

# **Entry Mode Taxonomy** **and Selection Model for** **International Construction** **Markets**

**Chuan Chen**



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# Preface

An entry mode is an institutional arrangement that makes possible the entry of a company's services, technology, human skills, management or other resources into a foreign country. Selecting an inappropriate entry mode can lead to significant negative consequences. Entry mode selection is therefore one of the most critical decisions in international construction. The purpose of this research was to understand various entry modes and improve the selection decision for international construction companies.

Comparative case studies identified and defined 10 basic entry modes utilized in the international construction arena: 1) strategic alliance, 2) local agent, 3) licensing, 4) joint venture company, 5) sole venture company, 6) branch office/company, 7) representative office, 8) joint venture project, 9) sole venture project, and 10) BOT/equity project. Basic entry modes can be combined or sequenced throughout the entry into a single geographic market. These entry modes can be classified into a dichotomy: permanent entry (joint venture company, sole venture company, branch office/company, and representative office) versus mobile entry (joint venture project, sole venture project, and BOT/equity project), which differ primarily in investment risk exposure, resource commitment, and flexibility.

Complementary business and economic theories suggested 13 home country specific, home-host country specific, host country specific, and entrant specific factors that can influence the selection between permanent entry and mobile entry. Hypotheses were developed centering on these factors, e. g. , with other conditions being equal, contractors are less likely to use permanent entry modes for a target market with a high competitive intensity. Binary logistic regression analysis of empirical data was used to test these hypotheses. The results were interpreted and analyzed. In addition, the regression analysis, together with a two sample t-test, provided a descriptive as well as normative statistical model for selecting superior entry modes to penetrate target foreign construction markets.

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# Chapter 1

## Introduction

### 1.1 Background

The international construction sector is an important part of the global economy. Mawhinney (2001) defined international construction as construction projects where one company, resident in one country, performs construction works in another country. This simple definition, consistent with other definitions (Gibson et al., 2003; U. S. Department of Commerce 1984), underpins the scope of activities investigated in this research.

Through international projects, contractors can achieve opportunities for growth that may be unavailable in their domestic market, and capitalize on expertise and experience gained from long involvement in a type of construction or some sophisticated technology (Ashley and Boner, 1987). To the contractors' country of origin (home country), the benefits from international construction can be grouped into six categories: 1) expatriation of profits from foreign projects; 2) exports of equipment and materials as a direct result of foreign project work; 3) exports of services (such as insurance, transportation, and financing) as a direct result of foreign project work; 4) repatriation of personal income in the foreign projects; 5) follow-up procurement of home country goods and services resulting from the continued operation and maintenance of foreign projects; and 6) employment of home country nationals both in home and host countries (U. S. Department of Commerce, 1984). The host country can have projects completed when it does not have the required expertise or resources, obtain technology transfer, benefit from increased competition in domestic markets for quality and efficiency improvement, and sometimes, obtain partial or entire financing for the project.

Han and Diekmann (2001) summarized four globalization factors in the last decade that may expand opportunities for contractors in international construction markets: 1) all signatory countries to the GATT (now, WTO) system opening their domestic markets; 2) the development of re-

gional Free Trade Blocs; 3) establishment of world standards; and 4) rapid developments in telecommunication, travel and other related industries.

However, it is not easy to make the best of the opportunities in international construction markets. Working in an international setting often requires a much wider view of the project's context than with domestic projects where project expertise is often disconnected from other aspects of the business; and international projects manifest more types of risks than domestic projects (CII, 2003; Han and Diekmann, 2001; Mawhinney, 2001). To survive and grow in the international construction arena, a contractor cannot afford poor decisions in assigning their limited resources to diminishing markets, while avoiding the attractive ones. In crafting effective entry strategies, contractors must, first and foremost, evaluate market attractiveness and accessibility systematically and objectively, however in the construction management knowledge body there is no systematic tool or method available for this purpose. The decision to enter a new foreign market is of critical importance for the company's profit making ability and sustainable growth. To domestic market oriented contractors, it is also important to understand the foreign competitors' entry decision to protect their competitive position in the domestic construction market for growth and survival in a world of global competition.

## 1.2 Problem Statement

The construction sector is project-based (Messner, 1994). This fundamental feature determines that the entry decision is substantially centering on "Go/No-Go" or "Bid/No-Bid" decisions for a specific project in the targeted new market (Han and Diekmann, 2001). Ashley and Boner (1987) observed that:

"Multinational contractor operations abroad are project specific; offices and key personnel are mobilized and set up prior to construction and are usually closed and withdrawn following project conclusion. When involved in multiple projects in one country over a prolonged period of time, the project office may acquire a greater degree of permanence and at some point can become recognized as a branch office of the firm. It rarely, however, develops the kind of permanence exhibited by a wholly owned subsidiary of a typical multinational enterprise."

Entries in the international construction sector are more often triggered on a contingent basis than in other international trade sectors like manufacturing. Long term presence and increasing commitment are frequently dependent on market performance rather than strategic vision and goals. However, new changes in the 1990s started to drive a tendency of market entries aiming at a more sustainable and permanent presence in new markets, including:

(1) The continuous prosperousness of some construction markets in developed economies, like that of the United States. Sustainable presence in these markets can be profitable.

(2) The continuous increase in demand within some construction markets in developing economies, e. g., China and the Czech Republic. Early entry and establishment of permanent residence to exploit the growth are strategically important.

(3) The dwindling size of some construction markets in export-oriented economies, like Europe and Japan. Contractors have little choice but to turn to foreign markets for survival and growth.

(4) The emergence of innovative investment type entry modes, like mergers and acquisitions.

(5) Increasing size of global construction players. Frequent cross border mergers or acquisitions make very large international construction firms, who place more emphasis on entry issues on a corporate level.

Market entry has increasingly become a strategic and corporate-level decision. These market entry strategies guide lower level “Go/No-Go” or “Bid/No-Bid” decisions centering on specific projects within a market.

As more and more construction firms enter foreign markets, several questions of interest to both academicians and practitioners will be increasingly asked including: “How do construction firms enter individual foreign markets?” and “How does this entry behavior vary across different types of firms and different entry situations in the construction sector?”. The answers to these and other related questions in the area of international construction are not clear. The existing knowledge of entry modes in firms has been accumulated mostly in the context of the manufacturing industry. Given that construction has distinct characteristics which make a wholesale transfer of concepts and theories serving the manufacturing industry unrealistic, there is a need for adapting this knowledge, and for developing new concepts and frameworks to meet the unique nature of the construction industry.

### 1.3 Research Objectives

The goal of this research is to develop a systematic taxonomy of entry modes specific to international construction markets along with a model for entry mode selection. To realize this goal, the following objectives need to be accomplished:

(1) To understand the history, status quo, and trends in the global construction market from an entry perspective;

(2) To define a taxonomy of market entry modes that construction companies use to enter selected international markets prior to attaining business sustainability within the markets;

(3) To develop a market-entry mode selection model for construction companies to achieve optimal entry performance.



## 1.4 Scope

An international market entry strategy is a comprehensive plan which sets forth the objectives, goals, resources, and policies that will guide a company's international business operations over a future period long enough to achieve sustainable growth in world markets (Root, 1987). Market entry strategies require decisions on (Root, 1987): 1) the choice of a target market; 2) the objectives and goals in the target market; 3) the choice of an entry mode to penetrate the target country; 4) the marketing plan to penetrate the target market; and 5) the control system to monitor performance in the target market (Figure 1.1). In some literature (Brouthers, 1995; Buckley and Casson, 1998; Taylor et al., 2000; Tse et al., 1997), entry strategy and entry mode are interchangeably used. In general business literature, the mainstream research on market entry strategies focuses on two issues: 1) market selection and 2) entry mode selection. This may be because these two questions are most important and difficult. The scope of this research specifically focuses on entry mode selection.

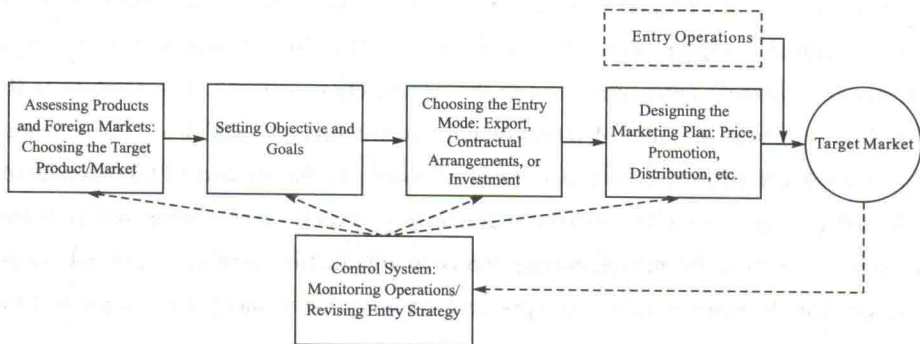


Figure 1.1 The Elements of an International Market Entry Strategy

Source: Root, 1987

Market can be defined by different dimensions, such as geographic location, size, client, product, and service. From an entry strategy perspective, market entry decision issues normally center on cross-border activities. For example, in Root's theory market is focused on country (Root, 1987): This research focuses on geographic markets and therefore, if not specifically indicated otherwise, "market" is identical to "country".

According to Drewer (2001), the international construction system is made up of 4 segments: 1) design consultancy, 2) construction, 3) labor trade, and 4) material production. Among the four, design service is the most mobile in crossing country borders and leaping entry and exit barriers. The labor market depends upon construction markets to a great extent, and is normally traveling in a single direction from developing countries to developed economies. Cross-border material transactions are also dependant on construction and quite similar to common goods trade. International

construction activities attract more extensive attention from different economies, and they also face more challenges. The scope of this research emphasizes the construction segment. However, since many contractors also provide design services, especially in industrial and petroleum projects or projects delivered under a design-build or turnkey delivery system, design consultancies are also addressed in this research when they are combined with the construction services for a project.

The foundation of the construction industry has been the focus of the debate to whether it is production( Newcombe, 1976) or service delivery( Fleming, 1988; Hillebrandt, 1984) . This question is important since the perspective from which one looks at the industry defines its markets, and consequently the strategic processes which are used to govern and direct the construction organization( Langford and Male, 2001) . The latest mainstream viewpoint is that construction is a hybrid industry of both product and service components( Langford and Male, 2001; Maloney, 2002; Warf, 1991) .

“...In the construction industry over the last twenty years, ...there is a strong differentiation between contractors who provide management services and contractors who undertake to build the physical product. ...Large firms providing management contracting and project management services may be regarded as part of the service industry, whereas those providing resources which are used to construct the building might be better described as manufacturing-style organizations.”( Langford and Male, 2001)

This research emphasizes the higher level of service featured activities that large international contractors frequently undertake.

Except for the above mentioned restrictions, the entry mode taxonomy and entry mode selection model developed in this research are generic tools that can help contractors select superior entry modes to penetrate potential economies( either developing countries or developed countries) and provide services to different types of owners( e. g., local private, home private, local public, or international organization) .

## 1.5 Research Methodology

This research applies theories and techniques previously developed and supported in general international business fields; analyzes data from multiple sources; and elicits opinions from seasoned leaders in the international construction industry, through the following research process.

### **Research Process**

Based on the previous review of research methods and methodologies in general, and especially those utilized by previous successfully implemented research in the construction management field, together with thorough consideration of the purpose and constraints involved in this specific re-

search topic, the following research process was developed( Figure 1.2) .

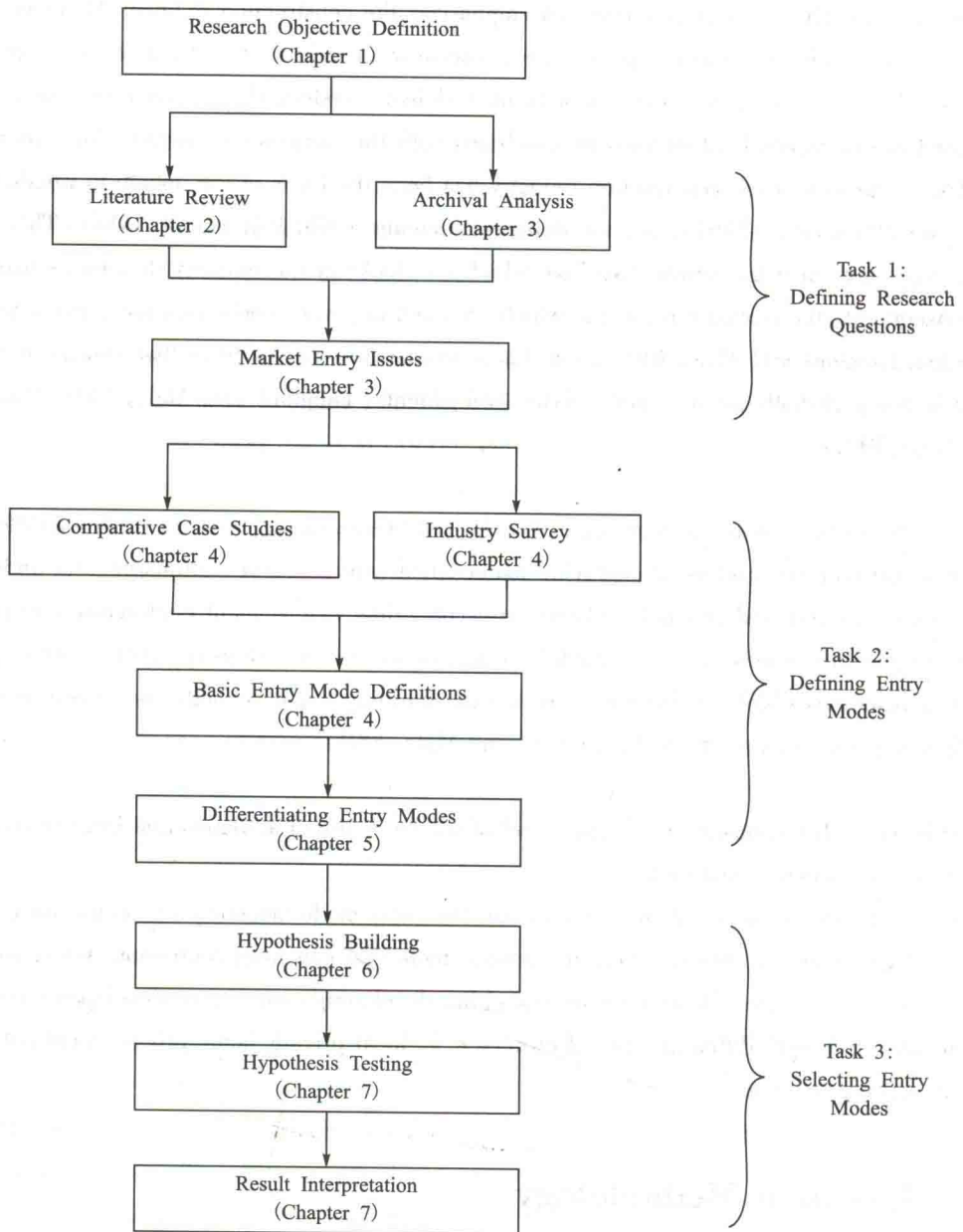


Figure 1.2 Research Process

### Task 1: Define Research Questions

The goal and scope of this research necessitates input from multiple fields, and those emphasized in this specific research are international construction, strategic management, ( global) marketing strategy, and international business. Each of these fields has a large body of literature. To command the mainstream of each field, this research began with an extensive literature review. A large number of academic journals, industry journals, books, reports, proceedings, theses, laws and regu-

lations, newspapers, and web pages were reviewed, documented, analyzed, synthesized, and compared. The literature review is also a source of data and information for the other research activities. Anecdotal information was documented for later comparative case studies to define entry modes. It should be noted that the literature review process was a concurrent activity throughout the entire research process. The latest findings or information in related areas were continuously monitored to incorporate new ideas or avoid potential overlap.

One of the conclusions from the literature review was that entry mode selection is an important and extensively studied strategic issue in international business but it received very little attention in international construction research. This led to the following questions:

(1) Is entry mode selection a critical issue in construction?

(2) If it is important, are the findings about entry mode selection in general business equally applicable in the construction industry, so no specific research is needed?

To address these questions, this research reviews the globalization process of the construction industry, studies the current status/trends empirically, and analyzes comments from industry leaders regarding international market entry. It is found that entry mode selection is also a very important issue in international construction industry. By assuming that, as a specific industry, construction has characteristics that necessitate findings about entry mode selection from other industries to be adapted to apply in this industry, two research questions were proposed:

(1) What are the entry modes that international contractors use to enter selected overseas markets?

(2) What are the internal and external factors influencing entry mode selection and how do they influence the selection?

In other words, this research addresses two basic issues: entry mode definition and entry mode selection.

### **Task 2: Entry Mode Definition**

The study started with existing taxonomies of entry modes in general international business, and then cases regarding each entry mode from international construction practices were sought. Special cases that involve patterns of entry that did not match any well defined entry modes in general business were also examined. In total, over 90 cases were collected that jointly show the structure, formation process, merits and demerits for a taxonomy of entry modes specifically for international construction markets. These entry modes were further analyzed in terms of their setting characteristics (e.g., cooperative or competitive, permanent investment or contractual based) and their effects (e.g., risk, control, and flexibility). Based on their similarities and differences in terms of these setting characteristics and effects, they were grouped. One grouping scheme provides a dichotomy of permanent entry versus mobile entry. This dichotomy was identified as a critical selection issue for the following research step.

### **Task 3: Entry Mode Selection**

The hypothesis testing method was used for entry mode selection. Theories that may potentially in-



fluence the selection between permanent entry and mobile entry were examined and streamlined to identify factors that can influence the selection. Hypotheses centering on these factors were developed. Multiple sources of data were collected to test the hypotheses and develop a model using the binary logistic regression technique. This model that describes under what scenarios contractors will choose which entry mode is further analyzed to check if it is a normative model with a t-test. A normative model means that if contractors use the entry mode suggested by the model, better performance can be achieved. Based on the results of the hypothesis testing and model building, managerial implications were developed.

## 1.6 Relevance

With the entry mode taxonomy and entry mode selection model developed in this research, contractors who have already developed a presence in international markets can review and adjust the portfolio of their overseas business and entry strategies under implementation.

These tools are especially useful for contractors who are just beginning to explore overseas business opportunities or for global players who are expanding geographically to new markets to choose entry modes from scratch.

Economies are becoming more global and companies can no longer count on having domestic markets protected by tariffs and other import barriers since foreign competitors can always find ways to leap such barriers. Contractors remaining at home, when threatened by new entrants from abroad, can also gain insights from this research for developing their competitive or cooperative strategies regarding market entrants.

Although this research is focused on the contractors' perspective, government policy makers can obtain important information from the results when forming or reforming regulations and policies to encourage or control entry of foreign contractors, or encourage local contractors to expand their business overseas.

## 1.7 Reader's Guide

Chapter 1 provided an overview of this book, identified the problems and scope of the book, and presented the research methodology used. Chapter 2 reports the major findings from literature in disciplines of international business, strategic management, and international construction in relation to international market entry. Chapter 3 reviews the internationalization process of the global construction market, and identifies the current trends in market entry and entry mode selection. Chapter 4 provides a comparative analysis of case studies to define and characterize basic entry modes for international construction markets, and evaluates the taxonomy with a survey of practi-