business strategy, although locational factors are fundamental to trade theory and every model of international economic activities (Chadee et al., 2003). In spite of the importance of FDI location choice in the field of international business and strategic management, however, state that this critical issue has received relatively little attention in the literature. As argued by Mudambi and Navarra (2003), location choice shortlisting is a lacuna in the literature. Researchers (Buckley, 2002; Peng, 2004) have also suggested that it is necessary to look back at the long-run core question of what determines the international success, or failure, of MNEs.

In the case of China; given the significant contribution of FDI inflows to China’s economic growth, the widening gap of economic development across China’s different regions, and the policy shift by the Chinese government in terms of accelerating economic growth in the inland regions; it is of particular importance for policy makers at local government level and MNE executives to understand the determinants of FDI location choice. Findings in this research area will provide thoughtful insights to enrich understanding of the determinants of FDI location choice in China, benefiting not only foreign investors in formulating and implementing practical business and investment strategies tailored to the context of an emerging and transitional economy, but also the policy makers within local Chinese governments and other developing countries alike to better formulate strategies in attracting more foreign investment in the future.

1.5 Research Question, Objectives, and Process of the Study

This study aims to explore the determinants of MNEs’ FDI location choice in an inland region of China. Based on the existing FDI literature, this study proposes a theoretical framework regarding FDI location choice. Following this framework, a number of specific research hypotheses are theoretically developed and empirically tested, using firm-level data, in order to explore the locational determinants of FDI in the inland provinces.
As the primary purpose of the study is to explore the determinants of FDI location choice in an inland region of China, the principal research question is presented as follows:

*What are the determinants of MNEs' FDI location choice in the inland regions of China? To what extent do these factors influence FDI location choice in these particular regions?*

In addressing this research question, the following research objectives are to be achieved in the present study:

- To develop a theoretical framework for the investigation of FDI location choice in Gansu province of China;
- To identify and estimate the determinants of FDI location choice in the inland China region of Gansu;
- To formulate specific hypotheses regarding factors determining FDI location choice in Gansu;
- To empirically test and assess the extent to which the determining factors affect FDI location choice in Gansu; and
- To provide practical recommendations for the decision-makers in terms of understanding the impacts and significance of determining factors of FDI location choice in the context of inland regions of China.

To achieve these research objectives, a study is devised, using the process indicated in Figure 1.1 below, which illustrates a summary of the steps followed in this study. First, the most important step is to establish the research question, following an extensive review of the existing literature related to the topic. A conceptual framework and associated hypotheses are then formulated, after reviewing the existing literature regarding theories relevant to FDI location choice. Following the conceptual framework and hypotheses, a survey questionnaire was designed and pre-tested using empirical data in the trial fieldwork. The population and sample size were explored and then defined. The fieldwork investigations were conducted through a mail survey, in which questionnaires were completed by management executives in foreign invested
enterprises (FIEs) operating in China’s inland regions; in this case, Gansu province. Briefly summarising, the main steps in the research process include the research problem identification, literature review, establishment of the conceptual framework, questionnaire design and pretesting, research fieldwork (data collection), data analysis, interpretation, and the thesis write-up.

**Figure 1.1 Flowchart of Research Process of the Research**

**1.6 Definitions – FDI**

Generally speaking, the concept of FDI refers to the setting up of an overseas operation through a greenfield investment project, or the acquisition of an existing enterprise located in another country. FDI implies that the investor exerts a significant degree of
influence on the management of the enterprise in the host country. The management dimension is what distinguishes FDI from other forms of investment, such as foreign portfolio investment, which includes equity and debt securities, and financial derivatives. Actually, there is a plethora of definitions of FDI, but all aim to render clear the desire of a firm to obtain and manage an asset in a foreign host country.

A closer look at the concept of FDI reveals, however, that its definition has changed over time, partly due to the complex nature of the phenomenon. One of the earliest definitions can be found in the 1937 inward investment survey conducted by the US Department of Commerce, which aims to measure:

All foreign equity interests in those American corporations or enterprises which are controlled by a person or group of persons domiciled in a foreign country (US Department of Commerce, 1937, p.10).

Although control was the main criterion for the classification of foreign inward investment in the above definition, no specific definition of control was provided in the report. In the subsequent survey of outward investment in 1953, control was explicitly defined on the basis of foreign categories, only some of which still constitute measures of FDI. Similarly, Delios and Beamish (2005) suggested that a FDI is the purchase of assets in a foreign country by a firm, where that purchase provides control over the use of those assets. Further, a foreign subsidiary is the consequence of FDI.

As noted by Lipsey (1999, p. 310), however, the current definition of FDI, as endorsed by the International Monetary Fund (IMF) in 1993, the United Nations (UN) in 1992, and the Organisation for Economic Cooperation and Development (OECD) in 1996, seems to have shifted its emphasis away from the notion of control, toward a much vaguer concept of lasting interest. The IMF defines FDI as the investment that is made to acquire a lasting interest in an enterprise operating in an economy other than that of the investor, with the investor’s purpose being to have an effective voice in the management of the enterprise (IMF, 1977). According to this new benchmark definition, FDI reflects the objective of obtaining a lasting interest by a resident entity of one country (direct investor) in an entity resident in an economy other than that of the investor (direct investment enterprise). The United Nations defined FDI as, “a
investment involving a long-term relationship and reflecting a lasting interest of a resident entity (individual or business) in one economy (direct investor) in an entity resident in an economy other than that of the investor (host country)” (The United Nations, 1992, cited in Lindblad, 1998, p. 1). The lasting interest implies the existence of a long-term relation between the direct investor and the enterprise and a significant degree of influence on the management of the enterprise (OECD, 1996). Similarly, Thirwall (1994) suggested that FDI has been defined as the long-term investment made by non-residents of a host country through either creation, or acquisition, of capital assets in the host county.

On the other hand, Gillis, Perkins, Roemer, and Snodgrass (1992) and Hogendorn (1992) claimed that FDI implies the ownership of capital assets large enough to have full, or partial, control of the enterprise and a physical presence by foreign firms, or individuals. In this sense, FDI includes not only the transfer of investment capital, but also a whole package of physical capital, modern technology, techniques of production, managerial and marketing knowledge, and business practices (Gills et al., 1992; Thirwall, 1994). A more succinct statement of the function of FDI was supplied by Rugman (1981, p. 150), stating that, “FDI is the method which allows the Multinational Corporation (MNC) its best chance of monitoring the use of its firm’s specific advantage”. Wallace (1990) presented an all-inclusive definition of FDI, being that FDI may be broadly defined as the establishment, or acquisition, of substantial ownership in a commercial enterprise in a foreign country, or an increase in the amount of an already existing investment abroad, in order to achieve substantial ownership.

In spite of the efforts of international agencies to push for uniformity, it is important to acknowledge that definitions and measures of FDI still differ among countries. Indeed, different countries often have diverse conventions as to what constitutes ownership of a company from the perspective of asset management. For example, while in the US an equity capital stake of 10% of shares would suffice to indicate foreign ownership, in the UK a stake of 20%, or more, would be regarded as a more appropriate indicative threshold.

In the case of China, FDI is also considered to encompass non-equity co-operation, such as contractual joint ventures, compensation trade, and joint exploration. According to
China’s Ministry of Foreign Trade and Economic Cooperation (MOFTEC, 2001), FDI refers to the investments inside China by foreign enterprises and economic organisations, or individuals (including overseas Chinese, residents from Hong Kong, Macao, and Taiwan, and Chinese enterprises registered abroad), following the relevant policies and laws of China, for the establishment of ventures with exclusively foreign owned investment, Sino-foreign joint ventures and cooperative enterprises, or for the co-operative exploration of resources with enterprises, or economic organisations, in China.

FDI in China can be in any of the following forms: Wholly foreign-owned enterprises (WFOEs); equity joint ventures (EJVs); and contractual joint ventures (CJVs; contractual/cooperative joint ventures); among other options, which include joint developments. Foreign investors are generally free to choose the entry forms (i.e., any form of FDI) to conduct business in China. Among the various entry modes, WFOEs and EJVs are the most important and these two forms collectively account for more than 80% of the total value of FDI in China since 1979.

A WFOE is a foreign company using entirely its own capital, technology, and management while operating in China. It manages its operations in China independently of any local organisations and is responsible for all risks, gains, and losses. An EJV is a limited-liability company with equity and management shared in proportions negotiated between the foreign and Chinese partners, in which the foreign partner could have majority, equal, or minority stakes. Until 1996, EJVs were the dominant entry mode in China. Since then, however, WFOEs have increased much faster than EJVs. By 1999, more than half of the FDI in China was in the form of WFOEs. More importantly, the continuation of WFOEs as the most popular entry mode into China appears irreversible. Given the dominant role of EJVs and WFOEs in China’s FDI (SSB, 2007), this study will be confined to these two venture groups, with the primary data collected from a sample of MNEs engaged in FDI in Gansu province by means of either WFOEs, or EJVs.
1.7 The Outline of the Thesis

The thesis is organised into the following eight chapters, which delineate the research procedures and empirical results.

Chapter 1 provides an overview of the study, discussing the situation of the study, the research site, the significance and scope of the research, the research questions and objectives, and the definition of the FDI concept. A structure outline is also provided.

Chapter 2 describes the background of FDI inflows, introduces the topic of global FDI flows, the trends and characteristics of FDI flows in China, and FDI development in Gansu province.

Chapter 3 provides a critical review of the theoretical and empirical studies of FDI, within which the determinants of FDI inflows, especially FDI location studies in China, are analysed.

Chapter 4 presents a conceptual framework addressing FDI location choice, and develops several specific hypotheses associated with the conceptual framework.

Chapter 5 discusses the methodological issues in the study and formulates the research design, which outlines the design rationale, sample selection, measurements of the variables, and methods used in the statistical analysis.

Chapter 6 analyses and discusses the preliminary results of the survey data. It provides a picture of the demographic statistics of the responding investing firms and their most recent FDI ventures in Gansu province, as well as the background of the responding firms, in order to investigate the location determinants that have affected the foreign firms’ location choice of Gansu province.

Chapter 7 presents an intensive discussion of the results obtained from the analysis, empirically testing the hypotheses and commenting on the significance of the findings.
This chapter covers the aspects of data analysis, including validity testing, reliability testing, tests of correlation, and multivariate regression analysis.

Chapter 8 provides a summary of the findings from the study, emphasising the significance of the findings along with the answers to the research questions. It also discusses implications of the findings for FDI research and provides suggestions for future research.
CHAPTER 2 FDI INFLOWS IN THE GLOBALISATION ERA

2.1 Introduction

This chapter provides background information regarding the research topic, by presenting a general picture of global FDI flows, FDI inflows to China, and FDI development in the inland China province of Gansu. FDI has played a critical role in global economic integration in the past three decades. The dramatic growth of global FDI flows in the last three decades has caused extensive research interest in this area. In the meantime, the rapid increase of FDI activities has also evolved corporate and government strategies towards a more global focus. Before the review on FDI literature is discussed in Chapter 3, it is necessary to present a general picture regarding the development of FDI flows during the last three decades and demonstrate the characteristics of this development. After a brief introduction, the first part of this chapter (Section 2.2) describes the development of global FDI flows during the last three decades. The next section (Section 2.3) reviews the process of FDI flows to China, with an emphasis on the general trends, the unique characteristics, and new changes appearing in recent years. In the last section of the chapter, FDI inflows to Gansu province are discussed in order to illustrate the research setting for this study.

2.2 Global FDI Inflows

As Figure 2.1 illustrates, global FDI inflows were relatively insignificant prior to the 1980s, whereas FDI activity started to increasingly intensify from the 1980s onwards, growing faster than other economic aggregate forms, such as capital formation and trade. Generally speaking, the evolving process of global FDI flows since 1980 have undergone three major downturns: 1982-1983 (down 14%); 1991 (down 24%); and 2001-2003 (down 31% annually) (UNCTAD, 2004). The periods of FDI recession are correlated with slow growth of the world economy, particularly in the principal FDI host countries (UNCTAD, 2004). After global FDI flows had a peak high of US$1,411
billion in 2000, there was a consecutive fall until 2003. Global FDI flows in 2003 represented only two-thirds of the peak value of US$1.4 trillion, which was reached in 2000 (UNCTAD, 2004). Based on the report by UNCTAD (2008), after this downturn, global FDI flows had consecutive growth over four years and reached a new record high in 2007. With inflows of US$1,833 billion, the previous record set in 2000 was surpassed by some US$400 billion (UNCTAD, 2008). To some extent, the record FDI levels in dollar terms reflected the significant depreciation of the US dollar against other major currencies. Even measured in local currencies, however, the average growth rate of global FDI flows was still 23% in 2007 (UNCTAD, 2008).

**Figure 2.1 Global FDI inflows, 1980 to 2007**

The sustained growth of FDI and the related international production primarily reflects the strong performance of the world economy and the increased profit margins of MNEs in many countries, as well as further liberalisation of FDI policies in host countries, and other specific factors such as currency movements, developments in stock exchange and financial markets, and high commodity prices (UNCTAD, 2007). Continued consolidation through cross-border mergers and acquisitions (M&A) caused a substantial contribution to the global surge in FDI flows. In 2007, the value of such transactions amounted to US$1,637 billion, which was 21% higher than the previous record high in 2000 (UNCTAD, 2008). The increase in FDI flows largely reflected high
economic growth and strong corporate performance in many parts of the world. Reinvested earnings accounted for about 30% of total FDI inflows as a result of increased profits of foreign affiliates, notably in developing countries (UNCTAD, 2008).

Observing the evolution process of global FDI flows during the past three decades, several general patterns can be summarised. First, FDI flows into the two groups of developed and developing countries have undergone a similar development trend of surges and downturns, as shown in Figure 2.2. Generally speaking, FDI inflows into both developed and developing countries increased rapidly since the 1980s. In 2000, FDI inflows into the two country groups reached record highs at US$1120 billion and US$190 billion, respectively (UNCTAD, 2008). Nevertheless, the level of FDI inflows into developed and developing countries suffered consecutive falls after 2000. FDI flows to developed countries fell by 25% from US$490 billion in 2002 to US$367 billion in 2003 for the third consecutive year (UNCTAD, 2008). After the significant falls at the beginning of the new century, global FDI flows surged again from 2004, and reached new record highs in 2007. As a result of continuous growth for four years, FDI inflows to developed countries reached US$1,248 billion in 2007; being 33% more than in 2006 (UNCTAD, 2008). Similarly, FDI flows to developing countries started to rebound in 2003, rising by 9% in that year, and reaching their highest level ever, at US$500 billion, in 2007. This was a 21% increase over 2006 (UNCTAD, 2008).

Second, the stocks of FDI in the developed countries were far larger than those of developing countries during the entire period of 1980 to 2007 (UNCTAD, 2008). The United States maintained its position as the largest FDI recipient in the world, with countries in the European Union (EU) as a whole continuing to be the largest host region within the developed countries. Combined together, developed countries received almost two-thirds of the total FDI stocks during the whole period over the last three decades. Moreover, FDI inflows accounted for half of all net capital flows to developing countries (UNCTAD, 2007). Thus, in more recent years, FDI flows have continued to be the most important and stable source of external financing for developing countries.
There are some specific differences in FDI inflows between developed and developing countries. Even though FDI inflows of developing countries have increased rapidly since the 1980s, the share of FDI flows to developing countries in the global FDI is smaller than that of developed countries. In contrast to developed countries, FDI flows to developing countries have increased from US$24 billion (24% of total foreign investment) in 1990, to US$379 billion in 2006, with their share in global FDI inflows reaching 30% (UNCTAD, 2007). Another incidence of this rapid change occurred in 2006, while FDI inflows to developed countries rose by 45%; well over the rate of the previous two years; to reach US$857 billion, while FDI flows to developing countries attained their highest level, at US$379 billion, which was a 21% increase over 2005, but was only a 44% share of FDI inflows to developed countries (UNCTAD, 2007). This difference is mainly attributed to the reasons described below. First, the economic difficulties and political instabilities faced by many developing countries make them less attractive to FDI inflows (Wei & Liu, 2001). Second, the increased importance of
technology-intensive investments leads to a preference among MNCs to locate within developed countries (Dunning, 1996).

Third, the cross-country distribution of FDI inflows has remained highly skewed, with the top fifth of FDI recipients enjoying 68% of FDI stocks up to 2006 and the bottom fifth enjoying barely 1% (UNCTAD, 2007). The industrialised nations have remained the major contributor, as well as the major recipient of FDI, although FDI flows to the developing world have more than doubled between 1990 and 2006. For instance, in 1999, nearly 58% of global FDI inflows went to the industrial countries, 37% to developing countries, and just 5% to the transition economies of Eastern Europe (UNCTAD, 2001). Even more striking is the disparity within the group of developing economies. More than 80% of the FDI in the developing countries in the 1990s went to only a few countries, such as China and India (UNCTAD, 2007). China, in particular, has obtained the lion's share of FDI flows to developing countries since 1992. UNCTAD (2007) predicted that 30% of total FDI flows to developing countries from 2006 to 2010 would go to China, and that the most attractive FDI destinations among the developing countries would be China and India over the next three years (UNCTAD, 2007). In reflecting this trend, more and more scholars have focused on the development, and related issues, of FDI inflows to China, which is the largest emerging economy.

2.3 FDI in China during the Reform Era

Since China adopted an open-door policy since 1979, the remarkable development of FDI in China has attracted much attention from both the academic and business sectors. A large number of FDI studies have attempted to address the following key issues: What are the determinants of FDI location choice in China? Is China’s experience with FDI unique and does it challenge existing FDI theories? Prior to examining the related theoretical analysis, it is necessary to review the general trends, the unique characteristics, and new changes in FDI in China. This will be done in the following sub-section, illustrating the difficult development path of FDI flows into China.
2.3.1 Overview of FDI in China

Foreign investment in China has a long history. Generally speaking, for much of the 20th century, China’s economy was insulated from foreign competition. In the early 1900s, British, French, German, and Russian firms were the most active foreign investors in China. Collectively, firms from these countries accounted for nearly 90% of all foreign investment in China in 1902 (Wu, 1958). The importance of these countries as foreign investors in China declined in the following forty years, as the nominal value of Japanese investment in China grew from a low of US$53 million (3.5% of the total value of FDI in China in 1902) to US$6,829 million in 1944. Notable features of foreign investment in China during this period include the relative absence of joint ventures and high geographical concentration in Shanghai and the northern provinces of China (Hayter & Han, 1997). Between 1949 and 1976, China followed an economic strategy of self-reliance.

Since 1979, China started to adopt an open-door policy, being a strategy aimed at internationalising the country’s economy. In the past three decades, China, the largest and fastest emerging economy, has become one of the largest recipients of FDI in the world. It is recognised that the development process of FDI flows to China has not been smooth. During the early stages of China’s economic reforms and opening up to the outside world, FDI inflows were not significant. Its growth increased slowly in the mid-1980s and gained momentum in the early 1990s. During the 1990s, a significant amount of FDI flowed into China. Since 2001, China has become a major host country of FDI on a global level.

During the period between 1980 and 2004, FDI inflows to China experienced dramatic growth, with an average annual rate of 23.77%, and reached a record high in 2002. In the same year, China was ranked as the biggest FDI recipient in the world for the first time, taking the position previously held by the US (OECD, 2003). Since 2000, the nation has been attracting US$130 million FDI per day on average (SSB, 2007). In 2006, China remained the largest FDI recipient among the developing countries, with inflows valued at US$69 billion, although FDI flows into China declined for the first time that
year over the seven year period, mainly due to a decrease of FDI inflows in the service sector (UNCTAD, 2007).

Figure 2.3 China’s FDI Inflows, 1979 – 2006

As shown in Figure 2.3, FDI flows into China experienced a steady and significant rise over the whole period from 1979 to 2006, particularly in the latest two decades. The booming FDI flows into China are a reflection of the expansion of global operations by MNEs from the early 1990s, as indicated in Figure 2.4. This, however, is only a part of the explanation. While global FDI inflows increased rapidly in the 1990s, the growth rates of China’s FDI inflows were much higher than those of global FDI. Moreover, while global FDI inflows had dramatic and consecutive drops after 2000, FDI inflows to China showed a different trend, bouncing back since 1999 and reaching a record high in 2002, which made China the largest recipient in the world. After that, FDI inflows to China continuously increased over the next five years (UNCTAD, 2007). In 2006, FDI inflows to China had a slight fall for the first time in seven years (by 4% to US$69 billion). China retained its position as the largest FDI recipient in the developing countries. The modest decline in FDI flows was mainly due to a reduction of investment in financial services (UNCTAD, 2007).
In comparison with other developing countries, China attracted a lion’s share of FDI flows to developing countries since it adopted an open-door policy. China’s share of FDI flows in the group of developing countries has steadily increased. Taking 2006 as an example, as shown in Figure 2.5, China accounted for almost half of FDI flows to developing countries (UNCTAD, 2007).

In summary, China enjoyed a higher growth rate in FDI flows than that of the general trend for global FDI flows, and it also gained a significant and increasing share of FDI flows to the group of developing countries. These two phenomena regarding FDI flows to China indicate that specific characteristics in regards to China have played a critical role in attracting FDI inflows, with China having unique location advantages over other potential host countries in attracting foreign investors (Zhang, 2001). On the other hand, the growth of FDI inflows to China since 1979 has not always been smooth, but has
undergone several twists. Thus, the trends and unique characteristics of FDI flows to China need to be discussed in more detail. This is done in the following sub-section.

Figure 2.5 World FDI Inflow Stocks, 1985, 1990, 1995, 2000, 2006

Source: Data from UNCTAD, World Investment Report, Various Issues

2.3.2 Trends and Unique Characteristics of FDI Flows to China

The general trends and characteristics of FDI in China have been extensively reviewed (Huang, 2003; OECD, 2003; Sun, Tong, & Yu, 2002; Wei & Balasubramanyam, 2005; Wei & Liu, 2001; Wu, 1999). Several significant and unique characteristics of FDI in China are introduced here in detail, in order to provide comprehensive background information and especially to emphasize their importance in FDI theories and business practice.

2.3.2.1 The Stages of FDI Development in China

China’s FDI development can be divided into three stages. The first stage started in 1979 when the Law of the People’s Republic of China on Joint Ventures using Chinese
and Foreign Investment, the first law of its kind in China, was enacted. This law granted FDI a legal status in China and, together with its subsequent amendments, provided a basic legal framework for MNEs to invest in China. The Act mandated that foreign firms take a minimum equity share of 25% in foreign invested enterprises, but it did not prescribe a maximum. In the original act, foreign investment was also limited to only four Special Economic Zones (SEZs): Shantou, Shenzhen, Xiamen, and Zhuhai. The fifth SEZ, Hainan, was added in 1988.

In these SEZs, a variety of FDI incentives were promoted. For example, a two-year tax holiday was granted to foreign investing firms for the first two years of profitable operations. Taxes for the third to fifth years of profitable operations were at 50% of the normal rates. Duties were eased on imports of equipment and exports of products. Other barriers to FDI, such as entry and exit formalities, were also reduced. Among other factors, vast tracts of land were allocated for commercial use and the establishment of plant, which were especially attractive for many of the investments from Hong Kong in the early period, even with the establishment of the SEZs. Nonetheless, several barriers to investment still existed. For example, Lockett (1987) identified poor infrastructure, bureaucracy, low labour productivity, and a weak legal framework, as the main problems faced by managers of foreign subsidiaries in SEZs.

Starting from a very low base, China received a moderate total value of US$12.05 billion in actual FDI flows during this period from 1979 to 1988, although experiencing double, or even triple, digit annual growth rates (SSB, 2007). In contrast to other stages, over 70% of FDI projects were involved in manufacturing industries in the initial stage (SSB, 2007). During the period of 1979 to 1991, the FDI flow into China was slow and the actual investment showed no significant growth till 1991. Foreign investment was concentrated in small-sized assembling and processing plants of export goods. To some extent, the type of early FDI in the first stage was mainly restricted to low cost manufacturing industries. Into the 1990s, however, the share of FDI in these areas of industry, particularly in the SEZs, declined (Hayter & Han, 1997).

The second stage of FDI development began in 1992. The Tiananmen Square Incident slowed down the FDI growth rate to a single digit figure in 1989 and 1990, which ended the first stage of FDI development in China. To reverse the worsening investment
climate, the Chinese government issued amendments to the Joint Venture Law in April 1990. In 1991, the Income Tax Law for Enterprises with Foreign Capital and Foreign Enterprises was passed and the FDI situation in China was improved. Double-digit growth was resumed in 1991, at the beginning of stage two of FDI development in China. In 1990 and 1992, an additional 13 free trade areas (FTAs), designed specifically for export processing, were established near major cities along the coast. FTAs have been established in Shanghai, Tianjin, Dalian, Shatoujiao, and Futian (Shenzhen), Guangzhou, Zhangjiagang, Haikou, Qingdao, Ningbo, Fuzhou, Xiangu, and Shantou. Partly as a result of this action, the share of FDI flows in the regions along the south and southeast coasts of China declined, from 59% during the period of 1979 to 1986, to less than 43% during the period of 1992 to 1997 (SSB, 1998). A sharp increase occurred in 1992 and the FDI inflows in that year alone (US$11.007 billion) were just slightly lower than the total FDI value (US$12.103 billion) for the entire initial decade of 1979 to 1989. This represented an increase of approximately 152% over the previous year of 1991 (SSB, 2007). Starting from 1991, China also gradually opened its domestic markets to MNEs in certain service sectors, including telecommunications, transportation, banking, and insurance. China’s FDI regime gradually shifted from export-promotion FDI to technology-promotion FDI. Such a shift in FDI was partly due to increasing pressures from the US and other industrialised countries for the opening up of China’s domestic markets, and partly due to a determination from China’s central government to limit expansion of low value-added and export-oriented FDI (Zhang, 2001).

In regards to the second stage, from 1992 to 2000, some characteristics are worthy of further discussion. The most striking characteristic of this period is the surprising surge in FDI flows in the 1990s, in contrast with the moderate growth during the first stage. Another significant feature is the change of entry modes for FDI inflows. During the 1980s, FDI mainly took the form of contractual, or equity joint, ventures. During the 1990s, however, the wholly-owned foreign firm was the fastest growing form of FDI entry mode into China. It accounted for 40% of the FDI value in 1996. During this stage, the average capital size for each FDI project increased significantly, with a shift of FDI focus to large infrastructure and manufacturing projects (SSB, 2002). China was increasingly considered as one of the most attractive sites in the world for FDI from the 1990s onwards.
At the end of 2001, China became a member of the World Trade Organisation (WTO). This marked the beginning of the third stage, over the period from 2002 to 2007. Since this entry into the WTO, a series of laws and regulations in China have been revised, with several new rules on FDI having been promulgated. The investment market for FDI in China has become more open, systematic, and technology-oriented (UNCTAD, 2004). As a result, China’s FDI flows increased consecutively over the first four years of the period, having a slight decline in 2006 (UNCTAD, 2007). The most impressive characteristics for this latest stage are that China has proposed new investment policies and incentives to attract FDI to poor interior regions, and to promote FDI in terms of quality, rather than appealing simply for a greater quantity of FDI.

2.3.2 Sources of FDI by Country

Throughout the period of 1979 to 2000, the Hong Kong Special Administrative Region (HK SAR) was consistently the most important source of FDI to Mainland China. It contributed 48.50% of the total cumulative contractual investment and 48.89% of the total cumulative actual investment over this period (MOFTEC, 2001). Other important FDI sources include the US, the EU, Japan, Taiwan Province, and Singapore. They respectively accounted for 8.96%, 14.2%, 5.7%, 7.07%, and 5.23% of the total cumulative contractual investment, and 8.62%, 11%, 7.98%, 7.51%, and 4.88% of the total cumulative actual investment in 2000 (MOFTEC, 2001). East Asian economies also dominate FDI to China. Combined together, they contributed over 65% of both the total cumulative contractual and actual investment up to 2000 (MOFTEC, 2001).

The dominant position of Hong Kong can be attributed to several factors. First, Hong Kong is geographically adjacent to Guangdong province, where the first and most important special economic zone (SEZ), Shenzhen, is located. Second, during the 1980s, the Hong Kong economy was undergoing massive structure change, which led to a major shift of export-oriented labour-intensive manufacturing industries to Mainland China in order to take advantage of the cheap labour available there. Third, especially since 1992, much of the investment from Hong Kong represented a recycling of capital from Mainland China, seeking to take advantage of the preferential treatment given to
foreign investors (Lardy, 1996). Although Hong Kong is the biggest investor over all of this time period, its share in both contractual and actual investment has been continually decreasing. While the former decreased from 62.68% in 1991 to 27.75% in 2000, the latter decreased from 59.96% in 1991 to 38.92% in 2000 (MOFTEC, 2001). The consistent decrease of FDI share from Hong Kong may indicate that the transfer of export-oriented labour-intensive manufacturing industries from the Hong Kong Special Administrative Region (SAR) to Mainland China entered a saturation stage. On the other hand, the sharp decrease in contractual investment may largely reflect the speculative investment in real estate (MOFTEC, 2001).

During the early stage, investments from overseas Chinese, particularly from Hong Kong, Taiwan, Macau, and Singapore, were the major source of China’s FDI inflows (Fung, Lizaka, & Parker, 2002). FDI from the US and the EU countries has increased at a steady pace since 1992, especially in terms of actual investment. The US’s share of the total contractual and actual investments increased from 4.58% and 7.40% in 1991, to 12.83% and 10.77% in 2000, respectively (MOFTEC, 2001). FDI from the EU followed a similar path. The share of total contractual and actual investments rose from 6.34% and 5.63% in 1991, to 14.20% and 11.00% in 2000, respectively (MOFTEC, 2001). For FDI flows from both the US and the EU, the amount of both contractual and actual investment in 2000 was significantly higher than the previous peak levels. Firms from other Asian developing economies featured largely in terms of project numbers, but not in the scale of their investments. They are concentrated in export-orientated light industries and textile projects in China, using labour-intensive technology (Buckley & Lessard, 2005; Fung et al., 2002).

2.3.2.3 Entry Modes of FDI

In the process of FDI flows to China, the entry modes of FDI have witnessed some systematic changes, with a clear trend able to be observed. First, for the early period of flows, contractual joint ventures and joint exploration investments played a dominant role. After 1986, equity joint ventures and wholly-owned enterprise investments replaced contractual investments, to become the main forms of FDI. Second, for most years within the period covering the 1980s and 1990s, equity joint ventures occupied a
dominant position. Third, since the 1990s, the share of wholly-owned enterprises has gradually increased, exceeding that of joint ventures by 2000 (MOFTEC, 2001). Altogether, joint ventures and wholly-owned enterprises contributed about 80% of both total contractual and actual investment by 2000 (MOFTEC, 2001).

In the initial period of FDI flows, foreign investors were unfamiliar with the Chinese investment environment, and were inclined to take part in small, tentative investments. According to MOFTEC (2001), contractual joint ventures and joint exploration accounted for over 60% of total contractual investments in 1985. Wholly foreign-owned enterprises accounted for less than 1% of FDI in that year. After 1986, equity joint ventures and wholly foreign-owned enterprises became the main forms of investment. By 1990, the share of contractual joint ventures and wholly foreign-owned enterprises exceeded those of contractual joint ventures and joint exploration, for both contractual and actual investments. Partly due to the difficulty in doing business alone in China, and partly due to encouragement from the Chinese government, the investments mainly took the form of equity joint ventures. This pattern began to change after the 1990s. From 1998 on, the share of wholly foreign-owned enterprises in contractual investment exceeded that of equity joint ventures (MOFTEC, 2001). By 2000, the actual investment share of wholly foreign-owned enterprises also exceeded that of joint ventures.

Several factors may account for this changing trend in entry modes from joint ventures to wholly-owned ventures. First, as foreign investors become more familiar with the Chinese investment environment, it is easier for them to do business independently. Second, entry in the form of wholly-owned ventures is conducive to the technology monopoly of foreign investors, which is becoming more and more important in the highly competitive Chinese markets. Third, after the mid-1990s, the fundraising difficulties encountered by Chinese firms enabled foreign partners to increase their equity shares through increasing reinvestment levels. Fourth, a related fact is that, except for a few sectors, the Chinese government dropped the restrictions on foreign control in joint ventures after the mid-1990s.
Disparate sectoral distribution of FDI in China has occurred in the past two decades. In the early reform period, the share of FDI inflows into China was mainly dominated by the labour-intensive manufacturing (light industry) and services sectors. In the 1980s, the distribution of FDI inflows within the manufacturing sector was concentrated on traditional labour-intensive industries such as textiles and garment production. The manufacturing sector attracted around 67 per cent of FDI inflows in the early 1980s (SSB, 1998). This share subsequently declined to around 30 per cent in the mid 1980s and rebounded to around 80 per cent in the late 1980s. However, in the early 1990s, FDI inflows gradually shifted to capital and technology-intensive manufacturing sectors, especially the chemicals, machinery, transport equipment, electronics and telecommunications sectors. Since this period, FDI rapidly extended to almost every field of the economy in China. Throughout the 1990s, the manufacturing sector and real estate of services sectors are the two biggest recipients of investment. By 2000, industry and services sector accounted for 60.87 percent and 37.31 percent of the total cumulative contractual investment respectively (SSB, 2002). Among services, real estate is the largest recipient sector of contractual FDI, absorbing a share of 23.60 percent. By the end of 2003, the manufacturing sector had the highest share of FDI measured in terms of number of registered enterprises, number of projects and utilised FDI. The manufacturing sector accounted for 71 percent of registered foreign enterprises and investment projects, and 69 per cent of total utilised FDI in China (SSB, 2007). Of the service sectors, the real estate sector attracted around 10 per cent of total utilised FDI. The social services industry has more registered foreign enterprises and foreign investment projects than the real estate sector, but only around 6 per cent of the total utilised FDI in China. Investment in primary industry accounts for a low proportion of the total utilised FDI.

Generally, the pattern of the sector distribution was determined by the relative importance between manufacturing industry and real estate. Overall, there appeared a big fluctuation between the relative share of industry and services. The service sector gradually became the second largest recipient of FDI in China, with most FDI channelled to the real estate and social services sectors. More specifically, the share of FDI in services is largely influenced by real estate. One of the most important reasons
behind the high skew towards real estate in the service sector is the policy constraint. In such sectors as banking, insurance, wholesaling and retailing, foreign direct investment is severely restricted in the aspect of geographical locations and business scope.

2.3.2.5 Location Distribution of FDI

FDI is unevenly distributed among the thirty-one provinces of China. FDI flows to China started in the four special economic zones in 1979 and 1980, and gradually extended to other coastal areas, then to inland areas. By 2000, FDI could be seen in all provinces of China apart from Tibet. One prominent feature of the provincial distribution is that FDI in the coastal area dominates the inward FDI throughout the whole FDI inflow process. By 2000, four provinces (Guangdong, Jiangsu, Fujian, and Shandong) and one city (Shanghai) in this coastal area accounted for 64.56% of the total cumulative actual investment (MOFTEC, 2001).

The provinces in China are officially classified into two regions: the coastal, and the inland region. FDI has been highly concentrated in the coastal region. According to the authorised statistical data of 2001 and 2002, the concentration of China’s FDI inflows in coastal regions remained very strong, with the inland regions having attracted only a modest amount of FDI flows, although every region at province level has recorded some FDI inflows. As shown in Table 2.1, shares of FDI in coastal China (mainly the coastal areas) were 88.2%, 87.36%, and 85.88% in 2003 in regards to the number of new investment projects, contractual value, and actual utilisation of investment capital, respectively. Another regional area, the inland regions, received less than 15% in all the three measures. Until the end of 2006, the percentage of actual FDI to coastal regions was 86.85%, with only the remaining 13.15% going to the inland regions (SSB, 2007). The uneven distribution of FDI flows is caused by historical and locational factors. As suggested (Luo & O’Connor, 1998), the degrees of economic development and the stages of reform were not the same in all regions of China. Many MNEs typically consider the inland regions as more complex, uncertain, and less dynamic for investment, in comparison with the eastern coastal regions. In addition, the inland regions tend to have much more governmental interference and greater cultural distances. Considering locational factors, metropolitan cities such as Beijing and
Shanghai and coastal areas would inevitably be the heavily favored locations relative to inland regions (Ali & Guo, 2005). By contrast, inland regions obtained fewer FDI than those of coastal areas, even though inland regions have unique characteristics which are rich in natural resources. Zhang (2001) argued that foreign investors concern themselves primarily with quick market access in the initial stage of investment in China and thus prefer to coastal regions of China.

Table 2.1 Regional Distribution of FDI within China in 2003

<table>
<thead>
<tr>
<th>No. of Projects</th>
<th>Contractual Value</th>
<th>Actual FDI</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Numbers</td>
<td>Share %</td>
</tr>
<tr>
<td>Total</td>
<td>41,081</td>
<td>115,70</td>
</tr>
<tr>
<td>Coastal Regions</td>
<td>3,659</td>
<td>88.2</td>
</tr>
<tr>
<td>Inland Regions</td>
<td>522</td>
<td>11.8</td>
</tr>
</tbody>
</table>

Source: Data from China Statistical Yearbook, Various Issues

Among the various characteristics of FDI flows to China, the uneven distribution of FDI presents a critical issue, both for MNEs and for China itself. For MNEs, this uneven distribution indicates that some regions possess more location-specific advantages than others, reflecting both the impact of government policy and the advantage of physical location (Golley, 2003). As for China as a host country, the increasing regional differences in FDI flows has widened the gaps in economic development and has created social and political problems. In 2003, the inland regions of China accounted for 72% of China’s total area, but only 29% of the population, while its GDP accounted for only 17% of China’s total GDP.

In order to narrow, or slow down, the widening gap, China’s central government has adopted a series of measures, including encouraging FDI in the inland regions. The provincial governments in these regions are also trying to attract more FDI and improve local economic development. In an attempt to address the issue of the uneven
distribution of FDI and the disparity of economic development between coastal and inland regions, the Chinese government responded with the Great Western Development Strategy, launched in January 2000, which aimed to help the relatively poorer west catch up with the more prosperous east. This strategy involved the 12 inland provinces, cities, and autonomous regions of Shaanxi, Gansu, Qinghai, Ningxia, Sichuan, Xinjiang, Chongqing, Yunnan, Guizhou, Tibet, Guangxi, and Inner Mongolia. These regions cover 6.85 million square kilometres and have a combined population of about 367 million, being respectively 56% of China’s land area, and 23% of its population (SSB, 2002).

The striking difference in terms of FDI flows between coastal and inland regions shows that the degree of openness has an important effect on attractiveness to foreign investment. During recent years, the Chinese government has passed regulations almost every year that offer more incentives to foreign firms to invest in the inland Chinese provinces. All these new policies are aimed to make the inland regions more attractive to foreign firms. At the same time, the local governments of these inland provinces have offered additional incentives to foreign investors. As a result, FDI has started to expand to some inland provinces and the vast western region has started to show its appeal to foreign investors. The gradual growth of FDI flows to the inland regions has confirmed that MNEs have expanded their investments in these regions in response to the recent changes in China’s FDI policies.

Since the turn of this century, economic growth in the inland regions appears to be gaining more momentum and accelerating. As a result, the combined GDP of the inland regions reached US$481 billion in 2005, in comparison with US$214 billion in 2000 (SSB, 2007). The locational advantages in inland provinces, such as low production and living costs, great market potential, and more local government support, has been shown to be of high appeal to many foreign investors. Consequently, the share of FDI flows to the inland regions has been dramatically increasing since 2000. Nevertheless, foreign capital use in these regions accounted for US$2.17 billion in the inland regions in 2006, making up just 3% of the country’s total (SSB, 2007).

Regional disparity in terms of FDI flows to China has not attracted much scholarly attention to date. This study is an attempt to address this gap by focusing on FDI
location choice in China’s inland regions, using the case of Gansu province, which has been justified in the research setting section of the study. In the next section, FDI flows to Gansu province are discussed in more detail in order to further emphasize the theoretical and practical implications of the study.

2.4 FDI Flows into Gansu Province

This study focuses on FDI location choice in China’s inland regions, using the case of Gansu province. Gansu province is taken as the research site for the study of FDI flows to China’s inland regions, because it has common characteristics with other inland provinces, being relatively under-developed, but rich in natural resources. Before introducing the topic of FDI development in Gansu province, the environment of Gansu is briefly described in order to present a general picture of the profile of Gansu province.

Gansu is an inland province in China’s poor interior and lies in the north western region at the upper reaches of the Yellow River, as shown in Figure 2.6. It is home to the largest and best-preserved Buddhist art palace in China, which sits on the ancient Silk Road. It is also home to the grand Jiayuguan Pass, an important outpost in ancient China, where the Great Wall ends in the west. Lanzhou is the capital of Gansu. The State Council of China approved Lanzhou as an inland open city in 1992, thus, giving it the same preferential policies as the coastal open cities. Lanzhou is a major transportation hub in China, serving as the main transit and consolidation hub for containers on the New Asia-Europe Continental Bridge.
At the end of 2005, the total population of permanent residents in Gansu province stood at 25.944 million. Ethnic minority groups, which include Kazak, Mongolian, Tibetan, Hui, Dongxiang, Tu, and Manchu, account for about 8% of the total population, with ethnic majority being Han.

Gansu is abundant in its reserves of natural resources and is one of China’s most important production bases of non-ferrous metals, including copper, aluminium, nickel, lead, and zinc. The reserves of 11 different minerals in Gansu are ranked as the largest reserves in the 31 provinces of China, with the reserves 32 minerals ranked among the top 5, and those of 51 minerals being among the top ten. The reserves of nickel-cobalt are ranked among the top 3 in the world, the reserves of zinc among the top 3 in China, and the reserves of copper among the top 4 in China. Gansu is mainly a rural, agricultural province and is the country’s second-largest producer of Chinese medical herbs. Owing to its natural resources, Gansu’s major industries are derived from these natural resources and include nonferrous metals, petrochemicals, energy, machinery,
food processing, and the production of building materials. At present, the province supplies over half of the oil-drilling equipment in the country.

Major sources of investment in Gansu province have come from the US, Hong Kong, the UK, the Philippines, and Taiwan. Major foreign investment has mainly been engaged in construction, property development, food and beverages, machinery, electronics, petrochemicals, pharmaceuticals, textiles, and other manufacturing industries. In order to further accelerate the development of its resource-based industries, the province has introduced incentives to encourage foreign investment in the mining, refining, and processing of minerals. Due to Gansu’s inland location, the provincial government also provides transport subsidies for qualifying domestic and foreign exporting enterprises.

Figure 2.7 FDI inflows at Gansu Province, 1985 - 2007

Source: Data from China Statistical Yearbook, Various Issues

FDI flows to Gansu have had a dramatic increase since the middle of the 1990s, but were still small compared to that in provinces in the eastern regions of China. After China’s go west policy was enacted in 2000, FDI flows to Gansu rose again from the peaks in the mid-1990s but fluctuated in total, as shown in Figure 2.7. Given the fact that Gansu is a typical inland province in China; representatively relatively under-
developed, but rich in natural resources; it provides a suitable research setting for exploring the determinants of FDI flows to inland regions of China. Two reasons are provided as a justification for the choice of Gansu province as the research site of the present study. First, by addressing determining factors for FDI flows to Gansu, the present study represents a first attempt to explore FDI location choice in the inland regions of China in order to fill the proposed research gaps. Most studies on FDI location choice in China have been focused at a national, or industry, level, using archival statistical data at the macro level. As argued by Pan (2003), however, FDI location choice is actually a decision that is made at the firm level. Little work has been carried out in exploring the factors determining FDI location choice in the inland regions of China. This is mainly because of a lack of firm-level data, or a theoretical framework at the provincial level. Second, by identifying the factors affecting MNEs location choice in Gansu, the study will be able to provide practical implications, guiding policy-makers to attract more FDI to the inland regions. Few studies have examined the determinants of FDI location choice at the sub-national level, and even less have focused on the inland regions of China. Considering the huge geographical and economic size and the great regional discrepancies in China, China provides an ideal sample for the study of FDI location choice.

2.5 Summary

This chapter provided background to the research topic by describing the development of global FDI flows, FDI flows to China, and more particularly to its Gansu province. After presenting a general profile of global FDI flows, this chapter has provided a more detailed outline regarding FDI flows into China. The general trends and related characteristics of FDI flows to China in terms of development stages, source countries, entry modes, and location distribution, are discussed and illustrated in the related figures and tables. A significant feature regarding FDI flows to China is the uneven location distribution of FDI between different regions. This feature deserves more research attention, given the critical role of FDI in economic development. As it is suitably representative, Gansu province is considered to be the ideal research site for the present study: What are the factors determining FDI location choice in China’s inland regions? The following chapter will critically review the main FDI theories regarding
the rationale and motives of FDI behaviour, and discuss existing empirical studies on FDI location choice. Based on the relevant FDI literature and the identified research lacuna, a conceptual framework is proposed in Chapter 4 to address the research questions of the study.
CHAPTER 3 LITERATURE REVIEW

3.1 Introduction

This chapter presents a critical review of the literature regarding FDI theories, especially theoretical and empirical studies related to FDI location choice. The primary objective of this chapter is to provide a theoretical and empirical context and rationale for the conceptual framework and research hypotheses, which are to be formulated in Chapter 4. Section 3.2 reviews the relevant FDI theories to provide explanations for FDI activities of MNEs. Section 3.3 reviews the main empirical studies in the topic domain of FDI location choice. Section 3.4 reviews the approach of strategic investment motivations, discussing existing studies related to FDI strategic motivations. Based on these theoretical analyses and empirical studies, the research opportunities on the topic of FDI location choice in China are identified in the final section (3.5).

3.2 The Overview of FDI Theories

The theory of capital movement is the earliest explanation for FDI, which is also viewed as a part of portfolio investment (Aliber, 1971; Iversen, 1936). FDI was originally believed to flow from a country with low interest rates to those yielding higher interest rates. This is an inadequate explanation, because there have also been FDI transactions from higher interest-bearing countries to those with lower interest rates. In addition, FDI also engages the transfer of non-capital assets, such as production technology, marketing, and management experience. The international capital theory does not substantially address such issues, so that, since the 1950s, a significant volume of FDI location theories have been developed from various theoretical perspectives. These theoretical discussions mainly range from the mainstream economic theories (Caves, 1971; Hymer, 1960, 1976; Kindleberger, 1969; Vernon, 1966), internalisation theory (Buckley & Casson, 1976; Rugman, 1981), transaction cost theory (Anderson & Gatignon, 1986; Caves, 1982; Williamson, 1985), to Dunning’s eclectic paradigm.
The following sub-sections review the various main theories of FDI in more detail.

3.2.1 Theories Assuming Perfect Markets

Until the early 1960s, FDI was largely assumed to exist as a result of international differences in the rates of return on capital investment, with capital moving across countries in search for higher rates of return. Although the hypothesis appeared to be consistent with the pattern of FDI flows recorded in the 1950s, its explanatory power declined a decade later when investments from the US into Europe continued to rise in spite of higher rates of return registered for US domestic investments (Hufbauer, 1975). The implicit assumption was of a single rate of return across industries and the implication was that bilateral FDI flows between two countries could not occur, which also made this hypothesis theoretically less convincing.

The search for an alternative explanation of FDI flows soon resolved around the application of Markowitz and Tobin’s portfolio diversification theory (Markowitz, 1952; Tobin, 1958). This approach contends that, in making investment decisions, MNEs consider not only the rate of return, but also the risk. Since the returns to be earned in different foreign markets are unlikely to be correlated, the international diversification of a MNE’s investment portfolio will reduce the overall risk faced by an investor. Empirical studies have, however, offered only weak support for this hypothesis. This is not surprising when one considers the failure of the model in explaining the observed differences between propensities of different industries to invest overseas, and in accounting for the fact that many MNEs’ investment portfolios tend to be clustered in those markets with highly correlated expected returns.

Generally, most of the early literature is based on neoclassical assumptions and it runs parallel to the neoclassical theory of international trade developed by Heckscher (1919) and Ohlin (1933). Similar to the neoclassical theory of international trade, the neoclassical theory of foreign investment also assumes that countries are differently endowed with capital and labour, and that there is mobility of products across frontiers through the immobility of labour. The main problem in the neoclassical analysis is that
it is linked to the unrealistic assumption of perfect competition. A perfectly competitive environment may have been not too unreasonable as an approximation of reality when the neoclassical theory was first applied to international trade.

On the other hand, the difficulty of the neoclassical theory in explaining portfolio investment and in its application to direct investment has been highlighted by Hymer (1960). Hymer pointed out that the neoclassical theory of portfolio investment does not provide a clear-cut answer to which way capital would flow and by what amount, because of the elements of risk and uncertainty involved, as well as the costs of gathering information. By doing so, Hymer (1960) provides a seminal study for foreign direct investment and multinational enterprises, which is discussed in the following section.

3.2.2 Market Imperfection Theory

Drawing heavily on the work of Bain (1956), Hymer (1960, 1976) challenged the assumption of the model of perfect competition and focused on a firm’s ability to hinder competition in a market. Hymer’s path-breaking study was the first explanation of FDI activities as a means of transferring knowledge and other intangible firm assets in order to produce abroad. He pioneered this analysis from an industrial organisation perspective, referred to as the oligopolistic theory. Hymer pointed out that the movement of capital associated with FDI is not a response to higher interest rates, but rather is used to finance international operations, arguing that multinational firms arise as a result of market imperfections. Market structure and the competitive conditions of firms are, therefore, important determinants. Firm-specific advantages and the firm’s market position have been used to explain MNEs cross-border investments. These advantages must be sufficient to outweigh the disadvantages faced by MNEs in competing with local firms.

Hymer identifies four factors that cause the rise of multinational firms: 1) Market imperfections in goods markets (e.g., special marketing skills); 2) market imperfections in factor markets (advantages in raising capital, superiority of management or special patents, and general superiority in technology); 3) internal and external economies of
scale (the latter linked to vertical integration); and 4) governments’ interference with production, or trade. This explanation also provides a theoretical justification for Dunning’s empirical results of 1958. Hymer’s work spawned several other contributions to the theory of industrial organisation, notably those of Kindleberger (1969), Dunning (1977), and Caves (1993). Rugman (1981) suggested that market imperfection, in general, is an impediment to the simple interaction of supply and demand to set a market price. He argued that firm-specific advantages held by a MNE can be better used in foreign production, rather than by licensing, or exporting, goods. Horaguchi and Toyne (1990) and Huang (2003) also postulated that FDI is the direct result of an imperfect global market environment.

Kindleberger (1969) further extended Hymer’s work and proposed a market imperfection model which postulated that, for direct investment to thrive, two conditions must be fulfilled: (1) The MNE must possess firm-specific advantages that outweigh the disadvantages of being a foreign firm; and (2) the market for these advantages must be imperfect. Some of the market imperfections that always lead to the development of MNEs include knowledge advantages, distribution networks, economies of scale, and product differentiation. As for market imperfection theory, Teece (1981) commented that it is not surprising that some scholars have missed important features of the multinational enterprises, as they were obsessed with the market power consideration. He felt that the efficiency consequences of the organisation of economic activity by MNCs were more interesting, were possibly more important, and less understood than the market power considerations.

Generally speaking, Hymer focused on MNEs per se and treated FDI as a modality by which firms extend their behaviours abroad, which is different from the neoclassical theory. Hymer’s argument that local firms hold natural advantages over foreign investors has, however, been criticised by contemporary theorists, who have argued that it is, in fact, foreign investors that often have natural advantages over local firms because of their global access to capital, technology, and management skills (Dicken, 1994). Foreign investors may also have a greater ability to take advantage of economies of scale (Kindleberger, 1969; Taylor & Thrift, 1982). Another major drawback of the market imperfection theory is that location factors of host countries are ignored in the theory, with Hymer focusing more attention on the market power advantages of MNEs,
and neglecting the efficiency advantages of FDI. Hymer’s main determinants of foreign investment are, to a large extent, the determinants of investment in general, at both the national and international level, under oligopolistic conditions.

Both Hymer and Kindleberger were largely preoccupied with the issue of why it is the MNEs (usually from the US at that time) that take up investment opportunities in the host country, rather than local firms. This emphasis could be seen as downplaying the specificity of internationalisation. Moreover, there is also an overemphasis on the cost of foreign operations. This was a reasonable stance to take in the 1950s and early 1960s, however, the costs and risks of foreign operations have declined considerably since then. In general, Hymer’s conceptual framework underplays the advantages of internationalisation and MNEs per se, including the advantages of spreading production over many countries. Based on this, internalisation theory was developed in order to address the theoretical issue of FDI.

3.2.3 Internalisation Theory

In the middle of the 1970s, there were some attempts by economists to offer generalised explanations of international production, with the most prominent of these being internalisation theory. The genesis of internalisation theory dates back to Coase (1937), who argued that transaction costs on foreign activities make it more conducive for a firm to create an internal market, rather than enter foreign markets. The internalisation theory was based on transactional market imperfections. It delineates an international extension of transaction cost and economics explanations of the boundaries of firms (Buckley & Casson, 1976; Hennart, 1982). This idea has been further expanded by Williamson (1985), McManus (1972), Buckley and Casson (1998), Dunning (1980), and Rugman (1986).

The central theme of internalisation theory is concerned with explaining why the cross-border transactions of intermediate products are organised by hierarchies, rather than determined by market forces. According to internalisation researchers, market failures stemming from the existence of transaction costs are the main reason for a MNE’s decision to internalise its foreign markets by means of FDI, compared with market
contracts such as licensing. A MNE internalises its foreign markets up to the point where the benefits of further internalisation are outweighed by the costs (Buckley, 1988).

Internalisation theory also explains that expansion through FDI can be a viable alternative for a MNE when it has a competitive advantage over other firms. This firm-specific advantage needs to be protected by the organisational structure, implying that FDI becomes favourable when the benefits of internalisation outweigh its costs. The existence of non-trade goods and impediments to trade, however, introduces other elements into the location decision. These barriers cause the actual location of the FDI to diverge from that which factor costs alone would suggest. Thus, a modified view of the internalisation model is that FDI arises when trade in goods is impeded, or prevented, according to the Heckscher–Ohlin-Vanek (H-O-V) model developed by Heckscher (1919), Ohlin (1933), and Vanek (1968). This impediment produces a difference in relative factor prices, which induces a flow of capital into the economy that offers a higher relative return on capital. This perspective corroborates the wisdom of the FDI-MNE theory that market structural imperfections across borders provide an incentive for MNEs to locate production in local markets (Caves, 1982). Under these circumstances, MNEs can maximise profits by internalising markets for relevant intermediates and utilising their monopolistic advantages (Dunning, 1980).

Rugman (1979) extended the internalisation theory by analysing the role of MNEs as a vehicle for international diversification, and by including FDI as a possible instrument. According to this extension, while internalisation is helpful in creating internal markets and bypassing capital market imperfections, it is also, at the core of the MNE concept, highly consistent with the transaction cost and eclectic theories.

3.2.4 Transaction Cost Theory

Transaction cost theory and internalisation theory share the same theoretical foundation of market failure. Both theories view FDI as a response to market failure. Profit-seeking firms internalise operations when, by doing so, the costs of organising and transacting business will be lowered. The theories diverge, not in spirit but in emphasis, when it
comes to specifics. The transaction cost theory is micro-analytic, focusing on the transactions as the basic unit of analysis. Transaction cost economists argue that the transaction cost theory provides a framework for discriminating between transactions that need to be internalised and those that do not. Therefore, without such a framework, internalisation theories of the multinational enterprise must be considered incomplete and even tautological (Teece, 1986).

The basic rationale behind transaction cost theory is that firms need to create governance structures that will minimise costs and inefficiencies associated with entering and operating in a foreign market (Hennart, 1982; Williamson, 1985). The transaction cost approach interprets FDI as an entity seeking more efficient outcomes within the MNE in order to minimise transaction costs that are related to international transactions, including negotiating, monitoring, and enforcing a contract (Buckley & Casson, 1976). In transaction cost theory, a transaction is defined as, “the transfer of a good or service across a technologically separable interface” (Commons, 1989, p. 1). The decision required in order to acquire the good, or service, is essentially a make or buy decision. It is suggested that when transaction costs are low, firms are less likely to contract with outsiders and will internationalise through other entry modes, such as licensing their brand names, or franchising their business operation, rather than pursuing FDI (Mahoney, Trigg, Griffin & Pustay, 2001). Hence, the location advantages of the host region are the market environment and opportunities to allow reduced transaction costs to occur.

Williamson (1985) further stated that transaction cost economies adopt a contractual approach to the study of economic organisations and likens transaction costs to the economic equivalent of friction in physical systems. If transaction costs were trivial, there would be no advantage in using one mode of organising a transaction over another mode, as all such advantages would be nullified by costless contracting. A most efficient governance structure means that the total production and transaction costs are, in the long run, less than those of any other governance structure. Production costs include direct and indirect costs of making the products, such as the costs of labour, energy, raw materials, semi-manufactured products, components, depreciation of machinery, and maintenance. Transaction costs are those costs connected with finding a contractual partner, specifying a contract, and securing that the ex-ante defined goals
will be met ex-post. The amount, or degree, of transaction costs are determined by three characteristics of the transaction, namely, asset specificity, uncertainty or complexity, and frequency (Williamson, 1985; Hennart, 1982). By minimising the sum of the production and transaction costs, FDI can provide the most efficient governance structure when the production costs in a foreign location are lower than those in the home country, and/or the transaction costs of using external markets are higher than the costs of integration.

3.2.5 Product Life Cycle Theory

The product life cycle theory of multinational firms (Vernon, 1966) is perhaps the most directly relevant traditional theory in the study of industrial location. Hirsch (1965, 1967) was one of the first researchers to assess the product life cycle in relation to technological and labour requirements. Based on a case study of the US electronics industry in the 1960s, Hirsch argued that products in fact become increasingly more capital intensive as processing technologies mature from initial research and development, to mass production and distribution. Hirsch then concluded that the US is the most competitive location in the initial phase of industrial development in the electronics industry, when highly skilled labour is required. As the industry matures, the US loses its competitiveness to other locations offering low-cost, low-wage labour, which is better suited to mass production.

Almost simultaneously, Vernon approached the process of internationalisation based on these existing theories. In an attempt to articulate the timing of firms' engagement in multinational activities, Vernon (1966), researching better explanations for shifts in international trade and international investment, proposed the product life cycle (PLC) theory, concluding that any theory which does not include the roles played by innovation, economies of scale, ignorance, and uncertainty is incomplete. In his model, FDI was viewed as replacing trade. His locational theory treats trade and FDI as part of the same process of exploiting foreign markets and, from this standpoint, he examines the international locations of corporations. Vernon (1966) suggested that location choice is a dyadic integration of product life cycle and location characteristics. For new products, locational factors; such as market demand, communication and external
economies, and flexibility of production; are critical to market formation and development. For standardised products, the costs of various production factors become more important to market extension and penetration.

Based on the research by Vernon (1966), the product life cycle approach views enterprises in developing economies as relatively passive recipients of technology and skills at the mature stage of the product life cycle. The competitive edge of developing-economy enterprises, which MNEs can be derived from, has one of three possible sources: (1) The possession of technologies, which are so mature that they have been phased out by developed-country firms, but are not yet mastered by countries lower on the industrialisation scale; (2) an advantage gained by downscaling the technology, making production more labour-intensive, or adapting it to local raw materials; or (3) a cost advantage arising from lower wages.

Vernon (1979) further extended the PLC theory and suggested that producers are less concerned with the cost of labour and capital at the initial stage of product introduction. This is because of the high degree of product differentiation and the resulting product monopoly at the early stages. Therefore, at the initial stage, a firm’s locational decision will be based primarily on factors that contribute to efficient product development and that facilitate subsequent introduction to the market. Factors such as effective communication networks internal to the firms and the availability of necessary scientific, technical, and managerial skills are the primary locational concerns. Therefore, even a firm with multinational markets has little incentive to locate production anywhere other than in its home country during the early stages. As products become more standardised and competition intensifies, however, there is increasing concern about the cost of labour and capital. The decision to locate facilities overseas is usually triggered by the perception of threat. Firms respond to this perception by setting up facilities overseas, in order to protect the market they have captured through exporting (Vernon, 1979).

As mass production has become outdated, however, flexible specialisation became the coherent mode of production in the late 20th century, and Vernon’s theory needs to be re-examined. As Vernon himself admitted, product life cycle theory had already somewhat lost its explanatory power by the late 1970s. Multinational firms had already become more truly global than Vernon had anticipated in the late 1960s, establishing
extensive networks of global manufacturing operations (Taylor & Thrift, 1982; Vernon, 1979). Multinational activities are no longer restricted to offshore production by American and European firms taking advantage of low production costs in developing economies. Due to the shrinking income differences in major industrialised economies and the cross-investment by Japanese and European firms in the United States, as well as the increasing reliance of US producers on imported raw materials, the absolute advantage of US firms in their home market had itself declined. Also, American industries no longer monopolise the market for high income consumers, which, according to Vernon, is the critical stimulus for innovative activities.

In addition, the product life cycle theory has been criticised for being a partial theory, which addresses only the market-seeking type of FDI. Other types of foreign direct investment, such as resource-based and efficiency-seeking modalities, are unaccounted for by the theory (Dunning, 1993a). Further, the product life cycle theory has also been criticised for failing to explain the more contemporary phenomena of foreign direct investment, such as the fact that in many cases a new product is introduced to domestic and foreign consumers almost simultaneously. As a result, the product life cycle theory has become, in the general sense, increasingly inadequate in explaining multinational activities.

In fact, the product life cycle theory has undergone certain modifications, in order to accommodate recent changes in FDI theory. Grosse and Kujawa (1995) argued that the product life cycle is a dynamic view, exploring the reasons for trade flows in the context of changing technology and multiple markets. They agreed with Vernon that the export market, which forms the nucleus for FDI in the third stage of the product’s life cycle, is vital. A low-cost advantage is the important consideration at this stage of decision-making. Vernon (1979) reconsidered his theory and observed that it had less power in elucidating the reasons for FDI. He combined the geographical reach of many firms and focused on the reduction in the gap between the US and other national markets in terms of both size and factor costs.
3.2.6 Macroeconomic Theory

The economic perspective of MNE theory predicts that a company investing in production facilities will choose the location that minimises total costs, given the demand in local markets. Labour cost differentials, transportation costs, the existence of tariff and non-tariff barriers, as well as government policies (e.g., taxes affecting the investment climate), are generally held to be important determinants of location choice. Aliber (1970) also took into account the size of foreign markets and the costs of doing business abroad. Hirsch (1976) further suggested that the costs of controlling foreign operations are of importance. Such costs are likely to be less in familiar markets; that is, in markets that are culturally similar to the home country, or in markets where the company has previous experience.

In the macro-economic model, location selection is determined by the target country’s comparative advantages, or factor proportions. This view sees FDI as an international transfer of certain specific and mobile factors of production to locations where the local costs of immobile production factors (natural resources, labour, human capital, machinery, and plant) are most advantageous. Profit maximising firms choosing to exploit these specific advantages must select a cost minimising location. Where the final product is perfectly traded, one would expect the location of FDI to be related to factor endowments and comparative advantages.

Current approaches building upon economic theories emphasise factors such as transport costs, exchange rates, taxes, labour rates, and other cost-based variables. Such a highly quantitative emphasis, however, underestimates the importance of strategic, or qualitative, factors that are more likely to provide long-term advantages under conditions of high competition. For example, location dictates the level of knowledge embedded in the workforce. It can affect the ability of firms to implement skill-based process technologies, or it can limit the effectiveness of quality programmes. Another disadvantage of strictly cost-base analysis is that it tends to focus on factor cost advantages, which are often transitory. Government regulations, tax systems, and exchange rates can change quickly. Strategies based on such parameters may be rendered obsolete by the very factors that first created these advantages.
It has also been argued that a neo-classical economic framework is unable to capture the role of firm-specific advantages in determining FDI inflows (Dunning, 1993a). Therefore, when formulating a location selection strategy in international expansion, MNEs should attach high importance to the strategic, or qualitative, factors which may include, but are not limited to, the economic factors of investment location. Only after establishing a set of desirable location options, foreign companies may further refine FDI location choices using cost-based algorithms.

### 3.2.7 Internationalisation Theory

Another approach in the study of determinants and timing of FDI has been developed in internationalisation theory. This theory declares that a firm follows four stages in its international development, being: No regular export activities; exporting via independent representatives, or agents; establishment of overseas sales subsidiaries; and production and manufacturing plants (Johanson & Vahlne, 2001). This four-stage development model was proposed by Johanson and Wiedersheim-Paul (1975) in their study of internationalisation strategies of small and medium sized enterprises (SMEs). The model asserts that the internationalisation of a SME is a long, slow, and incremental, process, having two dimensions; the geographical, or rather the, cultural expansion, and the commitment. According to the four stage proposition of the theory, FDI activity will occur when a firm has accumulated a certain level of market knowledge through its international activities in earlier stages, with the increased market knowledge enabling it to increase its market commitment overseas.

Therefore, market related knowledge plays an important and decisive role in the internationalisation process of a firm. When regarding market related knowledge as a type of firm resource, the internationalisation theory shares some commonalities with the later developed resource-based view (Anderson, Day, & Rangan, 1997). The uniqueness of the internationalisation theory is, however, a very controversial point in the related study. It has been criticised as being deterministic and not capable of explaining why a firm starts its internationalisation by establishing a wholly owned foreign subsidiary, rather than by exporting (Young et al., 1989; Zhao & Decker, 2004).
The four stage model of internationalisation theory has gained empirical support from some studies (Kwon & Hu, 1995; Luostarinen, 1979), but is not supported by other studies (Ayal & Raban, 1987; Millington & Bayliss, 1990; Turnbull, 1987). Turnbull (1987) powerfully argued that an orderly and progressive sequence is inconsistent with the empirical and theoretical evidence. He suggested that operating environments, industry structures, and a company's own marketing strategy will determine a company's stage of internationalisation.

Internationalisation theory to date is still in the process of being developed, even though there are opposing views in regards to the gradual stages of internationalisation. Most investors search for ways to minimise overseas investment risk. Gradually, with its obvious ability to educate management, the risk-reward spectrum follows from the lowest (exporting), through to the use of a foreign agent, to an overseas sales subsidiary, to technical licensing, to contracting management services and turnkey contrasts, to FDI (joint venture to wholly-owned subsidiary). A fit with the firm's strategic timing and motivation needs would, however, also be decided by CEOs themselves. Research into internationalisation stages has principally covered only one of the motivations for FDI, that of host country market-seeking. Other strategic motivations have yet to be addressed.

3.2.8 The Eclectic Paradigm

Dunning is considered to have been the first researcher to develop a systematic theory of internationalisation, known as the eclectic paradigm (1979). His approach was an innovative attempt to address the process of internationalisation, as being two simultaneous processes of international trade (import-export activities) and international production (foreign direct investment). This is a departure from Vernon, who treated international trade and international investment as separate stages of development. Dunning's eclectic paradigm (1981) further set out a holistic approach to explain the level, and pattern, of international production. By recognising the importance of both structural and transaction cost imperfections for MNE activities, Dunning added a new dimension of ownership advantages to the location and internalisation advantages that
were already suggested by internalisation theory. Dunning’s approach consists of an attempt to analyse the why, how, and where of FDI activities in terms of ownership, location and internalisation (OLI) advantages. The context of Dunning’s eclectic paradigm is indicated in the Figure 3.1 below.

![Figure 3.1 The Framework of Dunning’s OLI Paradigm](image)

: denote the direction of cause-effect relations in the OLI paradigm.

The eclectic approach represents the most recent theoretical endeavour to bring these alternative perspectives together within one framework, explaining both the location and the ownership characteristics of FDI (Wei & Liu, 2001). As Dunning put it, the theory of determinants of MNE activities must then seek to explain both the location of value-adding activities, and the ownership and organisation of these activities (Dunning, 1981, 1998). FDI location will, therefore, depend on three sets of factors, as shown in Figure 3.1:
1. **Ownership (O):** Ownership advantages are those that are specific to a particular firm and these advantages enable it to take advantage of investment opportunities abroad. The O advantages include marketing skills, and R&D skills, or production skills that allow firms to provide goods and services more competitively in their own countries, as well as in other countries. Firms have ownership advantages when they have access to some asset, or process that provides the firm with an advantage over existing firms in the foreign market. This can be physical, for example patented products, or production processes, or more intangible, such as global brand name recognition. Multinational firms invest abroad to exploit these firm-specific advantages in foreign markets and to secure higher returns.

2. **Location (L):** Locational advantages are those advantages that are specific to a country and which dictate the choice of production site. Major criteria will involve low-cost labour, incentives to production on the part of host governments, natural resources, domestic market potentials, and political stability. These are not easily transferable between countries and could differ from the home country situation. It is also important to recognise that, although the possession of such ownership specific and internalisation advantages is a necessary condition for achieving a better international competitive position, it is not sufficient for ensuring the potential success of investment decisions in foreign countries (Dunning, 1980, 1998; Galan & Gonzalez-Benito, 2006). Similarly, location factors, which define the degree of attraction of a group of host countries with respect to the investment decisions carried out by MNEs, are one of the basic determinants that should be taken into account. In fact, as Dunning (1998) pointed out, the importance of location advantages can be observed in the academic research on international business, as the initial emphasis on firm-specific determinants is now being complemented by a renewed interest in the spatial aspects of FDI.

In respect to the location-specific advantages of host countries, eclectic theory holds that MNEs pursue FDI only where it is beneficial to the exploitation of their ownership advantages in technology, patents, cost effectiveness, established markets, managerial skills, and financial strength. In other words, these firm-specific advantages, originating from the process of serving home country markets, are, and only can be, confined to a specific location in international markets where profitable operations can be achieved.
The eclectic approach explains that location is an integral part of inducing FDI, in which the presence of location-specific advantages in overseas production sites is one of the necessary conditions, and is directly relevant and important to the location choice of FDI. Firms may be motivated to invest abroad because of locational advantages. Firms often invest in production facilities in foreign markets because transportation costs are too high to serve these markets through exports. This could either be directly related to the physical nature of the good, as with a large sized item, to a service that needs to be provided on site, or because of policy factors such as tariff rates, import restrictions, or issues of market access that make physical investment advantageous over serving the market through exporting. The locational advantage could also be related to the actual endowments of the host location; either the richness of its natural resources, or the high quality and low cost of its labour force.

3. Internalisation (I): The third dimension is that of internalisation advantages. Internalisation advantages determine whether foreign production will be organised through markets (licensing), or hierarchies (FDI). The O and L advantages must be complemented by internalisation to overcome transaction costs, such as those pertaining to transport, information, different taxes and tariffs (which differ among countries), and other market imperfections. Although the other two OLI dimensions highlight reasons why firms would move production to a foreign location, they do not give any reason as to why a firm would not simply license a foreign producer to make the item for the parent firm. A MNE could simply provide the technology needed for the production process and the blueprints for the product to a local firm. The concept of internalisation advantages captures the firm-specific motivations for a firm choosing to produce the product within the organisation itself, but in a foreign location. The OLI framework also includes characteristics of the host location as critical aspects of internationalisation.

Generally speaking, in terms of OLI, it has been argued that the engagement of any enterprise in international production will depend on the presence of these three groups of advantages, with variables from all three groups acting interdependently (Dunning, 1993a, 1998; Dunning & Narula, 1996; Narula & Dunning, 2000). Underpinning this approach is the notion that the more ownership-specific advantages an enterprise possesses, the greater is its inducement to internalise and, hence, to compete in other countries (Caves, 1982; Dunning, 1997). Closely related to Dunning’s work, is that of
other scholars who have developed a number of theoretical models to explain firms’
decisions to invest abroad based on the OLI model (Casson, 1987; Ethier & Markusen,
1996; Rugman, 1986; Teece, 1986; Williamson, 1985). These studies have explained a
firm’s decision to internationalise the production process by investing abroad, rather
than licensing across borders, as a rational response to imperfect markets. The location
choice, in these studies, is captured by an ad hoc assumption that downstream
distribution must be located in the destination consumption market. Brainard (1997),
Helpman and Krugman (1985) have combined elements of ownership and location
advantages in several theoretical models where MNEs arise endogenously.

These models can be roughly classified as theories based on vertical firms, horizontal
firms, and the knowledge-capital model of multinational firms (Markusen & Maskus,
1999a, 1999b). Vertical firms separate production activities by the level of capital
intensity, with production of different goods and services being carried out at different
physical locations (Helpman & Krugman, 1985). Although these studies provide
important contributions to the understanding of multinationals’ investment decisions,
theories based on vertical multinationals have failed to account for the existence of
firms replicating the production of the same goods and services in different physical
locations.

Markusen explained this pattern of replicating production by creating a model of
horizontal firms, with firm-level economies of scale that integrate horizontally across
national borders (Markusen, 1984). These horizontal models have been integrated,
along with the existing vertical models of multinational firms, into Markusen’s
knowledge-capital model (Markusen & Venables, 1998). In this model, multinational
firms can produce the same product, or service, in multiple locations (horizontal), or can
geo graphically separate the firm’s headquarters from the production location (vertical).

Although the OLI framework and the horizontal, vertical, knowledge-capital models of
multinationals all remain strong tools for understanding the motivations for MNEs’
investment decisions, they still do not go far enough in answering one of the more
important questions of FDI: Which locations attract FDI? FDI remains a firm-level
decision, but investment locations have differed in their abilities to attract it. Moreover,
the wide variety of determinants in this theoretical model, ranging from possession of
raw materials to government incentives, appears almost tautological and does not provide a sound justification for the relative importance of the different factors (Walkenhorst, 2001). Even though, Dunning (1998) further developed his eclectic paradigm, which attempts to synthesise the determinants of international production, explaining which location-specific factors can influence a firm’s location decision to serve foreign markets by direct investment rather than exports, or some other forms, but did not include some significant factors, such as strategic ones.

While Dunning’s eclectic theory has gained some acceptance as a generic framework to understand a multinational firm’s investment location, it has also been criticised as systematic taxonomy, rather than theory. Cantwell (1995) maintained that it is, rather, an organising paradigm for identifying variables, derived from the different approaches most relevant to explaining the wide range of different environments in which international production has been established. It is not a theory, but a paradigm, or, more precisely, a taxonomy of the various determinants of FDI. Dunning (1993b) also acknowledged that the eclectic paradigm is not a theory of MNE, or FDI, per se, but rather an organisational framework for examining the activities of enterprises engaging in cross-border activities. While it may serve as the broadest framework to date, for most types of multinational activities it is difficult to distinguish which are the most important factors. Moreover, considering company-specific characteristics may be critical to understanding MNEs’ international investment patterns and the eclectic paradigm may insufficiently allow for such firm-specific behavioural differences.

3.2.9 Summary of FDI Theories

The review of the existing literature presents the main theoretical findings and the key contributions by those studies that regard FDI location theory. Each theory has a different focus on the issue of FDI location choice. All these FDI location theories are certainly insightful, but they are all view-specific, and are focused solely on stressing the relevance of certain factors to the detriment of others that may be equally significant. These theories have considered the nature and motivations of FDI flows from different perspectives. According to Dunning (1993), there is no general theory of FDI, with little rationale to seek a single, all-embracing view. As stressed by Graham (1996) and
McCorriston (2000), the established literature on FDI does not present a coherent framework for analysis. Instead, the theory on FDI seems to draw on elements from three distinct branches (Singh & Jun, 1995): First, the theory of international capital markets, which explains financing and risk-sharing arrangements; second, the theory of the firm, which rationalises headquarters location, input choice, and corporate management; and third, the theory of international trade, which describes the geographic distribution of production and sales. These theoretical researches of FDI provide only a generalised rationale for FDI, without explaining variations in investment location. This multidimensionality of FDI analysis has often resulted in empirical tests of models that, either are not comprehensive in their consideration of potential determinants, or have a somewhat eclectic theoretical foundation.

As such, model building and variable selection are carried out on a case-by-case basis, depending on the specific country situation. Clearly, such an approach in FDI makes the development of a general theory of FDI quite difficult. This also means, however, that a study of FDI focusing on a specific country, or region, is significant because of the multidimensionality of FDI theories and investment locations. Thus, the current study on the inland region of China is rather significant because of FDI multidimensionality in the theoretical framework, which also adds to the existing FDI literature.

Therefore, more pertinent to the theme of the present research are Dunning’s eclectic theories and the work of several other scholars who link the motives and type of investments by MNEs with the stage of economic development of the respective host countries (Dunning, 1981, 1986; Dunning & Narula, 1996). Dunning’s eclectic theory has combined various theories in an attempt to understand more fully the nature and motivation of FDI flows and has proven to be a better approach to explaining FDI, as linked to MNEs. This comprehensive analysis framework can avoid the deficiencies in the previous work discussed above and it provides a more comprehensive and precise analysis to explore the determinants of FDI location choice.
3.3 Empirical Research on FDI Location Choice

Following the guidance of FDI theories, relevant empirical studies have been conducted based on these different theoretical frameworks, or the approaches discussed above. Reviewing the main empirical findings of FDI location choice will be helpful in formulating sensible theoretical hypotheses for this study. This will assist in the selection of appropriate variables, data, and proxies to be empirically tested in order to determine FDI location choice in a particular setting. It will further assist by providing an indication of the expected signs and magnitudes of the coefficients of the variables found in the literature. Section 3.3.1 presents an overview of the empirical studies of FDI location choice. The following Section 3.3.2 is divided into two parts. The first part discusses the main empirical studies, excluding studies of FDI location in China, while the second part presents a summary of the empirical studies of FDI location in China to date, as well as categorising the major determinants of FDI location choice at the national level and at the regional level. Building on the review of the major empirical studies of FDI location, related characteristics and patterns are also presented.

3.3.1 Overview of Empirical Studies of FDI Location Choice

A large number of factors has been discussed and analysed as potential determinants of FDI location (Walkenhorst, 2001). The selection of potential determinants for FDI location depends on their analysis framework, data availability, and particularly on the focus of the research. Most research projects are in the empirical setting of developed countries, such as the US and the EU countries, and have confirmed the statistically significant influences of factors such as market size, market growth potential, labour wage rate, industry productivity, agglomeration, investment incentives, and cultural proximity (Barrell & Holland, 2000; Coughlin, Terva, & Arrondee, 1991; Graham, 1999; Head, Ries, & Swenson, 1995; Lipsey, 2001; Luger & Shetty, 1985; Woodward, 1992). The main research findings from this group of studies are presented below.
3.3.2 Empirical Studies of FDI Location Choice

In order to explain FDI and the phenomenon of MNEs, empirical studies and theoretical research started off by being developed as different parts of the same story. Early empirical research was mainly undertaken in the form of field studies with only limited theoretical foundation, as a theory of MNEs did not yet exist. A theory of FDI, or capital movements in general, was developed independently based on a trade theory perspective. As far as empirical studies were concerned, descriptive analysis dominated the field until the 1960s, while econometric analysis started to emerge in the 1960s and early 1970s. In studies based on secondary statistics, various combinations of research set-ups are possible and most empirical studies on the determinants of FDI have previously experimented to find explanations for MNEs' decisions to invest overseas. FDI from a single home country, or a group of home countries, into a single host country, or a group of host countries, can be analysed using time-series, cross-section, or panel data in an aggregated, or disaggregated, form, while determinants of FDI can be macroeconomic factors, microeconomic factors, or a combination of the two.

More specifically, in early empirical studies, typically based on questionnaire surveys, companies were asked to identify their reasons for the initial investment decision. Major contributors analysing FDI in general included Grosse and Behrman (1992), Basi (1963), Kolde (1972), Wilkins (1970). These studies looked at a variety of factors, including market factors, trade barriers, costs factors, and the investment climate. The consensus was that market factors, in particular market size, market growth, and maintenance of market share, but also dissatisfaction with existing market arrangements, were the main determinants of FDI. Nonetheless, cost factors; especially the availability of labour and raw materials, lower labour and/or production costs, and financial inducements by the host government; were seen as equally important in some of the studies. Political stability was the most important determinant of FDI found by Basi (1963), while foreign exchange stability and a positive attitude to foreign investment were other notable factors. Wilkins (1970) found that local competitive threats and lower costs were the predominant reasons for foreign investment when analysing foreign manufacturing plant establishments by US companies before 1900.
Turning to the latest three decades, the vast majority of empirical studies on FDI location choice have focused on developed countries; mostly the US and the EU; as the host country environment (Bagchi-Sen & Wheeler, 1989; Coughlin et al., 1991; Friedman, Gerlowski, & Silberman, 1992; Hill & Munday, 1991; Woodward, 1992). These studies at the national level emphasise determinants such as economic growth and market size, political stability, labour quality and cost, infrastructure quality, taxes and tariffs incentives, and government policy and administration (Ahmed, Mohamad, Tan, & Johnson, 2002; Borgonovo & Peccati, 2006; Lipsey, 2001; Sethi et al., 2003; Wei & Liu, 2001; Wheeler & Mody, 1992), which can influence MNEs to identify which countries to direct their investments towards. Bagchi-Sen and Wheeler (1989) found population size, population growth, and per capita retail sales to be important determinants of the spatial distribution of FDI among metropolitan areas in the US.

Coughlin, Terva and Arromdee (1991) investigated the determinants of FDI location in the US from 1981 to 1983 using a conditional logistical model. They found that states with higher per capita income and a higher density of manufacturing activities attracted relatively more FDI; higher wages deterred FDI, while high unemployment rates attracted FDI; higher tax rates deterred FDI; and more extensive transportation infrastructure and larger promotional expenditures attracted FDI. Almost simultaneously, Wheeler and Mody (1992) examined the location choice of outward FDI by US manufacturing multinationals in 42 countries from 1982 to 1988. They found that agglomeration economies played a dominant role in the location choice of US outward FDI. They also showed that investors prefer good quality infrastructure to tax incentives. Other scholars, such as Mody and Srinivasan (1998), focused on the differences of FDI location of MNEs. They found that during the 1980s, the US and Japanese multinationals were attracted by some similar country characteristics, including low wage inflation, low country risk, good infrastructure, and an educated work force. Both groups of investors were also strongly attracted to locations with significant past investment.

Among the determinants of FDI, investment incentives of FDI location were increasingly emphasised. Hautler and Wooton (1999) analysed tax competition between two countries of unequal size and demonstrated a firm’s preference to locate in a larger market, as well as the link among profit tax, tariffs, and consumption tax. Similarly,
Head, Ries and Swenson (1999) studied Japanese investments between 1980 and 1992 and concluded that unilateral withdrawal of promotions (namely, provision of foreign trade zones, lower taxes, and job creation subsidies) could cause individual countries to lose substantial amounts of their investment. Likewise, Glass and Saggi (2000) also demonstrated that, by reducing its tax on multinational production, a host country can attract additional FDI, some of which is diverted from other host countries, with this shift in FDI able to cause host wages to rise, while wages elsewhere will fall.

The empirical studies discussed above mainly examined the issue at a national level, using macro-economic data. Even though country differences may be important determinants of location as to where MNEs decide to locate their overseas activities, regional distinctions within countries also influence the location choice of FDI, especially in emerging economies such as China and India. These countries have larger landscape and variable regional characteristics, which can make FDI distribution uneven. In fact, in the case of China, regional discrepancies of FDI distribution have attracted academic interest. Such discrepancies imply that there is a unique location choice pattern for FDI at a regional level and that FDI location choice needs to be explored in more depth at a regional level. Arguably, a sub-national level allows for a more detailed theoretical analysis of regional differences and, therefore, may offer more accurate evidence regarding the sensitivity of FDI decisions to locational determinants. In particular, in a single transition economy, sub-national environments can evolve at different rates, leading to considerable variance across regions within national boundaries. Variance across regions within a host country indicate environmental complexity and involves the diversity (scope of economic policies, breadth of governmental authorities, and segments of consumers) and heterogeneity (distinctions among economic policies, incongruence of policies by various governments, and deviations of consumption behaviours among each segment of consumers) of various factors, or issues, in each environmental segment (e.g., macroeconomic, political, and social-cultural) that have an impact on firms’ operations. This environmental complexity is not homogeneous across locations because different regions have varying levels of economic development, governmental authority, policy treatment, and openness to the outside world.
Some empirical studies have moved from a focus on location choice at a cross-national level to the examination of locational determinants at a sub-national level (Coughlin et al., 1991; Friedman et al., 1992; Hill & Munday, 1991; Head et al., 1995; Shaver & Flyer, 2000; Woodward, 1992; Zhou et al., 2002). Similar to national-level studies, studies of sub-national determinants of FDI location have provided inconclusive findings regarding these factors. Regional differences, such as agglomeration effects, local market measures, infrastructure, local market size, local government incentives, the level of economic development, the effect of specific market and regional growth characteristics, and information cost (Coughlin et al., 1991; Dunning, 1998; He, 2002; Head et al., 1995; Wheeler & Mody, 1992) have all been found to influence FDI location decisions. These studies have confirmed the positive and significant effect of market-related factors, while providing inconclusive findings about other factors, such as policy. More detailed analyses on these empirical studies are indicated, as follows.

Woodward (1992) studied Japanese-affiliated manufacturing investments in the US during the 1980s, concluding that investors prefer states with strong markets and low unionisation rates. Focusing on the UK, Hill and Munday (1992) identified market access factors and financial incentives as determinants of the distribution of FDI across the UK. These two studies achieve consensus regarding the critical role of market factors in FDI location at a regional level. With the exception of market factors, Head, Ries and Swenson (1995) examined the location choices of 751 Japanese manufacturing plants built in the US in the 1980s and observed strong agglomeration effects at the industry level. They found that a state’s FDI stock has a positive impact on the FDI it receives in the future. They interpreted the preference of Japanese firms for being located close to other Japanese firms as evidence of the importance of access to intermediate inputs and technological spillovers, rather than of the importance of natural resources, or specialised labour, as the primary determinants of FDI location choice.

In similar findings to those of Woodward (1992), Braunerhjelm and Svensson (1996) also showed that agglomeration, exports, and R&D are important factors affecting Swedish MNEs’ FDI location. Woodward (1992) reported mixed results, however, regarding the effects of policy determinants such as taxes and promotional activities on the location of FDI in the US. He further suggested that policy incentives for FDI have limited influence on FDI location. On the other hand, Hines (1996) compared the
distribution between US states of investment from countries that grant foreign tax credits, to investment from all other countries, to suggest that state taxes significantly affect the pattern of FDI.

In summary, several patterns and characteristics highlighted by these empirical studies have to be further discussed. First, the vast majority of the investigations on FDI location choice focused on developed countries at a national level, being mostly the US and the EU, as the host country environment (Pan, 2003). The main reason for this was that these countries possess distinctive national characteristics, such as economic growth rates and labour costs as well as the availability of skilled labour and technology, which can affect the success of FDI (Lipsey, 2001). Moreover, FDI flows since the 1950s started to boom in these developed countries and, as a result, the major FDI studies were based on the context of these countries. These studies focus on FDI activities in developed countries such as Japan and the US. This means that the conclusions are not entirely applicable to China’s market setting. Second, findings from empirical studies on FDI location choice are not extensive enough, and can even be confusing and conflicting at some times, considering the vast number of empirical studies conducted. This situation is mainly caused by a lack of consensus in the theoretical framework of FDI location choice. The absence of a generally accepted and representative theoretical framework to capture FDI was emphasised by Ioannatos (2003), who argued that this has led researchers to rely on empirical evidence to explain the emergence of FDI.

Although based on experiences in the US and Europe, these empirical findings are undoubtedly useful in offering general guidance for understanding the determinants of FDI location choice for emerging countries such as China. Considering China’s distinctive features, in terms of having a different economic system, a unique history, and an impressive economic growth in FDI activities, the determinants influencing FDI flows to China may be different from the existing factors discussed in the research setting of developed countries and may, therefore, challenge existing research findings. In particular, the economic landscape in China is evolving rapidly, and these changes have had profound effects on existing managerial criterion and the related theories (Meyer, 2004). These environmental changes in China have definitely had an impact on the location preferences of FDI within China. Thus, with the rapid growth and critical
role of China’s economy, more and more research attention has been paid to the
determinants of China’s FDI location since the 1990s. The main research projects on
FDI location in China are discussed in the following section.

3.3.3 Empirical Studies of FDI Location Choice in China

In the context of global competition and free trade, China’s market environment
presents many MNEs with both opportunities and challenges. To date, China has
become one of the most important countries in the world as a FDI destination.
Considering the rapid emergence of FDI in China, numerous studies have been
conducted to explain the determinants of FDI location since the late 1990s (Broadman
& Sun, 1997; Chen, 1996.; Cheng & Kwan, 2000; He, 2002; Ng & Tuan, 2003; Wang
& Swain, 1995; Wei et al., 1999; Wu, 1999; Zhang, 2001). These studies can be broadly
categorised into two groups: Studies at the national level (why foreign firms invest in
China), and studies at the regional level (why a foreign firm chooses a specific region
within China). These two streams of literature are discussed separately in the following
two sub-sections to categorise the factors determining FDI location choice in China at
the national level and at the regional level.

3.3.3.1 Determinants for FDI Location Choice at the National Level

Previous empirical studies of the determinants of FDI inflows to China at the national
level have found that market size, market growth, trade barriers, wages, production
costs, transportation and other costs, political stability, psychic and cultural distance,
and the government’s trade and taxation regulations all affect FDI location choice in
China (Broadman & Sun, 1997; Wang & Swain, 1995; Zhang & Yuk, 1998), but
research methodologies and focuses differed.

Grub et al. (1990) used interviews and a questionnaire to study the motivations of US
firms that invest in China. Among the positive variables, they found that the potential
market size and inexpensive labour were the most important determinants of US
investment in China. It was also found, however, that investment incentives provided by
the Chinese authorities were only moderately significant for US firms in making investment decisions. Among the negative variables, foreign exchange problems (non-convertibility of the currency and multiple exchange rate systems) were most serious for US firms. The cumbersome bureaucracies, as well as the lack of infrastructure facilities, were also serious problems hindering US investment. Finally, swings in economic policies and too many controls over FDI also discouraged US investments.

By aggregating data and using statistical analysis, Wang and Swain (1995) investigated the determinants of FDI from 1979 to 1982. They used dummy variables to capture specific political factors which might have had an important effect on FDI inflows. The independent variables in their model included market size measured by GDP, the growth rate of GDP, wage rates, and imports. Using a single linear regression model, their study confirmed the positive effect of the variable of market size on FDI inflows to China. The wage rate in China was negatively related to FDI, and a negative coefficient was found between imports and FDI. This study was one of the few that applied econometric techniques and statistical methods. It was, however, criticised by Matyas and Korosi (1996) for inconsistencies in its estimate results and its limited level of freedom in the F-test results. Moreover, since there are only 14 observations in Wang and Swain’s regression, the robustness of their statistical findings is dubious.

Market factors in the research of Wang and Swain (1995) were emphasised in other studies, such as that of Zhang and Yuk (1998). They asserted that FDI patterns in China are most likely to be determined by location-specific advantages, such as large market size and low labour cost. Simultaneously, based on a study by the World Bank (Broadman & Sun, 1999), market size and preferential policy were indicated to be the two most important determinants of FDI location in China (Hu & Wang, 1999). Li and Li (1999) clarified, however, that foreign investors with new technology and new management skills were primarily attracted by China’s huge potential domestic market and geared mainly towards long-term strategic considerations, whereas those foreign investors who made investments in labour intensive production geared towards exporting were mainly attracted by China’s cheap labour costs. Most of these studies, including those of Wang and Swain (1995), Hong and Chen (2001) and Zhang (2000), relied, however, on time series data over a relatively short period and, consequently suffered from the problem of too few degrees of freedom.
To increase the degree of freedom in the empirical analysis and remedy the lacuna in methods, Liu and Song (1997) analysed the determinants of FDI inflows into China based on FDI sourced from 22 countries and regions from 1983 to 1994. The tested factors included market size measured by GDP and wage rates. Their study also showed a positive relation between market size of China and FDI inflows, and a negative relation between the wage rate and FDI inflows into China. Simultaneously, Vanhonacker (1997) argued that the increase in FDI was not only attributable to Chinese governmental improvements through economic and social reforms, but was also initiated by MNEs’ strategic motivations and their internal capacities.

As with the study by Liu and Song (1997), the work of Dees (1998) and Wei and Liu (2001) provided evidence that China’s low labour costs and relatively large volumes of exports play an important role in foreign firms’ FDI decisions. They suggested that multinationals relocate certain types of manufacturing operations away from their home bases, or set up new businesses in a host country, to exploit international differences in factor prices. Since labour costs are an important part of total costs, especially in labour intensive manufacturing, the lower the labour costs in a host country, the more attractive the host country is. Zhang (2000) also found that labour costs play a much more significant role in attracting FDI from Hong Kong, than from the US. The study also investigated the relation between the exchange rate and FDI inflows. A real depreciation of the host country’s currency favours the foreign firms’ purchase of the host country’s assets and allows foreign investors to take advantage of relatively inexpensive labour in the host country. Therefore, depreciation is expected to be positively associated with FDI inflows. Wu (1999) also argued, however, that large market size and low labour costs are not unique to China.

In summary, these studies of FDI location in China at the national level have provided very interesting findings and added to the FDI literature. They emphasised the role of factors at the national level in FDI location in China and attempted to compare China’s FDI with that in other countries. Consensus was reached that the important impacting factors of FDI location in China are cost factors, market factors such as market size, and market potential. Policy factors such as investment incentives from the central government, cultural proximity, and macro-economic factors such as exchange rates
were tested, but generated conflicting results. Considering that FDI in China is still in the early stage, many studies are descriptive, with most analysing FDI location in China through the use of macro-economic data and relevant economic theories. With the rapid development of FDI in China, especially since the 1990s, more and more studies have started to explore FDI issues in more depth. More specifically, FDI is unevenly distributed between different regions in China. The lion’s share of the large amount of FDI in China is located in the coastal regions, with the inland regions only gaining a small amount, as discussed in Section 2.3.2 of Chapter 2. Empirical studies of FDI location in China at the regional level are reviewed in the next section.

3.3.3.2 Determinants for FDI Location Choice at the Regional Level

A number of studies have investigated the regional distribution of FDI location in China (Broadman & Sun, 1997; Head, Ries, & Swenson, 1999; Kinoshita, 1997; Sun et al., 2002; Xin & Ni, 1995). Xin and Ni (1995) conducted a survey to rank provinces of China as to those with the best investment environment. They identified eight variables, with the following weightings: Market scale 30%; wage level 20%; educational level 10%; the extent of industrialisation 10%; transport facilities 10%; communication facilities 10%; living environment 5%; and the level of scientific research 5%. Similarly, Kinoshita (1997) examined the data from a special survey conducted by the World Bank in 1992 on 468 firms in 8 cities in China (6 located in coastal provinces and 2 in inland cities). She investigated the possible effects of FDI on improving a firm’s total factor productivity during the 1990–1992 periods. She found no evidence that foreign investment helped increase the productivity growth of local firms via foreign joint ventures, foreign linkages, or the mere presence of foreign firms in the industry. Hence, she concluded that opening up an economy to foreign investment is not sufficient for a country to benefit from foreign technology spillover.

Using multivariate statistical analysis, Head and Ries (1996) estimated a logistical model and studied 931 joint ventures in 54 cities from 1984 to 1991. They intentionally excluded investments by overseas Chinese (Hong Kong, Macau, Singapore, etc.) which would probably have a different set of location determinants due to familial, linguistic, and cultural ties. Their conditional logistical regression shows that cities with good
infrastructure, an established industrial base, and a foreign investment presence are more attractive to investors. By using a panel study using econometric analysis, Broadman and Sun (1997) estimated a FDI location equation, in which the dependent variable is the accumulated FDI of a province. They identified 5 locational advantage factors at the provincial level: Gross national product (GNP); labour costs; human capital; infrastructure; and geographical location (that is, whether it is on the coast). They found GNP to have the most robust impact on FDI location and, with the exception of wages, the other factors having the expected sign.

From a rather different research focus, Branstetter and Feenstra (1999) also explored FDI in China at the provincial level. They used data from 29 provinces over the years from 1984 to 1995 to estimate the structural parameters of the government's welfare function. They aimed to examine the tradeoffs between the benefits of increased trade and FDI against the losses incurred by state-owned enterprises as a result of such liberalisation. Indeed, they found that the government placed much heavier weight on the output of the state-owned enterprises than on consumer welfare, although this preference has declined somewhat over time. They, hence, expressed skepticism on China's joining the WTO.

Similar to this study is a paper by Cheng and Kwan (2000), in which the authors look at data from 29 provinces from 1986 to 1995 and observe the agglomeration effects of foreign capital stock. They emphasised government policy and agglomeration economies, and found that large regional markets, good infrastructure, and preferential policies all positively influenced the location decision of foreign investors in China. They also found a strong self-reinforcing effect of FDI, or agglomeration. Wages and education have either a negative, or an insignificant, effect on FDI location. In conclusion, they predicted relative, but not absolute convergence of regional FDI. Sun, Tong and Yu (2002) further reviewed the previous work regarding the influences on FDI in China and identified 8 important determinants of FDI distribution across different provinces within China. Their summary has some supposition among diverse variables and too many fragmented results. Further, it ignores some determinants regarding the MNEs themselves and their home nations. Simultaneously, Sun (2002) also suggested that preferential policies of local government, regions' openness, the extent of commercialization have positive impact on FDI location. Furthermore, by
using time-series data, Yin and Lu (2004) estimated the effect of central and local government policies on FDI flows in China. They found that policies from Chinese central government have a strong influence on FDI, but those from local authorities have minor or no influence on FDI flows.

Different from most FDI location studies in China is that of Ng and Tuan (2003), who investigated the locational distribution of FDI in an individual province of Guangdong. Their study showed that transaction costs, firm size, and quota effects are all significant in the locational choice of foreign firms. Infrastructure and human capital (or labour quality) are also important determinants of FDI. These empirical findings appear to support and illustrate Krugman’s (1991) view of the validity and formation of a core-peripheral relation. Based on the empirical evidence derived from the second and third China Industrial Censuses, lower intra-regional transaction and transportation costs facilitate industrial concentration. Consequently, the coastal regions have attracted foreign investment not only because of the preferential policies, but also due to their proximity to big export ports (Mei, 2004). A consistent finding of these studies is that foreign firms have a significant preference for investing in the coastal provinces. This is not surprising, as the coastal regions are areas of low information cost and enjoyed preferential treatment during China’s early experimentation with FDI.

In summary, the common regional factors that have been investigated include market factors, agglomeration effects, investment risk, internal factors of investing firms, infrastructure, labour costs and investment incentives, even though the results and approaches are mixed. Most of these studies investigated FDI location choice in China using province-level data and econometric modelling methods. Related findings provide valuable guidelines for both policy-makers and executives of MNEs. Most studies focus on the impact factor analysis of FDI location due to the lack of a relevant theoretical framework. Meantime, because of the broad adoption of archive data, investing firms’ perspective on FDI location choice in China at the regional level is hardly exposed. Table 3.1 indicates the recent literature on FDI location choice (source from the study of Buckley et al. in 2007).
Table 3.1 Main Literature of FDI Location Choice

<table>
<thead>
<tr>
<th>Author(s)</th>
<th>Method</th>
<th>Data and sample</th>
<th>Key variable(s)</th>
<th>Major results</th>
</tr>
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<tbody>
<tr>
<td>Davidson (1980)</td>
<td>Survey</td>
<td>Foreign operations of 180 US multinationals from inception to 1975. Over 13,000 FDI by US MNEs at the time.</td>
<td>Entry frequencies explained by market size, corporate experience, prior presence</td>
<td>Corporate experience affects location decisions in two ways: (1) firms prefer nations in which they are active to those in which they are not, and (2) firms with extensive experience exhibit less preference for near, similar and familiar markets. Markets that others might perceive as less attractive because of high uncertainty levels are given increased priority as the firms experience rises. As firms gain experience, the location of foreign activity will increasingly represent an efficient response to global economic opportunities and conditions.</td>
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<tr>
<td>Barkema et al. (1996)</td>
<td>Panel</td>
<td>225 foreign entries of 13 Dutch firms.</td>
<td>Longevity of foreign entry.</td>
<td>Cultural distance is a prominent factor in foreign entry whenever this involves another firm.</td>
</tr>
<tr>
<td>Burgel and Murray (2000)</td>
<td>Survey</td>
<td>398 export decisions of 246 UK technology-based start-ups.</td>
<td>Entry mode of export.</td>
<td>Direct export or selling through intermediaries. Choice is a trade-off between resources available and support requirements of the customer.</td>
</tr>
<tr>
<td>Mudambi (1998)</td>
<td>Survey</td>
<td>MNEs in West Midlands of UK: 70 valid responses.</td>
<td>Length of duration of operation at a particular location (after accounting for portfolio risk).</td>
<td>Firms with a longer tenure of operations are significantly more likely to invest in any given period.</td>
</tr>
<tr>
<td>Brush et al. (1999)</td>
<td>Survey</td>
<td>209 responses from plant managers of US MNEs.</td>
<td>Contrast of manufacturing strategy: integrated or independent plant versus international strategy: locate home or abroad.</td>
<td>Manufacturing choices benefit from international issues more than vice versa. Managers rank determinants associated with manufacturing strategy higher than those associated with IB.</td>
</tr>
<tr>
<td>Kuenmerle (1999)</td>
<td>Survey</td>
<td>FDI in R&amp;D 32 large MNEs in 4 countries.</td>
<td>Motives for FDI in R&amp;D.</td>
<td>FDI in R&amp;D both to augment knowledge basis and to exploit it. R&amp;D investment at home in multiple sites before venturing abroad.</td>
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<th>Author(s)</th>
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<th>Data and sample</th>
<th>Key variable(s)</th>
<th>Major results</th>
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<tr>
<td>Chung and Alcacer (2002)</td>
<td>Panel</td>
<td>1,784 FDI transactions entering US 1987–1993 from OECD countries. International Trade Administration reports</td>
<td>Knowledge seeking (access technical capabilities in host).</td>
<td>Location within USA – greater market size, lower factor costs, better access to surrounding station and knowledge seeking limited to firms in research-intensive industries – manufacturing firms may seek this not only through laboratories but also through manufacturing facilities.</td>
</tr>
<tr>
<td>Mitra and Goleder (2002)</td>
<td>Panel</td>
<td>19 MNLS with 722 entry operations.</td>
<td>Operations in similar markets on subsequent entry decisions.</td>
<td>Cultural distance from domestic market is not a significant factor. ‘Year-market knowledge’ and economic knowledge have significant effects.</td>
</tr>
<tr>
<td>Henisz and Macher (2004)</td>
<td>Panel</td>
<td>44 semiconductor firms making 69 foreign investments in new manufacturing plants. (1994–2002).</td>
<td>Explanation of foreign investment in new manufacturing facility.</td>
<td>Firms with more advanced technological capabilities more likely to invest in countries with greater technological sophistication but not in politically hazardous countries. Less advanced technology firms more willing to trade off political hazards and technological sophistication. Firms also trade off other own versus other firms’ experience as sources of critical knowledge on foreign investment environments.</td>
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<tr>
<td>Pedersen and Petersen (2004)</td>
<td>Survey</td>
<td>485 firms: 201 Denmark; 168 Sweden; 116 New Zealand.</td>
<td>Familiarity with local markets development over time.</td>
<td>‘Shock effect’ of foreign market entry develops over time (lowest level of market familiarity 8 years after entry), supports ‘psychic distance paradox’ that adjacent countries provide high levels of shock.</td>
</tr>
<tr>
<td>Enright (2005)</td>
<td>Survey</td>
<td>1100 MNE managers in Asia Pacific.</td>
<td>Regional strategies and establishment of regional management centres.</td>
<td>Regional structures are important in Asia-Pacific.</td>
</tr>
<tr>
<td>Cheng (2006)</td>
<td>Survey</td>
<td>466 Taiwanese investors in China.</td>
<td>FDI mode choice (includes brownfield ventures).</td>
<td>FDI mode choice influenced by resources owned by investor, resources specific to host firm and risk. Incorporates brownfield investment as a choice.</td>
</tr>
</tbody>
</table>

Source: Buckley et al. (2007)

3.3.4 Summary of Empirical Studies of FDI Location Choice in China

Despite insights provided by the empirical studies of location determinants of FDI in China mentioned above, there are some significant limitations in the existing studies in this particular literature topic area. First, many analyses examined the spatial distribution of FDI in China only in the early 1990s (e.g., e.g. Broadman & Sun, 1997; Cassidy & Andreoss-O’Callaghan, 2006; Chen, 1996; Head & Ries, 1996; Zhao & Zhu, 2000). These studies may not be able to capture recent changes in location determinants, nor China’s current FDI policy incentives. Moreover, since the early 1980s, a number of studies have investigated location choice issues in China, however, much of this research is descriptive and/or anecdotal (e.g., Beamish & Wang, 1989; Hayter & Han, 1997; Lockett, 1987; Luo, 1999), with few based on statistical methodologies (e.g. Cheng & Kwan, 2000; Zhao & Zhu, 2000).
Second, very few studies investigated FDI determinants in the setting of individual provinces. Moreover, most of the recent studies investigated FDI location using aggregate data and economic theories. Although aggregate data is useful to describe a general trend, they may also disguise the distinctions among different groups of investors, especially when the sources of FDI are greatly diversified. A theoretical framework is lacking in the existing FDI location studies. Furthermore, no particular attention has to date been paid to the distribution of FDI in the inland regions of China.

Third, the empirical results of these studies in China are not conclusive (e.g., De Mello, 1997; Lipsey, 2001; Sun et al., 2002). The role of cost factors on FDI location choice in China at the regional level is still confusing. Chen (1996), who obtained his findings from an empirical investigation covering the sample period of 1987 to 1991, stated that FDI distribution in China at the sub-national level is not influenced by labour cost, although at the country level, low labour cost is identified as an important factor in attracting foreign investment. Another empirical analysis based on data from 1986 to 1995 reveals, however, that wage rates do have an impact on the regional distribution of FDI in China (Wei et al., 1999). Conflicting findings based on a testing period of 1985 to 1995 claim, however, that a negative relation exists between wage costs and FDI regional location (Cheng & Kwan, 2000).

Finally, aggregated data of FDI flows and the OLI modelling method have dominated the existing studies on the location patterns of FDI in China. Nonetheless, the aggregated data and methodology are contradictory to the disaggregated and discrete nature of FDI location. Discrete-choice models, which are well grounded on microeconomic utility maximisation and feasible in terms of rich empirical specifications, will be more likely to provide a powerful tool in revealing location choice by individual firms. The discrete-choice models on location choices of FDI have been well developed and successfully employed in the context of the US (e.g., Coughlin et al., 1991; Coughlin & Segev, 2000b; Friedman et al., 1992; Luger & Shetty, 1985; Woodward, 1992). New insights would be provided by integrating the discrete-choice models into the analyses on location choices of FDI into China. Thus, considering that the research lacuna in the result of previous empirical studies about the determinants of FDI location within China, it is more necessary to theoretically examine the
determinants of FDI location within an inland region of China (as described in Chapter 2). Table 3.2 summarises the main variables of FDI location choice.

**Table 3.2 Main Variables of FDI Location Choice**

<table>
<thead>
<tr>
<th>Variables</th>
<th>Previous studies</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign experience</td>
<td>Andersson et al., 1992; Andersson and Svensson, 1994; Caves and Mehra, 1986; Forsgren, 1984; Larimo, 1993; Barkema and Vermeulen, 1998; Brouthers and Brouthers, 2000; Larimo 1996; Larimo, 1998; Wilson, 1980</td>
</tr>
<tr>
<td>Efficiency of government administration</td>
<td>Sethi et al. (2002)</td>
</tr>
</tbody>
</table>
3.4 Strategic Motivations for FDI

Understanding why firms establish themselves overseas is critical, because the rationale for foreign investment largely underpins the very nature of MNEs and their behaviour. This question is not only theoretically important, but also has critical implications for practice. Different motivations for going abroad require different strategies, and are associated with different capabilities. They also necessitate corresponding organisational structures and processes and different managerial skills. An explicit understanding of the rationale for firms’ foreign investments is also necessary in order to propose adequate policy responses (Farrell, Remes & Schultz, 2004). Investment driven by different motivations is associated with different benefits and costs for the countries involved and requires differing policy responses. With motivations being of such critical importance, for both theory and practice, it is important to understand what motivations may drive FDI location choice.

FDI theorists have long recognised that firms invest overseas for different reasons (Farrell, Remes, & Schultz, 2004). Traditional conceptualisations; which were essentially formulated with reference to firms producing and selling physical products in a world in which the possession of tangible assets was a major source of value creation; focused on the need to access physical assets and markets and to cut costs, as major drivers of foreign expansion (Dunning, 1993a). In response to changes in the internal organisation of MNEs (Cerrato, 2006) and to the growing prevalence of global integration and vertical investments (Caves, 1996), interest in the field has broadened to include efficiency-seeking investments (Kobrin, 2005). With the growing importance of knowledge as the fundamental rationale for the existence of MNEs (Kogut & Zander, 1993; Nachum & Zaheer, 2005), the search for knowledge is now recognised as another major driver of FDI (Chung & Alcacer, 2002; Kuemmerle, 1999; Wesson, 2004). Other researchers have acknowledged that while these motivations are internal to MNEs, under certain circumstances investment decisions are driven by external competitive pressure (Flowers, 1976; Knickerbocker, 1973). In addition, some motives for FDI out of host countries’ concerns could be the expectations for transferring marketing and managerial skills of foreign firms which are particularly attractive for developing countries. Marinov and Marinova (2000) suggested that host country governments hope
that foreign firms could transfer managerial skill, know-how and production techniques to their subsidiaries. In the case of China, central and local government encourage foreign firms to transfer technology, management and marketing skills to their subsidiaries by providing finical incentives. However, as FDI behaviour of MNEs is typically a firm-level decision, foreign firms more consider investment motivations from firms’ perspectives. Drawing on these bodies of theory, the present study confines the analysis to the following major investment motivations identified in the literature: Market seeking; resource seeking; strategic-asset seeking; and efficiency seeking.

3.4.1 Resource-seeking Motivation

The resource-seeking motivation is driven by a need to access resources not available in the home countries of the investing firms, or available only at higher cost than could be obtained in other locations. Cost minimisation considerations and the need to secure sources of supply are the major drivers of this investment motivation. A fundamental assumption underlying the conceptualisation of the resource-seeking motivation has been the immobility of the resources sought (Behrman, 1974; Dunning, 1993b). If a resource can be transported over distance at low cost, it might be more economic to import it than to establish foreign operations in order to access it. Hence, this motivation was found to be influential primarily with reference to physical, tangible resources, which are immobile and costly to transport.

3.4.2 Efficiency-seeking Motivation

Efficiency-seeking investments are driven by the intention to spread value-adding activities geographically in order to take advantage of differences in the availability and costs of factor endowments in different countries. Essentially this is a decision by the MNE on how best to configure its activities internally, in line with the comparative advantage of different locations (Nachum & Zaheer, 2005; Zaheer & Manrakhan, 2001), in order to maximise efficiency and reduce costs. This decision is dependent on the balance between the advantages to be gained by spreading value-added activities in various locations and the cost of communication and coordination over distance,
including transportation costs (Aarland, Davis, Henderson, & Ono, 2003). The spread of activity geographically involves a great deal of coordination and knowledge transfer, which for reasons involving various kinds of market failure, is better carried out internally, rather than externally (Kogut & Zander, 1993; Nachum & Zaheer, 2005).

### 3.4.3 Strategic Asset-seeking Motivation

According to the strategic asset-seeking perspective, FDI has been used as a means for MNCs to tap into, or develop, strategic resources in a foreign market, and exploit such assets as market intelligence, technological know-how, management expertise, and reputation from being established in a prestigious market (Chung & Alcacer, 2002; Dunning, 1998; Kuemmerle, 1999; Wesson, 2004). It emphasizes that FDI is attracted toward centres of innovation located in recipient countries, being in line with resource-based theory, which argues that rival firms compete on the basis of their resources (Barney, 1991; Collis & Montgomery, 1995). In other words, strategic asset-seeking FDI is driven by the firms’ need to access complementary resources, notably various kinds of knowledge, in order to upgrade their own capabilities. Knickerbocker (1973) argued that FDI could be a strategic response to the increased competition in the home country. Clearly, retaining the firm’s competitiveness is a prime concern in the decision to locate and has led to a bandwagon effect in other countries, which may influence related investment projects by other firms in the same field in order to follow in a pioneer’s footsteps. The follower firms might react out of concern that early entrants could gain additional information about a potential market and use their first-mover status as an advantage (Kindleberger, 1969). While considering foreign market entry, follower firms could decide that the best tactic is to imitate the actions of earlier entrants, or role models (Campa & Guillen, 1999). In the context of emerging countries like China, FDI has witnessed a bandwagon effect since MNEs cannot afford to cede new markets to their rivals and they have had to follow them into those emerging markets (Sethi, et al., 2003). Considering that MNCs seek to acquire the assets of foreign companies to promote long-term strategic objectives, strategic asset-seeking occurs mainly in developed countries.
3.4.4 Market-seeking Motivation

Market-seeking investments are undertaken in order to serve particular markets through local production and distribution, rather than by exporting from the home country, or from a third country. Two major reasons are recognised in the literature as driving this type of investment, both of them having to do with market failure of one kind, or another. The first of these is the imposition by host governments of a variety of import barriers on foreign-made goods and services, which raise the costs of servicing a particular market via exports. Although governments increasingly attempt to regulate business activity in information-intensive industries, at least until now, they have been subject to fewer trade restrictions (Kobrin, 2005). Hence, there has been little market failure caused by government intervention in information-intensive industries. Another factor driving market-seeking investment is the reduction of transaction costs, primarily those arising from transportation. Such an impetus applies to products that are costly to transport. The negligible cost of transfer over distance of information-intensive products excludes the need for foreign local presence for this reason.

3.5 Research Opportunities: FDI Location Choice and China

The review of theoretical and empirical studies of FDI location indicates that the question of where multinational enterprises decide to locate their FDI activities is an under-researched area, considering the changing geography of multinational activity (Dunning, 1998) and the rapid evolution of China’s market environment. This environment provides MNEs with both tremendous opportunities and uncertainty. The causation on the impact of host country context and policies on MNE behaviour and FDI flows also deserves further exploration (Dunning, 2001; Ramamurti, 2004). Given that China is the largest emerging and transitional economy in the world, and one of the biggest recipients of FDI in the world, new phenomena in terms of FDI are challenging existing theoretical and empirical findings from developed countries. These phenomena, therefore, need to be explored if there is to be a theoretical framework on determinants of FDI that could be suitable in the setting of China.
Theoretically, many academic studies have explored the determinants of location choice by foreign investors within the US and the EU (e.g., Bartik, 1985; Coughlin et al., 1991; Friedman et al., 1992; Head et al., 1999; Luger & Shetty, 1985; Woodward, 1992). These studies have addressed the process of location choice from both theoretical and empirical perspectives at the national level, but has rarely analysed FDI distribution at a sub-national (i.e., regional) level. In the case of China, even though some studies have focused on the regional choices of foreign investors in China (e.g., Cheng & Kwan, 2000; He, 2002; Head & Ries, 1996), the results generated from these studies show a lack of consensus, with none exploring FDI location within the inland regions. Moreover, the study of FDI location choice within China also needs to be updated over time to reflect the rapid evolution of FDI activities in China.

More specifically, since the end of the 1970s, China has been implementing its economic reforms and opening its doors to the world, with the objective of shifting the economy from being centrally planned, to being market-driven. After a long period of hard work, China has perceived the great changes of its market context (Luo, 1999; Luo & O’Connor, 1998; Pan, 2003), and it is particularly true that many new changes have come after China through its entry into the World Trade Organisation (WTO). As argued by researchers, both the business environments in host countries, and MNEs’ investment strategies have changed drastically (Luo & O’Connor, 1998), with these changes bringing MNEs more opportunities and difficulties in China. These can be explored further to provide new insights in the FDI literature. On the one hand, the market environment in China is typically regarded as one full of complexity, opportunity, and dynamism. From a research perspective, the dynamic Chinese environment offers a rich setting for the examination of a diverse range of issues, and challenges the capabilities of current FDI theory (Luo, 2001; Buckley, 2002; Peng, 2004). On the one hand, this transition changes fundamental managerial assumptions, criteria, and decision-making and, on the other hand, it represents a genuine transformation in the business environment (Luo & Park, 2001; Tan & Litschert, 1994; Zhang et al., 2004). Investment strategies of MNEs in China challenge the mainstream theories of FDI because of the great changes in China’s environment. This is especially the case when regarding the uneven distribution of FDI in China, which is mainly located in the coastal regions of China, and implies the important role of factors at a regional level in determining FDI location within China.
In summary, the current research gaps in the literature can be presented as follows. First, empirical work on FDI and its determinants needs to be explored over time, especially in the research setting of China. As for FDI flows, China is one of the most popular investment destinations in the world. Since 1992, China has been the second largest recipient of FDI worldwide and became the biggest FDI destination in the world in 2002. Since China entered the WTO at the end of 2001, a new round of FDI projects in China has begun. Moreover, FDI flows to China have played a critical role in dramatically improving its economic development. Despite the considerable amount of research that has been undertaken regarding FDI in China, the area of FDI in inland regions of the country has been, to a large extent, overlooked. Since 2001, FDI in China has begun to be attracted into the western regions and new studies need to reflect and explore this phenomenon. Second, the empirical findings on the effect of factors influencing FDI location choice within China lacked consensus in the related theoretical framework. Existing studies of FDI location in China have not paid adequate attention to regional differences across China. Specifically, inland regions of China attract a very small amount of the total FDI flow into China, and this is an area which deserves more research attention.

On the other hand, as shown in the review of the relevant literature, existing studies on FDI location choice are mainly based on macro statistical data and have been conducted at cross-national level, using econometric modelling analysis methods. For these studies, the size of the archival data sets and the longitudinal nature present strong positive points. The perspective of decision-makers of MNEs has, however, been ignored to a large extent. Fundamentally, FDI location choice is an economic phenomenon at a micro, rather than at a macro level. In addition, within a large emerging market like China, firms in different regions often face differing environmental complexities and business practice specificities (Shenkar, 2004), which means that survey data collected directly from MNEs operating within China is better able to reflect a managerial perspective on FDI location choice, and in greater detail. Actually, FDI inflows to particular locations under certain macroeconomic conditions depend largely on the decision-making of executives of the foreign investing firms.
The majority of the existing empirical studies of FDI in China are based on economic methods used by foreign investors, or on case studies of the MNEs’ experience in the transitional environment. Employing open-ended, or ranked-response, questions, survey studies are a better means to gain firm specific information that can be analysed, compared, and generalised to a certain extent to a specific region. Thus, there is a need to explore the issue of FDI location choice using questionnaire surveys, which can reflect managerial perspectives and increase the understanding in the literature. For this reason, this study focuses on new changes to FDI within China, especially in the inland regions (Gansu province is selected as the sample here), in order to determine the important factors that trigger FDI location choice within China. This can serve as a guideline for MNEs seeking more opportunities in China, including those from developing countries. Building on the above discussion of theoretical and empirical analysis of FDI location determinants, a proposed conceptual framework and related hypotheses regarding the determinants of FDI location choice in the inland region of China are presented in the following chapter.
CHAPTER 4 CONCEPTUAL FRAMEWORK AND HYPOTHESIS FORMATION

4.1 Introduction

This chapter proposes the conceptual framework and theoretical hypotheses to fill the relevant research gaps identified in Chapter 3. Based on the existing approaches to FDI location decision and the analysis of the relevant FDI literature, the theoretical framework for this study is formulated mainly through the integration of two theoretical constructs of eclectic paradigm and strategic investment motivations. Following this conceptual framework, research hypotheses are developed to test the validity of the framework and to identify the determining factors impacting FDI location choice in the particular setting of the study. Research results regarding FDI location choice in the research setting of developed countries, and specifically in China, have been helpful in forming sensible theoretical hypotheses for this study. Related factors determining FDI location choice in the inland region of China (in the case of Gansu province) are drawn upon based on the theoretical and empirical analysis discussion, which include ownership, location, internalisation factors, and strategic investment motivation factors. Section 4.2 proposes the conceptual framework for this study. Then, associated with this conceptual framework, 12 hypotheses are developed and categorised according to the 4 perspectives of O-, L-, and I- advantages and strategic investment motivations in Section 4.2, which will be empirically tested in the present study.

4.2 Conceptual Framework of FDI Location Choice

4.2.1 Existing Approaches for the Study of FDI Location Choice

A variety of theoretical approaches have been used to explain FDI location choice and a wide range of factors have been experimented with in empirical studies in order to identify the determinants of FDI location choice. In the existing literature, at least eight different theoretical approaches to explaining FDI as the location decision of MNEs can
be distinguished. They are the: (1) Approach based on the neoclassical trade theory and the Heckscher-Ohlin model, in which capital moves across countries owing to differences in capital returns; (2) approach of ownership advantages of FDI (including monopolistic advantages and internalisation theory), based on imperfect competition models and the view that MNEs are firms with market power; (3) Dunning’s OLI framework, which brought together traditional trade economics, ownership advantages, and internalisation theory; (4) FDI location approach, according to the horizontal FDI model, or proximity-concentration hypothesis; (5) approach according to the vertical FDI model, factor-proportions hypothesis, or the theory of international fragmentation; (6) approach according to the knowledge capital model; (7) approach according to the diversified FDI and risk diversification model; and (8) approach based on policy variables when FDI is seen as the result of a bargaining process between MNEs and governments.

There are also some additional individual models that are difficult to characterise in any of these approaches. For example, Gopinath, Pick and Vasavada (1999), drawing on earlier work by Barrell and Pain (1996), present a structural framework of FDI that they then transform into a regression model. Nevertheless, their analysis is centred on derived-factor demand, which might lead to the omission of other potentially important variables, such as market size, or firm-specific factors. Markusen and Venables (2000) developed a monopolistic competition model that includes positive trade costs to demonstrate how the presence of trade costs changes patterns of trade and creates incentives for factor mobility, leading to agglomeration of activity in a single country, thereby generating multinationals. Generally, these different theoretical approaches do not necessarily replace each other, albeit that they explain different aspects of the same phenomenon. From each of the theories discussed, a number of determinants can be extracted and these support pertinent theoretical hypotheses.

Drawn from existing theoretical approaches and literature analysis, a conceptual framework is formulated in this study as an analytical foundation for the thesis in addressing the central research question of the study. The framework is an integration of OLI eclectic paradigm and perspective on strategic investment motivations. This integration is not, however, a simple adaptation of these two theoretical components. The present study adopts a holistic, rather than a segmented, perspective on the issue of
FDI location choice. It aims to include and examine all the factors which potentially have an impact on FDI location choice by MNEs. Therefore, in addressing the central research question for this study, an analytical framework with the capability to provide comprehensive coverage over all the potential determining factors for FDI location choice, is required.

4.2.2 Approach of Eclectic Paradigm

Among the various existing theoretical approaches, the eclectic paradigm suggested by Dunning integrates the main FDI location theories and is a holistic and dynamic framework for studies of FDI location choice (Dunning & Robson, 1987; Estrella Tolentino, 2001). Generally, the basis of this conceptual framework lies in the theoretical and empirical research conducted by Dunning (1979, 1980, 1988, 1997), which is rather prevailing in FDI academia and one of the first rigorous attempts to understand, from an integrative and general point of view, the determinants that drive MNEs to undertake FDI in host countries. The proponents of eclectic theory affirm that the propensity of a firm to engage in international production through FDI in different host countries is strongly linked to the possession of three specific types of advantage: location, ownership, and internalisation. FDI will take place when the three kinds of advantages come together. More specifically, it is argued that the engagement of any enterprise in international production will usually depend on the presence of these three groups of advantages, with each group of variables of these three groups acting interdependently (Dunning, 1993a, 1998; Narula, 1996; Narula & Dunning, 2000).

The eclectic paradigm is one of the most enduring approaches in international business today. It is difficult to find a major area of FDI activities that has been unaffected, either directly or indirectly, by Dunning’s articulation of the nature of multinational enterprise (MNE) production and the factors affecting the distribution of MNE activity. OLI paradigm is often used to explain why a MNE would choose to invest in a particular host country. The present study focuses on FDI location choice in an inland region of China. For this particular research setting, the eclectic paradigm can also be used to explain why foreign investors would choose to invest in a specific location within a particular host country. The reasons for this are as follows: First, Dunning’s eclectic
paradigm allows for further theoretical extension, because Dunning’s eclectic paradigm per se is a composite of the main FDI theories and it provides a valid cornerstone for FDI literature to bring forth further theoretical development over time (Cantwell, 1995; Dunning, 2001; Stoian & Filippaios, 2008); second, factors from various theoretical perspectives can be incorporated and categorised into the eclectic paradigm. Actually, the structuring of the impacting factors in the eclectic paradigm underlying the choice of production location and internalisation of intermediate product transactions has laid the foundation for much of the research conducted over the last three decades on the distribution and character of the global operations of multinational corporations; and last, but not least, the development of global FDI, especially FDI in China, is challenging existing FDI theories built in the setting of developed countries and before the 1980s (Meyer, 2004), with the need to re-examine these theories over time. New insights can further test existing theoretical frameworks and extend possible theoretical developments. New conceptual frameworks can be sequentially developed to reflect the theoretical and practical need in FDI studies.

The OLI eclectic paradigm has been regarded as the most influential framework for empirical investigation of the determinants of FDI location choice, despite its several limitations, some of which were acknowledged by Dunning (2001) himself. The eclectic paradigm provides a rich and robust framework for analysing and explaining the determinants of international production and how the situation varies between firms, industries, and countries over time. More particularly, this paradigm provides a powerful tool for the understanding of a wide variety of factors determining FDI location choice. By using this framework, new determinants can be freely invented to describe a particular case of FDI, as long as they fall under one of the three headings. In addition, the eclectic paradigm of OLI facilitates comparison between different theories by establishing the common ground between various approaches and by clarifying the specific questions theorists have posed, as well as the different levels of analysis. Thus, the OLI approach has been taken as the major theoretical construct in the formulation of the conceptual framework for this study, given the integrative nature of the approach.

Empirically, ownership advantages are specific to the investing firm, and they are related to the extent to which it possesses a set of internal factors, or resources, and capabilities that its competitors (or potential competitors) lack. R&D intensity, firm size,
and international experience denote foreign firms’ ownership advantages in the present study. More detail of the theoretical discussion and empirical evidence variables determining FDI location choice are presented in the next section of this chapter.

Similarly, internalisation advantages stem from the existence of market imperfections and the different transaction costs associated with the different ways of accessing international markets; exporting, contracting, or FDI. Meantime, it is also important to recognise that, although the possession of such ownership specific and internalisation advantages is a necessary condition for achieving a better international competitive position, it is not sufficient for ensuring the potential success of investment decisions in foreign countries, especially in an emerging country such as China (Dunning, 1980, 1988, 1998; Campa & Guillén, 1999; Meyer, 2004). Investment risk is used as a variable in the present study to investigate the role of internationalisation factors.

Finally, location factors, which define the degree of attractiveness of a group of host countries with respect to the investment decisions carried out by MNEs, are one of the basic categories of determinants that should be taken into consideration. Location advantages arise from favourable conditions possessed by countries receiving FDI. These advantages are usually linked to economic, technological, infrastructural, political, legal, social, and cultural factors in the host countries. Underpinning this approach is the notion that the more ownership-specific advantages an enterprise possesses, the greater is its inducement to internalise and, hence, to compete in other countries (Caves, 1982; Dunning 1993a; 1998; Campa & Guillén, 1999). Many empirical studies have found strong support for Dunning’s eclectic theory, even though most studies focus on the factors at a national level (Adam & Filippaios, 2007; Agarwal & Ramaswami, 1992; Dunning, 1980; Makino, Lau, & Yeh, 2002). In this study, the determinants at the regional level will be and identified and explored, including cost factors, market size, market potential, investment incentives, culture distance, infrastructure, and agglomeration.

Due to its generality, however, the OLI paradigm has only limited power to explain specific kinds of foreign production, or the behaviour of certain enterprises (Dunning, 2001), unless the framework is applied to a predefined specific context. Indeed, the OLI paradigm is context specific and, in particular, its configuration is likely to vary across
firms, regions, or countries, and across industries, or value-added activities. Furthermore, its applicability is likely to depend on the motivations for FDI (Dunning, 2001). Thus, the construct of strategic investment motivations is needed for the formation of the conceptual framework. To accommodate for this generality, the present study also clearly specifies the particular research context in a poor inland province of China; Gansu province.

4.2.3 Approach of Strategic Investment Motivations

It has been long suggested that the eclectic paradigm needs to be further developed and improved, because this theoretical approach only provided a generalised rationale for FDI inflows given the nature of its generality (Hill & Munday, 1991). Strategic investment motivations are taken as the other major component part of the conceptual framework. For foreign firms, their strategic-motivational factors play a critical role in FDI behaviour (Kennedy & Sandler, 1997; Trevino & Grosse, 2002; Trevino & Mixon, 2004). The importance of investment motivations for MNEs on FDI location has been largely ignored by previous studies, but may be crucial in influencing firms’ location decisions, as suggested by some researchers (e.g., Kogut, 2000). Generally speaking, the three perspectives of ownership, locational, and internalisation advantages respectively reflect the aspects of where, why and how in regards to the issue of FDI location choice. In the present study, the perspective of strategic motivations is added to the eclectic paradigm to form a new conceptual framework. Theoretically strategic factors mainly reflect the aspect of what; that is, what are the intentions of MNEs. On the other hand, from the combined standpoint of MNEs and FDI theory, exploiting and obtaining firms’ strategic objectives consists of the primary motivations for MNEs’ increasing engagement in FDI activities abroad (Chandprapalert, 2000; Dunning, 2001). By incorporating the strategic-motivation perspective into the eclectic paradigm, this study will be able to add new theoretical insights to the issue of FDI location choice. Thus, the proposed conceptual framework of the study includes four perspectives of FDI location choice, including the perspectives of ownership, locational, and internalisation advantages from the eclectic paradigm, as well as the perspective of strategic investment motivations.
Theoretically, different motivations stand behind different location decisions of investing firms. A motivation for FDI refers to the reason that gives an investing firm the impetus to invest abroad. Firms engage in foreign direct investment because they are motivated and have the capability to do so. As reviewed earlier, the literature has identified four major types of motivation which drive firms’ foreign FDI activities. As classified by researchers (Markusen & Venables, 2000; Dunning, 1993a), the four categories of motivations are market-seeking, resource-seeking, efficiency-seeking, and strategic-asset seeking. Surprisingly, so far no study has been undertaken to empirically analyse OLI variables with strategic motivations in order to understand investors’ FDI location choices. Mortimore (2003), building on Dunning’s work (2001), argued that the relative importance of location specific determinants depends on TNC motivations for investing. Despite the increased interest in FDI, very few studies (Chandrapapalert, 2000; Vyas, 2000) have attempted to empirically analyse the influential OLI variables together with strategic motives in order to analyse FDI choices among foreign investors. As suggested by Tahir and Larimo (2004), empirical evidence regarding the influence of these strategic motivations on FDI location choice has remained anecdotal.

4.2.4 Formulation of the Conceptual Framework

Through integrating the perspective of strategic investment motivations with the three perspectives of OLI advantages, the eclectic paradigm will be expanded to include the perspective of strategic investment motivations. This new structure of four perspectives on FDI location choice is able to include the motivation factors of investing firms and provide a more comprehensive coverage of all the potential determining factors impacting FDI location choice, thus, enriching the knowledge of FDI location choice in general. Therefore, by combining the two theoretical constructs of strategic investment motivations and the eclectic paradigm, the present study proposes a new conceptual framework regarding FDI location choice and, thus, contributes to the literature of international business. Moreover, the present study also presents a new perspective by focusing on firm-based empirical investigation in the research setting of an inland province, where the market conditions are very different from those in the coastal areas in China, which have dominated past research attention.
A combination of the two theoretical constructs of the eclectic paradigm and FDI strategic motivations result in a new analytic framework to address FDI location choice and, thus, enrich the knowledge of FDI in general. Thus, the theoretical framework of this study is based on a combination of four sets of factors; location, internalisation, ownership, and strategic motivations. The proposed theoretical framework is constructed through the integration of the two constructs of the eclectic paradigm and strategic investment motivations, and is illustrated in Figure 4.1

**Figure 4.1 The Conceptual Framework of the Study**

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Ownership-specific advantages (O) are firm-specific assets that are reflected in the firm’s size, multinational experience, and skills, and through the firm’s ability to develop differentiated products (Dunning, 1981). Ownership-specific advantages need to be both unique and sustainable in order to provide the firms with competitive
advantage in FDI choices (Brouthers & Brouthers, 2003). Location-specific advantages (L) are essential in determining where firms will engage in cross-border value-adding activities (Dunning, 1993a). The level of location-specific advantages may also be expected to influence the ownership strategies chosen by the investing firm. The internal advantage comprises the internalisation advantages (I) that a company has in transferring assets within their own organisations, instead of via the market, due to market failures (Dunning, 1993a). The greater the perceived costs of transactional market failure, and the greater the benefits of circumventing market failure, the more likely the company will be to exploit its ownership-specific advantages within the firm, and the greater the degree of ownership it will prefer in its FDI. The strategic-specific factors (S) are strategic motivations that drive MNEs to conduct FDI activities abroad. Even though MNEs have location advantages, ownership advantages, and internal advantages, FDI location choice has to match with, and achieve, MNEs’ strategic objectives with related investment motivations. Thus, strategic motivations are incorporating into the OLI framework, as a new theoretical construct.

The conceptual framework aims to provide comprehensive coverage of all potential factors impacting FDI location choice by MNEs. This framework is to be tested in this study in the research setting of the Chinese inland region of Gansu. As discussed previously, little research has been carried out on the FDI behaviour of foreign firms in China at a regional level, and even less in the inland regions of the country. Empirical findings are extremely limited, or even non-existent on the question of whether or not variables on location choice identified by previous studies are also valid in the Chinese setting, and how the discussed strategic motivations influence location choice in the inland regions of China.

4.3 Hypotheses

Twelve main variables and one control variable are incorporated into the conceptual framework (in Figure 4.1), as the potential determining factors having an impact on FDI location choice in Gansu by foreign investing firms. To establish the testability of the framework, hypotheses are developed based on the twelve variables, and are stated under a \textit{ceteris paribus} situation. The development of hypotheses regarding the
variables from Dunning’s eclectic paradigm and the studies of FDI motivation is discussed in detail in this section, together with a discussion of the control variables in this study.

### 4.3.1 Factors from Ownership Advantages

Ownership advantages are specific to a particular company and are related to the accumulation of tangible and intangible assets, technological capacity, or product innovations. Most empirical studies have concentrated upon the ownership advantages of FDI location determinants. Based on relevant empirical studies of FDI location (Coughlin & Segev, 2000; Coughlin et al., 1991; He, 2002; Ng & Tuan, 2003; Wei et al., 1999; Woodward, 1992; Zhang, 2001), firm size and international experience are used as independent variables in the present study to indicate foreign investing firms’ ownership advantages. Correspondingly, two hypotheses regarding the ownership advantages of investing firms are proposed for testing in the present study.

#### 4.3.1.1 Firm Size

In FDI literature, firm size of MNEs has been found to exert a significant influence on MNEs’ investment location choice, as a large size often enhances their ability to enjoy economies of scale and scope, and to invest in advanced technologies (Kogut & Singh, 1988). Firm size, indicating firm-specific advantages and resources, should be positively correlated with a firm’s FDI activities. FDI usually requires a large investment in obtaining information, and setting up foreign operations and foreign firms. While facing these cost disadvantages, MNEs have to compete with local firms. Large firms seem to be more capable of absorbing the costs and risks involved, and to possess more advantages to offset this disadvantageous position (Buckley & Casson, 1976; Luo, 1998).

Theoretically, firm size represents major advantages, as well as resources available to a firm going abroad. From a resource-based perspective, firm size is an essential resource leading to high profitability (Chan, 2005). The importance of firm size in facilitating the
procurement of natural resources rests in two areas. First, thanks to substantial purchasing capacities, large multinationals are more capable of playing one local resource owner against another and winning a propitious position in acquiring natural resources. Second, strong bargaining power renders large multinationals more capable of coping with political issues and better able to haggle effectively for desired arrangements without relying on local partners. Firm size has been acknowledged as one of the most effective instruments available to large multinationals in international business negotiations. Researchers have implicitly conceived firm size as a marker of a firm’s bargaining power (Tseng, 2007). Therefore, it is less imperative for large-scale multinationals to undertake a risk-reduction-seeking FDI activity.

Furthermore, FDI venturing, unlike exporting, requires substantial financial, as well as managerial, resources. As emphasized in previous studies (Capron, 2004; Gomescasseres, 1990; Li & Guisinger, 1992; Loree & Guisinger, 1995; Taylor et al., 2000), large firms are more willing to undertake the risks and costs associated with FDI projects in distant and unfamiliar markets, due to their larger resource base. From the production perspective, it has traditionally been argued that production units are thought to be located where the marginal costs of production are lowest. It is considered much easier for a large business to organise its production structure in such a way that it can exploit the benefits of economies of scale in production, which can then lead to higher efficiency gains, lower marginal costs of production, and larger market share.

Results from previous empirical studies (Mutinelli & Piscitello, 1997) have also indicated that large firms often have a large resource base and, therefore, better possibilities to undertake FDIs. Wignaraja (2002) further argued that firm size can, among other things, facilitate firms’ location choice and lead to improved strategic performance. Other empirical studies also indicate that firm size, either measured by total sales, or total assets, is probably the most important determinant of FDI decisions, whereas other firms’ attributes could be subordinate to firm size (Buckley & Casson, 1976; Chen, 1996; Cheng, 2006; Kinoshita, 1998).

In the case of China, the majority of the previous studies adopted archival data to explore FDI flows (Pan, 2003), making it difficult for them to collect data on firm size at the micro level, which means that there is a lack of attention to firm size. Here a
hypothesis is developed to explore the role of firm size FDI location choice by MNEs in the case of Gansu province.

Hypothesis 1: Firm size positively influences FDI location choice in the inland region of China.

4.3.1.2 Investment Experience

Geographic expansion into host-country markets imposes demands on firms in terms of required skills that are different from their current possessions of resources, or capabilities. It is often thought that firms accumulate the necessary skills to facilitate market entry via their previous experience of operating in a given foreign market, or in other foreign markets (Barkema, 1998). Greater host-country experience helps to develop capabilities for multinational expansions, by reducing the overall liability of foreignness; whether defined in social, economic, or political dimensions (Zaheer, 2000). Due to exposure to international operations, a firm’s organisational structure and its information-gathering and -assessing systems are likely to be changed in order to adapt to this new challenge. This change, while caused by operations in certain countries, will have an impact on the firm’s operations in these countries. Several studies have pointed out that prior investments in one country have a positive impact on later investments in other countries (Davidson, 1980; Johanson & Vahlne, 2001; Johanson & Wiedersheim-Paul, 1975).

Practically, investment experience is particularly crucial for MNEs in understanding the operating environment of an emerging economy such as China (Luo, 1999; Meyer, 2006). It is generally believed that a firm with more experience of a particular location is more likely to invest there than a firm with less experience (Kogut & Zander, 1993), because increased knowledge of MNEs regarding a foreign country reduces both the costs and the uncertainty of operating in a foreign market (Buckley, 1985). Moreover, related to knowledge is experience, which is thought to provide important tangible and intangible advantages (Gilmore, O'Donnell, Carson, & Cummins, 2003; Gresser & Gaskell, 1993; Porcano, 1993).
Empirical studies have also proven that host-country experience and more general international expansion capabilities, developed through a sequence of overseas investments, indeed influenced firms’ decisions regarding subsequent foreign investments (Chang & Rosenzweig, 2001; Henisz & Macher, 2004; Kogut, 2000; Zhang et al., 2007). The length of operations, or time-based experience, in a host country is an important source of organisational learning for MNEs (Luo, 1999; Shenkar, 2004). This factor was, however, ignored in the existing FDI studies. Pan (2003) stated that firm-level factors, such as firms’ international experience in a foreign market and business strategies, are usually missing from existing empirical studies of FDI location choice. Thus, the hypothesis on investment experience is proposed and a positive link between the international operational experience of a MNE and FDI location is expected.

*Hypothesis 2: International operations experience positively influences FDI inflows in the inland region of China.*

### 4.3.2 Factors from Location Advantages

Location advantages are those factors that are present in the particular geographical area chosen by a MNE for FDI. Locational advantages have been widely considered by scholars as an important external dimension in bringing about the success of business operations in the host country. In empirical examinations of the locational dimension of advantages, factors, and decisions, the foreign investor is viewed as a profit maximiser who selects a particular location (such as a country, state, province, or a rural, or urban, area) if the location provides lower costs, or higher revenue, relative to other choices. Dunning (1993a) listed the following location-specific variables: Spatial distribution of natural and created resource endowments and markets; input prices, quality, and productivity (e.g., labour, energy, materials, components, and semi-finished products); international transport and communication costs; investment incentives and disincentives; social and infrastructure provisions (commercial, legal, educational, transport, and communications); cross-country differences in ideology, language, culture, business practice, and political systems; economies resulting from centralisation of research and development (R&D), production, and marketing; and economic systems and governmental strategies (the institutional framework for resource allocation).
A number of factors in locational advantages have been examined in the FDI literature, including taxes and promotional incentives offered by national and/or local governments, the quality of the local infrastructure, the quality and availability of local labour, local market characteristics, and agglomeration effects (Coughlin et al., 1991; Hill & Munday, 1991; Luo, 1999; Zhang et al., 2004). The vast majority of the existing studies are, however, statistical data-based investigations, with a focus on FDI location choice at the national level. In the case of China, the most commonly tested factors include market size, infrastructure development, labour costs, labour quality, exchange rates, degrees of openness, levels of foreign investment, levels of research and development (R&D), and country risk (Chen, 1996; Cheng & Kwan, 2000; Head & Ries, 1996; Zhao & Zhu, 2000). These studies are mainly based on cross-province analysis using econometric modelling methods, and the results are not consistent. This inconsistency in the results is mainly due to the difficulty in collecting comprehensive and reliable empirical data and a lack of consensus in the existing conceptual frameworks. Moreover, while modelling the effects of these locational determinants, existing empirical studies have not explained why particular regions within China are chosen as research sites in FDI location choice. In addition, no empirical study has focused on provinces in the inland regions of China. Thus, determinants of FDI location choice in the setting of China’s inland regions deserve close research attention. Based on the relevant empirical studies of FDI location choice, (Coughlin et al., 1991; He, 2002; Ng & Tuan, 2003; Smith & Florida, 1994; Wei et al., 1999; Woodward, 1992; Zhang, 2001), six variables; the cost factor, the market factor, investment incentives, cultural distance, infrastructure, and agglomeration; are selected to represent locational advantages, and corresponding hypotheses are developed.

4.3.2.1 Cost Factor

According to the classical theory of international divisions of labour, FDI is a vehicle for firms to maximise profits by locating their functions in different geographical areas. Under this profit-maximising objective, a firm will deploy its value-chain activity in a location that allows it to minimise costs. Vernon (1966) indicated that the availability of less expensive inputs in a host country is an essential determinant for moving
production capacity abroad. Practically, cost factors primarily consist of transportation costs, labour costs, and labour quality.

Foreign investors tend to display sensitivity to inter-country variations in labour costs when making their choice as to a host country. A major motivation for FDI is to lower production costs through the utilisation of low cost factors of production in the host country (Chen, 1996). Previous studies found that labour costs often account for a large proportion of the total costs in foreign operations (Bajo-Rubio & Sosvilla-Rivero, 1994; Hatzius, 2000). Bellak (2008) also argued that US investments and Japanese investments in Ireland were mainly made on cost-minimisation and tariff-free market access.

Labour costs constitute a substantial proportion of total production costs. Labour costs sway investment location decisions, particularly for firms in labour-intensive industries. Foreign production is more likely to occur when production costs are lower abroad than at home. In certain studies, and in line with the conventional wisdom, higher labour cost is found to be a deterrent to FDI (Belderbos & Sleuwaegen, 2005; Cheng & Kwan, 2000; Coughlin & Segev, 2000; Fung et al., 2002; Tahir & Larimo, 2004; Wei & Liu, 2001). Based on empirical findings, Rolfe and White (1992) and London and Ross (2004), also argued that low labour costs may create an opportunity to achieve plant-level economies of scale, higher production efficiency, and lower marginal costs of production, which in turn can lead to larger market share. Sethi, Guisinger, Phelan, and Berg (2003) empirically examined FDI from the US into western European and Asian countries over a twenty-year period from 1981 to 2000, finding that MNEs made significant investments in order to take advantage of the lower wage levels in those parts of the world.

On the other hand, as pointed out by Lipsey (2001), many studies (Hill & Munday, 1991; Wheeler & Mody, 1992) have shown no evidence that low wages, associated with low per capital real income, were the main attraction for FDI. This is probably because higher wages tend to be a reflection of a higher level for labour quality. Labour quality is also an important determinant of FDI and is more significant for a host country where more capital- and technology-intensive investment projects are concentrated. Some studies have reported that higher wages reflect a more productive workforce and, as
such, are associated with increased foreign investment (Dunning, 1981; Gilmore et al., 2003). As higher wages indicate higher productivity, industries in which the quality of labour is important, such as those with significant research and development (R&D) expenses, prefer high-quality labour, even when it is at a higher cost, to cheap labour with low productivity. This positive relation between labour costs and FDI inflows is supported by empirical studies (Love & Lage-Hidalgo, 2000; Moore, 1993; Schneider & Frey, 1985).

A reduction in transportation costs is a major consideration for locating operations in a foreign market (Buckley, 1990; Demirbag, Tatoglu, & Glaister, 2007). Generally, the investor’s home country is often the source of product components and the market for the finished products. Due to this two-way flow of goods, transportation costs can be a concern for MNEs. Regions with developed infrastructures and high-quality labour tend to be more attractive for foreign investors, since they promote profitability in the international production. High transportation costs result in an increase in delivery costs. This negative relation between transportation costs and FDI propensity holds if the firm’s products are sold to customers in the target market.

In the case of China, it has been reported that the effects of labour costs on FDI location choice are divided. This discrepancy appears across methodological boundaries and, therefore, an issue arises around the independence of specific methods used in the analyses. Fu (2000) modified effective wages into effective industrial wages and identified a negative correlation between labour costs and FDI inflows at the provincial level in China. Sun, Tong and Yu (2002) provided empirical evidence showing that wages were positively related to FDI before 1991, but negatively related to FDI since 1991. On the other hand, the role of labour costs in FDI location varies with the variables of the country of origin. Zhang (2000) found that the variable of labour costs plays a much more significant role in location choice for FDI from Hong Kong than it does for FDI from the US. Linking the variable of low labour costs to export-oriented FDI, Liu and Song (1997), Dees (1998) and Wei and Liu (2001) provided evidence to show that China’s low labour costs and relatively large volumes of exports play an important role in foreign firms’ FDI decisions. Multinationals relocate certain types of manufacturing operations away from their home bases, or set up a new business in a host country, to exploit international differences in factor prices. Since labour costs are
an important part of total costs, especially in labour intensive manufacturing, the lower
the labour costs in a host country, the more attractive the host country is.

Empirical studies on the effect of labour costs on FDI location in China have provided
conflicting findings. Chen (1996), Head and Ries (1996), and Broadman and Sun (1997)
suggested a statistically insignificant correlation between the geographic distribution of
FDI inflows and labour costs. Using regression analysis and a sample period of 1987 to
1991, the study by Chen (1996) showed that FDI regional location choice is not
influenced by considerations of labour cost. On the other hand, Zhao and Zhu (2000)
identified a positive correlation between high labour costs and FDI attraction. Efforts
have been made to reconcile these conflicting results in terms of the role of labour costs
in attracting FDI within China. Zhao and Zhu (2000) pointed out that absolute wage
levels can be a misleading indicator of labour costs, because they may be associated
with differing levels of labour productivity. That is to say, a higher wage level could be
interpreted either as a sign of high labour costs, or as an indicator of a skilled and high-
quality labour force. Following this argument, Cassidy and Andreosso-O’Callaghan
(2006) and Wei et al. (1999) controlled for different labour productivity levels by using
so-called effective wages. Effective wages, which are average wages divided by labour
productivity, are the unit labour price that is normalised by labour productivity. After
doing so, these empirical studies concluded that foreign investors avoid Chinese
provinces with higher effective wages.

Empirical studies have also been conducted on the importance of labour quality in FDI
location decisions in China. A positive effect has been identified by the majority of the
studies, with the exception of that by Cheng and Kwan (2000), in which a positive, but
statistically insignificant, relation was found. Zhao and Zhu (2000) found that sound
quality of labour is a significant determinant of FDI, irrespective of its country-of-
origin. He (2001) further found that foreign investors choose Chinese provinces with
higher effective wages. This positive relation between effective wages and FDI
attraction is significantly strong even when agglomeration economies of FDI are
controlled for. He (2001) hypothesised that superior labour quality associated with high
effective wages would be a potential explanation for the positive correlation. By
spatially locating in high-wage areas, foreign investors would tap into larger pools of
high-quality labour forces. Furthermore, Cheng (2006) empirically tested this high
labour quality hypothesis and found that high labour quality does, to a large extent, explain the positive correlation between effective wages and FDI attraction in China.

In summary, cost factors have been widely used as explanatory variables in empirical studies of FDI location, with a range of different measures being used in the literature, including transportation costs, labour costs, and labour quality. The tested hypotheses have varied, and have, on occasion, been competing. In the earlier studies, low labour costs associated with unskilled labour were seen as being attractive to FDI, particularly to export-oriented, labour intensive assembly activities. More recent studies have stressed the quality of human capital, as measured by educational attainment, or health status. The empirical evidence on the influence of cost variables is not clear-cut, and in a number of studies it has been found to be either statistically insignificant, or appearing with the wrong sign in regression equations (Altomonte, 2000). Thus, considering the results regarding cost factor in the previous studies discussed above, a hypothesis regarding the effect of the cost factor on FDI location choice can be proposed as follows:

_Hypothesis 3: The cost factor negatively influences FDI inflows in the inland region of China._

4.3.2.2 Market Factor

The market factor includes two aspects; the market size, and the market potential of the local region. Market size is a key consideration in the FDI location decision. As the demand in the host country grows to a size that permits local production to be more cost-effective, foreign firms prefer to serve the market by FDI into exports (Vernon, 1966). Moreover, a large market size also provides a better opportunity for foreign investors in terms of production scales that make it conductive to sales, not only in the internal market, but also for re-export to other markets. The larger the market size of a particular region, the more FDI the region should attract, other conditions remaining constant.
The literature has suggested the importance of market size in host countries, as foreign investors are likely to be attracted by large markets that allow them to internalise profits from sales within the host countries. A substantial number of empirical studies have also confirmed a positive relation between market size and FDI inflows in developed countries (Agarwal, 1980; Chakrabarti, 2001; Love & Lage-Hidalgo, 2000). Love and Lage-Hidalgo (2000) suggested that this variable positively affected investment flows from the US to Mexico between 1967 and 1994. Chakrabarti (2001) also considered this variable to be a rather robust determinant of FDI. These studies indicated that foreign investment requires a sufficiently large host-country market to accommodate the increase in local supply.

At the regional level, based on a study on Japanese-affiliated manufacturing investments in the US during the 1980s, Woodward (1992) concluded that investors prefer states with strong markets and low unionisation rates. Papanastassiou and Pearce (1999) and Wheeler and Moody (1992) demonstrated that a large market size at a regional level has a significant and positive effect on the attraction of FDI. More recently, Filippaios and Papanastassiou (2008) argued that the characteristics of specific market and regional sizes have significant effects on FDI spatial distribution in the US.

In the case of China, existing empirical results on this factor are conflicting and inconsistent, showing a complicated picture. As market imperfections widely exist in China, a large market size is more likely to be linked to better opportunities for a MNE to exploit a firm’s specific advantages, such as technology, managerial experience, marketing power, or financial strength (Lall & Streeten, 1977). Market-seeking MNEs often utilise FDI as a critical strategy for market extension, since a large foreign market is preferred as a profitable location to capture more profits created by those overseas settings (Markusen & Venables, 2000). According to studies by Wei et al. (1999) and Wei and Liu (2001), a consistent finding is that the growth of regional markets proxied by GDP growth is statistically significant for inflows of contracted FDI. The positive relation between market size and inward FDI was also confirmed by a study by Zhang (2000), which found that FDI, both from the US and Hong Kong, is induced by China’s large markets. This finding reflects the market-seeking motive of US firms and the objective of Hong Kong firms to shift from mainly export-oriented investments towards both the Chinese, and the international markets. Another study by Zhao and Zhu (2000)
found that the market size of a city significantly induces investment from Hong Kong, Macao, Taiwan, Singapore, and other Asian countries, but that this variable is not important for firms from Japan, South Korea, the US, and EU countries.

In a more detailed study by Sun et al. (2002), the full sample was divided into two sub-samples covering the periods of 1986 to 1991 and 1992 to 1998, with the results showing that provincial GDP had no significant impact on FDI before 1991, though there has been a positive relation since then. They suggested that this result may reflect a shift in FDI motivations from export-orientation to market-seeking, with the early 1990s being the turning point.

Market potential is the other dimension of market factors for FDI location choice. According to FDI theories, developed countries tend to invest in developing countries that have a higher rate of return. The argument is that a rapidly growing macro-economy provides relatively better opportunities for profit-making than do slowly growing, or stagnant, ones (Agarwal, 1980). Rapid economic growth in the host country leads to high level of aggregate demand for products, which in turn stimulates greater demand for FDI inflows. As a result, higher economic growth in host countries provides greater opportunities for foreign investors in terms of profit-making and leads to a higher attractiveness of the host country.

Thus, market potential can also influence FDI location choice, due to its impact on the market capacity of host countries and the opportunity costs of MNEs (Agarwal & Ramaswami, 1992; Brouthers & Brouthers, 2003; Erramilli, Agarwal, & Kim, 1997; Terpstra & Yu, 1988). Facing high market potential, larger firms tend to prefer marketing-seeking FDI so that they can, in the first place, obtain economies of scale to reduce per unit costs and, in the second place, establish a long-term market presence. Facing the same high market potential, small- and medium-sized firms may find that risk-reduction-seeking FDI provide better opportunities, either because; first, they do not increase the capacity in the market, hence they do not impact on competitor pricing strategies as severely, second, a large potential market can provide a better return on investments by minimising the resource commitment, based on lower expected returns, and third, the switching cost of market exit can be reduced if the product sales are low.
On the other hand, these two types of FDI (market-seeking and efficiency-seeking) appear to be very closely related in terms of the effect of market potential on FDI location. For market-seeking FDI, the ultimate goal of the investment is to acquire a large market share. To achieve this goal, FDI operations tend to produce in large quantities to benefit from economies of scale. As for efficiency-seeking FDI, the ultimate goal of this type of FDI is to pursue efficiency, mainly released through economies of scale. Therefore, high market potential tends to have a positive effect on both types of FDI.

A number of empirical studies have confirmed a significant and positive effect of the market potential in host countries on FDI location choice (Dunning, 1980; Papanastassiou & Pearce, 1999; Peng, 2001; Scaperlanda & Balough, 1983). It has been argued (Wei et al., 1999) that with the existence of larger market potential, firms expect to experience greater long-term profits, through economies of scale and lower marginal costs of production, in these countries. For the effect of market potential in individual countries, empirical studies have confirmed that market potential in the host countries of the US and the EU has a significant and positive effect on the attraction of FDI inflows (Lunn, 1983; Root & Ahmend, 1979; Scaperlanda & Balough, 1983).

In the case of China, a US-China Business Council survey assessing changes in the investment environment before and after the Tiananmen Square Incident also found that market potential has gained importance as a motivating force in locating FDI from the US in China since the 1990s (Zhang & Yuk, 1998). According to the results of this survey, the main motive for investment by US companies in China prior to June 1989 was to incorporate the China market as part of their global operations. Since the 1990s, their major motives have been to capture the huge potential market in China. Zhang (2000) thought that the hypothesis between FDI and market potential emphasised the necessity of growing market size in attracting FDI into China. At the provincial level, Fu (2000) also suggested that the provincial market potential is a motivational factor, because of China’s highly segmented markets resulting from differing levels of economic development.

It is expected that the market factor is positively associated with FDI inflows. Thus, a hypothesis regarding the market factor is proposed:
Hypothesis 4: Market factors in the inland provinces of China positively influence FDI location choice.

4.3.2.3 Investment Incentives

It has been suggested that China’s economic transition is essentially a process of two pronged decentralisations: power and fiscal decentralisation from central to local government, and decentralisation of decision making from governments to firms and households (Qian & Weingast, 1997; Zhang, 2000). The devolution of power has given greater incentives to local governments in terms of revenue creation and economic development, and has allowed many regions to experiment with new and flexible policies. Shifts of decision-making power to firms and households have created a more predictable business environment for foreign investors.

Theoretically, a high level of FDI incentives increase net profits and, consequently, encourages FDI (de Mooij & Ederven, 2003). Many officials in developing countries have reported that foreign private investors seek all available investment incentives offered by host countries and it is less likely that FDI would flow into countries without these incentives (Kahai, 2004). According to Deichmann, Karidis, and Sayek (2003), investment incentives can be instrumental in a firm’s decision to internalise processes and are, therefore, important for guiding inflows of FDI, as incentives have been provided for foreign investors through benefits such as cheaper land cost, lower tax rates, or even both. Locating FDI in these countries through the use of investment incentives could enable investors to achieve low operational costs and higher efficiency than would otherwise be the case, thus, improving the competitive advantages of these firms.

Empirical findings have provided support for the role played by incentives in attracting FDI. Using data from the 1977 and 1982 US Department of Commerce Benchmark Survey, McAleese (1985) claimed that incentives offered by local governments positively influenced the inflows of FDI from the US into Ireland. Among investment incentives, policies on corporate taxation have received the most research attention, and
several studies have found that a lower rate of corporate taxation as an investment incentive has a positive effect on investment decisions (Billington, 1999; Friedman et al., 1992; Loree & Guisinger, 1995; Tahir & Larimo, 2004). Swensen (1994), in an empirical study, also found a significant positive effect of taxes on inward FDI. Studies at the level of individual countries have also generated supporting evidence for this finding. Gerlowski, Fung and Ford (1994) found that foreign investors from Canada, the UK, and Japan all have strong motives to avoid locations with high tax rates. Yamada and Yamada (1996) suggested that tax-related incentive policies, such as lower corporate taxes on earnings, are important determinants of FDI by Japanese firms entering the EU. Ermisch and Huff (1999) concluded that lower taxes on foreign corporate investments are a beneficial strategy in attracting FDI to emerging countries such as Singapore.

On the other hand, the role of foreign investment incentives set by the host government as a promoting factor in attracting FDI is still being debated in the relevant literature. Empirical studies regarding tax rates show the lack of consensus that this factor influences the allocation of foreign investment. As argued by Greenaway (2007), policy and taxes may indeed have little impact on FDI. Hines (1996) also suggested that pro-investment policies are often unnecessary, and sometimes even detrimental to inward FDI flows.

The mixed findings of the policy effect on FDI inflows may rest in several areas. First, a local government often implements a variety of investment promotions, such as tax concessions, subsidies, waiving environmental, or employment safety, standards, and relaxing some sort of performance requirements. Data on the effects of these policy incentives are, however, often not only lacking in consistency and availability, but are also difficult to operationalise (Kotabe, 1993; Loree & Guisinger, 1995, 1995; Zhou et al., 2002). This problem results in discrepancies in using policy measures and difficulties in generating consistent empirical findings across studies. Second, investment attraction programmes are usually an ongoing effort, involving various promotional activities. As such, any static analysis, which is often based on different samples of cross-sectional data, might not capture the dynamic cause-effect relation between promotional activities and resultant FDI flows to a host region (Kotabe, 1993). Third, measures of FDI vary from study to study. Among the studies discussed above,
Loree and Guisinger (1995) used a flow measure, Coughlin, Joseph and Arromdee (1991) adopted counts of subsidiary establishments, and Kotabe (1993) studied investment cases. Different measures capture different variations of FDI location choice and, therefore, may give rise to different results for policy variables.

In the case in China, studies have shown that favourable investment policies attract more FDI (Head & Ries, 1996; Liu et al., 2000; Wei et al., 1999). Tung and Cho (2001) showed that tax incentives in some areas of China were an important factor in attracting FDI during the 1990s. On the other hand, Lim (2005) argued that potential foreign investors could regard investment policies offered by the local government, such as fiscal incentives, as a signal of a weak fundamental position of the host country. Considering the profound revolution of China’s business environment, it is necessary to quantify the effect of investment incentives on FDI locational decisions over time, albeit it is difficult to do so (Luo & O’Connor, 1998). In particular, since 2001, the Chinese central government has promoted a go west policy, which has provided related investment incentives. The role of investment incentives in FDI location needs to be explored over time. In this study, investment incentives are expected to be positively related to FDI inflows into Gansu province.

*Hypothesis 5: Investment incentives positively influence FDI location in China’s inland regions.*

### 4.3.2.4 Cultural Distance

Based on the behavioural theory of the firm, Johanson and Vahlne (2001) suggested an internationalisation process approach. The seminal work on the internationalisation of firms holds that MNEs are assumed to enter foreign markets successfully at an increasing cultural distance from the home country, as measured by differences in language, values, political systems, and so on. Thus, firms are predicted to take steps by starting their internationalisation in those markets that they can most easily understand, then entering more distant markets only at the later stages. Lower cultural distances between home and host countries have been shown to facilitate the transfer of resources and organisational capabilities (Chadee et al., 2003; Contractor & Kundu, 1998;
Erramilli et al., 1997; Grosse & Trevino, 1996). Generally, culture can be described as the collective programming of minds that differentiate the motives and behaviour of one social group from those of another (Hofstede, 1983). Cultural factors determine a firm’s receptivity and adaptability to the social context of a host country, which indeed influences FDI location choice (Johnson & Vahlne, 2001; Luo & O’Connor, 1998).

Practically, higher cultural distances tend to increase the costs of operating an overseas subsidiary (Kogut, 2000; Tahir & Larimo, 2006). Based on the internationalisation process approach, Benito and Gripsrud (1992) stressed the importance of cultural differences on FDI location decisions and suggested that FDI will be more likely to be located in a host country that is culturally similar to the home market. In investigating FDI flows to Central and Eastern Europe, Mikalak (1992) suggested that inherent variations in language and culture dissuade potential investors, except in countries that have traditional ties with Central and Eastern Europe. Likewise, Grosse and Trevino (1999) concluded that those countries that are culturally dissimilar to the US and/or farther away tend to have less FDI flows to the US. Furthermore, the potential benefits realised from investment are generally higher in culturally familiar countries than they are in unfamiliar countries.

There is, however, disagreement among researchers as to the extent to which firms prefer to invest in markets exhibiting near and similar cultures. Other studies have also have refused this notion that firms will successively enter markets at an increasingly cultural distance from the home country (Turnball, 1987; Benito & Gripsrud, 1992). Sethi et al. (2003) argued that the preferences and tastes of customers in different nations are converting to a global norm and, thus, the effect of cultural distance is likely to be progressively diluted. Due to the absence of consensus on this factor, the role of culture distance needs to be further explored in this study, with a positive relation between culture proximity and FDI location choice expected.

Hypothesis 6: Cultural proximity positively influences FDI location choice in China’s inland region.
4.3.2.5 Infrastructure

The infrastructure level (e.g., roads, ports, railways, and telecommunications) can also represent an important FDI location determinant. The availability of adequate infrastructure represents the ease of operations in a location for foreign investors, and allows foreign investors to move their production materials and products more easily to designated areas. Regions with poorly developed infrastructure have low productivity levels, with the low return to private investments discouraging both domestic and foreign investors. Generally speaking, analyses of the relevance of public infrastructures for regional development and for the process of geographical concentration of industrial activities show that regions with poor infrastructure have a relatively lower level of productivity and lower returns to private investments, than is the case in regions with better infrastructure. The relatively low return to private investments for regions with poor infrastructure reduces the attractiveness for both domestic and foreign investments. The weak market factor and inconsistent government policies in emerging markets often create an uneven distribution of infrastructure across regions. As it is generally poorly developed and unevenly distributed across regions, infrastructure plays a critical role in FDI location decisions in an emerging market such as China.

The literature also shows that infrastructure, such as power supplies, transportation facilities, and communication networks, are important factors in FDI location choices (Fung et al., 2002; Head & Ries, 1996; Hsiao & Hsiao, 2004). These findings have been empirically validated, both in developed countries such as the US (Coughlin et al., 1991; Head et al., 1995; Shaver, 1998), and in developing economies such as China (Gong, 1995; Head & Ries, 1996; Wei et al., 1999). More specifically, Glickman and Woodward (1991) unveiled the critical importance of transportation infrastructure in the MNE’s location decision. Meanwhile, Coughlin, Terza and Arromdee (1991) found that transportation infrastructure has a positive and significant impact on the location decision of FDI in the US. Coughlin et al. (1991) demonstrated that FDI is attracted to regions with high levels of final demand for the output, but also to regions with extensive transportation infrastructure and high densities of manufacturing activity. A study by Loree and Guisinger (1995) on the policy and non-policy determinants of US FDI showed that, as explanatory variables, the quality of telecommunication and transportation infrastructure is positively related to the intensity of FDI inflows.
Due to the huge environmental and market size of China, the discrepancy between regions is significant, such that infrastructure does play a critical role in FDI location choice. A location with good infrastructure is more attractive than another with poor infrastructure (He, 2002; Wei et al., 1999). Chen (1996) provided evidence of a clear preference by investors in China for locations that are well connected by railroad infrastructure. On the other hand, Coughlin and Segev (2000) found a positive, though insignificant, relation between infrastructure and FDI. Thus, the hypothesis regarding infrastructure proposed in this study is:

_Hypothesis 7: Infrastructure positively influences FDI location in China’s inland region._

4.3.2.6 Agglomeration

Agglomeration economies refer to the positive externalities and economies of scale associated with spatial concentration activities and co-location of related production facilities (Krugman, 1991; Smith & Florida, 1994; Head et al., 1995). Agglomeration economies emphasize the benefits from production enhancements and heightened demand. Production enhancements occur as a result of knowledge spillover and the availability of a specialised labour force. The agglomeration effect is often associated with externalities. Foreign firms can benefit from the concentration of production and urbanisation. This is because such concentration helps them to enhance their levels of technology and reap economies of scale due to knowledge spillovers, availability of human capital, and the use of joint networks of suppliers and distributors. Foreign firms may also benefit from the presence of their fellow investors, who are either their competitors, or their suppliers, since such a presence may enable them to obtain valuable information. Firms may also enjoy other positive externalities from agglomeration, such as complementarity between industries and experienced local administration.

As firms agglomerate in a region, it becomes easier to access the competitors’ knowledge at a lower cost and to cultivate and attract a large specialised labour force
Knowledge flow and a specialised labour force help firms to improve performance through reduced transaction costs in searching and acquiring the necessary skills and workforce. In addition, agglomeration can lead to increased demand by reducing the consumers’ transaction costs when they need to inspect the goods personally. Consumers can be more efficient when firms are spatially concentrated. Agglomeration also provides a means of gathering information on the local environment (Mariotti & Piscitello, 1995), where the presence of other investors is interpreted as proof of success in uncertain markets (Lall & Streeten, 1977).

The agglomeration effect is a process that drives entities together due to one, or several, factors. Agglomeration of multinational companies occurs when the availability of FDI-related services, highly skilled labour, spillovers of know-how from one company to another, and other advantages of companies’ being located close to one another, appear as factors that drive the companies together. It is stressed that an agglomeration economy is related to infrastructure quality, the availability of specialised service suppliers and of skilled labour, location-related reputation effects, and the development of location attractiveness to foreign investors (Dunning, 1998).

Theoretical analysis has developed various explanations for manufacturing agglomeration. The early work of Marshall (1920) provides three compelling reasons for spatially concentrated industries; localisation provides a pooled market for workers with specialised skills, facilitates the development of specialised inputs and services, and enables firms to benefit from technological spillovers. More recently, studies by Krugman (1991) have constructed formal models to analyse and extend these concepts. For foreign investors, agglomeration factors are positive externalities that arise from the geographic clustering of similar firms, or industries, in a region (Shaver, 1998). These positive externalities include knowledge spillovers from competitors and pools of specialised labour and input providers created by high levels of industry demand (Marshall, 1992).

The existing literature has also suggested that agglomeration has luring effects for FDI inflows, as it offers positive externalities and economies of scale associated with the spatial concentration of economic activities and the collocation of related production facilities (Porter, 1990; Wheeler & Mody, 1992). Prior entry by competitors encourages
firms to enter foreign locations for two reasons. First, follower firms might react out of concern that early entrants could gain additional information about a potential market and use their first-mover status as an advantage (Kindleberger, 1969). Explanations for this observed pattern of imitation range from social arguments of legitimacy, or the establishment of rules of thumb (DiMaggio & Powell, 1991), to rational calculation in light of herd behaviour among competitors (Abrahamson & Rosenkopf, 1993). Whether this motivation is rationally, or socially, driven, while considering foreign market entry, firms could decide that the best tactic is to imitate the actions of earlier entrants, or role models (Campa & Guillén, 1999; Martin, Swaminathan, & Mitchell, 1998). Second, firms might replicate the foreign location decisions of competitors to tap into the potential knowledge spillovers present in that location (Chung & Alcacer, 2002; Shaver, 1998). Due to the intangible nature of technical knowledge in particular, technological spillovers are often localised and, thus, require physical proximity (Almeida & Kogut, 1999).

Empirical studies have proved the role of agglomeration in FDI location choice. Knickerbocker (1973) identified agglomeration as an attractive local feature for firms competing in a single industry. Such firm-specific agglomeration effects are shown to be especially important for foreign firms, because an existing concentration of foreign-owned firms demonstrates the potential of a particular location (Guimaraes, Figueiredo, & Woodward, 2000). According to Coughlin, Terza and Arrondee (1991), the density of manufacturing activity was one of the important factors in location decisions of foreign firm in the US during the period from 1981 to 1983. Head, Ries and Swenson (1995) examined the location choice of 751 Japanese foreign direct investments and observed strong agglomeration effects at an industry level. In a similar vein, Driffield and Munday (2001) demonstrated the importance of agglomeration economies and spillovers on the total factor productivity growth for the UK regions. Their study shows that a critical level of industry concentration of similar economic activities is a necessary condition for spillover to occur. On the other hand, Shaver and Flyer (2000) argued that, although agglomeration exists, it tends to be most prevalent among firms with weaker advantages.

In the case of China, a number of studies have provided empirical support to the argument that agglomeration has significant and positive impacts on inward FDI flows,
although different measures of agglomeration are adopted (Gong, 1995; Head & Ries, 1996; Chen, 1996; Wei et al., 1999; Cheng & Kwan, 2000; Zhang, 2001). Among these studies, Head and Ries (1996) built a model of self-reinforcing FDI that resulted from location externalities and empirical results derived from estimating a conditional logistic model, providing a strong case for agglomeration economies. The simulation exercise performed in this study shows that incentive zone status, such as with a special economic zone, generates 30% more FDI than would otherwise be the case. This effect was amplified by the agglomeration economies. Remarkably, as suggested by a number of empirical studies, new FDI flows do not converge spatially to the geographic pattern of existing Chinese domestic investments, but instead they follow the patterns of prior FDI stocks (Broadman & Sun, 1997; Cheng & Kwan, 2000; Wei et al., 1999).

From the above discussion, the relation between agglomeration and FDI location choice in Gansu province is hypothesized as follows:

*Hypothesis 8: The agglomeration effect positively influences FDI location in China’s inland region.*

### 4.3.3 Factors from Internalisation Advantages

Internalisation advantages stem from the capacity of the firm to manage and co-ordinate activities internally in the value-added chain. Although the other two OLI dimensions: the ownership dimension, and the location dimension; highlight reasons why firms would move production to a foreign location, they do not give any reason as to why a firm would not simply license a foreign producer to make the item for the parent firm. The concept of internalisation advantages captures the firm-specific intention of a firm choosing FDI to produce the product within the organisation itself in a foreign location over licensing, or exporting, across borders. Here, investment risks associated with FDI behaviour are used to denote the internalisation factors as firm-specific motivations.
4.3.3.1 Investment Risks

The long-term nature of FDI activities fosters a high sensitivity to risk perception. Investment risks are often reflected in frequent changes in government and economic policies, military coups, riots, insurrections, worker strikes against a national authority, and so forth. Risks in foreign markets are frequently cited as a deterrent to inward FDI flows (Dunning, 1996). Therefore, investment risk is an important factor to consider, especially in developing countries. Practically, political and macroeconomic stability and transparent legal regulations concerning foreign ownership and profit repatriation are important risk variables for potential investors (Janicki & Wunnava, 2004; Resmini, 2000). In some studies, investment risks have been categorised as a location-specific variable (e.g., Hill & Munday, 1991). In another stream of studies, including those by Dunning (1993b) and Chandtrapalalert (2000), investment risks are applied as an internalisation variable. The present study follows this second stream.

At a regional level, Edwards (1990) and Butler and Joaquin (1998) suggested that, most firms prefer to undertake investment in a region with relatively low levels of risk. In the case of risk-reduction-seeking FDI, low levels of risk in a region increase the probability of FDI inflows. Agarwal and Ramaswami (1992) also found a negative correlation between environmental instability and FDI inflows. In a study of the post-independence economic transition in the Ukraine, Ishaq (1999) concluded that the small FDI flows in relation to the country’s GDP are mainly due to the country’s unstable and uncertain political environment. This empirical result is in line with other studies (Dunning, 1997; Kogut & Zander, 1993), which suggest that firms undertaking FDI tend to pursue a reduction of corporate risks associated with changes and moves of national and regional governments in the host country. Therefore, foreign firms will undertake FDI in locations with relatively low levels of risk.

Generally, empirical evidence regarding the impact of investment risk is somewhat equivocal since it is difficult to obtain reliable quantitative estimations of this qualitative phenomenon over a long period of time. This is particularly true with regard to some aspects of investment risk that may be seen by foreign investors as local governments imposing direct restrictions on foreign investments. As such, the expected
The sign of the effect from investment risk variable on FDI location choice is positive. The hypothesis regarding the investment risk variable is stated as follows:

_Hypothesis 9: Investment risks negatively influence FDI location in China’s inland region._

### 4.3.4 Factors from FDI Strategic Motivations

It has been stated by some researchers that very few studies have attempted to theoretically link the influential OLI variables with strategic motivations in order to analyse FDI location choices by foreign investors, despite the increased interest in FDI (Chandprapalert, 2000; Tahira & Larimo, 2005; Vyas Vyas, 2000). Even less has been done to empirically analyse FDI location choice by testing such a framework. The effects of these strategic motivations on FDI location choice have remained primarily anecdotal. Furthermore, on the empirical side, as discussed earlier, little research has been carried out regarding the topic of FDI location choice by MNEs in China at a regional level. Even looking at the limited studies in this research area, it can be ascertained that they have been carried out by following a framework of the economic theories and through using econometric analysis based on statistical data. Thus, information on whether or not; and, if so, how; strategic motivation variables affect FDI location choice in China is extremely limited.

The present study introduces variables from the strategic motivation perspective to the investigation of FDI location choice. By incorporating variables from OLI advantages and FDI strategic motivations, this study presents a new analytical framework. Furthermore, as discussed earlier, empirical studies on FDI location choice are dominated by a focus on the developed countries, such as the US and the EU countries, and the attention of the limited number of studies in China has been focused on the national level, or the coastal regions. Thus, the vast inland region, where the market conditions are very different from those either of the developed countries, or the more developed Chinese coastal region, has been almost untouched. This study will contribute to FDI literature by empirically testing a new analytical framework in the setting of a province in China’s western inland region.
Firms’ motivations in entering foreign locations can go beyond cost minimisation, and include more competitive and strategic considerations such as pre-empting, or maintaining, cost priority with their peers, or both. For example, Erramilli and Souza (1997) suggested that US MNEs prefer to invest in more uncertain countries in order to respond to changes in these countries more efficiently, and to have the opportunity to further understand foreign markets. Theoretically, four main strategic motivations of FDI have been identified: market-seeking, efficiency-seeking, strategic asset-seeking, and resource-seeking (Dunning, 1997). Among these four, strategic asset-seeking is less likely to motivate FDI activities by foreign firms in the particular location of Gansu. As an inland province, Gansu is less developed economically in comparison with many other provinces in China and, thus, is highly unlikely to possess some strategic assets, such as propriety technology and famous brands, for which foreign investing firms aim. Thus, it is assumed in the study that foreign investing firms are not motivated to seek strategic assets for their FDI activities in Gansu.

4.3.4.1 Market-seeking Motivation

Market-seeking motivation is essentially focused on gaining access to local markets. A host country’s FDI regime regulating the entry and scope of this type of FDI would be a prerequisite for the presence of multinationals. If the subsidiaries of multinationals are allowed to sell their products in a host country, the size of local markets is expected to be a critical determinant, because larger market size offers greater opportunities to realise effective economies of scale (Zhang, 2000). Since this motivation of FDI involves advanced technology, it generally requires a certain level of human capital, or skilled labour, and good infrastructure conditions in the host country. Most empirical research has found market-seeking to be the dominant motive, with natural resource-seeking and efficiency-seeking FDI as distant seconds and thirds, respectively (Holland, Sass, Benacek, & Gronicki, 2000; Jensen, 2006; Meyer, 1998; Resmini, 2000).

Hypothesis 10: Market-seeking motivation positively influences FDI location in China’s inland region.
4.3.4.2 Efficiency-seeking Motivation

Efficiency-seeking motivation is commonly described as off-shoring, or investing, in foreign markets to take advantage of a lower cost structure. Efficiency-seeking FDI is classified as being FDI projects undertaken in order to rationalise the structure of established production units in such a way that a firm can gain from the common governance of inter-related activities in different locations. According to Behrman (1981), firms undertaking efficiency-seeking FDIs look for the most economic sources of production to serve a multi-country standardised market. The potential benefits derived from undertaking efficiency-seeking FDIs are especially those of economies of scale and scope, which are derived from product and geographical concentration and from process specialisation (Kogut, 2000; Tahira & Larimo, 2005).

*Hypothesis 11: Efficiency-seeking motivation positively influences FDI inflows into Gansu province.*

4.3.4.3 Resource-seeking Motivation

The resource-seeking motivation is driven by a need to acquire resources not available in the home countries of the investing firms, or available at a higher cost than could be obtained in other locations. Cost minimisation considerations and the need to secure a reliable supply of sources are the major causes driving this investment motivation. A fundamental assumption driving the conceptualisation of the resource-seeking motivation has been the immobility of the resources sought. If a resource can be transported over distance at low cost, it might be more economic to import it than to establish foreign operations in order to access it. Hence, this motivation was influential primarily with reference to physical, tangible resources, which are costly to transport. In summary, the theoretical hypothesis regarding the relation between the resource-seeking motivation and FDI location choice can be proposed as:

*Hypothesis 12: The resource-seeking motivation of MNEs positively influences FDI location choice in Gansu province.*
4.3.5 Control Variable

Dunning’s eclectic paradigm (1988) posits that the pattern of foreign direct investment may vary with the country of origin of the investing firm. Firms in a particular country may possess some specific advantages emanating from the nature of their domestic market and these advantages are different to the firm-specific ownership advantages. As such they can be referred to as country-specific advantages. Firms from a particular country will exploit foreign markets by actively using these country-specific ownership advantages in conjunction with their firm-specific ownership advantages and the location-specific endowments present in the host country. There is extensive empirical evidence supporting the notion that a MNE’s country of origin influences its choice regarding investment location (Blackborn, 1972; Grosse & Trevino, 2002; Zhao & Zhu, 2000).

In their empirical study, Schroath, Hu and Chen (1993) investigated the existence of country of origin effects on foreign investment activities in China, using Dunning’s eclectic paradigm. They identified spatial location and industry as the two areas where country of origin variables will impose an influence. Empirical findings from other studies also largely supported the hypotheses about the presence of country of origin effects for FDI activity in China. The locational distribution of FDI from Hong Kong and Taiwan in China reflects the close geographic proximity and cultural similarity between South China and the ethnic Chinese populations in Hong Kong, Taiwan, and Macau (Chadee et al., 2003; Vanhonacker, 1997). In addition, most of the FDI from these source regions are highly concentrated in light manufacturing industries, suggesting that low labour costs represent an important motivation behind these investments (Dunning, 1998).

By comparison, Western firms investing in China appear to be attracted primarily by the growth potential of the booming Chinese consumer market (Tse, Pan, & Au, 1998). As such, they tend to seek locations that are close to a large concentration of affluent consumers (Dunning, 1998; Porter, 1990). Thus, these firms are more likely to prefer the large metropolitan cities and regions such as Shanghai, Beijing, and provinces in the eastern coastal regions. Discrepantly, Japanese investors may possess some advantages
in cultural proximity with China, relative to their Western competitors. Nonetheless, they have been quite cautious in entering the Chinese market, compared to US and European firms. The main reason for this caution could be related to investment risk, which is discussed in Section 4.3.3.a, in which Hypothesis 9 in the present study is developed. Generally speaking, a possible impact of MNEs' country of origin on FDI inflows to China is expected.

4.4 Summary

Built on the literature review in the previous chapter, this chapter has constructed a conceptual framework for use as an analytical tool to address the research question and obtain the research objectives of this study. Associated with the framework, variables were drawn from ownership, location, and internalisation advantages based on the construct of the eclectic paradigm, and were also drawn from the construct of FDI strategic motivation. A set of 12 hypotheses were developed around the proposed relations between these variables and the FDI location choice in the setting of Gansu province in China's inland region. These hypotheses will be empirically tested in the study to address the call for further research attention in the topic area of FDI location choice within China, especially in regards to the western regions. Table 4.1 provides a summary of the 12 hypotheses and the control variable. Chapter 5 follows with a discussion of the research methods used in the study, in order to provide an overview of how these hypotheses are tested.
Table 4.1 Summary of the Variables in the Study

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variable</th>
<th>Impact</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>FDI location</td>
<td>one proxy variable - FDI entry mode (JV, WOS)</td>
</tr>
<tr>
<td></td>
<td><strong>Dependent Variable</strong></td>
<td></td>
</tr>
<tr>
<td>H1</td>
<td>Firm size</td>
<td>+</td>
</tr>
<tr>
<td>H2</td>
<td>International experience</td>
<td>+</td>
</tr>
<tr>
<td>H3</td>
<td>Cost factor</td>
<td>-</td>
</tr>
<tr>
<td>H4</td>
<td>Market factor</td>
<td>+</td>
</tr>
<tr>
<td>H5</td>
<td>Investment incentives</td>
<td>+</td>
</tr>
<tr>
<td>H6</td>
<td>Culture distance</td>
<td>-</td>
</tr>
<tr>
<td>H7</td>
<td>Infrastructure</td>
<td>+</td>
</tr>
<tr>
<td>H8</td>
<td>Agglomeration</td>
<td>+</td>
</tr>
<tr>
<td>H9</td>
<td>Investment risk</td>
<td>-</td>
</tr>
<tr>
<td>H10</td>
<td>Market-seeking motivation</td>
<td>+</td>
</tr>
<tr>
<td>H11</td>
<td>Efficiency-seeking motivation</td>
<td>+</td>
</tr>
<tr>
<td>H12</td>
<td>Resource-seeking motivation</td>
<td>+</td>
</tr>
<tr>
<td></td>
<td><strong>Independent Variables</strong></td>
<td></td>
</tr>
<tr>
<td></td>
<td><strong>Control Variable</strong></td>
<td></td>
</tr>
<tr>
<td>Country of origin</td>
<td>four categories (US=1, Japan=2, EU=3, Asian countries= 4)</td>
<td></td>
</tr>
</tbody>
</table>

(+) denotes positive relationship expected in the hypotheses of the study.

(-) denotes negative relationship expected in the hypotheses of the study.
CHAPTER 5 RESEARCH METHODS

5.1 Introduction

The chapter discusses methodological issues and describes the various aspects of the research methods used in this study. This includes a discussion of the research design, sampling plan, the development of the survey instrument, the variable measurements, and the data analysis techniques utilised in the data analysis. Section 5.2 discusses the rationale of the research design and provides a brief justification of the survey method used in the study. Section 5.3 discusses the sampling plan, including the population and sample definition of the study, used in the study and data collection procedure. Section 5.4 discusses the development of the survey instrument and the data collection procedure. Section 5.5 introduces the variables and their measurement in the study, with Section 5.6 providing a brief introduction to the data analysis techniques used in this study.

5.2 Research Design

5.2.1 A Focus on the Firm Level

The study is built on relevant previous research in the area of FDI location choice and, where possible, avoids reinventing the wheel. Historically, studies of FDI location choice tended to focus on either country-level, or regional-level, selection, or in some cases on the firms’ internal advantages (Dunning, 2001; Luo, 2004; Pan, 2003). These studies mainly addressed macro-level factors determining FDI location choice and flows and used econometric techniques to analyse the related economic data. Generally speaking, these studies can reveal the macro-level determining factors which impact the FDI location among host countries, or FDI flows into a single host country. Nonetheless, impacting factors at the micro-level; that is, the firm-level; on FDI location choice from the perspective of investing firms have been largely ignored by previous studies. In fact, as suggested by some researchers, firm-level factors are at the
centre in determining FDI locational preferences of MNEs (Buckley & Casson, 1998; Wignaraja, 2002) and, thus, are crucial in influencing firms' location decisions (Nachum & Wymbs, 2005).

More especially, investing firms have different capabilities and characteristics and are subject to different motivations in regards to their involvement in FDI behaviour. As a result, they tend to have different preferences on FDI location choice, and their view on opportunities offered by a particular location is likely to differ to some degree (Dunning, 1998). To reflect MNEs’ heterogeneity and their perspectives in FDI location choice, it is necessary to focus the FDI location issue at the perspective of investing firms and take account of firm-specific factors. Particularly in the case of China, it has been suggested that firm-based advantages play a crucial role in the process of FDI location choice, but that these firm-specific advantages tend to be ignored (Pan, 2003). Therefore, a study focusing on the perspective of investing firms will enrich the literature domain of FDI location choice and generate important implications for MNEs and policymakers in host countries. This study is designed to explore this perspective of investing firms regarding FDI location through testing the proposed theoretical framework and to analyse key factors at firm-level that motivate foreign investors’ FDI location choice.

This study attempts to present an overview of the determinants impacting FDI location chosen by MNEs when selecting the Chinese inland province of Gansu to locate their FDI projects, rather than provide answers to the detailed process of decision making related to why and how questions, which can be more effectively answered through qualitative research, using methods such as case studies, or in-depth interviews. More in-depth exploration of qualitative study through case study or in-depth interviews can provide insights into the details of decision-making process of FDI location choice by MNEs. Thus, considering research objectives of this research, quantitative study is more appropriate for this study and a survey method of quantitative study is more effective than any qualitative-oriented method in answering what type questions. The following section will justify the research method utilised to collect the firm-level data.
5.2.2 Survey Method

Existing FDI theories do not appear to be comprehensive or satisfactory enough to explain all the determinants that motivate FDI location choice, especially in the research setting of an emerging economy such as China. As suggested in the literature, an emerging phenomenon; that of FDI location within China; requires a new evaluation as a renewed issue and a research frontier for international business (Buckley, 2002; Meyer, 2004; Peng, 2004). An examination of some important studies in the academic area relevant to this study (e.g., Chen, 1996; Luo, 1999; Luo & Park, 2001; Pan, 2003; Pan & Chi, 1999; Tan & Litschert, 1994; Vanhonacker, 1997; Zhang et al., 2004) reveals a predominantly positivist approach in terms of the research methodology used. Even though voluminous specific methods have been used to evaluate the determinants of FDI location choice, existing quantitative-oriented empirical studies can be generally categorised into three groups based on the research methods used; econometric studies, aggregate econometric studies, and statistical analyses. The first two groups are mainly based on statistical archival data, such as time-series and panel data, and use econometric techniques. The last group is based on survey data, which is mostly collected through the method of a questionnaire survey, and uses quantitative analytic methods with the help of multivariate statistical techniques.

Previous studies using econometric techniques attempt to evaluate specific FDI location determinants functioning in the host countries, or local regions, with reference to the global tendencies of FDI flows. By analysing the data at a macro-economic level, these studies can provide a vision of the structural characteristics and macroeconomic policies at the national level for host countries which favour FDI inflows. On the other hand, it is difficult for these macro-level studies to incorporate more specific factors at firm, or regional, level, because the relative aggregate values only capture general and long-term tendencies (Pan, 2003). Actual FDI location choice is, however, fundamentally a behaviour performed at firm level rather than at the macro-economic level, as decisions of FDI location choice have to be made by executives of MNEs. Nachum and Wymbs, (2005) also suggested that the best way to assess FDI location choice is to observe the behaviour of individual firms. Therefore, data at the firm-level collected through a survey method is more suitable in reflecting the characteristics of managerial decision-
making regarding FDI location choice. The reasons that the survey method is deemed more appropriate for this study are summarised in more details in the following paragraphs.

First, as explained in the previous chapters, this study approaches the issue of FDI location choice using a survey method and a newly proposed conceptual framework, which has not been used in the existing studies on FDI location, in the research setting of China’s inland regions. Thereby, an element of novelty is introduced. To the author’s knowledge, no study has been done to date that explores FDI location choice by MNEs in a setting of China’s inland region. Thus, this study is essentially exploratory in nature and the aim of this study excludes the task of exploring the detailed decision making process of MNE executives regarding their FDI location choice. This quantitative study attempts to present an overview of the determinants impacting FDI location chosen by MNEs when selecting the Chinese inland province of Gansu to locate their FDI projects, rather than provide answers to the detailed process of decision making related to why and how questions, which can be more effectively answered through qualitative research, using methods such as case studies, or in-depth interviews. In answering what type questions, a survey method is more effective than any qualitative-oriented method, such as a case study.

Second, the study attempts to provide an identification of the various variables at the micro-level regarding FDI location choice of MNEs, which is best done through the quantitative research method of a survey. As discussed above, the results of previous empirical studies have mainly been generated using econometric analysis techniques on macro-level data and reflect the general trend of FDI location distribution research methods across countries, or in individual host countries. The perspective of the foreign invested enterprises (FIE) has been ignored to a large extent and needs to be addressed through analysis based on empirical data collected using a survey method on foreign invested enterprises (Buckley, 2002; Child & Tse, 2001; Jiang, 2005; Luo, 2004; Pan, 2003). This study aims to explore the research topic of FDI location choice in the inland region of China from a perspective of investing firms, using firm-level data related to FDI location choice by the investing firms, which is indispensable. Therefore, the survey method is deemed appropriate as the data collection method in this study.
5.2.3 Mail Questionnaire Survey

A mail questionnaire survey was used as the data collection method in this study. In the mail survey approach, the investing firms’ motives are determined by directly asking senior managers of foreign investing firms to identify the factors impacting their FDI location choice, and the importance of these impacting factors. Zhang and Yuk (1998) suggested that such a questionnaire should be sent to a senior manager of MNEs, which is appropriate in FIEs where such a person should have sufficient information about the firm. This approach was very popular in the 1960s and 1970s (Dunning, 1998). More recently, several other attempts have been made to test the importance of location factors in affecting FDI decisions, such as in Chen (1996), Zhang and Yuk (1998) and Jiang (2001, 2003). The reasons why the mail survey method is deemed more appropriate for this study are outlined in detail in the following.

First, primary rather than secondary data is required by the objectives of the study to reflect the perspective of investing firms, and a questionnaire survey is an effective way to collect the necessary primary data for this study. Primary data is superior to secondary data in terms of its ability to capture the perceptions of managers. FDI location choice is a complicated managerial task, and the perceptions of decision makers provide the most direct and accurate information on what factors impact this managerial decision. Through being addressed to those managers who are directly involved in, or have enough knowledge about, the decision making process, a mail questionnaire survey is a method which is able to collect the perceptions of decision makers on the impacting factors related to FDI location choice.

Second, for a large-scale quantitatively oriented study, the mail survey approach is more feasible than other data collection methods when considering time consumption and financial costs (Cooper & Schindler, 2008). It is relatively inexpensive, wide ranging, and self-administered, with the anonymity of the participants able to be better managed and ensured (Page & Meyer, 2000).

Third, in terms of sample accessibility, a mail survey approach has an increased chance of being acceptable to respondents in comparison with an interview approach. Cooper
and Emory (1995) suggested that business executives are easier to reach using a mail survey than any other methods. As for the research setting of China, Jiang (2003) also found in a study on FDI in China that senior managers from MNEs preferred a mail questionnaire survey, as senior managers are quite busy and can seldom be directly approached. Considering the possible response rates in mail survey studies, the respondents were promised that the final findings would be sent to them if they completed their questionnaires, in order to increase the likelihood of a good response rate for the survey.

Last, a mail questionnaire survey also has some advantages over other survey approaches in respect to data reliability. Compared with respondents in telephone, or personal, interviews, respondents answering a mail questionnaire have more time to carefully consider their answers, and to collect facts, or talk to others if necessary. Also, a mail survey is usually regarded as more impersonal and provides more anonymity than other communication methods (Cooper & Schindler, 2008). Therefore respondents are more likely to provide unbiased answers.

In conclusion, the mail survey approach is selected as the most appropriate data collection method for the study. This selection is based on multiple factors, including the requirements to achieve the research objectives of this study, considerations of time and financial costs, and its effectiveness in obtaining a sufficient quantity of high-quality responses.

**5.2.4 Ethical Issues**

The ethical aspects of the study were guided and approved by the Human Ethics Guidelines of Massey University. Informed consent, confidentiality, and participants' rights were carefully considered in this research to protect the rights of the respondents. The covering letter accompanying the questionnaire identifies the researcher as a PhD student from Massey University and explains the benefits expected from this research. Confidentiality of information from the survey was preserved by not including the name of any organisation, or the person who completed the questionnaire, in the results. Non-identifying information was used to describe the respondent firms. The usage of data
was restricted to the purpose of the thesis and any research papers that may result from it.

5.3 Sampling Plan

This section explains the data collection procedures. First, the population of the research subjects and the sample size are determined. Through the development of the survey instrument, the theoretical hypotheses proposed in Chapter 4 were transformed into the related variables, which can be measured by single, or multiple, indicators. These indicators were presented in the questionnaire to ask senior managers of foreign invested firms about FDI location in Gansu province. The fieldwork process for data collection is then discussed.

5.3.1 The Population and Sample

As stated in Chapter 2, Gansu province in China’s inland region is selected as a suitable research setting for this study. This study investigates the determinants for FDI location choice by MNEs in the particular region of Gansu in China. Usually, the decisions of FDI location choice are made by executives from the parent firms of the FDI subsidiaries. It is, however, not feasible in practice to obtain information directly from all the parent firms for an individual research project such as the present one, regarding their FDI decisions to locate FDI in Gansu, as these investing firms are scattered in various countries around the world. As a result, the FDI subsidiaries of investing firms are considered as the research subjects in order to collect the data regarding factors impacting their FDI location in the inland region of China. Senior managers of foreign invested firms in Gansu province are approached as the subjects for the data collection for this study. It is assumed that senior managers of the FDI subsidiaries of the investing MNEs are knowledgeable enough regarding the factors causing the MNEs to invest in that particular location and, thus, are able to provide sufficient information to address the research questions of this study. This approach for data collection has been widely used in the area of international business studies and has been proven to be a valid data collection method (e.g., Luo, 2001, 2007; Zhang & Yuk, 1998).
Therefore, the population under study is defined as the FDI subsidiaries in Gansu province in China invested in by foreign firms through any one of the four levels of foreign ownership (minor, equal, major, and full). The official information for this population is sourced from the latest edition (2006) of Directory of Foreign Invested Enterprises in China, which was jointly published by the National Bureau of Statistics of China (NBSC) and the Ministry of Commerce in China. The source data contained in the Directory of Foreign Invested Enterprises in China is reliable and has been adopted in other international business studies (e.g., Luo, 2007). The 2006 edition provided up-to-date information regarding the contact details of FDI subsidiaries for China’s 31 provinces. A total of 266 foreign-invested enterprises are listed in this directory as being situated in Gansu province. Thus, the population for this study consists of 266 FDI subsidiaries in Gansu. Considering that the population number of 266 is rather small and quite manageable, the whole population of the subjects under study is taken as the sample for the questionnaire survey in the research.

5.3.2 Data Collection Process

The fieldwork began in early December 2006 and was conducted over the period from December 2006 to March 2007. Where feasible, the procedures outlined by Dillman (2000) and de Vaus (2002) were incorporated into the questionnaire design and the data collection. This mainly includes: (1) Using the principle of establishing a vertical flow in the questionnaire, using transition statements to introduce conceptually different parts of the questionnaire, differentiating where possible between questions and response categories with visual guides (e.g., the use of capital and shading); and (2) the inclusion of a personally addressed and individually signed cover letter with the provision of a reply paid return addressed envelope and the questionnaire, explaining the purpose of the study and providing instructions on completing the questionnaire, as well as the sending of a combined reminder and thank-you letter, together with a reply-paid return-addressed envelope and replacement questionnaire.

Before launching the mail survey, in following the suggestion of Luo (2004), a pilot test for the questionnaire was conducted. In the pilot test, two versions of the preliminary
questionnaire in English and Chinese were sent to seven senior managers of foreign firms operating in Gansu province. They were asked to identify any ambiguities in the terms, concepts, or the issues raised. Three questionnaires were returned. In responding to the feedback from the pilot test, ambiguities in the questionnaire were clarified. Item sequencing in the self-completion questionnaire followed Dillman’s (2000) recommendations for a sound postal survey. Questionnaire items that were similar in topic were grouped together. Questions that everyone could answer and were the least potentially threatening were placed towards the beginning of the questionnaire. In addition, following Dillman’s (2000) advice, the front page of the questionnaire contained no questions, instead consisting of the project title, research contact information, and a brief repetition of the purpose of the research from the covering letter. The last page of the questionnaire contained fewer questions and thanked respondents for their time. As this point, it also suggested that respondents could use the last page to make any comments that they wanted to.

This self-administered mail questionnaire, accompanied by a covering letter, a self-addressed reply-paid envelope, and directions for completion, was sent to the senior managers of foreign firms operating in Gansu province in December, 2006. Senior managers of foreign firms are those persons who have sufficient knowledge about the firm (Sethi et al., 2003). In line with the logic of John (1984), who argued for selecting knowledgeable informants, the choice of this rather exclusive respondent group is based on the belief that people in these important positions are the most cognizant with the firm and the dynamics of the overall foreign investment decision (Chandprapalert, 2000; Kim & Hwang, 1992). The cover letter explicitly required that a respondent should reply only if he, or she, had actively taken part in the MNEs’ FDI location choice, or knew about the decision-making factors included in the questionnaire. It also requests that, if appropriate, they pass the questionnaire to another individual who may have sufficient information in this regard.

After one month, a follow-up reminder letter with an extra copy of the questionnaire was sent, with the aim of increasing the response rate of the questionnaire survey. A total of 109 questionnaires were eventually returned with at least some of the questions completed. Three responses were eliminated from the data analysis because of excessive missing data. Thus, the final number of respondents used in the analysis was 106, giving
a usable respondent rate of 39.8%. This response rate is comparable to those of previous studies, such as 44% achieved by Tseng (2007) and 36.4% by Tatoglu and Glaister (1998).

5.4 Development of the Survey Instrument

This section provides an exposition of the survey instrument employed in this study. The process was followed to ensure that the questionnaire items and their scales were suitable for MNEs operating in the Gansu province.

A survey questionnaire was developed to measure the constructs of interest to the study. This questionnaire can be perused in the Appendix to this thesis. The development of the survey items was guided by theoretical considerations, previous literature, and consultation with experts in this field. The questionnaire was drafted in English and then translated into Chinese. After it was initially drafted, it was reviewed by several reviewers. Feedback from these reviewers in terms of both content and wording was carefully considered in revising the questionnaire. This process led to an improvement in its content, design, wording, and clarity, thus, making the completed questionnaire easier to read and more appealing to the respondents. The questionnaire comprises two sections. Section 1 aims to collect general information regarding the respondent company and the individual respondent, and Section 2 contains the survey items related to the factors that could have an effect on the FDI location choice of Gansu province.

In the survey questionnaire, a seven-point Likert scale was used to measure the respondents’ perception of the relative importance of factors affecting FDI location in Gansu province. Respondents were asked to indicate the degree to which each factor influences the location decision of investing firms in the Gansu province. Previous survey studies in the area of international business have demonstrated that the Likert scale is reliable and is a valid measurement method for investigation of FDI issues (e.g., Luo, 2001, 2007). Moreover, a seven-point Likert scale can not only increase measurement reliability, but can also avoid any compromise by the respondents, considering that a respondent may be influenced by China’s Confucian culture and consequently might possibly provide neutral answers.
5.5 Variable Measurements

The variables to be tested in this study were derived from the conceptual framework and matched with the hypotheses associated with the framework, both of which were developed in Chapter 4. In matching the conceptual framework and hypotheses, the independent variables are drawn from the two theoretical constructs of the eclectic paradigm and strategic investment motivations and are categorised into the four groupings of ownership, internalisation, location, and strategic motivations. Identification of, and theoretical support for, each independent variable can be found in the review of the FDI literature in Chapter 3 and the hypothesis development in Chapter 4. Indicators adopted to measure each of the independent variables and the operational measurements for both the dependent, and independent, variables are discussed here.

5.5.1 Dependent Variable

According to Page and Meyer (2000), the dependent variables show the presumed effect in a study. As explained before, this study investigates FDI location choice by foreign investing firms in the inland region of China. The dependent variable is: What are the determining factors for MNEs to locate FDI projects in China’s inland province of Gansu? Following the vast majority of FDI studies of location strategies (Brush, Maritan, & Karnani, 1999; Chen, 1996; He, 2003; Quer & Claver, 2007; Roberto, 2004; Tatoglu & Glaister, 1998), the dependent variable can be treated and proxied by a dichotomous variable such as the FDI form of a greenfield project and acquisition, the FDI entry mode of a wholly owned subsidiary (WOS), or a joint venture (JV).

This study adopts the conditional logistical method to carry out the model testing on FDI location determinants. It is suggested that this method is an appropriate way of studying managerial decisions by individual firms, as it allows the introduction of a qualitative endogenous dependent variable (Bertrand, Mucchielli, & Zitouna, 2007). More details on the conditional logistical method are introduced in the section outlining the data analysis techniques (Section 5.6.2.c) in this chapter. The adoption of a method
for regression analysis requires a discrete, or dichotomous, dependent variable. In this study, the dependent variable is measured as the proxy of FDI entry mode between a WOS and a JV to explore the determinants of FDI location. There are two reasons for such a dependent variable measurement. First, the dependent variable of, What are the determining factors for MNEs to locate FDI projects in China’s inland province of Gansu? cannot be directly measured. The study is an ex-post empirical assessment of FDI location decisions by MNEs. To be a dichotomous variable, the dependent variable in the study should be formulated as: whether or not the investing firm invests in the location of Gansu. It is impossible, however, to measure the dependent variable in such a way, as all the firms participating in the survey have already made an investment in Gansu province. Through the proxy of FDI entry mode, the dependent variable of FDI location choice in this study can be measured using statistical models as discrete choice models. More importantly, in terms of the entry modes adopted, FDI projects can only take one of the two forms of a joint venture, or a wholly-owned venture. Each is essentially different in terms of legal form, risk characteristics, resource commitment, and investment motivations. As suggested in the literature (Ile, 2003), through the evaluation and comparison of location determinants of JVs and WOEs, key factors in attracting foreign investors and influencing their FDI location can be revealed. An understanding of the location pattern between JVs and WOEs would not only guide the location decisions of potential investing firms, but also provide scientific support to local governments in designing policies to attract more FDI. Thus, through the proxy of FDI entry modes, the determinants which have an impact on the FDI location choice of MNEs can be identified. As the FDI entry mode is a discrete variable and has two forms of a WOS, or a JV, it is suitable for use as a proxy for the dependent variable of this study.

Thus, considering the measurement of the dependent variable and the research subject; foreign invested firms in Gansu province; entry mode is treated as the proxy of the determinants of FDI location in this study. This dichotomous variable takes the form of zero if the foreign firm has only undertaken shared-ownership FDI; including a joint venture, or the partial acquisition of a local company; and one if the foreign firm has undertaken full-ownership FDI; including greenfield investment, or the total acquisition of a local firm. The statistical method that lends itself to the investigation of foreign investment location choice is conditional logistical regression (McFadden, 1974). This
method is suitable for examining discrete dependent variables. The related data is the information on the location choice in the form of an entrant mode and information about the attributes of the chosen location. The technique estimates how changes in a location attribute increase, or decrease, the probability that an entrant will choose to locate in this region.

5.5.2 Independent Variables

It is suggested that the independent variables are used to predict the value of the dependent variable (Hussey & Hussey, 1997). Factors drawn from the ownership, location, and internalisation dimensions of the eclectic paradigm and factors drawn from the theoretical construct of strategic investment motivation (Chandprapalert, 2000; Dunning, 2001), are identified as the potential determinants for FDI location choice by MNEs. Thus, they are taken as the independent variables in this study. Most of the independent variables are latent constructs, which are linked to the empirical study only through operational measurements. In previous empirical studies of the FDI behaviour of MNEs, two types of measurements; psychometric scale measurement and proxy measurement; have been used to measure the independent variables. Generally speaking, while measuring managerial perceptions, psychometric measurement based on multiple scales, rather than a single-item proxy, has been considered to be a more accurate measurement method. Thus, psychometric scale measurement on managerial perceptions is adopted as the measurement method for most of the independent variables in this study. As the independent variable of firm size reflects the objective scale of the investing firms, rather than the subjective perceptions of management executives, an objective measurement will be more appropriate for this variable. Thus, the proxy measurement method is adopted to measure the variable of firm size. For the psychometric measurements, single, or multiple, indicators are used in this study to operate practical measurements of each independent variable. Most operational indicators of variable measurement are adopted from established measurement indicators in the literature, as discussed in following discussion on the measurement of the various independent variables. In some cases, where the existing measurement indicators are considered incomplete, or unsuitable, additional indicators are developed from the theoretical concepts in the literature and consultation with experts.
Firm size is measured using a single proxy indicator, which is the number of employees of the parent firm, and is measured on a six-point scale. This is a measure of firm size frequently used in the relevant literature (e.g., Aulakh & Kotabe, 1997; Brouthers & Brouthers, 2003; Gatignon & Andersen, 1998; Quer, Claver, & Rienda, 2007). When answering the questionnaire, the respondents were asked to specify the scale of their parent firm in terms of employee numbers. A higher score directly indicates that the parent firm’s size is larger.

International experience is measured using two psychometric indicators, being international experience in terms of FDI activities of the investing firm involved in countries other than China, and investing experience in terms of FDI activities in Chinese locations other than Gansu province. The first was used in Tatoglu and Glaister (1998) and the other by Quer and Claver (2007). Both indicators measure the respondent’s perceived degree of operational experience of the investing firm in terms of FDI activities, using a seven-point scale where a high score indicates a high level of FDI experience in the investing firm.

The cost factor is measured on the perceived level of cost considerations by the investing firms in terms of four indicators: (1) Access to low-cost labour; (2) access to highly-skilled labour; (3) low cost of raw materials, energy, land, and water; and (4) low transportation/logistics costs. These indicators are adopted from the FDI location studies of Berkoz and Turk (2008), and Coskun (2001). This study integrates two new dimensions of the cost factor; land costs and energy costs; into indicator three. The dimension of land costs is added to the cost factor in order to test whether high land costs deter, or low land costs encourage, incoming FDI. As suggested in the literature (Sun et al., 2002), the factor of land costs plays a significant role for FDI location choice in China. In addition, considering increasingly rising levels of housing prices in China since 2000, particularly in its coastal regions, the factor of land costs reflects the increasing competition for the limited available land. Another newly added dimension for indicator three is energy costs. The major consideration for integrating this dimension is that the huge reserves, mainly in terms of mineral energy, in China’s inland region is regarded as a locational advantage in terms of natural resources. As the energy supply in China’s coastal region has long been under heavy, demand, this energy
abundance would provide the inland province of Gansu a comparative competitive advantage in terms of FDI attraction, because foreign investors may avoid locations where there is a shortage in the energy supply and costs are very high. All these four indicators are measured on a seven-point scale, where a high score indicates a high level of investing firms’ cost requirements being satisfied when making decisions regarding FDI location choice.

The *market factor* is measured using the two sub-variables of *market size* and *market potential*. *Market size* is measured on a single psychometric indicator of the effect of market size on foreign firms’ FDI location decisions. It was used in the FDI location study of Tatoglu and Glaister (1998), measured using a seven-point scale, where a high score indicates a high effect of the market size of the host region on FDI location. *Market potential* is measured by the respondent perceptions of five indicators: (1) Expected economic growth of the local market; (2) growing demand in the local market; (3) a low level of competition in the local markets; (4) the purchasing power of local customers; and (5) enabling faster entry to the target market. These five indicators are developed in the studies of Coskun (2001) and Tatoglu and Glaister (1998). All of the indicators of both sub-variables are integrated into a single market factor in the study and measured using a seven-point scale, where a high score indicates a high level of influence of market factor of the host region, as perceived by foreign investing firms.

*Investment incentives* are measured on the perceived level of local incentives in terms of five indicators: (1) Corporate tax incentives; (2) financial incentives; (3) local government policies towards FDI and other guarantees; (4) efficiency of local government administration; and (5) the attitude of the local government towards FDI. These indicators are developed in the studies of Coskun (2001), Tatoglu and Glaister (1998), Tahir and Larimo (2004) and Sethi et al. (2003). All indicators are measured on a seven-point scale, where a high score indicates a high investment incentive, as perceived by foreign investing firms.

*Cultural distance* is measured using a single psychometric indicator of the effect of the market culture factor on foreign firms’ investment decisions, which is the local cultural affinity of foreign investing firms. This was used in the FDI location study of Pak and Park (2005) and Galan and Benito (2001). Cultural distance was measured using a
seven-point scale, where a high score indicates a greater proximity level between investing firms and the location.

*Infrastructure* is measured on the respondent perception of five indicators regarding the quality of infrastructure in the location: (1) Reliability of the energy supply; (2) transport linkage; (3) quality of the communication infrastructure; (4) water supply and infrastructure; (5) quality of infrastructure; and (6) the level of the whole infrastructure development. These indicators are developed in the studies of Berkoz (2005), and Tatoglu and Glaister (1998). These indicators were also examined in the studies of Wheeler and Mody (1992) and Bevan, Estrin, and Meyer (2004). All indicators are measured on a seven-point scale, where a high score indicates a high level of infrastructure, as perceived by foreign investing firms.

*Agglomeration* is measured on the perceived level of the industrial agglomeration by investment firms in terms of three indicators: (1) Proximity to firms in the same sector; (2) proximity of firms in a complementary sector; and (3) high industrial concentration (such as in an industrial park). These indicators are adopted from the FDI location studies of Berkoz (2005). All indicators are measured using a seven-point scale, where a high score indicates a high level of industrial agglomeration, as perceived by foreign investing firms.

*Investment risk* is measured on three psychometric indicators of investment risk confronted by a foreign investing firm in terms of: (1) The level of security on the whole; (2) local social stability; and (3) the consistency of local government policies. It is developed from the studies of Tatoglu and Glaister (1998) and Pak and Park (2005), and is measured using a seven-point scale, where a high score indicates a high level of perceived investment risk in the local market.

Three variables are drawn from the theoretical construct of strategic investment motivations, being: (1) Marketing-seeking motivation; (2) efficiency-seeking motivation; and (3) resource-seeking motivation. The fourth dimension of strategic investment motivations (strategic-seeking motivation) is not included in the study as an independent variable, as discussed in Chapter 4 (refer to Chapter 4, Section 4.3.4). Each of the three variables is measured by the perceived level of consideration by foreign
investing firms in terms of the related strategic investment motivation. All three indicators are developed from the studies of Chandprapalert (2000), Dunning (2001), Mortimore (2003), and Vyas (2000). These indicators are measured using a seven-point scale, where a high score indicates a high level of related investment motivation, as perceived by investing firms for FDI activities in the location under study.

*Control variable:* The country of origin is treated as a control variable and is measured on the difference between FDI location decisions depending on the home country origins of the investing firms. This variable is included in the data analysis of the study to monitor its possible effect on FDI location choice, and to separate it from the impacting effects of the independent variables. Home countries of all responding firms are grouped into four categories, being: (1) The US; (2) EU countries; (3) Japan; and (4) Asian countries other than Japan. Considering the categorical nature of the variable, a categorical variable is used to measure the effect of the country of origin on an investing firms’ location decision.

The measurements of these variables are summarised in Table 5.1. The variable constructs are subject to scale reliability tests, which are presented in Chapter 7.
Table 5.1 Variable Measurement Scheme

<table>
<thead>
<tr>
<th>Variable</th>
<th>Measurement items</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Dependent variable</strong></td>
<td></td>
</tr>
<tr>
<td>FDI location</td>
<td>one proxy indicator</td>
</tr>
<tr>
<td><strong>Independent variables</strong></td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>1 proxy indicator</td>
</tr>
<tr>
<td>International experience</td>
<td>2 seven-point scale indicators</td>
</tr>
<tr>
<td>Cost factor</td>
<td>4 seven-point scale indicators</td>
</tr>
<tr>
<td>Market factor</td>
<td>6 seven-point scale indicators</td>
</tr>
<tr>
<td>Investment incentives</td>
<td>5 seven-point scale indicators</td>
</tr>
<tr>
<td>Culture distance</td>
<td>1 seven-point scale indicator</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>6 seven-point scale indicators</td>
</tr>
<tr>
<td>Agglomeration</td>
<td>3 seven-point scale indicators</td>
</tr>
<tr>
<td>Investment risk</td>
<td>3 seven-point scale indicators</td>
</tr>
<tr>
<td>Market-seeking motive</td>
<td>1 seven-point scale indicator</td>
</tr>
<tr>
<td>Efficiency-seeking motive</td>
<td>1 seven-point scale indicator</td>
</tr>
<tr>
<td>Resource-seeking motive</td>
<td>1 seven-point scale indicator</td>
</tr>
<tr>
<td><strong>Control variable</strong></td>
<td></td>
</tr>
<tr>
<td>Country of origin</td>
<td>4 categories</td>
</tr>
</tbody>
</table>

5.6 Data Analysis Methods

The data analysis procedure consists of several stages, from editing to analysis, using different statistical techniques. This section explains the techniques and procedures, to be followed by a more detailed discussion in the following two chapters. Several major statistical analysis tasks are performed sequentially in this study, involving various statistical techniques. Prior to the data analysis process of the major analysis tasks, the preliminary analysis of responding firms was performed. Descriptive statistics of the major characteristics of FDI projects reported by the responding firms were examined to provide an overall understanding of FDI projects of the sample firms under study. These preliminary results of data analysis are reported in Chapter 6. The major tasks of data analysis include non-response bias analysis, scale reliability analysis, and logistic
regression analysis. The statistical techniques involved in these statistical analyses are described in this section. The results from these analyses are reported in Chapter 7 of this thesis.

5.6.1 Overview of Data Analysis

The primary data collected from the mail survey was administered and subjected to quantitative analysis using the SPSS 15.0 program. Frequency distribution analysis was used to describe the general information of the companies and the location choices employed by investing MNEs in Gansu province. Cross-tabulation was used to describe the sample profile. The next step of the analysis was to construct scales and test the scale reliability. Since the questions were designed using a seven-point Likert scale for measuring the effect of most of the independent variables on FDI location (1 indicating the lowest, to 7 indicating the highest value), each indicator for the variables was scored in the same direction and each of the variable indicators in the scale contributed equally to the final scale score. Cronbach’s alpha was used to test the reliability of the scales. According to Peter (1979), a modest reliability in the range of 0.5 to 0.6 will suffice in the early stage of research. As this research is exploratory in nature, an alpha coefficient equal to, or greater than, 0.6 was considered acceptable for the scale reliability. The results of the reliability tests revealed that the alpha coefficients for most groups of variables were sufficient, and the lowest score for a group of variables was above 0.6, which was considered acceptable. The following step of the data analysis dealt with bivariate statistics, which investigated the differences between two groups (wholly-owned firms and joint venture firms) and the relations between the dependent and independent variables.

After the correlation test, a conditional logistic regression technique was used to test the hypothesis relation between the dependent variable (FDI entry mode; wholly-owned venture, or joint venture) and the independent variables (twelve factors, excluding the control variable) to detect which factors contributed most to the FDI location choice. The dependent variable was measured at a nominal level and the independent variables were measured at an ordinal level in this research. The logistic regression technique is particularly appropriate when: (1) The dependent variable is binomial; (2) the
independent variables are qualitative, or quantitative; and (3) the underlying assumptions of multivariate normality cannot be met (Afifi & Clark, 1984; Cox, 1970; Kachigan & Christensen, 1997). Moreover, many recent studies related to FDI location choice have employed logistic regression models (Erramilli et al., 1997; Anderson & Gatignon, 1986; Kogut & Singh, 1988; Terpstra & Yu, 1988; Tse et al., 1998).

The emphasis of the interpretation of the logistic regression results was on the level of significance and the direction of the relation between the dependent variable and each independent variable. A full model based on the conceptual framework for this research was tested, and a number of alternative models were also examined against the data. As a consequence, the best FDI location choice model was generated after analysing the logistic regression results and comparing the full model with a number of alternatives. Detailed data analysis techniques are outlined in the following sections.

5.6.2 Data Analysis Techniques

The techniques for statistical analysis utilised in this study are introduced in more detail in this section. The preliminary data analysis of the responding enterprises was conducted to form the sample data. This is presented in Chapter 6, prior to further statistical analysis in Chapter 7, in order to provide an overview of the respondent firms in Gansu province. The remainder of the statistical analyses are indicated in the following, and the related results are reported in Chapter 7.

5.6.2.1 Non-response Bias Test

The initial task for data analysis was to perform a non-response bias test on the sample firms. This procedure is necessary, because if non-response bias exists; i.e., if the responses of participants differ in some systematic way from the responses of non-participants; then the analysis results from the participant responses cannot be generalised to the entire survey sample frame, nor to the population of the study (Cooper & Schindler, 2008). The extrapolation method suggested by Armstrong and Overton (1977) is used to test for non-response bias. The test is based on the assumption
that participants who respond later are more similar to non-respondents, than are earlier respondents (Feber, 1948). Non-response bias exists if the group mean of FDI entry mode (foreign venture equity ownership percentage) between the first 50% and the remaining 50% of the responding firms are significantly different. Independent sample t-tests were performed on the dependent variable and all 12 independent variables. The t-statistics were computed based on the mean ($x$), sum of the squares ($ss$), and the number of subjects ($n$) of each group:

\[ t = \frac{x_1 - x_2}{\sqrt{\frac{ss_1 + ss_2}{n_1 + n_2 - 2} \left( \frac{1}{n_1} + \frac{1}{n_2} \right)}} \] (1)

A significant (two-tailed) t-statistic will reject the null hypothesis of equality of group means between early respondents and late respondents and, therefore, statistically proves the existence of a non-response bias in the survey. Conversely, and insignificant t-test result suggests that the sample is free from non-response bias.

5.6.2.2 Reliability

Reliability explains the extent to which a research instrument can replicate the same results on a continuous basis (Page & Meyer, 2000). Thus, reliability explains the internal consistency of a scale, or in other words, the extent to which the scale measures the true value of the construct in question (Hair, Black, Babin, Anderson, & Tatham, 2005). The rationale is that the items on any of the scales should measure the same construct and should, therefore, be highly correlated. Reliability reflects the precision, or consistency, of a measure. Simply put, it is the percentage of true variance in the observed variance for any particular scale. The scales that have been used in this study have generally received acceptable levels of reliability in previous studies.

This analysis task is applied to test the scale reliability of the variable constructs built on multiple indicators. The purpose of this analysis procedure is to refine the variable constructs and to calculate the final scores of the variables. As described earlier in this
chapter, the independent variables in this study are all latent constructs that consist of single, or multiple, measurement items. An item compromises the reliability of the construct if the item’s survey question is confusing, or can cause misinterpretations. Such items should be eliminated from the corresponding variable constructs. To perform this analysis task, the item-to-total correlation (the correlation between the score of each indicator item and the total score of the indicators used to capture each construct) was examined and a Cronbach’s coefficient alpha was calculated. Those indicators with a low corrected item-to-total correlation ($r<0.25$) were eliminated following the cut-off criterion suggested by Nunnally (1978). Cronbach’s coefficient alpha was then computed based on the number of items remaining in the construct and the ratio of the average inter-item covariance to the average item variance (Cronbach, 1951):

$$\alpha = \frac{N}{N-1} \left(1 - \frac{\sum_{i=1}^{N} \sigma_{i}^2}{\sigma_{x}^2} \right)$$

(2)

where $N$ is the number of components (items, or testlets), $\sigma_{x}^2$ is the variance of the observed total test scores, and $\sigma_{i}^2$ is the variance of component $i$. Alternatively, the standardised Cronbach’s $\alpha$ can also be defined as:

$$\alpha = \frac{N \cdot \bar{c}}{\left(\bar{v} + (N-1) \cdot \bar{c}\right)}$$

(3)

where $N$ is the number of components (items, or testlets), $\bar{v}$ equals the average variance, and $\bar{c}$ is the average of all covariances between the components.

Churchill (1979) and Peter (1979) suggested that in the early stages of basic research, reliability of 0.50 or 0.60 suffices. Since this study is the first to develop and implement a psychometric scale and proxy indicators in the study of FDI location choice by foreign firms in the inland region of China, 0.60 is set as the cut-off criterion for the Cronbach’s coefficient alpha in this study. A variable construct is proven to be reliable if the
construct exceeds the cut-off point of 0.60, and all indicator items within the construct have an item-to-all correlation above 0.25.

After variable constructs were finalised through the reliability test procedure, variable scores were calculated. If a variable is measured on a single indicator, the score of this indicator is automatically recorded as the score of the corresponding variable; if multiple indicator items exist in a variable construct, the scores of the indicator items are summed as the variable score. The method of generating a variable score is based on a unit weighting scheme approach. This approach is recommended in a situation where the sample size is moderate (50<n<200) and a criterion variable is vague, or nonexistent (Einhorn & Hogarth, 1975), which is the case in this study. Once the variable scores were calculated, a correlation test was performed to confirm the independence of the variables. If no strong and significant correlation exists among the variables, the variable constructs can be assessed as satisfactory and there is no potential risk of multicollinearity in later statistical tests.

5.6.2.3 Regression Analysis – Logistic Model

The core analysis task in this study is to empirically test the framework and the hypotheses derived from it, so as to provide answers to the research questions. The main research question is related to the determinants of FDI location choice in the inland region of China. Considering that the study is ex post facto research, FDI entry mode of foreign firms in Gansu province is considered as the proxy for FDI location. Therefore, binomial data analysis techniques are used in this analysis, due to dichotomous classification of the dependent variable. Before conducting the hypothesis tests, the difference between the two entry modes was assessed by comparing the group means of the impacting factors (independent variables) at both univariate and multivariate levels. At the univariate level, similar to the above described non-response bias test, an independent sample t-test was performed on each of the independent variables. At the multivariate level, the group differences across all the independent variables were assessed simultaneously using a MANOVA (multivariate analysis of the variance) test. Significant test statistics are expected from the t-test and the MANOVA test, because the rejection of the null hypothesis (equality of means) validates the framework of this
study, which is constructed to differentiate the choices of these two alternative FDI entry modes.

In FDI literature, many studies have explored similar research questions by relying on choice-theoretic empirical methods (Buckley et al., 2007; Hensher, Louviere, & Swait, 2000; Train, 2003) to capture the preference structures of managers either actively, or potentially actively, involved in FDI location choices. A discrete-choice model is applied, namely the conditional logistical model of McFadden (1974), with its compatible disaggregate firm-level data. The conditional logistical model (CLM); developed by McFadden (1974) and adopted by Carlton (1983), Bartik (1985), Coughlin Terva, and Arromdee (1991), and Woodward (1992); is used to test the influence of regional potential determinants on FDI locational choice in the inland region of China. Discrete choice models can be traced back to Thurstone (1927), Luce (1959), and Marschak (1960). Consistent with Marschak’s (1960) random utility maximisation specification, McFadden (1974) established the first econometric application of discrete choice models; namely, the conditional logistical model.

This established approach to location choices assumes that a rational investor $i$ would choose a location $j$ for its new plant only if this location could maximise its profits. Profitability will depend on a set of variables that includes characteristics specific to the firm, as well as to the potential locations. Since the forecasted profit of each possible investment location is not directly observable, it is further assumed that the anticipated profit is a function of observable characteristics of each investment location. Mathematically, the forecasted profit of foreign investor $i$ in location $j$ can be expressed as:

$$\pi_{ij} = X_{ij} \beta_i + \epsilon_{ij}$$  \hspace{1cm} (4)$$

where, $X_{ij}$ refers to the vector of observable location characteristics of investment location $j$, $\beta$ is the vector of the estimated coefficients, and $\epsilon$ is disturbance terms referring to unobserved characteristics of each alternative. Each $\epsilon$ is assumed to be the independently and identically distributed extreme value. Therefore, an investment location $j$ is selected by a foreign investor $i$ if, and only if:
\( \pi_j > \pi_{\bar{k}}, \text{for } j \neq s \) (5)

where, \( z \) is a vector of the characteristics for a particular investment location defined below. If the firm’s choice to invest in location \( j \) instead of location \( k \) is denoted by \( = 1 \), then:

\[
\Pr ob(Y = 1|Z) = \Pr ob(\pi_j > \pi_{\bar{k}}|Z)
\] (6)

The logistic estimate provides information on which of characteristics included in vector \( z \) plays an important role on the firm’s location choice. According to the model, the dependent variable takes the value of 1 for the location where a company chooses to invest and the value of 0 for all other locations. The probability of an investor \( i \) choosing a particular location \( j \) out of \( t \) potential locations can be mathematically expressed as follows:

\[
\Pr ob(j) = \frac{\exp(X_j \beta_i)}{\sum_{i=1}^{t} \exp(X_i \beta_i)}
\] (7)

The CLM assumes that a foreign firm selects a location, if by doing so, it will maximise profit. This assumption fits into the neoclassical economic theory of utility maximising behaviour (McFadden, 2001). The benefit of this approach is that it allows for the examination of combinations of investment and environmental features, and the relative value of each, in determining the choice of managerially preferred outcomes in a more controlled setting. In addition, it allows for the direct testing of the degree of managerial variation from a purely rational model and, in this way, serves as a more direct comparison between the rational calculative model and the internationalisation process model. Discrete choice models are widely and successfully used in studies of transportation (Ben-Akiva & Lerman, 1985; Hensher & Button, 2000), recreation demand (Train, 2003), election analysis (Glasgow, 2001), labour economics (Jovanovic & Moffitt, 1990), marketing analysis (Anderson, De Palma, & Thisse, 1992), migration
Applications of this model to the phenomenon of FDI location assume that profits differ between locations and that firms decide on a location to maximise their profits. The discrete-choice models on location choices of FDI have been well developed, and have been successfully employed, in the context of the US and the EU (e.g., Coughlin et al., 1991; Coughlin & Segev, 2000; Friedman et al., 1992; Ondrich & Wasyleanko, 1993). Carlton (1983), for example, analysed location determinants in US metropolitan areas and concluded that location economies strongly influence a firm’s decision. In studies of American states, Bartik (1985) emphasised the effects of unionisation, taxes, and public service; Coughlin et al. (1991) found positive evidence that income per capita, agglomeration economies, unemployment, and unionisation rates attracted foreign investment; and Friedman et al. (1992) highlighted variables such as access to markets, labour market conditions, taxes, and promotional efforts. Another interesting contribution was made by Woodward (1992), who used a conditional logistical model framework to analyse Japanese investment in the US.

The findings of Baudewyns (1999) and Baudewyns, Sekkat, and Ben-Ayad (2000) are of great interest in this study because they applied logistical methodology to European data (Brussels). Baudewyns (1999) showed the importance of accessibility to the centre and agglomeration economies. Baudewyns et al. (2000) later studied not only the location of new firms, but also the re-location of former firms. Another interesting study is that of Coughlin and Segev (2000), who analysed location determinants of FDI at regional and county levels, using US data. As stated earlier, previous studies were based on a conditional logistical model, in which the number of sites estimated was very small.

In the case of China, while limited compared with other assessments of FDI, previous empirical analyses on the determinants of FDI location in China have been conducted using aggregate methodologies and their applicable FDI data sets. In the aggregate approach, the ordinary least squares (OLS) method is typically used, along with either FDI inflows, or stock data. This approach assumes that each Chinese city, or province, in question is able to draw, or accumulate, any specific volume of FDI in any single year, or over a number of years, and that these FDI inflows, or stocks, are normally
distributed across these cities, or provinces. In the disaggregate approach, each individual firm’s location selection behaviour is examined against observable location characteristics, such as infrastructure capacity, or market potential. Compared with the aggregate approach, disaggregate methodology was applied in a few studies (e.g., Chen, 1996). Chen (1996) first applied a conditional logistical model to examine the location decisions of foreign affiliations in China and concluded that superior infrastructure endowment would attract foreign investors. The conditional logistical model was then employed in other studies (Belderbos & Carree, 2002; Cheng & Stough, 2006; He, 2003; Hou & Zhang, 2001; Wu & Strange, 2000), and concluded that foreign investors’ location choices are highly hinged upon a place’s market volume, transportation infrastructure, labour force quality, policy environment, and industrial agglomeration.

As discussed above, discrete-choice models are well grounded in microeconomic utility/profit maximisation and are feasible to rich empirical specifications. Unlike aggregate methodologies, e.g., the OLS model, the discrete-choice models empower researchers to reveal each individual choice maker’s preferences, some of which may be lost in the aggregate methodologies through their aggregation of the discrete data. Therefore, new insights would be provided by integrating the discrete-choice models into the analyses of the location choices of FDI in Gansu province. Using the results of the logistic model, this study examined the proposed theoretical hypotheses, and explored determinants of FDI location choice in Gansu province, an inland province of China.

5.6.2.4 Model Specification and Variable Description

The binomial logistical model is particularly appropriate when: 1) The dependent variable is binary; 2) there are qualitative and quantitative independent variables; and 3) the underlying assumptions of multivariate normality cannot be met (Hair et al., 2005). The CLM model aims to explain differences characterising the strategies underlying FDI in Gansu province and the relations with firm-specific aspects of the individual investors. This study has adopted this method as its key statistical analysis tool, as it has a mixed set of categorical (indicator) and interval independent variables and its dependent variable is also binary (Erramilli & Rao, 1993). As described above, the
variables included in the model all have significant levels (p< 0.05). The goodness of fit of the model is also appealing. It has been cited that the prediction capability is higher on the more frequently occurring choice (Anderson & Coughlan, 1987). The model chi-square value and its significance level in the established model also seem to be reasonable. The likelihood value is also sound.

A dichotomous variable as a dependent variable is created, that takes the value 0 if the foreign firm has only undertaken joint venture - shared-ownership FDI (JV), including a joint venture, or partial acquisition, of a Chinese company, and takes the value 1 if the foreign firm has undertaken full-ownership FDI - wholly-owned ventures (WV), including greenfield investment, or the total acquisition of a local firm. The dependent variable is a dummy equal to unity whenever the investment falls into category i and is otherwise equal to 0. The model is defined as:

\[
Type_i = \begin{cases} 
1 & \text{if the investment falls into category } i \\
0 & \text{otherwise}
\end{cases}
\]  

where, \(i\) indicates a joint venture, or wholly-owned venture.

Subsequently, in order to elaborate the statistical analysis, an alternative model was considered. The latter model allows us to assess the impacts of investor characteristics on the whole set of possible strategies. The variable type, thus, assumes five different values.

Since the dependent variable in the first case express three different characteristics, five binomial models were estimated:

\[
P(y) = \text{Prob}(TYPE_i = 1) = F(y) = F(\alpha + \beta x)
\]

In order to examine the probability of FDI in Gansu, a logistical model is estimated, in which the probability of a firm investing in Gansu is:

\[
\eta = 1/[1 + \exp(-\eta x + b + e)]
\]
where, $P_i$ is the probability that a foreign firm $i$ will locate in Gansu, $X_i$ is a vector of the characteristics, $b$ is a vector of the coefficients to estimated, and $E_i$ is a random error term, which comes from a distribution that is identically and independently distributed.

### 5.7 Summary

This chapter has discussed various methodological issues involved in the study. First, it justified the selection of survey method for this empirical study. Then the data collection technique and procedure used in this study were discussed, including the survey questionnaire development, the defining of the population and sample size, and conducting the fieldwork of the mail questionnaire survey. Afterwards, measurements for the dependent variable, the independent variables, and the control variable were described. Finally, the methods and techniques utilised in the data analysis of the study were discussed. The next two chapters present the results generated from the statistical analyses of the empirical data. Chapter 6 reports the preliminary data results obtained from the analysis to provide background information regarding the responding FDI projects.
CHAPTER 6 PRELIMINARY ANALYSIS OF DATA

6.1 Introduction

This chapter aims to provide a demographic profile of the responding FDI ventures invested in by foreign firms in Gansu province, with the purpose of investigating the determinants that affect foreign firms’ location choice in this particular region. By the time the mail survey in this study was completed, a total of 106 usable questionnaires had been returned to the author. Answers from respondents to the survey questionnaire were coded and entered into SPSS 15.0 for the purpose of data analysis. Prior to the data analysis using the proposed framework and hypothesis testing, this chapter presents preliminary results generated from the data analysis, in order to present the background information regarding FDI ventures of the responding firms.

6.2 Sample Profile

This section introduces the background information of FDI ventures of these 106 responding firms regarding their country of origin, timing of investment, scale of FDI, FDI entry mode, ownership structure of FDI, size of venture, and main target market of their FDI ventures.

6.2.1 Country of Origin

Tables 6.1 and 6.2 provide a summary of the country origins of the responding firms and the type of investment assets they control. A total of 106 foreign invested firms participated in this survey. Sixty-eight (64.2%) were FDI firms invested in by Asian countries/regions, excluding Japan. Eleven (10.4%) investors were from European Union (EU) countries and eighteen were US firms (17.0%). The number of foreign ventures from Japan (8.5%) is close to that of the EU country number. Table 6.1 indicates that home countries for FDI ventures operating in Gansu province are mainly...
Asian countries, and this is similar to FDI inflows in other regions of China (mainly from Hong Kong). Since the FDI boom in China, investments from Hong Kong have dominated this area. Up to 2006, FDI from Hong Kong has been more than 60% of all FDI in China (SSB, 2007).

Table 6.1 Country of Origin

<table>
<thead>
<tr>
<th>Country of Origin</th>
<th>Number of FDI firms</th>
<th>Percent in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td>18</td>
<td>17.0</td>
</tr>
<tr>
<td>Japan</td>
<td>9</td>
<td>8.5</td>
</tr>
<tr>
<td>EU</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>Asian Countries</td>
<td>68</td>
<td>64.2</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

Of the 106 foreign firms, 93 (87.7%) invested capital only in their Gansu subsidiaries, 4 (3.8%) contributed technology only, and 9 (8.5%) invested both capital and technology in their Gansu ventures. As for the investing assets, capital is the main investment type. This indicates that Gansu province still lacks financial support and necessary capital in its economic development. Technology-oriented FDI projects consist of only a tiny proportion of the total FDI inflows to Gansu.

Table 6.2 Types of Investment Assets

<table>
<thead>
<tr>
<th>Types of investment assets</th>
<th>Number of firms</th>
<th>Percent in sample</th>
</tr>
</thead>
<tbody>
<tr>
<td>Capital</td>
<td>93</td>
<td>87.7</td>
</tr>
<tr>
<td>Technology</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>Both</td>
<td>9</td>
<td>8.5</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>
6.2.2 Timing of FDI

6.2.2.1 Timing of FDI by Responding Firms

Table 6.3 is a summary of responding firms’ timing of FDI activities in Gansu. The responding foreign firms invested in Gansu province during the period from 1989 to 2005. The table shows that 14 (13.2%) investors started their FDI in Gansu before 1992. Eighty-two (77.4%) investors made their investments in Gansu province during the decade between 1992 and 2001. This was a period marked by the two significant events: China’s former leader, Deng Xiaoping’s, famous South China tour in 1992, during which he called for China to further open up its markets in order to accelerate its economic reform and development and; China’s admission to the World Trade Organisation (WTO) at the end of 2001. Since 2002, ten foreign enterprises have made investments in Gansu province. Table 6.3 indicates that an overwhelming majority (86.8%) of investment projects in Gansu were made after 1992, and this phenomenon is a reflection of the general trend in China’s FDI development; that China had a dramatic increase of FDI inflows after 1992; as described in Chapter 2.

<table>
<thead>
<tr>
<th>Timing of FDI</th>
<th>Number of firms</th>
<th>Percent in sample</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1992</td>
<td>14</td>
<td>13.2</td>
<td>13.2</td>
</tr>
<tr>
<td>1992 - 2001</td>
<td>82</td>
<td>77.4</td>
<td>90.6</td>
</tr>
<tr>
<td>2002 - 2006</td>
<td>10</td>
<td>9.4</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

6.2.2.3 Timing of FDI by Country of Origin

Table 6.4 shows the FDI construction by country of origin. Two different trends regarding timing and country of origin for FDI in Gansu are clearly shown in this table. First, the dominant position of FDI from Asian countries and regions (with the
exception of Japan) has been declining. The proportion of Asian investments was overwhelming for the period before 1992 (85.7%), then falling to a less overwhelming position (64.6%), although still dominant, during the period from 1992 to 2001, and further to a minor position of 30.0% for the latest period from 2002 to 2006. Second, reflecting the declining position of investments from Asian countries and regions, the proportions of investments from the US and Japan have been steadily increased over time. During the first two stages, investment in Gansu was dominated by Asian investors. Very few investments in Gansu province were from developed countries. The dominant position of investments from Asian countries and regions in Gansu province for the first two periods is also a reflection of the overall profile of FDI in China over that period of time. Theoretically, in the first stage of FDI in China, FDI from Asian countries, especially from Hong Kong and Taiwan, have fewer barriers in terms of language, geography, and culture. Since the economic development of China, other countries such as the US, Japan, and the EU countries have rapidly followed in the footsteps of those to first move into China.

Table 6.4 Timing of FDI by Country of Origin

<table>
<thead>
<tr>
<th>Timing of FDI</th>
<th>Home Country</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>US</td>
<td>Japan</td>
</tr>
<tr>
<td>&lt;1992</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td></td>
<td>14.3%</td>
<td>0%</td>
</tr>
<tr>
<td>1992 - 2001</td>
<td>12</td>
<td>7</td>
</tr>
<tr>
<td></td>
<td>14.6%</td>
<td>8.5%</td>
</tr>
<tr>
<td>2002 - 2006</td>
<td>4</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>40.0%</td>
<td>20.0%</td>
</tr>
<tr>
<td>Total</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td></td>
<td>17.0%</td>
<td>8.5%</td>
</tr>
</tbody>
</table>
6.2.3 Scale of FDI

6.2.3.1 Scale of FDI by Responding Firms

According to the invested capital value, the scale of foreign investments in Gansu province was classified into four categories; small (less than US$1 million), lower medium (US$1-9.99 million), upper medium (US$10 -19.99 million), and large (more than US$20 million). As demonstrated in Table 6.5, the majority of FDI projects are rather low in this investment scale. Among all of the investing projects, eighty-six cases (81.1%) were less US$1 million and 96.2% were under US$20 million, being theoretically defined as small and medium-sized investments. Only four projects (3.8%) among all of those made in Gansu province over the whole period have capital valued at more than US$20 million.

Table 6.5 Scale of FDI by Responding Firms

<table>
<thead>
<tr>
<th>Scale of FDI</th>
<th>Frequency</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1 million</td>
<td>86</td>
<td>81.1</td>
<td>81.1</td>
</tr>
<tr>
<td>1 - 9.99 million</td>
<td>14</td>
<td>13.2</td>
<td>94.3</td>
</tr>
<tr>
<td>10 - 19.99 million</td>
<td>2</td>
<td>1.9</td>
<td>96.2</td>
</tr>
<tr>
<td>20 million and over</td>
<td>4</td>
<td>3.8</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

6.2.3.2 Scale of FDI by Country of Origin

Table 6.6 provides a statistical summary of the investment scale by country of origin. Investments from Asian countries, with the exception of Japan, are overwhelmingly dominated by small projects, with 62 FDI projects (91.2%) invested in by Asian countries/regions are valued at less than US$1 million and no single project from this group can be categorised as large (capital value larger than US$20 million). FDI projects from Japan are dominated by low to medium sized investments, with 55.6% of
Japanese projects being in the range between US$1-9.99 million. As for investment from the US, 72.2% of FDI projects from the US are less than US$1 million. On the other hand, however, two US projects have capital value larger than US$20 million, representing half of the large investment projects in Gansu. Similar to the case of the US investments, 72.7% of FDI projects from the EU countries are less than US$1 million. As shown in Table 6.6, although the majority of FDI projects in the sample were invested in by Asian investors, all the large FDI projects (US$20 million and over) were invested in by firms from developed countries: 2 from the US, 1 from Japan, and 1 from the EU.

Table 6.6 Scale of FDI by Country of Origin

<table>
<thead>
<tr>
<th>Country of origin</th>
<th>Total investment size</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1 million</td>
<td>1 - 9.99 million</td>
<td>10 - 19.99 million</td>
<td>20 million and Over</td>
<td>Total</td>
</tr>
<tr>
<td>US</td>
<td>13</td>
<td>3</td>
<td>0</td>
<td>2</td>
<td>18</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>5</td>
<td>0</td>
<td>1</td>
<td>9</td>
</tr>
<tr>
<td>EU</td>
<td>8</td>
<td>2</td>
<td>0</td>
<td>1</td>
<td>11</td>
</tr>
<tr>
<td>Asia</td>
<td>62</td>
<td>4</td>
<td>2</td>
<td>0</td>
<td>68</td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>14</td>
<td>2</td>
<td>4</td>
<td>106</td>
</tr>
</tbody>
</table>

<p>| | | | | | |</p>
<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>81.1%</td>
<td>13.2%</td>
<td>1.9%</td>
<td>3.8%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

6.2.3.3 Scale of FDI by Timing of FDI

Table 6.7 provides a summary of the scale of investment by the timing of FDI. It shows that all of the 14 FDI projects invested in before 1992 are less than US$10 million. Of these, 11 (78.6%) are less than US$1 million. In examining the second period of 1992 to 2001 it can be seen that, although the majority of the FDI projects (69 cases
representing 84.1%) are categorised as small (under US$1 million), all 4 large projects (larger than US$20 million) were made during this period. During the third period of 2002 to 2006, the scale of the FDI projects became smaller again, with all FDI projects in that sample period categorised into the 2 groups of small and lower medium, with no investment being made at, or above, US$10 million.

Table 6.7 Scale of FDI by Timing of FDI

<table>
<thead>
<tr>
<th>Timing of FDI</th>
<th>Total investment size</th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>&lt;1 million</td>
<td>1 - 9.99 million</td>
<td>10 - 19.99 million</td>
<td>20 million &amp; over</td>
<td>Total</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>&lt;1992</td>
<td>11</td>
<td>3</td>
<td>0</td>
<td>0</td>
<td>14</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992 - 2001</td>
<td>69</td>
<td>7</td>
<td>2</td>
<td>4</td>
<td>82</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2002 - 2006</td>
<td>6</td>
<td>4</td>
<td>0</td>
<td>0</td>
<td>10</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>86</td>
<td>14</td>
<td>2</td>
<td>4</td>
<td>106</td>
<td>100.0%</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

6.2.4 FDI Entry Mode

6.2.4.1 FDI Entry Mode by Firms

Table 6.8 provides a summary of the FDI entry modes that were chosen by responding firms for their investment in Gansu province. It shows that foreign firms in the sample entered Gansu province through either a wholly-owned venture, or a joint venture, during the period from 1989 to 2006. Ninety-two (86.8%) responding firms used a joint venture as their entry mode into Gansu province, and the other fourteen firms (13.2%) chose to establish wholly-owned subsidiaries. As discussed in Chapter 2, joint ventures were a popular FDI method during the early stage of FDI development in China, with
wholly-owned ventures having been the preferred entry mode in China since the end of the 1990s. In Gansu, however, foreign investing firms still prefer joint ventures over wholly-owned subsidiaries as their FDI entry form. This trend is a reflection of the lower FDI development in Gansu province than is the case in China as a whole. To some extent, FDI in Gansu province is still in the early stage, compared with FDI in the coastal regions of China. In 2000, the Chinese central government launched a go west policy to accelerate the inland regions' development and assist them to catch up to the development level of the coastal regions. Twelve among the 14 wholly-owned firms were established through M&A (merger and acquisition). Of 92 joint ventures, 86 were set up through the M&A method. As shown in Table 6.8, 98 (92%) of the respondent firms were established through the form of M&As, with only 8 firms established by the greenfield method.

<table>
<thead>
<tr>
<th>Number of</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wholly-owned</td>
<td>14</td>
<td>13.2</td>
</tr>
<tr>
<td>Joint venture</td>
<td>92</td>
<td>86.8</td>
</tr>
<tr>
<td>Greenfield</td>
<td>8</td>
<td>0.08</td>
</tr>
<tr>
<td>M&amp;A</td>
<td>98</td>
<td>0.92</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

6.2.4.2 FDI Entry Mode by Country of Origin

Table 6.9 shows the entry modes by investors' country of origin. As indicated in the table, 63 (92.6%) projects invested in by Asian firms chose a joint venture as their entry mode. Similarly, although less significantly, more than 60% of FDI projects invested in by US, EU, and Japanese firms adopted the joint venture form. For the 3 groups of investing firms from Japan, the EU, and the US, Japanese firms have the highest proportion of using wholly-owned subsidiaries as their entry mode, but only at a level of 33.3%. Meantime, only 22.2% of the projects invested in by the US firms and 18.2% invested in by the EU firms used wholly-owned subsidiaries. Generally speaking, for
home countries, a joint venture was still the preferred FDI entry mode in Gansu. This phenomenon indicates that FDI inflows to Gansu are still in the initial stage, which means that foreign investing forms are still in the process of familiarising themselves with Gansu’s investment environment.

Table 6.9 Country of Origin and Entry Mode

<table>
<thead>
<tr>
<th>Country of Origin and Entry Mode</th>
<th>Entry mode of the respondent firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wholly-owned</td>
<td>Joint venture</td>
</tr>
<tr>
<td>US</td>
<td>4</td>
<td>14</td>
</tr>
<tr>
<td></td>
<td>22.2%</td>
<td>77.8%</td>
</tr>
<tr>
<td>Japan</td>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>33.3%</td>
<td>66.7%</td>
</tr>
<tr>
<td>Entry mode</td>
<td>2</td>
<td>9</td>
</tr>
<tr>
<td>EU</td>
<td>18.2%</td>
<td>81.8%</td>
</tr>
<tr>
<td>Asian countries</td>
<td>5</td>
<td>63</td>
</tr>
<tr>
<td></td>
<td>7.4%</td>
<td>92.6%</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>13.2%</td>
<td>86.8%</td>
</tr>
</tbody>
</table>

6.2.4.3 FDI Entry Mode by Timing of FDI

Table 6.10 summarises the entry mode selections by timing of the FDI projects. For the first period before 1992, among all the 14 FDI projects, all but one was established through the form of a joint venture. For the second period between 1992 and 2001, 73 FDI projects (89.0%) were set up in the form of joint ventures, and 9 projects (11.0%) were established in the form of wholly-owned subsidiaries. For the third period between 2002 and 2006, the ratio between joint ventures and wholly-owned subsidiaries is 6 to 4. As shown by the figures in Table 6.10, the proportion of wholly-owned subsidiaries increased from 7.1% in the first period, to 11.0% in the second period, and then to 40.0% in the third period. On the contrary, the proportion of joint ventures steadily
declined, from 92.9% in the first period, to 60% in the third period. This changing trend of entry mode selections matches with the general trend of FDI entry mode selection in China, but has been more gradual. Wholly-owned subsidiaries have been preferred over joint ventures from the end of the 1990s, even though joint ventures used to dominate, as the most widely-adopted form. In the case of Gansu province, during any of the time periods, joint ventures have been preferred over wholly-owned subsidiaries.

Table 6.10 Timing of FDI and Entry Mode of the Firms

<table>
<thead>
<tr>
<th>Timing of FDI</th>
<th>Entry mode of the respondent firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wholly-owned</td>
<td>Joint venture</td>
</tr>
<tr>
<td>&lt;1992</td>
<td>1</td>
<td>13</td>
</tr>
<tr>
<td></td>
<td>7.1%</td>
<td>92.9%</td>
</tr>
<tr>
<td>1992 - 2001</td>
<td>9</td>
<td>73</td>
</tr>
<tr>
<td></td>
<td>11.0%</td>
<td>89.0%</td>
</tr>
<tr>
<td>2002 - 2006</td>
<td>4</td>
<td>6</td>
</tr>
<tr>
<td></td>
<td>40.0%</td>
<td>60.0%</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>13.2%</td>
<td>86.8%</td>
</tr>
</tbody>
</table>

6.2.4.4 FDI Entry Mode by Scale of Investment

Table 6.11 summarises the entry mode selection by the scale of the investment. As shown in Table 6.11, all wholly-owned subsidiary projects are distributed in the 2 groupings of small and lower medium scales of investment, indicating a trend that investing firms are less likely to take the full investment risk associated with the entry form of a wholly-owned subsidiary. In the meantime, joint ventures are unevenly distributed through all 4 investment-scale groups. In particular, all the of the 4 large FDI projects (larger than US$20 million) have taken the form of joint ventures. This pattern of entry mode selection to some extent shows that foreign investing firms were not
familiar enough with the investment environment in Gansu province to \textit{go it alone}, and required assistance from local partners to gain local knowledge and to share the investment risk.

**Table 6.11 Scale of Investment and Entry Mode of Firms**

<table>
<thead>
<tr>
<th>Scale of Investment</th>
<th>Entry mode of respondent firms</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Wholly-owned</td>
<td>Joint venture</td>
</tr>
<tr>
<td>&lt;1 million</td>
<td>10</td>
<td>76</td>
</tr>
<tr>
<td></td>
<td>71.4%</td>
<td>82.6%</td>
</tr>
<tr>
<td>1 – 9.99 million</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td></td>
<td>28.6%</td>
<td>10.9%</td>
</tr>
<tr>
<td>10 – 19.99 million</td>
<td>0</td>
<td>2</td>
</tr>
<tr>
<td></td>
<td>.0%</td>
<td>2.2%</td>
</tr>
<tr>
<td>20 million and over</td>
<td>0</td>
<td>4</td>
</tr>
<tr>
<td></td>
<td>.0%</td>
<td>4.3%</td>
</tr>
<tr>
<td>Total</td>
<td>14</td>
<td>92</td>
</tr>
<tr>
<td></td>
<td>100.0%</td>
<td>100.0%</td>
</tr>
</tbody>
</table>

**6.2.5 Ownership Structure of FDI**

This section categorises the 106 responding ventures into 4 groups, according to the ownership structure of the investment projects. The dividing points for the 4 groups are foreign minority ownership (less than 50%), equal ownership (50%), foreign majority ownership (larger than 50%), and full foreign ownership (100%). The ownership structure of the FDI ventures in the sample are described in terms of the number of FDI projects, the country of origin, the timing of FDI, and the scale of investment.
6.2.5.1 Ownership Structure of FDI Projects

Table 6.12 summarises the ownership structure of the responding cases in Gansu province. Among the 106 respondents the share of ownership by invested firms is as follows: 77 (72.6%) had minority foreign ownership; 12 (11.3%) had equal ownership; 3 (2.8%) had majority foreign ownership; and in 14 (13.3%) there was full foreign ownership. Clearly, foreign minority ownership is the major form of ownership structure in all FDI projects in Gansu province.

<table>
<thead>
<tr>
<th>Share of ownership</th>
<th>Number of firms</th>
<th>Percent in sample</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10%</td>
<td>6</td>
<td>5.7</td>
<td>5.7</td>
</tr>
<tr>
<td>10-25%</td>
<td>33</td>
<td>31.1</td>
<td>36.8</td>
</tr>
<tr>
<td>26-49%</td>
<td>38</td>
<td>35.8</td>
<td>72.6</td>
</tr>
<tr>
<td>50%</td>
<td>12</td>
<td>11.3</td>
<td>83.9</td>
</tr>
<tr>
<td>51-95%</td>
<td>3</td>
<td>2.8</td>
<td>86.7</td>
</tr>
<tr>
<td>100%</td>
<td>14</td>
<td>13.3</td>
<td>100.0</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
<td></td>
</tr>
</tbody>
</table>

6.2.5.2 Ownership Structure by Country of Origin

Table 6.13 provides a summary for the ownership structure by country of origin. Of the FDI projects invested in by US firms, 13 (72.2%) have a minority foreign ownership of under 50%, one project (5.6%) has equal ownership, and 4 (22.2%) have full foreign ownership. Of the Japanese invested projects, 6 projects (66.6%) have minority ownership of under 50%, and 3 (33.3%) have full foreign ownership. As indicated in the table, FDI projects invested in by firms from the EU are distributed across all 4 groups of ownership structure, and projects with equal ownership have the highest proportion (36.3%). Similarly, FDI projects invested in by Asian firms, excepting Japan, are also distributed to all 4 groups of ownership structure, however, minority foreign ownership
is the case in an overwhelming proportion (80.9%) of these investments, indicating that Asian firms tend to invest smaller levels of capital value and have smaller ownership shares in the FDI projects in comparison with investors from other source countries.

### Table 6.13 Country of Origin and Share of Ownership

<table>
<thead>
<tr>
<th>Share of ownership</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;10%</td>
<td></td>
</tr>
<tr>
<td>10-25%</td>
<td></td>
</tr>
<tr>
<td>26-49%</td>
<td></td>
</tr>
<tr>
<td>50%</td>
<td></td>
</tr>
<tr>
<td>51-95%</td>
<td></td>
</tr>
<tr>
<td>100%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Home of country</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>US</td>
<td></td>
</tr>
<tr>
<td>5.6%</td>
<td>5.6%</td>
</tr>
<tr>
<td>27.8%</td>
<td>38.8%</td>
</tr>
<tr>
<td>3.6%</td>
<td>0%</td>
</tr>
<tr>
<td>22.2%</td>
<td>18%</td>
</tr>
<tr>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Japan</td>
<td></td>
</tr>
<tr>
<td>11.1%</td>
<td>33.3%</td>
</tr>
<tr>
<td>22.2%</td>
<td>0%</td>
</tr>
<tr>
<td>33.3%</td>
<td>100.0%</td>
</tr>
<tr>
<td>EU</td>
<td></td>
</tr>
<tr>
<td>9.1%</td>
<td>18.2%</td>
</tr>
<tr>
<td>36.3%</td>
<td>18.2%</td>
</tr>
<tr>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Asia</td>
<td></td>
</tr>
<tr>
<td>4.4%</td>
<td>30.9%</td>
</tr>
<tr>
<td>45.6%</td>
<td>10.3%</td>
</tr>
<tr>
<td>1.5%</td>
<td>7.3%</td>
</tr>
<tr>
<td>100.0%</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td></td>
</tr>
<tr>
<td>5.7%</td>
<td>29.3%</td>
</tr>
<tr>
<td>37.7%</td>
<td>11.3%</td>
</tr>
<tr>
<td>2.8%</td>
<td>13.2%</td>
</tr>
<tr>
<td>100.0%</td>
<td></td>
</tr>
</tbody>
</table>

### 6.2.5.3 Ownership Structure by Timing of FDI

Table 6.14 shows ownership structure by timing of FDI. For the first period (before 1992), 11 projects (78.5%) had minority foreign ownership, one project (7.1%) had equal ownership between foreign and local partners, and 2 projects (14.2%) had majority, or full, foreign ownership. For the second period between 1992 and 2001, 61 cases (74.4%) had minority foreign ownership of under 50%. In this period, 9 projects (11%) had full foreign ownership, which is larger than that of the first period (before 1992). Most majority ventures in Gansu province have been set up since 1992. After 2002, none have a share of ownership under 25%. In the third period between 2002 and 2006, the proportion of investment projects with full foreign ownership in Gansu province reached 40%, which is larger than that of the first two periods.
### Table 6.14 Timing of FDI and Share of Ownership

<table>
<thead>
<tr>
<th>Share of ownership</th>
<th>&lt;10%</th>
<th>10-25%</th>
<th>26-49%</th>
<th>50%</th>
<th>51-95%</th>
<th>100%</th>
<th>Total</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;1992</td>
<td>1</td>
<td>5</td>
<td>5</td>
<td>1</td>
<td>1</td>
<td>1</td>
<td>14</td>
</tr>
<tr>
<td>Timing of FDI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1992 - 2001</td>
<td>7.1%</td>
<td>35.7%</td>
<td>35.7%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>7.1%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>5</td>
<td>26</td>
<td>30</td>
<td>10</td>
<td>2</td>
<td>9</td>
<td>82</td>
</tr>
<tr>
<td>2002 - 2006</td>
<td>6.1%</td>
<td>31.7%</td>
<td>36.6%</td>
<td>12.2%</td>
<td>2.4%</td>
<td>11%</td>
<td>100%</td>
</tr>
<tr>
<td></td>
<td>0</td>
<td>0</td>
<td>5</td>
<td>1</td>
<td>0</td>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>Total</td>
<td>5.7%</td>
<td>29.3%</td>
<td>37.7%</td>
<td>11.3%</td>
<td>2.8%</td>
<td>13.2%</td>
<td>100%</td>
</tr>
</tbody>
</table>

### 6.2.5.4 Ownership Structure by Scale of Investment

Table 6.15 demonstrates the ownership structure by scale of investment. The investment scale of the respondent FDI projects in Gansu province is categorised into four groups: under US$1 million, US$1-9.99 million, US$10-10.99 million, and US$20 million and over. For the first group, with capital value under US$1 million, sixty-four projects (74.4%) have minor foreign ownership, eleven projects (12.8%) have equal ownership, one project (1.2%) has majority foreign ownership, and ten (11.6%) have full foreign ownership. For the fourteen projects in the second group; with capital value between US$1 - 9.99 million; foreign investing firms have minority ownership for seven projects (under 50% equal ownership), equal ownership for one project (7.1%), and majority, or full, ownership for six projects (42.9%). There are only two projects for the third group; US$10 - 19.99 million; and foreign investors have minor ownership for both of them. For the fourth group; with the largest capital value of US$20 million or more; four projects are equally divided between minor foreign and equal ownership.
Table 6.15 Ownership Structure by Scale of Investment

| Total investment size | Share of ownership | | | | | Total |
|-----------------------|--------------------|---|---|---|---|---|---|---|---|
| <1 million            | 5  | 31 | 28 | 11 | 1 | 10 | 86 | 100% |
|                       | 5.8% | 36.1% | 32.5% | 12.8% | 1.2% | 11.6% | 100% |
| 1-9.99 million        | 1 | 1 | 5 | 1 | 2 | 4 | 14 | 100% |
|                       | 7.1% | 7.1% | 35.8% | 7.1% | 14.3% | 28.6% | 100% |
| 10-19.99 million      | 0 | 0 | 2 | 0 | 0 | 0 | 2 | 100% |
|                       | 0% | 0% | 100% | 0% | 0% | 0% | 0% | 100% |
| 20 million and over   | 0 | 2 | 0 | 2 | 0 | 0 | 4 | 100% |
|                       | 0% | 50% | 0% | 50% | 0% | 0% | 0% | 100% |
| Total                 | 6 | 34 | 35 | 14 | 3 | 14 | 106 | 100% |
|                       | 5.7% | 32.1% | 33.0% | 13.2% | 2.8% | 13.2% | 100% |

6.2.6 Size of FDI Enterprises

The number of employees is one of the commonly used measurements for the size of enterprises. Table 6.16 provides a summary of the number of employees employed by the respondent FDI enterprises. For this survey, respondent FDI enterprises are categorised into six groups according to the number of employees. As demonstrated in Table 6.16, a majority (sixty-eight enterprises, representing 64.2% of the respondent FDI cases) of FDI enterprises employed fewer than one-hundred people. Eleven FDI enterprises (10.4%) have employees of more than five-hundred. There are twenty-seven FDI enterprises (25.4%) for all the remaining four groups which have employee numbers of between one-hundred and five-hundred workers. The figures in Table 6.16 demonstrate that the FDI enterprises in Gansu are rather small. The small size of FDI enterprises is a reflection of the small scale of capital investments in Gansu, indicating a status of less developed FDI inflows in comparison with coastal provinces in China.
<table>
<thead>
<tr>
<th>Number of firms</th>
<th>Percent</th>
<th>Cumulative Percent</th>
</tr>
</thead>
<tbody>
<tr>
<td>&lt;100</td>
<td>68</td>
<td>64.2</td>
</tr>
<tr>
<td>100-200</td>
<td>14</td>
<td>13.2</td>
</tr>
<tr>
<td>201-300</td>
<td>6</td>
<td>5.7</td>
</tr>
<tr>
<td>301-400</td>
<td>4</td>
<td>3.8</td>
</tr>
<tr>
<td>401-500</td>
<td>3</td>
<td>2.8</td>
</tr>
<tr>
<td>&gt;500</td>
<td>11</td>
<td>10.4</td>
</tr>
<tr>
<td>Total</td>
<td>106</td>
<td>100.0</td>
</tr>
</tbody>
</table>

### 6.3 Summary

The background information presented in this chapter provides an overall understanding of the respondents' FDI ventures. The descriptive analysis on the respondent firms' FDI cases sheds light on the overall representativeness and reliability of the data, as well as FDI location characteristics of the sample firms. General characteristics of FDI ventures of respondents' firms are described in this section, which includes the time of the FDI venture, the scales of the FDI, the entry modes of the FDI, and the detailed ownership structure of the FDI venture. Through these detailed descriptions, an overview of FDI in Gansu province is provided. These FDI cases are home countries concentrated (mainly from Asian countries) in terms of country of origin, with most of them being established since 1992. According to the invested capital value, the scale of foreign investments in Gansu province is mainly small, or medium. As for entry mode of FDI in Gansu province, the portion of entry modes between JV and WOFE in FDI is not balanced, with foreign investing firms preferring JV to WOFE, however the share of WOFE is increasing over time. More specifically, the majority of FDI cases had minority foreign ownership of under 50%. The main target market of the respondents is the domestic market of China. More detailed statistical analysis of the data is carried out in the next chapter.
CHAPTER 7 DATA ANALYSIS

7.1 Introduction

The chapter presents the results of the statistical analysis on the data collected from the mail survey. The data analysis process of this study was divided into several steps. The first step was to test the non-response bias in the survey responses by checking for any systematic differences between responding firms and non-responding firms. The results of this test are reported in Section 7.2. The second step was to examine and refine the variable measurements and calculate the variable scores. As introduced in the methodology chapter (Chapter 5), most of the independent variables are latent and have been measured by single, or multiple, indicators. The variable constructs that consist of multiple indicators are subject to scale reliability tests. Based on the reliability test results, necessary adjustments were made to the variable constructs before the variable scores were calculated. The results of the scale reliability tests and the finalised variable constructs are presented in Section 7.3. The third step was to test the correlation for scores of the finalised variable constructs. The test results are described in Section 7.4. The fourth, and most important, step was to test the proposed framework and the related hypotheses by using the statistical techniques of independent samples t-testing, multivariate analysis of the variance, and binomial logistic regression analysis. Section 7.5 presents and discusses the relevant results of these statistical analyses. The last section of the chapter provides a summary of the data analysis results of the study.

7.2 Non-response Bias Test

The first task of the data analysis in this study was to perform a non-response bias test on the sample firms. This test is necessary, because if a non-response bias exists (i.e., if the response of participants differs in some systematic way from the potential responses of non-participants), then the analysis results from the participant responses cannot be generalised to either the entire survey sample, or to the population of the study (Armstrong & Overton, 1977; Cooper & Schindler, 2008). Generally speaking, the non-
response bias is assessed following the extrapolation method (Armstrong & Overton, 1977), which is based on the assumption that participants who respond later are more similar to non-respondents than they are to earlier respondents. This method is regarded as appropriate when the information for non-respondents is not available (Ferber, 1948).

As described in Chapter 5, an independent sample t-test technique was applied in the non-response bias test. This technique was performed to compare the group mean differences on the dependent variable and the 12 independent variables (excluding the control variable), because the group mean comparison reflects the difference between the early response group and the late response group. The t-statistic is computed based on the mean, the sum of the squares, and the number of subjects in each group. If the two-tailed t-statistic result is significant, the null hypothesis regarding the equality of group means between early respondents and late respondents will be rejected and the existence of a non-response bias in the survey will be statistically proven. Conversely, an insignificant t-test result will suggest that the sample is free from any non-response bias.

In the independent sample t-test analysis the dependent variable was measured as continuous data in this study. This continuous data is the equity ownership percentage of the respondent firm in its FDI projects in Gansu province of China. The independent variables were originally continuous and their variable scores were calculated after a series of scale reliability tests, which are reported in Section 7.3. The grouping of the early and later responding groups was based on the date when the completed survey questionnaire was received by the author. The early response group was defined as the first 50% of the survey responses, namely the first 53 returned usable survey questionnaires. Consequently, the remaining 53 respondents formed the late response group.

The results of the independent sample t-test analysis are reported in Table 7.1. The results from the t-test analysis suggest that the null hypothesis, that the group means are equal, cannot be rejected. The t-tests results on the dependent variable and the independent variables are all insignificant. These results indicate that the early response group and the late response group do not differ significantly on either the dependent variable, or the 12 independent variables. Following the assumption that late
respondents are more similar to non-respondents than they are to early respondents (Ferber, 1948), the insignificant t-test results suggest that a non-response bias does not exist in this study.

Table 7.1 Non-response Bias Test Results

<table>
<thead>
<tr>
<th>Variables</th>
<th>t-test for equality of means</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>t</td>
</tr>
<tr>
<td>Entry mode</td>
<td>.167</td>
</tr>
<tr>
<td>Firm size</td>
<td>-.495</td>
</tr>
<tr>
<td>International experience</td>
<td>-.671</td>
</tr>
<tr>
<td>Cost factor</td>
<td>.570</td>
</tr>
<tr>
<td>Market factor</td>
<td>.420</td>
</tr>
<tr>
<td>Investment incentives</td>
<td>1.121</td>
</tr>
<tr>
<td>Culture distance</td>
<td>-.243</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>.476</td>
</tr>
<tr>
<td>Agglomeration</td>
<td>.108</td>
</tr>
<tr>
<td>Investment risk</td>
<td>-.173</td>
</tr>
<tr>
<td>Resource-seeking motive</td>
<td>.653</td>
</tr>
<tr>
<td>Efficiency-seeking motive</td>
<td>-.762</td>
</tr>
<tr>
<td>Market-seeking motive</td>
<td>.395</td>
</tr>
</tbody>
</table>

7.3 Scale Reliability Test

The variable measurements of this study are introduced in the methodology chapter, Chapter 5. The variable measurement scheme serves as a basis for the questionnaire design, where the variable indicators are converted to survey questions in order to
collect relevant information from the respondents. Some questions could be confusing and lead to biased interpretation by respondents. This is because, as discussed in Chapter 5, the indicators used to measure the variables are mainly adopted from prior studies (based on the research settings of the US and EU countries), which have significant contextual differences from the current study. Therefore, an analysis of the scale reliability is necessary to examine the soundness of the variable constructs. The scale reliability tests were performed only on the independent variable constructs, because the dependent variable of this study is categorical and would not be misinterpreted by the respondents. The results of the scale reliability testing on the independent variable constructs are reported in this section. Indicated by the analysis results, some adjustments were made to the variable constructs. Cronbach’s coefficient alpha was used to calculate the reliability of scales. Since the survey questions were designed mainly using a seven-point Likert scale to measure most of the independent variables, each variable item was scored in the same direction, and each of the variable items in the scale contributed equally to the final scale score. The level of the alpha can be used to measure a scale’s internal consistency, which is the extent to which the items are related to one another and, therefore, make up a factor that measures a single underlying construct.

7.3.1 Ownership Variables

*International experience* is constructed using two indicators. They are the investment experience of investing firms in China, and their previous investment experience in other countries. A scale reliability analysis of these two indicators is given in Table 7.2. As shown in the table, all indicators have a corrected item-to-total correlation ($r=.435$) that is above the rejection criterion ($r=.25$). The Cronbach’s alpha on these two indicators is 0.630, which falls in the acceptance zone for this study ($a>0.60$). No adjustment is suggested for the variable constructs of international experience. The variable score is then calculated by summing the scales of the two indicators.
7.2 Scale Reliability Test – International Experience

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach's Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Firm experience in China</td>
<td>.435</td>
<td>.630</td>
<td>2</td>
</tr>
<tr>
<td>Previous investment experience in other countries</td>
<td>.435</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Firm size is measured using one indicator, namely, the number of employees. In this study, respondents were asked to indicate their employee numbers on a six-point scale. The scale score was then used as the variable score of firm size.

7.3.2 Location Variables

The Cost factor is measured using four indicators, with respect to: (1) Access to highly-skilled labour; (2) low cost of raw materials, energy, land, and water; (3) low transportation/logistics costs; and (4) access to inexpensive labour. A scale reliability analysis on these four indicators is given in Table 7.3. Although the reliability alpha suggest a good fit among the indicator scales (α>0.60), the item-to-total correlation of access to highly-skilled labour has the value 0.085, which is within the rejection zone (r<0.25). The low item-to-total correlation indicates that the respondents’ perception of this indicator was inconsistent with their perception of the other indicators in the cost variable.
The low item-to-total correlation on the indicator *access to highly-skilled labour* suggests that this indicator should be eliminated from the variable measurement of the cost factor. Practically, the elimination is appropriate in the context of the present study, because this indicator is specific to labour quality, while Gansu province of China is a poor inland province in China where there is a shortage of highly-skilled labour in comparison with other coastal provinces of China. This means that skilled labour is less likely to be considered as a major factor by investing firms when making their FDI location choice in Gansu province. To further confirm the adjusted variable constructs, a scale reliability test was performed on the remaining three indicators, with the results shown in Table 7.4.

**Table 7.4 Scale Reliability Test – Adjusted Cost Factor**

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low cost of raw materials, energy, land and water</td>
<td>.356</td>
<td>.756</td>
<td>3</td>
</tr>
<tr>
<td>Low transportation/logistics costs</td>
<td>.414</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Access to low labour cost</td>
<td>.581</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Market factor is constructed using the two sub-variables of market size and market potential. Market size is measured using one indicator, namely the size of the local market. Market potential is measured using five indicators: (1) Expected economic growth of the local market; (2) growing demand in the local market; (3) the purchasing power of the local customers; (4) enabling faster entry to the target market; and (5) low level of competition in the local market. As shown in Table 7.5, all six indicators for the variable of the market factor have a corrected item-to-total correlation ($r^2:.414$), which is above the rejection criterion ($r=.25$). The Cronbach’s alpha of these six indicators has a value of 0.745, which falls in the acceptance zone for this study ($a>0.60$). No adjustment is needed for the variable construct of market factor, including both the sub-variables of market size and market potential. The variable score was then calculated by summing the six indicator scales.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Expected economic growth of local market</td>
<td>.414</td>
<td>.745</td>
<td>6</td>
</tr>
<tr>
<td>Growing demand in local market</td>
<td>.515</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Purchasing power of local customers</td>
<td>.625</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Enabling faster entry to target market</td>
<td>.679</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Low level of competition in local market</td>
<td>.730</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Market size of local market</td>
<td>.768</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Investment incentives are measured using the five indicators of: (1) Corporate tax incentives; (2) financial incentives; (3) local government policies towards FDI and other guarantees; (4) the efficiency of local government administration; and (5) the attitude of local government towards FDI. A scale reliability analysis of these five indicators is shown in Table 7.6. As shown in the table, all indicators have a corrected item-to-total correlation ($r^2:.461$), which is above the rejection criterion ($r=.25$). The Cronbach’s alpha of these five indicators is 0.782, which falls within the acceptance zone for this
study ($\alpha>0.60$). No adjustment is suggested for the variable construct of investment incentives. The variable score was then calculated by summing the five indicator scales.

<table>
<thead>
<tr>
<th>Table 7.6 Scale Reliability Test – Investment Incentives</th>
</tr>
</thead>
<tbody>
<tr>
<td>Indicator</td>
</tr>
<tr>
<td>Efficiency of local government administration</td>
</tr>
<tr>
<td>Local government policies towards FDI and other guarantees</td>
</tr>
<tr>
<td>Attitude of local government policies towards FDI</td>
</tr>
<tr>
<td>Corporate tax incentives</td>
</tr>
<tr>
<td>Financial incentives</td>
</tr>
</tbody>
</table>

*Cultural distance* is measured using one indicator, which is the local culture affinity of investing firms. It is measured on a single psychometric indicator of the effect of the culture factor on FDI location. The related scale score is then used as the variable score of cultural distance.

*Infrastructure* is measured using six indicators. They are: (1) The reliability of the energy supply; (2) transport linkages; (3) the quality of the communication infrastructure; (4) the water supply and infrastructure; (5) the quality of the infrastructure; and (6) the overall level of infrastructure development. A scale reliability analysis of these six indicators was concluded, and the results are shown in Table 7.7. As shown in the table, all indicators have a corrected item-to-total correlation ($r \geq .324$), which is above the rejection criterion ($r=.25$). The Cronbach’s alpha of these six indicators is 0.729, which falls within the acceptance zone for this study ($\alpha>0.60$). No adjustment is suggested for the variable construct of infrastructure. The variable score was then calculated by summing the six indicator scales.
Table 7.7 Scale Reliability Test – Infrastructure

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Water supply and infrastructure</td>
<td>.324</td>
<td>.729</td>
<td>6</td>
</tr>
<tr>
<td>Quality of infrastructure</td>
<td>.400</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Quality of communication infrastructure</td>
<td>.518</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reliability of energy supply</td>
<td>.551</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Transport linkage</td>
<td>.614</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Level of whole infrastructure development</td>
<td>.679</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

*Agglomeration* is measured using three indicators. They are: (1) The proximity to firms in the same sector; (2) the proximity of firms in complementary sectors; and (3) the level of industrial concentration (such as in an industrial park). A scale reliability analysis of these three indicators was concluded and the results are given in Table 7.8. As shown in the table, all of the indicators have a corrected item-to-total correlation ($r^2\geq.520$), which is above the rejection criterion ($r=.25$). The Cronbach’s alpha of these three indicators is 0.854, which falls within the acceptance zone for this study ($\alpha>0.60$). No adjustment is suggested for the variable construct of agglomeration. The variable score was then calculated by summing the three indicator scales.

Table 7.8 Scale Reliability Test – Agglomeration

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proximity of firms in complementary sectors</td>
<td>.520</td>
<td>.854</td>
<td>3</td>
</tr>
<tr>
<td>Proximity to firms in same sector</td>
<td>.600</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High industrial concentration</td>
<td>.682</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
7.3.3 Internalisation Variables

*Investment risk* is measured using three indicators with respect to: (1) The level of overall security; (2) local social stability; and (3) the consistency of local government policy. A scale reliability analysis of these three indicators was concluded and the results are given in Table 7.9. Although the reliability alpha suggests a good fit among the indicator scales (α > 0.60), the item-to-total correlation of *consistency of local government policy* is in the rejection zone (r < 0.25). The low item-to-total correlation indicates that the respondents’ perception of this indicator was inconsistent with their perception of the other indicators in the variable construct.

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consistency of local government policy</td>
<td>.160</td>
<td>.641</td>
<td>3</td>
</tr>
<tr>
<td>Local social stability</td>
<td>.416</td>
<td></td>
<td></td>
</tr>
<tr>
<td>The level of whole security</td>
<td>.457</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The low item-to-total correlation on the indicator of *consistency of local government policy* suggests that this indicator should be eliminated from the variable construct. Theoretically, this indicator is subject to transaction cost theory, while the conceptual framework of the study is not designed to include this, because transaction cost theory has been incorporated into the OLI paradigm. It is not necessary to provide a specific indicator to measure the effect of transaction costs. To further confirm the adjusted variable construct, a scale reliability test was performed on the remaining two indicators, with the results shown in Table 7.10. As shown in the table, all indicators have a corrected item-to-total correlation (r ≥ .389), which is above the rejection criterion (r = .25). The Cronbach’s alpha on these two indicators is 0.684, which falls within the acceptance zone for this study (α > 0.60).
Table 7.10 Scale Reliability Test – Adjust Investment Risk

<table>
<thead>
<tr>
<th>Indicator</th>
<th>Corrected Item</th>
<th>Cronbach’s Alpha</th>
<th>Number of Items</th>
</tr>
</thead>
<tbody>
<tr>
<td>Local social stability</td>
<td>.389</td>
<td>.684</td>
<td>2</td>
</tr>
<tr>
<td>The level of whole security</td>
<td>.412</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

7.3.4 Motivation Variable

Strategic-seeking motives are measured using three variables. They are the efficiency-seeking, resource-seeking, and market-seeking motives. Each of these motives is measured on a single psychometric indicator of their effect on FDI location. The scale score was then used as the variable score of the respective motives. Higher scale scores indicate the preference of foreign investing firms in terms of the related strategic motivations of FDI.

7.4 Correlations among the Variables

After the scale reliability testing was conducted and the necessary adjustments made to the variable constructs, the scores for all of the independent variables were calculated. Based on these variable scores, a correlation test was performed on the independent variables. The results are shown in Table 7.11. Some significant correlations are found in the test results. Nonetheless, the absolute values of the correlation coefficients are all smaller than 0.50, while a correlation coefficient above 0.60 is considered to be rather high (Churchill, 1979; Cooper & Schindler, 2008). The fact that the variables are not highly correlated suggests that fairly independent constructs have been developed.
### Table 7.11 Correlation of Independent Variables

<table>
<thead>
<tr>
<th></th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
<th>10</th>
<th>11</th>
<th>12</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Firm size</strong></td>
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<tr>
<td><strong>International experience</strong></td>
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<tr>
<td><strong>Cost factor</strong></td>
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<tr>
<td><strong>Market factor</strong></td>
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<tr>
<td><strong>Investment incentives</strong></td>
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</tr>
<tr>
<td><strong>Culture distance</strong></td>
<td></td>
<td></td>
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<tr>
<td><strong>Infrastructure</strong></td>
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<tr>
<td><strong>Agglomeration</strong></td>
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<tr>
<td><strong>Investment risk</strong></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Efficiency-seeking motive</strong></td>
<td></td>
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<td></td>
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<td></td>
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<td></td>
</tr>
<tr>
<td><strong>Resource-seeking motive</strong></td>
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<td></td>
<td></td>
</tr>
<tr>
<td><strong>Market-seeking motive</strong></td>
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</tbody>
</table>

*: p < .05; **: p < .01; ***: p < .001
7.5 Logistical Model – FDI Location Choice

The main purpose of this section is to identify the best model for describing the relation between the dependent variable and the independent variables. The dichotomous nature of the dependent variable requires the use of logistic regression analysis, rather than linear regression models. The overall score for each of the independent variables used in the logistic regression analysis was calculated by adding up all the original scores for the single indicators into each one of the respective 12 independent variables. The analysis process started with an independent sample t-test, in order to examine the group mean differences between wholly-owned subsidiary (WOS) and joint venture (JV) entries on each independent variable of the conceptual framework. A multivariate analysis of the variance (MANOVA) test followed, to examine the overall validity of the proposed framework. A binominal logistic regression was then carried out in order to test the hypotheses. The results of these tests are reported in this section.

7.5.1 Independent Sample T-tests

Independent sample t-tests were performed on the 12 independent variables of the framework to investigate the group mean differences between WOS and JV in the sample data. To perform the tests, the independent variables drawn from the framework were entered as dependent variables, and the dichotomous categorical variable of the FDI entry mode was the grouping variable. The group mean, mean differences, and t-statistics are shown in Table 7.12.
Table 7.12 Independent Sample T-test

<table>
<thead>
<tr>
<th>Variables</th>
<th>Group means</th>
<th>Mean Dif. (JV-WOS)</th>
<th>t (EVA)</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>JV</td>
<td>WOS</td>
<td></td>
</tr>
<tr>
<td>Firm size</td>
<td>6.92</td>
<td>7.01</td>
<td>-0.896</td>
</tr>
<tr>
<td>International experience</td>
<td>2.19</td>
<td>3.41</td>
<td>-0.793</td>
</tr>
<tr>
<td>Cost factor</td>
<td>1.74</td>
<td>2.56</td>
<td>1.537</td>
</tr>
<tr>
<td>Market factor</td>
<td>2.31</td>
<td>2.97</td>
<td>-0.279</td>
</tr>
<tr>
<td>Investment incentives</td>
<td>34.76</td>
<td>45.69</td>
<td>-8.760</td>
</tr>
<tr>
<td>Culture distance</td>
<td>2.10</td>
<td>2.34</td>
<td>0.582</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>7.73</td>
<td>6.97</td>
<td>0.197</td>
</tr>
<tr>
<td>Agglomeration</td>
<td>12.64</td>
<td>11.87</td>
<td>1.726</td>
</tr>
<tr>
<td>Investment risk</td>
<td>2.56</td>
<td>3.72</td>
<td>1.168</td>
</tr>
<tr>
<td>Efficiency-seeking motive</td>
<td>17.24</td>
<td>19.12</td>
<td>0.316</td>
</tr>
<tr>
<td>Resource-seeking motive</td>
<td>2.89</td>
<td>2.53</td>
<td>0.487</td>
</tr>
<tr>
<td>Market-seeking motive</td>
<td>1.67</td>
<td>2.95</td>
<td>1.379</td>
</tr>
</tbody>
</table>

*: p < .05; **: p < .01; ***: p < .001

JV entries are significantly different from those of WOS, in terms of the two ownership variables of firm size and international experience. The difference in the group mean on firm size is negative and is significant at the .05 level, which suggests that WOS is more likely to occur in larger firms than is a JV. The t-test on international experience also returned a significant t-statistic on a negative group mean difference, which is consistent with the expectation that WOS is more likely to happen than is JV when investing firms have obtained more international investment experience.

For the variable of cost factor in the location advantage perspective, the mean difference between the two groups of FDI projects, in terms of JV and WOS, are significantly different. As shown in Table 7.12, cost factor has a group mean difference that is significant at the .001 level between the JV and WOS groups. The positive difference in
this group mean suggests that investing firms pay less attention to the cost factor when investing in a JV project than when investing in a WOS project. For the variable of market factor, the group mean difference between the JV and WOS groups is not significant. As there is no evidence to reject the null hypothesis of the equality of means on this variable, the two groups of FDI projects do not differ from each other on their endowment of the market factor.

The group mean difference on investment incentives is significant at the .01 level and is negative. This result suggests that a WOS project, on average, is more closely associated with investment incentives in the host location than is a JV project. The two variables of locational advantages, namely cultural distance and infrastructure, do not have significant group mean differences between JV and WOS. As there is no evidence to reject the null hypothesis of the equality of means on these two variables, the two groups of FDI projects do not differ from each other on their endowment of cultural distance and infrastructure.

The variable of agglomeration has a positive group mean, which is significant at the .05 level. This result suggests that a JV is more likely to happen than a WOS when the investing firm is targeting a host location with a high level of agglomeration. No significant difference is found on the variable of investment risk, indicating that an investing firm has not perceived much difference in terms of investment risk associated with a JV, or a WOS, project.

Independent sample t-tests were also conducted for strategic motivation variables. The negative group mean difference for the variable of efficiency-seeking motivation between JV and WOS groups is significant at the .05 level, suggesting that, on average, a WOS project has greater emphasis on efficiency-seeking motivation than has a JV project. For the variable of resource-seeking motivation, the negative group mean difference between the two groups of JV and WOS projects is significant at the .05 level, suggesting that, on average, WOS projects have a greater emphasis on resource-seeking motivation than do JV projects. No significant difference in the group means is found on the variable of market-seeking motivation, and this result indicates that the two groups of FDI projects do not differ from each other on market-seeking motivation.
To summarise, independent sample t-tests were performed between the two groups of WOS and JV projects on the 12 independent variables in the conceptual framework. The t-test results show that group mean differences are significant on seven variables; firm size, international experience, cost factors, investment incentives, agglomeration, efficiency-seeking motive, and resource-seeking motive. They are insignificant on five variables; market factors, cultural distance, infrastructure, investment risk, and market-seeking motive. On average, a WOS project has greater emphasis on firm size, international experience, investment incentives, efficiency-seeking motive, and resource-seeking motive, while a JV project has emphasis on cost factors and agglomeration.

### 7.5.2 Multivariate Analysis of the Variance Test

The overall validity of the conceptual framework is examined in a multivariate analysis of the variance (MANOVA) testing. Different from the independent samples t-test, MANOVA is a statistical technique for simultaneously testing differences between treatment groups on multiple dependent variables. The null hypothesis of the MANOVA test states that there is no difference in the profiles of different treatment groups. In this study, two treatment groups are identified; WOS projects and JV projects invested in by foreign firms. The rejection of the MANOVA null hypothesis is expected, because the framework is constructed on the integration of variables that are hypothesised to have impacts on the choice between the two types of FDI projects. Accordingly, WOS and JV should have different profiles on the impacting variables.

To perform the MANOVA test, the twelve independent variables in the conceptual framework were entered as dependent variables and the dichotomous categorical variable of FDI mode was entered as a grouping variable. Four different multivariate tests; Wilks’ Lambda test, Hotelling’s Trace test, Roy’s Largest Root test, and Pillai’s Trace test; were performed. It has been suggested that Wilks’ Lambda, Hotelling’s Trace, and Roy’s Largest Root tests are often more powerful than Pillai’s Trace test, while Pillai’s Trace test is generally considered to be more robust (Tabachnick & Fidell, 2007). The test results, including the value of the test statistics, $F$ statistics, and $F$ statistic significances, are shown in Table 7.13. In this study, the $F$ statistics of all four
multivariate tests are equal, because the degree of freedom of the effect equals one, due to the dichotomous classification of the FDI modes in these tests. The test results are all significant at the .001 level, which, as expected, rejects the null hypothesis, suggesting that there is a significant group profile difference between WOS projects and JV projects. The validity of the overall framework is, therefore, confirmed.

Table 7.13 MANOVA Test

<table>
<thead>
<tr>
<th>Tests</th>
<th>Value</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pillai’s Trace</td>
<td>0.470</td>
<td>7.251</td>
<td>.0000</td>
</tr>
<tr>
<td>Wilks’ Lambda</td>
<td>0.694</td>
<td>7.251</td>
<td>.0000</td>
</tr>
<tr>
<td>Hotelling’s Trace</td>
<td>0.587</td>
<td>7.251</td>
<td>.0000</td>
</tr>
<tr>
<td>Roy’s Largest Root</td>
<td>0.587</td>
<td>7.251</td>
<td>.0000</td>
</tr>
</tbody>
</table>

7.5.3 Logistical Model for FDI Location

The reported MANOVA test results support the overall validity of the integrated framework of this study. For a more detailed examination of the proposed framework in the study, logistic regression techniques were applied in the following data analysis. Several logistic models were tested and their results were compared for the purpose of identifying the best fit model for the hypothesis testing. The test results of these logistic models are shown in Table 7.14.

Model 1 is a controlled baseline model, which includes only a constant and one categorical control variable; the country of origin. The function of the baseline model is to provide a basis for comparison with the following models. The most suitable model for this baseline model is the one which creates the largest reduction of the -2 log likelihood ratio (-2LL). The extent of the reduction of the -2LL should be the best model among the alternatives. As expected, this baseline model cannot effectively differentiate the two FDI entry modes (JV and WOS), as suggested by an insignificant model Chi-square and a poor correct classification hit rate percentage (57.2%).
Table 7.14 Logistic Regression Results – FDI Location Choice

<table>
<thead>
<tr>
<th></th>
<th>Model 1</th>
<th>Model 2</th>
<th>Model 3</th>
<th>Model 4</th>
<th>Model 5</th>
<th>Model 6</th>
<th>Model 7</th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant</td>
<td>-1.723</td>
<td>-.891</td>
<td>-.628</td>
<td>-1.562</td>
<td>2.398</td>
<td>1.340</td>
<td>.783</td>
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<tr>
<td>Firm size</td>
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<td>.082*</td>
<td>.302**</td>
<td>.089</td>
<td>.335</td>
<td>.261*</td>
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<tr>
<td>International</td>
<td>.089</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>experience</td>
<td></td>
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<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Cost factor</td>
<td>-.875**</td>
<td>-1.303**</td>
<td>-1.303**</td>
<td>-.639***</td>
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<td></td>
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<tr>
<td>Market factor</td>
<td>.021</td>
<td>.615</td>
<td>.574</td>
<td>.302**</td>
<td>.141</td>
<td>.293</td>
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<tr>
<td>Investment</td>
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<td>.642**</td>
<td>1.308*</td>
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<tr>
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<td>Culture distance</td>
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<tr>
<td>Infrastructure</td>
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<td>Agglomeration</td>
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<td>.215*</td>
<td>.017*</td>
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<td>Investment risk</td>
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<td>-.562*</td>
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<tr>
<td>Efficiency-seeking</td>
<td>.179</td>
<td>.163</td>
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<tr>
<td>Resource-seeking</td>
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<td>.682**</td>
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<td>Market-seeking</td>
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<td>Home country Japan</td>
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<td>1.675</td>
<td>.039</td>
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<tr>
<td>-2LL</td>
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<td>147.273</td>
<td>157.430</td>
<td>155.021</td>
<td>163.610</td>
<td>147.509</td>
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</tr>
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<td>Chi-square (χ2)</td>
<td>9.175</td>
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<td>25.683</td>
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<td>63.198</td>
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<td>df</td>
<td>7</td>
<td>5</td>
<td>10</td>
<td>7</td>
<td>6</td>
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<td>11</td>
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<td>Model Sig.</td>
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<td>.003</td>
<td>.000</td>
<td>.002</td>
<td>.001</td>
<td>.001</td>
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<td>Hosmer and Lemeshow</td>
<td>.592</td>
<td>.485</td>
<td>.396</td>
<td>.030</td>
<td>.157</td>
<td>.274</td>
<td>.659</td>
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<td>83.9%</td>
<td>79.4%</td>
<td>64.5%</td>
<td>84.1%</td>
<td>87.2%</td>
<td>91.4%</td>
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<tr>
<td>hit rate</td>
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<td></td>
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</tr>
</tbody>
</table>

*: p < .05; **: p < .01; ***: p < .001
Model 2 is based on the framework of ownership advantages. Along with the control variables, the two ownership variables were entered into the logistic model as explanatory variables. As shown in the test results of Model 2 in Table 7.14, the variable of firm size has a significant and positive impact on the likelihood of a foreign firm choosing WOS. International experience is not statistically significant. Overall, the model fit is satisfactory, as the Chi-square is significant at the .001 level and the Hosmer and Lemeshow test result is insignificant. The model, however, has a rather low hit rate of 83.9%, which is only a 6.7% improvement from the random hit rate (77.2%). The value of -2LL is reduced from 167.734 in the baseline model, to 147.273.

Model 3 is based on the framework of location advantages. Along with the control variable, the six locational variables were entered into the logistic model as explanatory variables. As shown in the test results of Model 3 in Table 7.14, two variables (investment incentives and cost factor) have a significant impact on the likelihood of a foreign firm choosing WOS. As expected, the variable of investment incentives has a positive effect, while the cost factor has a negative effect. No significant impact is found on the four variables of market factor, agglomeration, cultural distance, and infrastructure. The model Chi-square is significant at the .01 level, as expected. The model classification hit rate is 79.4%, which is higher than the significance threshold (77.2%).

Model 4 is based on the framework of internalisation advantages. Along with the control variable (the country of origin), the one internalisation variable (investment risk) was entered into the logistic model as an explanatory variable. As shown in the test results of Model 4 in Table 7.14, there is a significant negative impact from investment risk on the likelihood of a foreign firm choosing WOS. The model Chi-square is significant at the .001 level, as expected. Unexpectedly, the Hosmer and Lemeshow test result is significant at the .05 level, indicating a poor match between the predicted and the observed value of the dependent variable. The model classification hit rate is 64.5%, which is lower than the significance threshold.

Model 5 is based on the framework of strategic motivations. Along with the control variable (country of origin), the three strategic-motivation variables were entered into the logistic model as explanatory variables. As shown in the test results of Model 5 in
Table 7.14, the variable of resource-seeking motivation has a significant positive impact on the likelihood of a foreign firm choosing WOS. The other two variables, efficiency-seeking motivation and market-seeking motivation, have no significant impact. The model Chi-square is significant at the .001 level, as expected. The Hosmer and Lemeshow test result is insignificant at the .05 level. The model classification hit rate (84.1%) is higher than that of the alternative, Model 4 (64.5%).

Model 6 is based on the framework of the OLI eclectic paradigm. Along with the control variable (country of origin), the nine variables of the O-, L-, and I- advantages were entered into the logistic model as explanatory variables. As shown in the test results of Model 6 in Table 7.14, four variables bear a significant sign. The three variables of firm size, investment incentives, and agglomerations have a positive impact, while the variable of cost factors has a negative impact, on the likelihood of a foreign firm choosing WOS. The model Chi-square is significant at the .01 level, as expected. The model classification hit rate is 87.2%.

Model 7 is based on the conceptual framework proposed in this study, by combining the two approaches of the OLI eclectic paradigm and strategic investment motivations. Along with the control variable (country of origin), all of the 12 variables identified in this study were entered into the logistic model as explanatory variables. Table 7.14 shows the test results of Model 7. Given that a difference in sample sizes exists, the proportional chance criterion is used to determine the predictive accuracy of Model 7. The overall performance of Model 7 is good, with a hit ratio of 91.4%, which is higher than the standard proportional chance criterion of 76%. The proportional chance criterion is calculated using $\alpha^2 + (1-\alpha)^2$, with $\alpha$ being the portion of WOS entries in the sample. The model test results show that seven variables have a significant impact on the likelihood of a foreign firm choosing WOS. Among these seven, the five variables of firm size, investment incentives, resource-seeking motivation, international experience, and agglomerations have a positive impact, while the two variables of cost factor and investment risks have a negative impact. The model Chi-square is significant at the .001 level, as expected. The model classification hit rate is 91.4% and has the largest reduction of -2LL in comparison with the baseline model (Model 1) among all of the alternatives (Models 2 to 7).
The several models from the individual theoretical perspectives were satisfactory in terms of model fit, model significance, and predictability, as discussed above. When they were integrated together, however, Model 7 benefited from the complementarities of the individual theories and achieved a satisfactory model fit on all assessment criteria. The model Chi-square is 79.236, at the eleventh degree of freedom, which is significant at the .001 level. This result indicates a significant reduction of -2LL from the baseline model, showing that this model has the best fit. Furthermore, the Hosmer and Lemeshow goodness-of-fit Chi-square test returned an insignificant result, as expected, indicating that there is not sufficient evidence to reject the null hypothesis that the actual and predicted values of the dependent variable are equal. Lastly, the overall hit rate percentage is 91.4%. When effectiveness (model fit) and efficiency (the proportion of significant explanatory variables) are both taken into consideration, Model 7, which is the exact transformation of the theoretical framework proposed in this study, appears to be the best model among the alternatives. This suggests that it is reasonable to base the hypothesis testing on the test results of Model 7.

7.5.4 Hypothesis Testing

The testing of the hypotheses is based on the best fit and most efficient logistic model, which is Model 7, shown in Table 7.14. Detailed test results, including estimated β coefficients, Wald statistics, significance levels, and model fit indicators, are shown in Table 7.15. In this study, a hypothesis is empirically supported if the β coefficient of the corresponding independent variable has the correct sign, as stated in the hypothesis, and is significant at the .05 level, or higher.

7.5.4.1 Test Results for the Variables from the Perspective of Ownership

Advantages

Hypothesis 1, regarding the variable of firm size, is supported by the logistic test results. The β coefficient of the firm size variable is positive, with a Wald statistic of 4.162, which is significant at the .01 level. This significant positive relation is consistent with
previous findings (e.g., Li & Guisinger, 1992; Taylor, Beechler, & Napier, 1996). Firm size has been acknowledged as one of the most effective instruments available to large multinationals in international business negotiations. This is especially the case for international firms in the manufacturing industry, as a larger firm size facilitates the procurement of natural resources, because researchers have implicitly conceived firm size as a marker of a firm’s bargaining power (Tseng, 2007). First, in terms of substantial purchasing capacities, large multinationals are more capable of playing one local resource owner against another and of winning a propitious position in acquiring natural resources. Second, strong bargaining power renders large multinationals more capable of coping with political issues and better able to haggle effectively for desirable arrangements without relying on local partners.

Therefore, it is less imperative for large-scale multinationals undertaking a FDI to use the JV entry form. As expected, the adoption of firm size has a significant impact factor on the FDI location choice of foreign firms. More specifically, if other factors are held constant, foreign firms that attach great importance to firm size in FDI will prefer a WOS to a JV. The logistic analysis result provides a good explanation of the relation between the two factors of firm size and entry mode in terms of FDI projects in Gansu. As discussed in Section 6.2.1, the majority of foreign investing firms come from Asian countries/regions (except Japan), such as Hong Kong and Taiwan, but the average size of the investing firms is rather small. As a result, an overwhelming majority of FDI projects (86.8%) in Gansu are in the form of joint ventures, rather than being wholly owned subsidiaries.
Hypothesis 2, regarding the variable of international experience, is supported by the logistic test results. As expected, the $\beta$ coefficient of international experience is positive and its Wald statistic is significant at the .05 level, as shown in Table 7.15. The model testing results indicate that a longer period of international experience can increase the probability that foreign firms will undertake FDI (WOS mode) in Gansu province. Generally, it can be argued here that a firm's past experiences manifest in organisational routines that form a blueprint for its future actions, reducing implementation costs of the

$$
\begin{array}{|c|c|c|c|}
\hline
\text{Variable} & \beta \text{ Coefficient} & \text{Wald} & \text{Sig.} \\
\hline
\text{Constant} & .783 & 0.055 & .7942 \\
\text{Firm size} & .302 & 8.326 & .0067** \\
\text{International experience} & .261 & 4.769 & .0209* \\
\text{Cost factor} & -.639 & 9.827 & .0009*** \\
\text{Market factor} & .574 & 0.566 & .1527 \\
\text{Investment incentives} & 1.308 & 5.934 & .0176* \\
\text{Culture distance} & -.524 & 0.965 & .4653 \\
\text{Infrastructure} & -.229 & 1.370 & .2918 \\
\text{Agglomeration} & .017 & 4.029 & .0354* \\
\text{Investment risk} & -.562 & 6.514 & .0461* \\
\text{Efficiency-seeking motive} & .163 & 1.206 & .1792 \\
\text{Resource-seeking motive} & .682 & 7.496 & .0083** \\
\text{Market-seeking motive} & 1.290 & 0.021 & .2615 \\
\text{Chi-square ($\chi^2$)} & 79.236 & & \\
\text{Hosmer and Lemeshow $\chi^2$} & & .659 & \\
\text{Sig.} & & & \\
\text{-2LL} & 132.684 & & \\
\text{Model classification hit rate} & & 91.4\% & \\
\hline
\end{array}
$$

*: p < .05; **: p < .01; ***: p < .001
investing firm and, thus, encouraging the firm to undertake further FDI in other locations. Prior investment experiences allow the investing firms to learn from past experience and enhance the value of FDI projects by reducing implementation costs in other host locations, something which becomes very valuable when dealing with similar circumstances. Most of the respondent firms in this study are small and medium sized enterprises from Asian countries and regions, such as Hong Kong and Taiwan. Most of these firms did not have international investment experience prior to their Gansu investment project, except for investing in other Chinese regions. As a result, only a tiny proportion of the investing firms have chosen WOSs over JVs for their FDI projects in Gansu. Therefore, in this regard, investment experience does have an impact on the decision making of the investing firms in locating their FDI in Gansu province.

7.5.4.2 Test Results for the Variables from the Perspective of Locational Advantages

Hypothesis 3, regarding the variable of cost factor, is supported by the logistic test results. The β coefficient of cost factor is negative and its Wald statistic is 0.307, which is significant at the .001 level. As expected, the variable of cost factor has a significant and negative impact on the FDI location choice of foreign investing firms. The negative effect of cost factor is consistent with the proposed hypothesis that lower costs of production would attract more FDI inflows to Gansu province in China. As shown in Table 7.15, the variable of cost factor has the highest significance level (.001 level) among all of the impacting variables in the model testing. This testing result suggests that cost factor is the most important factor among all of the explanatory variables in determining FDI location in Gansu province. The strong significance of this particular variable can be partially explained by the fact that a large proportion of FDI projects in Gansu are from Asian sources, including Hong Kong, Macau, and Taiwan, with these investing firms mainly focusing on the manufacturing and exporting of labour-intensive products. Therefore, they are more sensitive to the cost factor than to the other determinants.

Moreover, the logistic regression results suggest that the variable of cost factor also affects the entry mode selection of foreign firms when locating FDI projects in Gansu.
If other factors are held constant, and investing firms attach a great deal of importance to cost factors when deciding whether to locate FDI projects in Gansu province, they will prefer a JV, to a WOS mode. Usually, when production costs are high in the host location, investing firms will prefer the JV mode to the WOS mode, as investing firms are more likely to prefer a local partner in order to share the high costs. Prior research by Anderson and Gatignon (1986) and Kaynak, Demirbag, and Tatoglu (2007) suggested that foreign investors are more likely to choose lower equity ownership than majority, or full, ownership of their subsidiaries when the capital size of the operation is high. Major investing firms from Asian countries prefer a WOS to a JV when costs are low in the host location, however, as the investing firms are more comfortable to go it alone. The pattern of entry mode selection by investing firms in Gansu seems at odds with this general trend. An explanation of the preference of JV investing firms is that the two variables of firm size and international investment experience jointly play a moderate role, impacting FDI entry mode selection. Foreign investing firms in Gansu mainly consist of small sized companies from Asian countries/regions (excepting Japan), which have had less international investment experience. These characteristics of the investing firms indicate a relatively weak position in terms of their possessed ownership advantages, leading to a strong preference of JVs over WOSs.

Hypothesis 4, regarding the variable of market factor, is not supported by the logistic test results. As shown in Table 7.15, in line with the hypothesis, the β coefficient for the variable of market factor is positive and the Wald statistic has a value of 0.660. This variable is, however, statistically insignificant in the model testing, suggesting that the FDI projects in Gansu are not driven by a pursuit of sales in the local markets. The finding from this study regarding the variable of market factor is consistent with previous empirical studies on FDI location choice in China (e.g., Sun et al., 2002). Sun et al. (2002) divided their full sample into two sub-samples, from 1986 to 1991 and 1992 to 1998, finding that provincial GDP had no significant impact on FDI inflows before 1991, though there was a positive relation for the second period. As both provincial GDP size and GDP growth in the inland province of Gansu have been at a very low level compared with China’s coastal provinces, the results from the hypothesis testing regarding the variable of market factor match the market reality in Gansu.
Hypothesis 5, regarding the variable of investment incentives, is supported by the logistic test results. The $\beta$ coefficient of investment incentives is positive and its Wald statistic is 1.856, which is significant at the .05 level. As expected, the variable of investment incentives has a significant positive impact on FDI location choice by foreign firms in Gansu. More specifically, if other factors are held constant, when an investing firm attaches great importance to the variable of investment incentives in allocating a FDI project in Gansu, the firm would be more likely to prefer a WOS to a JV mode. This finding is in line with the results of earlier studies (Graham, 1999; Root & Ahmend, 1979; Mody & Srinivasan, 1998; Tahir & Larimo, 2004), which examined the use of preferential taxation and tax incentives to attract manufacturing FDIs. Theoretically, a higher level of FDI incentives increases net profits and consequently encourages FDI inflows (de Mooij & Ederveen, 2003). In the case of Gansu, investment incentives appear to be a significant variable, indicating that a higher, or lower, level of incentives does affect the likelihood of investing firms locating their FDI projects in the Gansu province of China.

Hypothesis 6, regarding the variable of cultural distance, is not supported by the logistic test results. The $\beta$ coefficient of cultural distance is negative and its Wald statistic has a value of 3.974, which is statistically insignificant. Thus, cultural distance is not a determinant that has an effect on FDI location in Gansu province, neither for JV entries, or for WOS entries. That is, neither a low cultural distance, nor a high cultural proximity, will increase the probability that foreign firms will undertake FDIs in the inland province of Gansu. It can be concluded that cultural similarity is not a significant factor in FDI location in Gansu province. The results coincide with the findings of previous studies (Grosse & Trevino, 1996; Mikalak, 1992), indicating that investing firms do not prefer to undertake FDIs in culturally similar locations. To some extent, cultural distance is more significant in the coastal regions of China, because of more linkages with Hong Kong and Taiwan.

Hypothesis 7, regarding the variable of infrastructure, is not supported by the logistic test results. As shown in Table 7.15, infrastructure is an insignificant variable in its effect on the dependent variable in the study. The availability of adequate infrastructure represents the ease of operations for foreign investors in a particular location, allowing foreign investors to move their production materials and products more easily to
designated areas. It is widely suggested that infrastructure is an important variable in its effect on FDI location choice (see Section 4.3.2 for the variable of infrastructure). A poor quality infrastructure is regarded as a major barrier for developing countries when trying to attract FDI inflows. In the case of China, unevenly developed regional economies, together with inconsistent government policies, have led to an uneven distribution of infrastructure across regions. Unexpectedly, the result from the model testing in this study suggests that infrastructure is not an impeding factor in attracting FDI inflows. A possible explanation for this result may lie in the fact that Chinese central and local governments have taken a series of measures to enhance the infrastructure in western regions since the late 1990s, with the aim of improving this regional disparity. Another important factor is that Gansu province provides logistical subsidies to foreign firms. Thus, infrastructure is not a significant determinant of FDI location in the case of Gansu province.

Hypothesis 8, regarding the variable of agglomeration, is supported by the logistic test results. As shown in Table 7.15, the agglomeration variable is significant at the .05 level in the logistic model testing, with a β coefficient of .017 and the Wald statistic of 0.712. In line with the hypothesis, the variable of agglomeration has a positive impact on the FDI location choice of foreign investing firms in Gansu province. More specifically, other factors held constant, when foreign firms attach great importance to the factor of agglomeration in locating FDI projects in Gansu, they will prefer a WOS to a JV, project. This result is in line with the empirical findings of Krugman (1991) and Smith and Florida (1994). They suggested that industry concentration in a region, especially the concentration of foreign firms in a region, will attract additional foreign investment to that region, as new entrants expect externality benefits. In the case of Gansu province, and given the fact that the FDI inflows are mainly dominated by small and medium sized projects, investing firms may prefer to enjoy the effect of agglomeration, because it means a partial spillover of FDI there. On the other hand, an interesting finding can be suggested from a comparison of the logistic analysis results for the three variables of cost factor, investment incentives, and agglomeration. These three are locational advantages, which are significant in model testing in terms of affecting FDI location choice in Gansu. It can be seen from the comparison that the β coefficient for the variable of agglomeration has the smallest value at 0.17, indicating that this variable has rather weak explanatory power. The relatively modest effect of the agglomeration
variable is a rather accurate reflection of the level of industry development in the province of Gansu. It makes sense that the variables of cost factor and investment incentives played a stronger role in attracting FDI than did agglomeration, because of the fact that the local government of Gansu offered strong incentives to stimulate FDI inflows, and that Gansu has had a relatively weak ability to trigger the agglomeration effect given its status as a less developed inland province.

7.5.4.3 Test Results of Variables from the Perspective of Internalisation

Advantages

Hypothesis 9, regarding the variable of investment risk, is supported by the logistic test results. This variable is significant at the .05 level, as shown in Table 7.15. The $\beta$ coefficient of the variable bears a negative sign and the Wald statistic is 4.625. Thus, in line with the hypothesis, the variable of investment risk has a negative impact on the FDI location choice of foreign firms in Gansu province. The significant results of the model testing regarding the variable of investment risk suggest that relatively lower levels of investment risk being perceived by the investing firms played an important role in attracting FDI inflows to Gansu. The finding is consistent with the results of previous studies (Butler & Joaquin, 1998; Edwards, 1990; Kogut, 2000), indicating that investing firms often prefer to undertake investment in a region with relatively a low level of risk. Moreover, it is suggested that foreign firms undertake FDIs designed to reduce corporate risk associated with changes and movements in regional governments in the host country (Dunning & Narula, 1996). In the case of China, decentralisation in terms of economic policies has been one of the major programmes of the economic reforms. The Chinese central government has authorised large policy powers to local governments, especially in the field of local economic development. The stability of the local environment, linked to investment risk, is critical to the FDI location of foreign firms in Gansu province. More specifically, the model test results suggest that, other factors held constant, when foreign firms attach great importance to investment risk when locating FDI projects in Gansu, they will prefer a JV, to a WOS, mode. The result also indicates that lower risk in Gansu province will increase the probability of foreign firms undertaking FDI by WOS.
7.5.4.4 Test Results of Variables from the Approach of Strategic Investment

Motivations

Hypotheses 10 and 11, regarding the variables of efficiency-seeking and market-seeking motivations, are not supported in the model testing. Although both of the variables bear positive signs for the β coefficients, as expected in the hypotheses, they are not significant, as shown in Table 7.15. Thus, it can be suggested that FDI inflows to Gansu are not usually motivated by a pursuit of efficiency, or a new market. For the variable of market-seeking motivation, the test result is in accord with the results from the independent sample t-test and the logistical model testing for the variable of market factor in this study. The result from the independent sample t-testing shows that the values of market factor in the survey data for the two sample groups of JV and WOS, do not have a significant difference. The logistic modelling for the hypothesis testing showed that the market factor does not impose a significant impact on investing firms’ location choice in Gansu. It is, therefore, logical that investing firms are not stimulated by market-seeking motivation when locating their FDI projects in Gansu.

Hypothesis 12, regarding the variable of resource-seeking motivation, is supported by the test results. The β coefficient of resource-seeking motivation bears a positive sign and is significant at the 0.01 level, as shown in Table 7.15. As expected in the hypothesis, the variable of resource-seeking motivation has a significant impact on the FDI location of foreign firms in Gansu province. Thus, the higher this strategic-seeking motivation is, the greater the probability of foreign firms undertaking FDI in Gansu province. This result is understandable given the fact that Gansu is a rich province in terms of natural resource endowment. Thus, in the case of Gansu province, the resource-seeking motivation plays a critical role in the FDI location choice. Moreover, the model testing results suggest that the variable of resource-seeking motivation also affects an investing firm’s selection of entry mode between a JV and a WOS. If other factors are held constant, foreign investing firms will prefer a WOS to a JV project in locating FDI projects when great importance is attached to the variable of resource-seeking motivation. This preference towards a JV mode is, however, moderated by other variables from the perspective of ownership advantages and locational advantages. When the investing firms are of small size and are relatively inexperienced in terms of FDI behaviour, the investing firms are mainly aimed at international markets and, thus,
are sensitive to production costs, the likelihood of selecting a WOS over a JV will increase.

In summary, this study proposed a conceptual framework regarding FDI location choice by investing firms, which combines the O-, L-, and I- advantages from the eclectic paradigm with the approach of strategic investment motivations. Twelve hypotheses were developed from the conceptual framework. The findings from the hypothesis testing suggest that seven out of the twelve hypotheses are supported by the empirical testing results, as shown in Table 7.16. The model testing results indicate that the proposed framework is capable of identifying those factors that determine the FDI location choice of foreign investing firms in the research setting of an inland province in China.

### Table 7.16 Summary of the Results of Hypotheses Testing

<table>
<thead>
<tr>
<th>Hypothesized</th>
<th>Hypothesis support</th>
</tr>
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<tbody>
<tr>
<td>Firm size</td>
<td>+</td>
</tr>
<tr>
<td>International experience</td>
<td>+</td>
</tr>
<tr>
<td>Cost factor</td>
<td>-</td>
</tr>
<tr>
<td>Market factor</td>
<td>+</td>
</tr>
<tr>
<td>Investment incentives</td>
<td>+</td>
</tr>
<tr>
<td>Culture distance</td>
<td>+</td>
</tr>
<tr>
<td>Infrastructure</td>
<td>+</td>
</tr>
<tr>
<td>Agglomeration</td>
<td>+</td>
</tr>
<tr>
<td>Investment risk</td>
<td>-</td>
</tr>
<tr>
<td>Efficiency-seeking motive</td>
<td>+</td>
</tr>
<tr>
<td>Resource-seeking motive</td>
<td>+</td>
</tr>
<tr>
<td>Market-seeking motive</td>
<td>+</td>
</tr>
</tbody>
</table>

To verify the effectiveness of the test results, an assessment of the validation of the overall model fit is necessary. The 12 hypotheses were examined using Model 7. As shown in Table 7.15, for the statistics of Model 7, the overall model fit is satisfactory in terms of the model Chi-square, the reduction extent of -2LL, the Hosmer and
Lemeshow test, and model hit rate percentage. The Chi-square for Model 7 is significant at the .001 level, with a value of 79.236 at the eleventh degree of freedom. This result indicates that the largest reduction of -2LL, from 167.734 for the baseline model, to 132.684 in Model 7, in comparison with all of the alternative models (Models 2 to 6), is significant. These results suggest a goodness of model fit. The model fit is also assessed in the Hosmer and Lemeshow test, which returned an insignificant result. This result also indicates a good model fit, because there is insufficient evidence to reject the null hypothesis, that the actual and predicted values of the dependent variables are equal.

7.6 Summary

The data analysis results of this study have been presented and interpreted in this chapter. Following an introduction, the chapter is divided into four sections, covering the validity testing, reliability analysis, correlation analysis, and data analysis of FDI location choice in Gansu province. The data analysis involved several statistical techniques. In the non-response bias testing, independent sample tests were performed to examine the difference between the two groups of early and later responses. In the reliability analysis, Cronbach’s alpha testing was performed on variable constructs with multiple indicators, followed by a correlation test of the finalised variable constructs. For the detailed analysis of FDI entry between WOS and JV, independent sample t-tests were first performed to compare the group mean difference between WOS and JV entries on the independent variables. This was followed by a MANOVA test, to confirm the overall validity of the conceptual framework by comparing the group profile difference between WOS and JV. The hypotheses derived from the framework were then tested in the logistic regression models.

The results of the non-response bias analysis suggest that there is no significant difference between the responding firms and the non-responding firms and, therefore, a non-response bias does not exist in this study. The t-testing returned insignificant results, which did not reject the null hypothesis of group mean equality. Based on these results, the data from the survey response was assessed as appropriate for subsequent analysis procedures. The scale reliability analysis was a process of examining and
adjusting the independent variable constructs. Adjustments were made to those variable constructs that included indicators with low item-to-total correlation (r<.25) and/or had a low Cronbach’s alpha (α>.60) on the indicator scales. Based on the adjusted variable constructs, variable scores were calculated, and correlations between the variable constructs were examined. No significant, or large, correlation is found from the correlation test, which confirms that the variable constructs are well established.

The analysis of impacting factors of FDI in Gansu province is divided into the following steps. Differences between WOS and JV, as evidenced by the mean differences of the independent variables, were first examined in a series of independent sample t-tests. The second step was to compare the group profile difference between WOS and JV. MANOVA tests, using four different methods, were then performed and the significance test results confirmed the overall validity of the conceptual framework. The third step was to select the best fit and most efficient logistic mode for the hypothesis testing. Alternative logistic models based on individual and integrated theoretical frameworks were tested and the results were compared. The comparison results suggest that the model from the integrated conceptual framework is superior to the alternative models in terms of both effectiveness and efficiency. After the hypothesis testing models were selected, the hypothesis testing results were interpreted in step four. Evidenced by the estimated β coefficients and variable significance, seven out of the twelve hypotheses are supported.

Thus, the main goal of this chapter has been to discuss the role of the ownership factor, location factor, internalisation factor, and strategic-seeking motivations, by extending the eclectic paradigm in order to further understand the location choices of foreign firms in China’s inland regions. The results indicated that seven variables; firm size, international experience, cost factor, investment incentives, agglomeration, investment risk, and resource-seeking motivation; were statistically significant in affecting the FDI location choice of the sample firms. More specially, as expected, large firm size and more investment experience, based on ownership advantages, low production costs, large investment incentives, high agglomeration levels, and low investment risks based on locational advantages, as well as strong resource-seeking motivation based on the strategic investment motivation approach increased the probability of FDI in WOS form in Gansu province.
As this discussion indicates, the results of this study provide answers to several questions that had previously been unanswered in the literature. The major findings indicate not only which determinants are related to FDI location in Gansu province, but also the directions of those relations. Knowing the determinant factors of FDI location can be very useful for foreign firms, since it helps them to define and lead future FDI location in the inland regions of China. Further, the theoretical model obtained in this thesis is also useful for academics, since it means an empirical adaptation and testing of Dunning’s eclectic paradigm. Such a model can be easily reproduced in other environments, thus, facilitating comparisons between regions. Moreover, it can be helpful for governments and public policy, since it provides some clues about the best way of fostering FDI. The following chapter provides a conclusion to this study, explores the limitations of the study, and suggests some future research directions.
CHAPTER 8 CONCLUSIONS

8.1 Introduction

This chapter concludes the study by summarising key empirical findings from the modelling tests which are reported in Chapter 7 and discussing the implications of these findings. Based on the empirical results from the model testing, the research question for the study is answered, and the research gaps identified earlier in the thesis are addressed. The implications and limitations of the study are discussed, and suggestions for future studies are provided. After the brief introduction for this Chapter, Section 8.2 provides a brief overview of the study. Section 8.3 summarises the major empirical findings from the study by discussing the determining factors impacting FDI location choice in the setting of an inland province in China and discusses the theoretical contributions of the study in connection to the three research gaps identified in Chapter 1. Section 8.4 addresses the implications of the empirical findings generated from this study and includes the related implications for theoretical development and business practice. Section 8.5 addresses the limitations of the research and proposes several directions for future research.

8.2 Overview of the Study

The study intends to answer the central research question of what the key determining factors for FDI location choice by foreign investing firms in the Chinese inland province of Gansu are. To address this research question, several research objectives (refer to Chapter 1, Section 1.5) need to be achieved, including; developing a conceptual framework regarding FDI location choice by MNEs, formulating specific hypotheses regarding the factors determining FDI location choice in Gansu province, identifying the factors determining FDI location choices in the research setting of Gansu province through empirical model testing, and providing practical recommendations for managerial executives of MNEs and decision-makers in the local government.
In order to provide a theoretical base for the formulation of the conceptual framework, a critical review of the existing literature regarding FDI theories in general, and FDI location choice in particular, was first conducted. The review served three important purposes. First, by discussing the major theoretical approaches explaining FDI behaviour, it provided a theoretical backing for the conceptual framework to be proposed in the study. Second, by identifying variables determining FDI location choice tested in previous empirical studies, it provided a thorough understanding of the potential variables that would play a role in answering the research question of the study. Third, it documented relations that have been hypothesised, or found, between these variables in previous conceptual and empirical studies, and identified a number of indicators that have been used to measure these variables in existing studies.

Based on the literature review, a conceptual framework regarding the determining factors of FDI location in China’s inland region was proposed by combining the two approaches of the eclectic paradigm and strategic investment motivations. Guided by this framework, 12 hypotheses were developed in terms of the ownership advantages, locational advantages, and internalisation advantages from the eclectic paradigm approach and the strategic investment motivation approach. Then, an empirical study was conducted to test the hypotheses extending from the conceptual framework. In order to measure the variables and obtain empirical data regarding the dependent and independent variables related to the 12 research hypotheses, a survey questionnaire was mailed to foreign firms operating in the Chinese province of Gansu, with 106 usable questionnaires being returned. A variety of data analysis techniques provided several interesting and valuable empirical findings, from which a series of conclusions can be drawn and the research question can be addressed. The results indicated that 7 variables; firm size, international experience, cost factor, investment incentives, agglomeration, investment risk, and resource-seeking motivation; are statistically significant in the sample firms and played a critical role in the FDI location in China’s inland region.

8.3 Contributions of the Study

Through an exploratory empirical study on FDI location choice by foreign investing firms in the research setting of Gansu province in China’s inland region, this study has
made identifiable and unique contributions to the literature in practical and theoretical terms.

First, on the practical aspect, a set of determining factors related to FDI location choice in Gansu province is revealed in the study. In addition, this study also sheds light on how these factors have an impact on the selection of entry modes, between a JV and a WOS. This research has investigated the FDI location choice of foreign investing firms in China’s Gansu province by identifying the determinants explaining why foreign firms locate their FDI projects in this particular Chinese inland region. It has been revealed that multivariate factors, rather than single factors, have an influence on the decision regarding the complex issue of FDI location choice in this particular research setting, and that a single theoretical approach cannot provide a satisfactory explanation of FDI location choice by investing firms. Empirical results of the study gained through multivariate regression analysis identified that the seven influencing variables are; firm size, international experience, cost factor, investment incentives, agglomeration, investment risk, and resource-seeking motivation. The impacts of these variables are discussed here, from their respective theoretical perspectives.

From the perspective of ownership advantages, foreign investing firms locate FDI projects based on their possessed ownership advantages in terms of firm size and international experience. In the case of Gansu province in China’s inland region, firm size and international experience are determinants of FDI location of foreign investing firms. Furthermore, a large and more experienced investing firm will be more likely to take a wholly-owned subsidiary mode, over a joint venture mode, while a small and less experienced investing firm will prefer a joint venture to a wholly-owned subsidiary.

From the perspective of locational advantages, foreign firms are attracted by the location-specific advantages possessed by the host location, expressed in the cost factor, investment incentives, and agglomeration. The cost factor has a very significant effect on FDI location choice in the Gansu province of China. The results of the logistic model testing demonstrate that this factor has the highest significance level among all of the independent variables, suggesting that investing firms are mainly attracted to Gansu by its lower production costs. On the other hand, the effect of the cost factor on the entry mode selection of investing firms in Gansu is moderated by weak ownership advantages
possessed by these investing firms, leading to a strong preference towards the mode of a JV, over a WOS, when locating an FDI project in Gansu. The two variables of investment incentives and agglomeration are also found to positively affect FDI location choice in Gansu. Between these two, a higher value $\beta$ coefficient for the variable of investment incentives indicates a stronger effect on FDI location choice than in the case of agglomeration.

From the perspective of internalisation advantages, the variable of investment risk is identified as a determining factor in FDI location choice by investing firms. More specifically, foreign firms are attracted to Gansu by a perceived low investment risk. Empirical findings from the model testing also suggest that this variable affects the entry mode selection of investing firms. On the one hand, investing firms would choose a JV mode if investment risk is given high consideration when locating a FDI project in Gansu. On the other hand, when perceived investment risk becomes lower, the likelihood of choosing a WOS mode increases.

From the approach of strategic investment motivations, it is revealed in the model testing that the roles of three variables in terms of strategic investment motivation in FDI differed substantially in determining FDI location in China’s inland regions. The variable of resource-seeking motivation is found to be significant as a determining factor impacting FDI location choice in Gansu. In terms of strategic investment motivations, investing firms are attracted to Gansu mainly because of its rich endowment of natural resources, rather than to penetrate the local market, or for the attainment of production efficiency. The logistic model test results also suggest that the variable of resource-seeking motivation affects investing firm’s selection of entry mode between a JV, and a WOS. When the resource-seeking motivation is important to the FDI project, the investing firm is more likely to select a WOS mode, however, this preference towards a WOS is moderated by other determining factors.

Secondly, on the theoretical aspect, the present study contributes to the literature by constructing a new conceptual framework through combining elements from different theoretical approaches related to FDI location choice. The current research is an exploratory study on FDI location choice in the context of the inland regions of China, which aims to fill research gaps in the literature on the three aspects: 1) The
confinement of conventional FDI location research to the setting of developed countries; 2) the almost exclusive research focus on the inter-country level; and 3) the over-reliance on secondary statistical data at the macro-economic level. At the conceptual level, this study contributes to the literature of FDI location choice by shifting the research setting from developed countries to emerging developing countries, by moving the research focus from the inter-country level to the intra-country level of China’s inland region, and by taking the perspective of investing firms through collecting firm-specific empirical data. The gravity centre of the world economy is gradually moving from developed countries to developing countries and, especially, to emerging economies in the current century. More specifically to China, there is also a trend that FDI inflows to the inland region are growing at a faster pace than those to the coastal region in the current century.

Despite a considerable amount of research having been undertaken regarding FDI in China, however, the area of FDI in the inland regions of the country has been largely an overlooked research topic. Against this background, it can be suggested that further studies on the issue of FDI location choice at a regional level, and with a focus on the inland rather than the coastal regions, will emerge. To the author’s knowledge, this research represents the first attempt to systematically study the issue of FDI location choice in the setting of the inland region of China. On the frontline of this research stream, this study is the first to develop a conceptual framework to address FDI location choice at a regional level in the setting of an emerging developing country, and provides an empirical test to validate the conceptual framework. As suggested by the literature, the theory on FDI location choice is quite fragmented. Findings from this study also confirm that variables drawn from one single theoretical approach cannot fully explain FDI location choice in the Chinese inland region by foreign investing firms. By combining the three perspectives of ownership, locational, and internalisation advantages from the eclectic paradigm with the approach of strategic investment motivations, this study constructs a new framework to address the issue of FDI location choice. Guided by this framework, variables are drawn from each of the individual theoretical perspectives to address FDI location choice in the particular setting of Gansu province. Empirical testing has validated the framework and suggests that it can provide a satisfactory explanation of FDI location choice. Actually, the conceptual framework proposed in this study is an open structure, and different variables are associated with
each of the four theoretical perspectives. New variables can be identified and added to their respective perspectives in order to address FDI location choice when there are different investment environment conditions, in various research settings, such as the country, or regional, level and developed, or developing, countries. Thus, by constructing and validating the framework, the present study has made an original theoretical contribution to the knowledge body in the field of FDI location research.

8.4 Implications of the Study

By constructing a conceptual framework regarding FDI location choice and validating the framework in a specific research setting, this study contributes to the literature on a theoretical level. Through model testing the hypotheses developed from the framework and, thus, identifying a set of determining factors in an inland province in China, the empirical results from this study provide managerial implications for both executives from foreign investing firms and policy makers in local governments. Thus, this empirical study is likely to be significant for theoretical development and business practice related to FDI behaviour.

8.4.1 Implications for Theoretical Development

Theoretically, the present study presents a comprehensive and critical review of the relevant FDI theories and the existing empirical studies of FDI location choice, both in the international and the Chinese context. The intensive review of the literature reveals that the four theoretical perspectives of ownership, locational, and internalisation advantages and strategic investment motivations are complementary to each other and jointly contribute to the decision making of MNEs regarding their FDI location choice. These four perspectives are drawn from the two FDI theories of the eclectic paradigm and strategic investment motivations. Built on the existing literature and drawing elements from these four perspectives, an integrated conceptual framework is proposed to address the complex issue of FDI location choice. As an open structure, various impacting factors can be categorised into the four groups of ownership, locational, and internalisation advantages and strategic investment motivations. Thus, the conceptual
framework is able to provide a comprehensive coverage of the factors determining the FDI location choice of MNEs.

The integrated conceptual framework is specifically tailored for the Chinese setting. Based on the framework, twelve hypotheses have been developed to address the issue of FDI location choice in the setting of a Chinese inland region, and a number of impacting factors have been identified through empirical model testing. Thus, it is proven that the framework is useful to provide an explanation of the location strategies of foreign investing firms looking to invest in the inland region of China. Moreover, adding the theoretical approach of strategic investment motivations to the eclectic paradigm represents a substantial extension of the prevailing FDI theory and leads to a deepening understanding of the mechanism for decision-making by MNEs in terms of FDI location choice. Although the conceptual framework is proposed specifically for the setting of the inland region of China, at the regional level, using firm-specific empirical data, the rationale of integrating the four complementary theoretical perspectives into a more comprehensive framework is applicable to the study of FDI location choice over broader research contexts. These contexts include: developing, or developed, countries, at the regional, or country, level, and a firm-specific, or a macro, perspective. Thus, the formulation of the integrated conceptual framework has significant implications for theoretical development in the area related to the FDI behaviour of MNEs.

8.4.2 Implications for Business Practice

8.4.2.1 Managerial Implications for Investing Firms

The location decision of a FDI is regarded as a strategic and crucial decision for a firm, as it may determine a firm’s success, or trigger a market entry failure. Therefore, it is of strategic importance to a firm’s foreign operations. The empirical results from the study present managerial implications for executives of potential foreign investing firms.

Based on the empirical testing of the framework, this study has identified a set of seven factors, which impact a foreign investing firm’s decision to locate a FDI project in
Gansu province. These factors cover both internal and external aspects of the organisational domain for the investing firms. The factors of firm size and international experience from the perspective of ownership advantages are internal to an investing firm. The cost factor, investment incentives, and agglomeration from the perspective of locational advantages, and of investment risk from the internalisation perspective, are external to an investing firm. The factor of resource-seeking motivation from the strategic investment motivation approach is a match between an investor’s intention and the endowments in a location and, thus, represents a combination of internal and external factors. The empirical results indicate that an investing firm needs to have a process of internal and external scanning to examine these factors when making a decision regarding FDI location choice, and that it is this joint consideration of internal and external factors that will lead to the optimum decision.

More generally, the conceptual framework proposed in this research has provided a useful tool for investing firms to make informed decisions as to where they should locate their FDI projects. As every situation is different, the assessment of a firm’s internal and external variables is always a complex task, and is especially thorny for new ventures. There are no commonly accepted lists of location variables, or methods, by which a location is determined. Location variables could differ from company to company, from one region to another, and from country to country. Therefore, the conceptual framework of the study should, in each individual situation, be used with appropriate justification to fit the particular circumstances. This conceptual framework is particularly useful for foreign investors who wish to make their FDI location within China, where the business environment is very complicated with respect to its political conditions, economic system and development, social and cultural context, and the stage of technological development.

8.4.2.2 Policy Implications for Local Governments

FDI location choice by investing firms is essentially a process of matching variables from the four theoretical perspectives of O, L, and I advantages and strategic investment motivations. Locational advantages are external to investing firms and the present attraction of a particular host site to investing firms. In order to improve attractiveness,
governments in the host country/region must have a clear understanding of what factors appealing to foreign investing firms. Therefore, empirical results from the present study also present practical implications to the local government of the particular location of Gansu. With a population of around 26 million, the provincial government of Gansu needs to have a clear understanding regarding the impacts and significance of determining factors of FDI location choice in the context of this inland region. This is especially important, as FDI in the coastal regions of China has played a critical role in the process of economic development.

Four variables from the perspectives of L and I advantages (cost factor, investment incentives, agglomeration, and investment risks), and the strategic investment motivation variable of resource-seeking, are found to be significant in the empirical model testing of the study. All of these five variables are closely related to the attractiveness of Gansu as a potential location for foreign investing firms. Thus, the empirical results will be useful for the local government in developing its policies in order to attract more FDI. The local government needs to understand that, as a less developed inland province, Gansu cannot provide a local market as large and attractive for FDI inflows as can the coastal provinces, and that the advantages of Gansu in attracting FDI inflows mainly lie in its low production costs (especially the availability of low cost labour), its rich endowment of natural resources, and its FDI-friendly policies. The conceptual framework, together with the logistic estimation model and suitable empirical data, is capable of identifying factors impacting the attractiveness of Gansu as a host location for FDI projects. It will, however, be quite time-consuming for policy makers in the local government to theoretically identify and empirically test all these relevant impacting variables. It will be more efficient for the policy makers to consider the relative significance of the impacting variables identified in this present study when formulating policies to attract FDI inflows.

In the meantime, the conceptual framework developed in the study can also serve as a guideline tool for policy makers in local governments of other Chinese inland provinces, coastal provinces, or even other host countries, when formulating relevant strategies to attract greater FDI inflows.
8.5 Limitations of the Study

The present study represents the first attempt to investigate FDI location choice using firm-specific empirical data in the setting of China’s inland region. This research has revealed some important findings on determinants affecting decisions of foreign investing firms in choosing a FDI investment location in the Chinese inland region of Gansu. As an exploratory study, this study has several limitations.

First, qualitative research methods could be used to provide further information on the intricate details of FDI location decision making. Case studies are especially attractive in this regard, since they can be used to examine the step-by-step location decision-making processes. By using empirical data gathered through a mail survey during a particular time period, this study adopts a static method, which provides insights into a set of factors which impact an investing firm’s location choice. The question of how an investing firm prioritises and ranks the relative significance and importance of these factors cannot, however, be solved by this type of study. It is recognised that these intricacies can be better studied and solved through qualitative-oriented studies, such as in-depth interviews, or case studies, focusing on a few firms.

Second, the sample size for the empirical model testing in the present study is too small for more detailed analysis of FDI location choice for investing firms from different industries and from different countries of origin. There are two main reasons for the small sample size. First, the number of foreign invested enterprises in Gansu province is rather small. In comparison with the vast number of foreign invested ventures in Chinese provinces in the coastal regions, such as Guangdong and Shanghai, there were only 266 FDI projects in Gansu at the time that the mail survey was conducted. Even though the whole population was used as the sample for the mail survey, the sample size is still relatively small. Second, as acknowledged in other researches (e.g., Jiang, 2001), it is rather difficult to conduct fieldwork through surveys in China. To overcome the shortcomings of this small population of FDI cases in Gansu province, the thesis’ author intended to expand the research site to other inland provinces neighbouring Gansu. This plan, however, had to be abandoned due to very low return rates of useable questionnaires. As a result, Gansu was chosen as the sole research site, with the
population for this research limited to foreign firms that had invested in Gansu province. Therefore, the empirical findings of this research may only be applied to explain the FDI location choice in this particular area. Future studies on other regions should be conducted.

Last, the changes and development of environmental, market, and other conditions in China are continuing, and further reforms are still occurring. This study was conducted in a certain period of time and only gives insights into the situation at that one time in the context of FDI in Gansu province. For future study on location choice in China, the hypotheses developed from the conceptual framework of this study needs to be adjusted to fit the prevailing situation at that particular point in time.

8.6 Suggestions for Future Research

This study has built up a foundation by formulating an estimated conceptual framework for FDI location choice. In light of the findings from this empirical investigation, several additional avenues for future research are opened up.

First, future research could test the conceptual framework of this study in different research settings, such as in different inland provinces, or at a city level. For example, cities at the centre of provinces and regions in China attract much greater FDI inflows than do other cities. Therefore, it would be useful to further explore city level factors. For FDI location choice at city level, the characteristics from FDI host cities need to be incorporated into the current framework.

Second, future study can link the two issues of FDI location choice and post-entry performance of the FDI projects together. It is well recognised that the decision on FDI location choice will significantly affect the performance of FDI projects. It will be interesting to demonstrate how the perceived beneficial locational factor eventually affects the FDI venture’s performance. Alternatively, research could be conducted on the questions of if, and how, variables determining the performance of FDI ventures impose an influence on FDI location choice. For both research directions, the current conceptual framework needs to be expanded through the addition of a performance
perspective, in order to accommodate variables determining the performance of FDI ventures.

Third, a comparison of FDI location patterns between the different provinces of coastal and inland regions in China would be expedient and meaningful. A future study may extend this study to other regions of China rather than just the inland regions, as foreign investors have also been actively engaging in other regions in China. The findings among regions on FDI location could be compared to further examine the applicability of the conceptual framework.

Fourth, future research could also examine the conceptual framework of this study in the broader setting of other developing countries. In such research, it would be possible to examine the special regional factors of these host countries.
References


List of Related Publications

Refereed Journal Articles


Paper in Scholarly Review Process

Kang, Y., & Liu, Y. ‘Location dynamics of Chinese OFDI in Asia: A cross country and time analysis’, in the revision process for publication in *Applied Economics*.

Professional Presentations and Participation

A reviewer for the 2009 *Academy of Management* (AOM) Annual Meeting

Presentation at *Academy of International Business and Economics* (AIBE) 2006 Annual Conference in USA

Appendices
Appendix 1: Ethical Approval of the Massey University Human Ethics Committee (MUHEC)

Massey University

3 November 2006

Yulong Lin
14 Maidstone Place
Pinehill
AUCKLAND

Dear Yulong

Re: Corporate Investment Strategies: From the Perspectives of Firms in China

Thank you for your Low Risk Notification which was received on 3 November 2006.

Your project has been recorded on the Low Risk Database which is reported in the Annual Report of the Massey University Human Ethics Committees.

Please notify me if situations subsequently occur which cause you to reconsider your initial ethical analysis that it is safe to proceed without approval by one of the University’s Human Ethics Committees.

A reminder to include the following statement on all public documents:

“This project has been evaluated by peer review and judged to be low risk. Consequently, it has not been reviewed by one of the University’s Human Ethics Committees. The researcher(s) named above are responsible for the ethical conduct of this research.

If you have any concerns about the conduct of this research that you wish to raise with someone other than the researcher(s), please contact Professor Sylvia Rumball, Assistant to the Vice-Chancellor (Ethics & Equity), telephone (64 3) 5249, e-mail humanethics@massey.ac.nz.”

Please note that if a sponsoring organisation, funding authority or a journal in which you wish to publish requires evidence of committee approval (with an approval number), you will have to provide a full application to one of the University’s Human Ethics Committees. You should also note that such an approval can only be provided prior to the commencement of the research.

Yours sincerely

Sylvia V Rumball (Professor)
Chair, Human Ethics Chairs’ Committee and
Assistant to the Vice-Chancellor (Ethics & Equity)

cc Dr Yuanfen Kang
Department of Management and International Business
Albany

Assoc Prof John Monnin, HoD
Department of Management and International Business
Albany

Dr Keith Macky
Department of Management and International Business
Albany

Massey University Human Ethics Committee
Accredited by the Health Research Council
Appendix 2 QUESTIONNAIRE (English Version)
Foreign Direct Investment Location Selection

Dear Respondent,

Thanking you for participating in this survey on foreign direct investment (FDI) location choice in Gansu province of China. This study attempts to explore locational determinants of foreign direct investment in business environment of Gansu province in China. An understanding of these determinants is of potential value to foreign firms attempting to enter into inland regions of China. This study is being conducted as part of the requirement for a PhD thesis at Massey University, New Zealand. The questionnaire that you are being asked to complete aims to investigate the practices your parent firm follows in regard to the determinants of location selection in Gansu province, China.

This questionnaire should take you approximately 20 minutes to complete. All replies are confidential, and respondents’ names are not required to be included in your response. Data will be coded to ensure that no unauthorised person can identify, or interpret, an organization’s responses. A postage paid envelope has been enclosed with the survey for your convenience.

Your cooperation in completing this questionnaire is much appreciated as you may be busy and often bombarded with such requests. It will also improve the quality and completeness of the resulting analysis. If you wish to receive a summary of the report, please provide your details on the last page of this questionnaire. If you know someone is more suitable to this survey, please pass this questionnaire on.

Thank you so much for your time and help.

Yours sincerely,
Yulong Liu

PhD Candidate
Department of Management and International Business
Massey University
Note: Contact details of all concerned parties are below:

Researcher: Yulong Liu  
PhD Candidate  
Department of Management and International Business  
Massey University  
Phone: 0064 9 414 0800 ext 9242  
Fax: 0064 9 441 8109  
Email: Y.D.Liu@massey.ac.nz

Or his supervisor: Dr. Yuanfei Kang  
Department of Management and International Business  
Massey University  
Phone: 0064 9 414 0800 ext 9577  
Fax: 0064 9 441 8109  
Email: Y.Kang@massey.ac.nz
# PART 1. General Information about the Firm

This part asks you several questions about your company, which may include both your parent firm and its venture in Gansu province. Please indicate your answers by responding in the box to the right of each question. This information is collected to determine the internal context of your organisation.

<table>
<thead>
<tr>
<th>Question</th>
<th>Response</th>
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<tbody>
<tr>
<td>a) Could you please indicate the country/region of origin of your parent firm?</td>
<td>(Country/region name)</td>
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<tr>
<td>b) Which sector is your firm operating in Gansu province?</td>
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<td>c) Which of the items best describes your firm’s market entry mode?</td>
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<tr>
<td>○ Wholly-owned enterprise</td>
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<td>○ Equity joint venture</td>
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<td>○ Other:</td>
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<td>d) In what way did your parent firm establish your firm?</td>
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<tr>
<td>○ Greenfield</td>
<td></td>
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<tr>
<td>○ Merger and acquisition</td>
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<tr>
<td>○ Other:</td>
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<tr>
<td>e) Which city in Gansu province is the location of your firm?</td>
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<td>f) Approximately how old is your firm?</td>
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<td>.......................years</td>
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<td>g) Please indicate which of the following competitive strategies your firm follows? (tick as many as applicable)</td>
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<tr>
<td>○ Growth</td>
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<td>○ Innovation</td>
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<td>○ New market alliances or joint ventures with other firms</td>
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<td>○ Maintaining the status quo</td>
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<td>○ Mergers with other firms</td>
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<td>○ Other:</td>
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<td>○ New products</td>
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<td>.......................</td>
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<td>Question</td>
<td>Options</td>
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</table>
| h) Which of the following statements best describes your firm? (tick one) | ○ Our purpose is to defend our market share  
○ We react to other players in the industry  
○ We attempt to export our products  
○ We actively seek to increase our current market share  
○ We minimise risk whilst maximising the opportunity for profit  
○ Other: ............... |
| i) In what year did your parent firm start establishing venture operations in China? | .................. (Year) |
| j) How many people do your firm employ?                                  | ○ 1-100  
○ 201 - 300  
○ 401 -500  
○ 101 - 200  
○ 301 -400  
○ Over 500 |
| k) What is your parent firm’s share of ownership in your firm?            | .................. (1- 100%) |
| l) What is your parent firm’s total investment in your firm? (US$)        | ○ Under 1 Million  
○ 10-19.99 Million  
○ 1-9.99 Million  
○ 20 Million & Over |
<p>| m) Is your parent firm planned to significantly change the total investment in your firm in the near future? | Yes ☐ No ☐, please go to Question p |</p>
<table>
<thead>
<tr>
<th>Question</th>
<th>Options</th>
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<tbody>
<tr>
<td>n) If your answer to Question m is “Yes”, what action will be taken?</td>
<td>Increase investment, Decrease investment, Withdraw investment, Other: .................</td>
</tr>
<tr>
<td>o) With respect to your answer to the question n above, could you please describe the main reason for why the action will be taken?</td>
<td>........................................... (please state)</td>
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<tr>
<td>p) What major types of products does your firm produce?</td>
<td>........................................... (please state)</td>
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<tr>
<td>q) What is the main target market for the products produced by your firm? (Please tick one box)</td>
<td>Mainland China’s market, Overseas markets</td>
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<tr>
<td>r) What percentage of the products produced by your firm was marketed in Mainland China’s domestic market during the last financial year?</td>
<td>........................................... (%)</td>
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<tr>
<td>s) What is the annual sale of your firm in 2005? (Unit: Chinese Yuan)</td>
<td>Under 1 million, 1-10 million, 10.1 – 50 million, Above 50 million</td>
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<td>t) Which sector is your parent firm operating?</td>
<td>...........................................</td>
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<tr>
<td>u) Were you involved in, or do you know, your parent firm’s FDI location decision making process before your parent firm started its investment in Gansu province?</td>
<td>☐ Yes ☐ No</td>
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<tr>
<td>Question</td>
<td>Options</td>
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</table>
| v) What type of assets has your parent firm invested in Gansu province? | ○ Capital  
○ Technology  
○ Both  
○ Others:.......... |
| w) How long have you been working for this firm?                       | ......................................... (YEARS)                     |
| x) What is your current position in this venture?                      | ......................................... (Position Title)               |
| y) Which of the following age ranges are you in?                       | ○ <25  
○ 25 - 34  
○ 35 - 44  
○ 45 - 54  
○ 55 and over |
| z) What is your highest educational qualification?                     | ○ No formal qualifications  
○ Secondary school  
○ High school  
○ Bachelors degree  
○ Postgraduate  
○ Other (please specify):................. |
| aa) What is your gender?                                               | □ Male  
□ Female |
### PART 2. Foreign Direct Investment Location Choice

**Section 1.** This section is meant to identify *key factors of FDI location selection* from your parent firm’s perspectives. The following statements describe what you think about *factors influencing FDI location choice of your parent firm in Gansu province*. What conditions in Gansu province influenced your parent firm for its ventures’ location? Using the rating scale below, please circle the number beside each statement that matches your opinions on each factor.

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<td><strong>International Experience:</strong></td>
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<td>a) Previous international experience of the parent company</td>
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<tr>
<td>b) Investment experience in other Chinese markets besides Gansu</td>
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<td><strong>Cost Factor:</strong></td>
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<td>a) Access to low-cost labour</td>
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<td>b) Access to highly-skilled labour</td>
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<td>c) Low cost of raw materials, energy, land and water</td>
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<td>d) Low transportation/logistics costs</td>
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<td><strong>Market Factor:</strong></td>
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<td>a) Size of local market</td>
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<td>b) Expected economic growth of local market</td>
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<td>c) Growing demand in local market</td>
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<td>d) Low level of competition in local market</td>
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<td>e) Purchasing power of local customers</td>
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<td>f) Enabling faster entry to target market</td>
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<td><strong>Investment Incentives:</strong></td>
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<tr>
<td>a) Corporate tax incentives</td>
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<td>b) Financial incentives</td>
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<td>c) Local government policies towards FDI and other guarantees</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>d) Efficiency of local government administration</td>
<td>1 2 3 4 5 6 7</td>
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<tr>
<td>e) Attitude of local government towards FDI</td>
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<th><strong>Culture Distance:</strong></th>
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<tbody>
<tr>
<td>a) Local culture affinity with foreign investing firms</td>
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<tr>
<th><strong>Infrastructure:</strong></th>
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<tbody>
<tr>
<td>a) Reliability of energy supply</td>
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<td>b) Transport linkage</td>
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<tr>
<td>c) Quality of communication infrastructure</td>
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<tr>
<td>d) Water supply and infrastructure</td>
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<tr>
<td>e) Quality of infrastructure</td>
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<td>f) Level of overall infrastructure development</td>
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<tr>
<th><strong>Agglomeration:</strong></th>
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<tbody>
<tr>
<td>a) Proximity to firms in the same sector</td>
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<tr>
<td>b) Proximity to firms in a complementary sector</td>
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<tr>
<td>c) High industrial concentration (such as in an industrial park)</td>
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<tr>
<th><strong>Investment Risk:</strong></th>
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<tbody>
<tr>
<td>a) The level of overall security on the whole</td>
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<tr>
<td>b) Local social stability</td>
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<tr>
<td>c) Consistency of local government policy</td>
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</table>
Strategic Investment Motivation:

<table>
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<tr>
<th>Motivation</th>
<th>1</th>
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<tbody>
<tr>
<td>a) Marketing-seeking motivation</td>
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<td>b) Efficiency-seeking motivation</td>
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<tr>
<td>c) Resource-seeking motivation</td>
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Section 2. The following statements describe what you think about various factors of location choice when your parent firm decided to invest in China. How important were the following China specific factors with respect to your parent firm’s FDI location choice? Using the rating scale below, please circle the number beside each statement that matches your opinion on each factor.

<table>
<thead>
<tr>
<th>Factor</th>
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<td>Political and Legal Factors:</td>
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<tr>
<td>a) Political stability in China</td>
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<tr>
<td>b) Government policies and regulations</td>
<td>1</td>
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<td>c) Import restrictions</td>
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<td>7</td>
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<tr>
<td>d) Level of the Chinese government to deal with</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>e) The status of political relations between China and the parent firm’s home country/region</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>f) Time length of diplomatic ties between China and the parent firm’s home country/region</td>
<td>1</td>
<td>2</td>
<td>3</td>
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<td>7</td>
</tr>
<tr>
<td>Economic Factors:</td>
<td></td>
<td></td>
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</tr>
<tr>
<td>a) Role of the Chinese government in the economy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>b) Size of the economy</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>6</td>
<td>7</td>
</tr>
<tr>
<td>c) Size of the population</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>d) Growth rate of the population</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>e) Growth rate of the gross national product</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
</tbody>
</table>
f) Growth rate of the per capita income

g) Distribution of personal income

h) Changes in employment

i) Relative importance of the manufacturing sector to the economy

j) The status of economic co-operation between China and the parent firm’s country/region

Social and Cultural Factors:

a) Employees’ loyalty to the company

b) Hardworking characteristics of employees

c) Language

d) Social society structure

e) Chinese people’s way of life

f) Way of doing business in China

Infrastructure and Technology Factors:

a) Availability of infrastructure

b) Quality of infrastructure

c) Availability of qualified scientific and technical personnel

d) Research and development intensity

Geographic Distance:

a) Geographic proximity distance between China and your parent firm’s country/region

b) Business operation’s location within China

Government Policies Toward FDI:

a) Attitude of the Chinese government towards foreign investment

b) Taxation incentives for foreign investment

c) Investment entry regulations
Based on your experience, could you please describe broadly what your firm’s future intentions would be in terms of FDI location choice in China? Why?

---

**Market Factors:**

| a) Market size for investment project’s product line | 1 2 3 4 5 6 7 |
| b) Market growth (sales potential) for investment project’s product line | 1 2 3 4 5 6 7 |
| c) Competitive situation in the Chinese market | 1 2 3 4 5 6 7 |
| d) Availability of marketing infrastructure | 1 2 3 4 5 6 7 |
| e) Quality of marketing infrastructure | 1 2 3 4 5 6 7 |
| f) Availability of distribution infrastructure | 1 2 3 4 5 6 7 |
| g) Quality of distribution infrastructure | 1 2 3 4 5 6 7 |
| h) Cost of required marketing effort | 1 2 3 4 5 6 7 |
| i) Export sales potential of investment project’s product line | 1 2 3 4 5 6 7 |

**Competitive Factors**

| a) Gain first mover advantages | 1 2 3 4 5 6 7 |
| b) Follow competitors | 1 2 3 4 5 6 7 |
| c) Follow firms in the complementary sector | 1 2 3 4 5 6 7 |
| d) Acquire opportunities | 1 2 3 4 5 6 7 |
Additional Comments

If you feel that we have overlooked some important issues, or wish to add further comments, please include below.


Thank you very much for your help and time. Your involvement in this research is much appreciated.
Appendix 3 The REMINDER LETTER (English Version)

Dear Sir / Madam,

One month ago I sent you a questionnaire that asked for your opinion regarding the determinants of FDI location choice.

If you have already completed and returned the questionnaire, please accept my sincere thanks. If you have not yet returned your questionnaire, I hope you will agree to participate in the study and return it as soon as is convenient to you. A replacement questionnaire is enclosed in case the original has been misplaced.

Thank you very much for your precious time and help.

Yours sincerely,
Yulong Liu

PhD Candidate
Department of Management and International Business
Massey University, Auckland,
New Zealand
Phone: 0064 9 414 0800 ext 9242
Fax: 0064 9 441 8109
Email: Y.D.Liu@massey.ac.nz
Appendix 4 QUESTIONNAIRE (Chinese Version)
海外直接投资在中国内陆地区投资地点的研究

尊敬的先生/女士：
您好！

首先十分感谢您在百忙中抽空来参与这一研究。这项研究的主题在于了解投资者在甘肃省投资时选择投资地点时所考虑的主要因素。研究结果将有助于海外投资者的进一步发展及深入了解现已中内陆地区投资环境，同时也有助于在新西兰梅西大学的一项博士论文的研究。所以烦请您在百忙中填写下面的调查问卷。调查表的内容是关于您的母公司在中国选择投资地点时考虑的因素。

完成这一调查问卷大约需要20分钟的时间。调查的内容将会绝对保密。研究的资料将是通过电脑软件处理后的综合结果，没有人能够辨认出参与采访的具体公司及其个人。请填完后装入已写好地址并已贴好邮票的信封寄回给我。

我将非常感激您的协助。您的积极参与将极大的提高研究成果的价值。如果您希望得到这项研究的成果，请在调查表的最后一页留下您的联系方式。另外，如果您认为您公司的其他人员更合适回答这项调查表，请您转交。

再次衷心感谢您的宝贵时间及其大力帮助。

此致

刘育龙
博士研究生
新西兰梅西大学管理与国际商务系
如果对调研有任何疑问，请联系：

研究者：刘育龙
博士研究生
新西兰梅西大学管理与国际商务系
电话：0064 9 414 0800 ext 9242
传真：0064 9 441 8109
电子邮件：Y.D.Liu@massey.ac.nz

或导师：Dr. Yuanfei Kang

新西兰梅西大学管理与国际商务系
电话：0064 9 414 0800 ext 9577
传真：0064 9 441 8109
电子邮件：Y.Kang@massey.ac.nz
## 海外直接投资在中国内陆投资地点的研究

### 第一部分：公司背景

这一部分的问题是一些有关您的母公司及其在甘肃省的子公司（贵公司）的基本情况。请将您的解答写在问题的右侧对应处。这些调查内容是为了判断公司的内部环境。

<table>
<thead>
<tr>
<th>问题</th>
<th>解答</th>
</tr>
</thead>
<tbody>
<tr>
<td>a) 请您说明一下您的母公司是属于哪一个国家或地区？</td>
<td>……………………….（国家或地区）</td>
</tr>
<tr>
<td>b) 贵公司是从事哪个行业？</td>
<td>……………………….</td>
</tr>
<tr>
<td>c) 您的公司是属于哪一类企业？</td>
<td>您的公司是属于哪一类企业？</td>
</tr>
<tr>
<td>d) 你们母公司是如何建立贵公司的？</td>
<td>您们母公司是如何建立贵公司的？</td>
</tr>
<tr>
<td>e) 您的公司在甘肃省的那个城市？</td>
<td>……………………….</td>
</tr>
<tr>
<td>f) 您的公司成立有多少年了？</td>
<td>…………………年</td>
</tr>
<tr>
<td>g) 请问您的公司竞争战略是什么？（可以多选）</td>
<td>您的公司竞争战略是什么？</td>
</tr>
<tr>
<td></td>
<td>0) 和其他公司联盟</td>
</tr>
<tr>
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</tr>
<tr>
<td><strong>h)</strong> 您的企业未来发展目标是什么？（请选择一个）</td>
<td>○ 为的是保持现有市场份额</td>
</tr>
<tr>
<td></td>
<td>○ 为的是积极应对业内的竞争者</td>
</tr>
<tr>
<td></td>
<td>○ 为了产品出口</td>
</tr>
<tr>
<td><strong>i)</strong> 您的母公司从哪一年开始在中国建立投资企业？</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>j)</strong> 您的母公司现有多少职工？</td>
<td>○ 少于 100 (人)</td>
</tr>
<tr>
<td></td>
<td>○ 201 - 300 (人)</td>
</tr>
<tr>
<td></td>
<td>○ 401 -500 (人)</td>
</tr>
<tr>
<td><strong>k)</strong> 您的母公司在中国占有多少股份？</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>l)</strong> 您的母公司在中国一共投了多少资金？（以美元计算）</td>
<td>○ 少于 1 百万</td>
</tr>
<tr>
<td></td>
<td>○ 10-19.99 百万</td>
</tr>
<tr>
<td><strong>m)</strong> 您的母公司有没有计划变动在您公司的投资额？</td>
<td>是 □</td>
</tr>
<tr>
<td><strong>n)</strong> 您的母公司将会怎样变动在您公司的投资额？</td>
<td>○ 增加投资</td>
</tr>
<tr>
<td></td>
<td>○ 减少投资</td>
</tr>
<tr>
<td></td>
<td>○ 撤走投资</td>
</tr>
<tr>
<td></td>
<td>○ 其它： ............</td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>o)</td>
<td>针对您对上一题 n 的答案，请您谈一谈贵公司之所以要这样打算的最主要原因是什么？</td>
</tr>
<tr>
<td></td>
<td>(请说明)</td>
</tr>
<tr>
<td>p)</td>
<td>贵公司的主要产品是什么？</td>
</tr>
<tr>
<td></td>
<td>(请说明)</td>
</tr>
<tr>
<td>q)</td>
<td>贵公司所生产的产品的最主要市场是哪一个？</td>
</tr>
</tbody>
</table>
|   | ○ 中国大陆  
|   | ○ 海外市场 |
| r) | 在上一个财政年度，贵公司所生产的产品有百分多少是在中国大陆销售的？ |
|   | (%) |
| s) | 贵公司 2005 年的总销售额在哪个范围？（单位：人民币） |
|   | ○ 1 百万以下  
|   | ○ 1-10 百万  
|   | ○ 10.1-50 百万  
|   | ○ 5 千万以上 |
| t) | 你们母公司是从事哪个行业？ |
|   |   |
| u) | 您是否参与或了解你们母公司决定在甘肃省投资的决策情况？ |
|   | □ 是   □ 否 |
| v) | 你们母公司向在甘肃省主要投资了哪方面的资源？ |
|   | ○ 资本  
|   | ○ 技术  
|   | ○ 两者都有  
|   | ○ 其他： .......

<table>
<thead>
<tr>
<th>候</th>
<th>内容</th>
<th>选项</th>
</tr>
</thead>
<tbody>
<tr>
<td>w</td>
<td>您在这个企业工作了多长时间？</td>
<td>........................ (年)</td>
</tr>
<tr>
<td>x</td>
<td>您目前在这个公司的职位是什么？</td>
<td>........................</td>
</tr>
</tbody>
</table>
| y | 请指出您的年龄段。 | ○ <25  
○ 25 - 34  
○ 35 - 44  
○ 45 - 54  
○ 55以上 |
| z | 请问您的最高学历是什么？ | ○ 没有正式学历  
○ 初中  
○ 高中  
○ 本科  
○ 研究生  
○ Other (请指明):... |
| aa | 请问您的性别？ | □ 男  □ 女 |

第二部分：外国直接投资在中国的地点选择

1. 请您以打分的形式评估一下下列有关因素对你们母公司选择甘肃省作为投资地点时的影响程度有多大。

<table>
<thead>
<tr>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>非常不相关</td>
<td>不相关</td>
<td>有点相关</td>
<td>不确定</td>
<td>有点重要</td>
<td>重要</td>
<td>非常重要</td>
</tr>
</tbody>
</table>
投资经验:

a) 以前的国际投资经验
b) 在中国其他地区的投资经验

成本因素:

a) 较低的劳动力成本
b) 较高的劳动技能
c) 在原材料，能源，土地和水方面的低成本
d) 较低的运输/物流成本

市场因素:

a) 当地的市场规模
b) 当地市场的未来成长
c) 当地市场需求的增长
d) 当地市场的低水平竞争
e) 当地居民的市场购买力
f) 能够快速进入目标市场

投资激励措施:

a) 公司税务激励
b) 财务激励
c) 地方政府对外商投资的相关政策
d) 地方政府的工作效率
e) 地方政府对外商投资的态度

文化距离:

a) 当地文化与贵公司的密切联系

基础设施:

a) 可靠的电力供应
b) 交通联系
c) 通信设施的质量
d) 水的供应及相关设施
e) 基础设施的质量
f) 整个基础设施的发展水平
聚集效应:

a) 靠近同行业的企业
b) 靠近互补行业的企业
c) 企业相互聚集(例如企业工业园区)

投资风险:

a) 整体的安全程度
b) 当地的社会稳定程度
c) 地方政府政策的连续性

投资的策略驱动:

a) 寻求市场的投资驱动
b) 寻求效率的投资驱动
c) 寻求资源的投资驱动

2. 这一部分是以打分的方式评估当您的母公司在选择中国作为投资地点时相关的
影响因素及其重要程度。

<table>
<thead>
<tr>
<th>1</th>
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<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>非常不相关</td>
<td>不相关</td>
<td>有点相关</td>
<td>不确定</td>
<td>有点重要</td>
<td>重要</td>
<td>非常重要</td>
</tr>
</tbody>
</table>

政治状况:

a. 中国的政治稳定性
b. 中国政府的政策以及规定
c. 进口限制
d. 与不同级别的中国政府打交道
e. 中国政府与你们母公司所在国或地区之间的政治关系的状况
f. 中国政府与你们母公司所在国或地区之间外交关系的时间长短

经济状况:

a. 中国政府在其经济体中所扮演的角色
b. 中国的经济规模
c. 人口的数量
d. 人口的增长率
e. 国民生产总值的增长率
f. 国民平均收入的增长率

g. 个人收入的分配

h. 就业状况的改变

i. 制造业在中国经济中的相对重要性

j. 中国政府同你们母公司所在国或地区之间的经济合作关系状况

社会文化差异:

a. 雇员对公司的忠诚

b. 雇员的勤劳品质

c. 语言

d. 社会结构

e. 中国人的生活习惯

f. 中国的经商之道

基础设施及技术状况:

a. 基础设施的完善程度

b. 基础设施的质量

c. 科学技术人员资源

d. 科研与开发的强度

地理位置:

a. 中国政府同你们母公司所在国或地区之间地理位置的就近程度

b. 在中国境内的投资地点

中国政府对外商投资的政策:

a. 中国政府对外商来华投资的态度

b. 中国政府对外国投资者的税务优惠政策

c. 中国政府对外国投资者进入中国投资的规定

d. 外国投资活动的协议

e. 中国政府在股份方面对外国投资者的限制

f. 中国的地方法规

中国的市场因素:

a. 投资项目所生产的产品的市场大小

b. 投资项目所生产的产品的市场销售潜力

c. 中国市场的竞争状况

d. 现有的市场营销设施

e. 市场营销设施的质量

f. 现有的产品分销设施

h. 市场营销所需要的费用
<table>
<thead>
<tr>
<th>i. 投资项目所生产的产品的出口潜力</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>竞争因素：</td>
<td></td>
<td></td>
<td></td>
<td></td>
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<td></td>
<td></td>
</tr>
<tr>
<td>a) 先发优势</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>b) 跟随竞争者</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>c) 跟随互补行业的企业</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
</tr>
<tr>
<td>d) 获取机会</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
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<td>7</td>
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</tbody>
</table>

根据您的经验今后在中国投资您认为应该选择哪一个投资地点？为什么？


除了以上调查的问题以外，您还有没有什么要补充的吗？


再一次衷心感谢您的大力支持和宝贵时间。非常感激你对这项研究的参与。

    诚挚的祝愿您新年快乐，万事如意！
尊敬的先生/女士：

您好！

一个月前我向您寄送了关于投资者在投资时选择投资地点时所考虑的主要因素的调查问卷。

如果您已经完成并已反馈了问卷，我万分感谢您在百忙中抽空来参与这一研究。如果您至今尚未填写并反馈调查问卷，请您在方便的时候尽快完成。如果您遗失了调查问卷，请您使用随信的调查问卷。

衷心感谢您的宝贵时间及其大力帮助。并祝愿您新年快乐，万事如意！

此致

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