

**The Global Trading Activities of Consulting Engineering Firms:
Managing Risk and Geographical Choice**

A thesis submitted in partial fulfilment of the requirements for the degree of
Doctor of Philosophy

at the
Department for Continuing Education
University of Oxford

By
Chia Huay Lau
Kellogg College
Michaelmas, 2019

SUMMARY TABLE OF CONTENTS

Abstract

Acknowledgements

Chapter 1	Introduction	1
Chapter 2	Literature Review and Research Framework	6
Chapter 3	The Consulting Engineering Sector	41
Chapter 4	Research Design and Methods	56
Chapter 5	Factors Driving Internationalisation	71
Chapter 6	Choice of Location and Internationalisation Outcomes	156
Chapter 7	Corporate Governance	218
Chapter 8	Summary and Conclusion	238
Appendix	Research Questionnaire	270
Bibliography		283

TABLE OF CONTENTS

Abstract		x
Acknowledgements		xiii
Chapter 1	Introduction	1
1.1	Research Objectives	2
1.2	Research Questions	2
1.3	Research Design and Methods	3
1.4	Contribution	4
1.5	Structure of Thesis	4
Chapter 2	Literature Review and Research Framework	6
2.1	Introduction	6
2.2	Research Framework	7
2.3	Definition of Firm's Internationalisation	10
	2.3.1 Measurement of Firm Internationalisation: Degree of Internationalisation	10
2.4	Deindustrialisation and the Services Sector	10
2.5	Globalisation	13
2.6	Internationalisation of Firms: Underlying Theories	15
		ii

2.6.1	Dunning's Eclectic Theory	15
2.6.2	Uppsala Model	20
2.6.3	Transaction Cost Theory	23
2.6.4	The Real Options Theory and Growth Option Value	25
2.6.5	Internalisation Theory	26
2.6.6	Theories of the Growth of the Firm and Monopolistic Advantage	27
2.7	Application of Theories, Research Gaps, and Contributions to the Literature	28
2.7.1	Why Consulting Engineering Firms Internationalise	29
2.7.2	Factors affecting the Internationalisation Strategies of Firms	32
2.7.3	Internationalisation and the Firm's Performance and Risk	35
2.7.4	Factors Affecting the Geographical Choice of Firms when Internationalising and Factors Affecting the Success of Foreign Subsidiaries	37
2.7.5	Effects of Internationalisation on Corporate Governance and Business Strategy	38
2.8	Conclusion	40
Chapter 3	The Consulting Engineering Sector	41
3.1	Introduction	41
3.2	The Degree of Internationalisation of Consulting Engineering Firms	43
3.3	Geographical Concentration of Consulting Engineering Firms	47

3.3.1	International Market Potential and the Effect on Geographical Concentration	50
3.3.2	Economic Growth and the Effect on Geographical Concentration	51
3.3.3	International Competition and the Effect on Geographical Concentration	53
3.4	Conclusion	54
Chapter 4	Research Design and Methods	56
4.1	Introduction	56
4.2	Research Questions, Design and Methods	56
4.2.1	Dual Approach of Longitudinal and Cross-company Studies	60
4.3	Quantitative Research and Data Selection	62
4.4	Qualitative Research	63
4.4.1	Research Questionnaire	64
4.4.2	Interviews	65
4.4.3	Qualitative Research Samples	65
4.5	Limitations and the Ethical Aspects of the Study	67
4.5.1	Research Methods	67
4.5.2	Research Samples	68
4.5.3	Ethical Aspects of the Study	68

Chapter 5	Factors Driving Internationalisation	71
5.1	Introduction	71
5.2	Research Framework	71
5.3	Why Services Firms Internationalise	73
	5.3.1 The Importance of Having an Overseas Presence	75
	5.3.2 International Economic and Technical Advantages	77
	5.3.3 International Competitiveness	86
	5.3.4 International Diversification	88
	5.3.5 Growth Options and Future Growth	89
	5.3.6 Optimum Size of Firm	91
	5.3.7 Summary of Qualitative Study	91
5.4	Internationalisation Strategy	93
	5.4.1 Internationalisation Mode Choice	95
	5.4.2 Internationalisation Stages	97
	5.4.3 International Joint Venture (IJV)	98
	5.4.4 Merger and Acquisition	110
	5.4.5 Foreign Direct Investment (FDI)	116
	5.4.6 Other Forms of Internationalisation Modes	120
5.5	Factors Affecting Internationalisation Strategies	121
	5.5.1 Real Options and Growth Option Value	121
	5.5.2 Degree of Control and Cost Efficiency	122

5.5.3	Effect of Host Government Policy	123
5.5.4	Speed and Timing Factors	123
5.5.5	Cultural Distance and Entry Mode Choice	125
5.5.6	The Influence of Market Size on Strategic Choice	126
5.5.7	The Influence of Experience on Strategic Choice	127
5.5.8	The Influence of Firm Size on Strategic Choice	128
5.6	Internationalisation and Firm Performance, Firm Internationalisation and Economic Growth, and Internationalisation and Firm Size	129
5.6.1	Ordinary Least Square (OLS) Regression	131
5.6.2	Questionnaires and Interviews	140
5.7	The Effect of Internationalisation on Consulting Engineering Firms' Risk	144
5.7.1	Political Risk	145
5.7.2	Financial Risk	145
5.7.3	Market Risk	146
5.7.4	Foreign Exchange Risk	146
5.7.5	Reputational Risk	146
5.7.6	Other Challenges faced by Consulting Engineering Firms when Internationalised	147
5.8	How Firms Mitigate Risk When Working in High Risk Regions	148
5.8.1	Investment Structures and Entry Mode	148
5.8.2	Financial Management Strategy	149
5.8.3	Operational Strategy	149

5.8.4	Quantitative and Qualitative Analyses: Were Firms with a Higher Degree of Internationalisation Less Affected by the 2009 Recession	151
5.9	Conclusion	152
Chapter 6	Choice of Location and Internationalisation Outcomes	156
6.1	Introduction	156
6.2	Factors Affecting Geographical Choice	157
6.2.1	International Market Potential	158
6.2.2	Regional Characteristics and Cultural Distance	166
6.2.3	Geographical Human Asset: Capability and Adaptability	169
6.2.4	Previous International Experience and Network	171
6.2.5	Market Distance and Size	172
6.2.6	Clusterisation: Following the Leader Strategy	172
6.2.7	Country Factors: Legal Institutions and Regulatory Processes, Political and Economic Stability	173
6.2.8	Regional and Country Risks and International Investment Geographical Choice: Qualitative Analysis	187
6.3	Factors Affecting the Success of International Subsidiaries	192
6.3.1	Home Country Firm Size	194
6.3.2	Technological Competency	196
6.3.3	Previous International Experience and Experiential Learning Capacity	198

6.3.4	Relational Capital	201
6.3.5	Host Country Economic Growth	201
6.3.6	Intensity of Foreign Penetration and Competitiveness	202
6.3.7	Cultural Distance and Liability of Foreignness	204
6.3.8	Geographical Distance	208
6.3.9	Host Country Government Policy and Support	209
6.3.10	Summary of Qualitative Study	211
6.4	Conclusion	212
Chapter 7	Corporate Governance	218
7.1	Introduction	218
7.2	Organisational Structure	219
7.2.1	Multinational Organisation	219
7.2.2	Global Organisation	220
7.2.3	Transnational Organisation	221
7.2.4	Consulting Engineering Firms' Operational Strategies: Global, Regional or Local	223
7.3	Horizontal and Vertical International Investments	227
7.4	International Resources Integration	229
7.4.1	Integrated Management System	229
7.4.2	Innovation and Dynamic Capabilities	230

7.4.3	Fluidity and Adaptability of Resources	231
7.4.4	Decoupling of Activities	234
7.5	Conclusion	236
Chapter 8	Summary and Conclusion	238
8.1	Introduction	238
8.2	Approach, Emergent Findings and Contributions to the Literature	238
8.2.1	Question 1: Why do consulting engineering firms internationalise and what factors affect their internationalisation strategy?	239
8.2.2	Question 2: How does internationalisation affect the performance of, and risks facing firms?	254
8.2.3	Question 3: What factors affect the geographical choice of firms when internationalising, and what factors affecting the success of internationalisation?	256
8.2.4	Question 4: How does internationalisation affect corporate governance and business strategy?	263
8.3	Summary	267
Appendix	Research Questionnaire	270
	Bibliography	283

ABSTRACT

This thesis considers the nature of:

- i. Firms' decision-making regarding the *international location* of their activities; and
- ii. Their choice as between *co-operating with other firms* already based in overseas locations, as opposed to *establishing their own overseas subsidiaries*.

These questions are important because of possible links between such internationalisation on the one hand and corporate performance on the other. The thesis analyses these links firstly using existing data sets, and secondly by analysing the data generated through our own questionnaire surveys and follow-up interviews. This research provides one of the first empirical studies of engineering services firm strategies for internationalisation.

Dunning (1988) suggests that foreign direct investment is driven by: market seeking, asset seeking, efficiency seeking and strategic asset seeking/augmentation. The international diversification theory holds that a multinational corporation has a lower systematic risk relative to similar domestic firms due to diversification, with cash flows from different countries. Rugman (1979), Miller and Pras (1980) and Caves (1996) propose that foreign operations have the effect of stabilising overall returns due to the fact that different economic conditions tend to be uncorrelated across different international markets. Internationalisation is expected to increase the firm's turnover, competitiveness and diversification, and to provide opportunities for future growth.

We research the choice of foreign direct investment (FDI), joint venture (JV) and acquisition. Williamson (1975) in his Transaction Cost Theory argues that it is likely for firms to internalise the transaction within its own organisation and structure of governance when they are faced with the situations such as: risk of opportunism by other parties, when there are limited numbers of partners to choose from for market transaction and uncertain or complex market condition. Dunning (1989) in his research on the importance of transaction costs in explaining the growth of multinational

service activities, finds that foreign direct investment tends to be the preferred entry mode for professional services activities rather than by contractual relationships. This is due to the risk of imitation once competitors have access to the knowledge and geographical diversification which provides advantages to firms.

We use Dunning's Eclectic Theory (Dunning, 1989) and The Uppsala Model (Johanson and Vahlne, 1977) as the theoretical basis to examine factors affecting geographical choice and foreign subsidiary performance. Our questionnaire and interview findings were reviewed with specific attention given to the effect of 'psychic distance' and 'liability of foreignness' on geographical choice. The findings were also reviewed against research from the World Bank *Doing Business* project.

To consider why consulting engineering firms internationalise and what effect this has on performance, questionnaires were distributed to the top 50 UK-based consulting engineering firms (ranked by total revenue), with follow up interviews to collect information on factors affecting the firm's internationalisation decision. The financial data (panel data) of the top UK based consulting engineering firms were obtained from the FAME database to determine the correlation between the firm's degree of internationalisation and overall turnover. Qualitative methods were used to collect information on why consulting engineering firms internationalised, what factors affect entry mode and geographical choice, and how firms adapt their international operational strategy to optimise their performance, as quantitative data alone does not give sufficient insight on decision-making.

Questionnaire returns were received from 20 firms (a 40% return). Of these, 70% (i.e. 14) firms participated in the follow-up interviews. Firms interviewed were reassured of anonymity, and that the information provided would be used for academic research purposes only. However, due to the competitive nature of the industry, I was aware that firms may have been selective in providing information during interviews, in order to protect their competitive advantages.

With internationalisation, firms must develop the capability to manage the risk and adapt organisational structures for the increased complexity and scope of operation. The final part of our research examines how consulting engineering firms have adapted to these challenges arising

from their international operation. A new form of organisational structure (the regional hub approach) is proposed, and is assessed against returns from our questionnaires and interviews.

ACKNOWLEDGEMENTS

This thesis is the result of a long eight years of part-time study (plus a year of maternity leave). It started in 2009 when I had just obtained my professional qualification as a Chartered Engineer. I had always wanted to do a doctorate study; however, due to my personal circumstances, I had decided to work in the industry and to do a part-time DPhil after obtaining my professional qualification. When I first started my DPhil, I was in the mid-management level of the firm that I worked for. Over the last 9 years I have progressed from the mid-management into the management of our group, involved in the engineering, operational and financial management of our group. My views on management theory in many ways reflect what I have observed by working as a professional in industry.

I would like to express my gratitude to my supervisor Professor Jonathan Michie for giving me the opportunity to study for a DPhil under his supervision. I am very grateful for his help and constructive feedback on my work, and the encouragement that I had received over the last 9 years.

Last but not least, I would like to thank my parents and family (especially my daughter for her patience and understanding) for the enormous support that they have given me throughout this long DPhil journey.

Chia Huay Lau

September 2018

Chapter 1 Introduction

Global trading has grown dramatically over the past few decades (Letto-Gillies, 2019). Most theories of internationalisation have their roots in industrial organisation and economics (from Coase in 1937 through Bain in the 1950s and Williamson in the 1970s) and developed further in the 1970s and 1980s with the combined growth of American multinational investment in Europe with the growth of European SME exports, mostly to neighbouring countries (see Weisfelder (2001), cited with overview in Axinn and Matthyssens, 2002). Key areas of research in internationalisation and globalisation of firms includes the speed of internationalisation, limits of psychic distance, entry mode, foreign market network, internationalisation strategy and the importance of knowledge and experience in internationalisation.

The services sector has been growing as a percentage of employment and national income in most industrialised countries for some years and by 2016 it accounted for 68 percent of the world GDP (United Nations Conference on Trade and Development (UNCTAD) Handbook of Statistics 2017, page 47). Despite the prominence of services in the world economy, and the specific recognition of the importance of services in the 1993 General Agreement on Tariffs and Trade (GATT), the vast majority of services firms are still not marketing their services internationally (Winsted and Patterson, 1998). This is true even in the period when exporting is one of the highest growth areas of economic activity consistently exceeding the rate of growth in world economic output over the past two decades.

Rugman and Verbeke (2004, 2007 and 2008) argued that most of the world's largest 500 companies have pursued regional, rather than global strategies. It is the purpose of this research to explore the global trading of services firms, in particular consulting engineering firms. This includes the firm's internationalisation and performance, internationalisation strategy, factors affecting the success of foreign subsidiaries, post-internationalisation corporate governance and the effect of the home country's economy on the firm's internationalisation strategy.

This thesis also considers the nature of firms' decision-making regarding the international location of their activities; and their choice as between co-operating with other firms already based in overseas locations, as opposed to establishing their own overseas subsidiaries.

1.1 Research Objectives

The main aim of this research is to study the global trading of consulting engineering firms, which includes the effect of internationalisation on the overall systematic risk, performance and growth potential of firms. This research asks the fundamental question of why consulting engineering firms internationalised and what are the factors affecting their internationalisation strategies. The effect of the 2009 global recession on the performance, resilience and the degree of diversification of consulting engineering firms were also studied in this research.

1.2 Research Questions

Exporting services is different from exporting manufactured goods, especially for knowledge-based services. Services are intangible and rely heavily on the tacit knowledge of the firm delivering the services, and therefore, existing internationalisation theories for manufacturing firms may not be entirely applicable for services firms. This research explores:

- i. Factors encouraging consulting engineering firms to internationalise.
- ii. Factors affecting the internationalisation strategy of firms.
- iii. The degree of internationalisation and risk of firms.
- iv. Factors affecting the performance of foreign subsidiaries.
- v. The degree of internationalisation and overall performance of firms.
- vi. The effect of the 2009 global recession on internationalisation strategy, degree of internationalisation and resilience of firms.

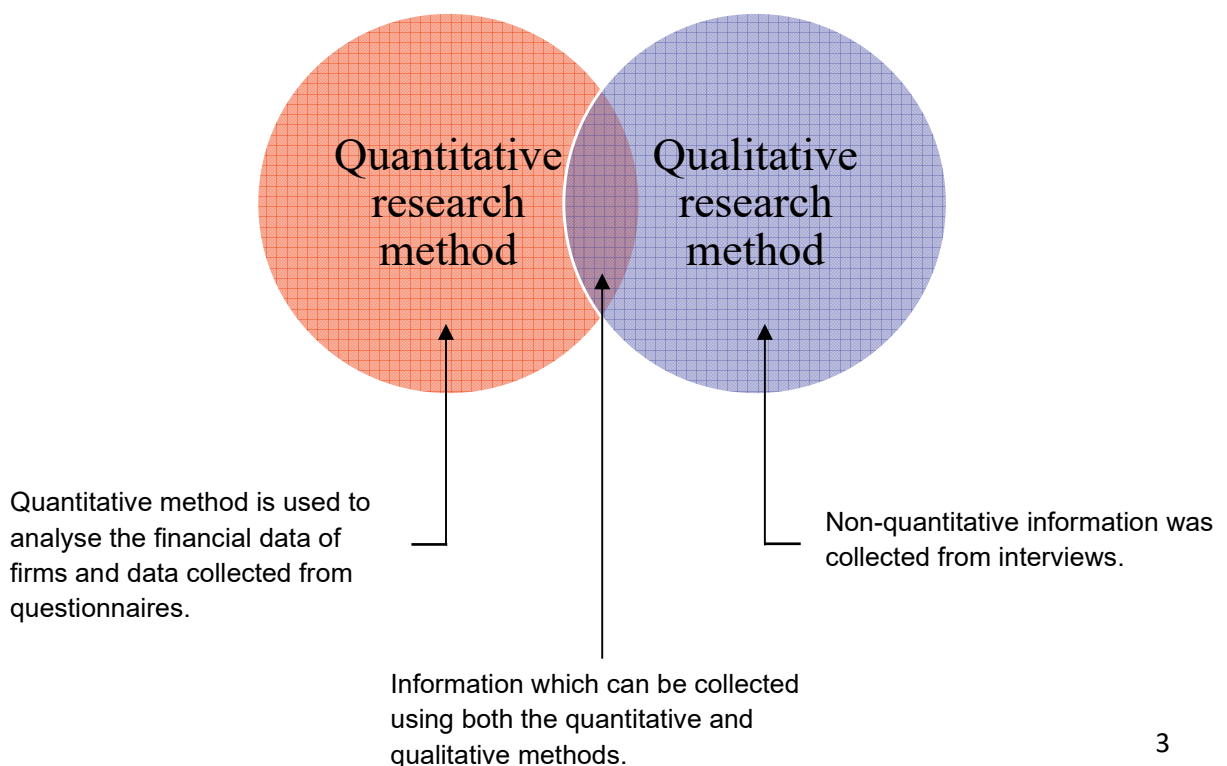
- vii. The effect of internationalisation on the corporate governance or structure of firms.

1.3 Research Design and Methods

Quantitative and qualitative research methods were used. STATA and Excel were used for the quantitative analyses of the financial data of top UK based international consulting engineering firms (obtained from the FAME database), and of the data collected from the questionnaires. The Ordinary Least Square regression method (OLS) was used to determine the correlation between variables.

Qualitative research methods were used to gather information which was not available in quantitative form. The qualitative research used questionnaires and interviews. For variables and information which we were able to collect or analyse using both quantitative and qualitative methods, the findings from both methods were compared with each other. The use of both quantitative and qualitative research methods is aimed at providing a more comprehensive approach to data collection and analysis.

Figure 1.0: Proposed research methodology



1.4 Contribution

This research provides an insight into the internationalisation of UK based international consulting engineering firms, in particular their geographical choices and risk management strategies during internationalisation. Factors affecting the entry mode and geographical choice and the effect of the home country economy on internationalisation decisions of firms were analysed. There is currently little literature on the internationalisation of consulting engineering firms, so the findings from this research should be useful to firms in planning and developing their internationalisation strategies. The variables studied in this research will provide firms with information on potential factors which will affect the decision making and the success of internationalisation of firms. Having this understanding, may help inform decisions on internationalisation strategies, and on designing mitigation strategies to address the potential risks of international operations.

1.5 Structure of thesis

Chapter 1 provides an introduction to and overview of the topic, which includes the research objectives, and the current issues around internationalisation facing consulting engineering firms.

Chapter 2 reviews the literature on the internationalisation of services firms, internationalisation theories, and factors affecting the internationalisation strategy and performance of firms.

Chapter 3 provides an overview of the consulting engineering sector, and the geographical spread of international offices of the top UK based international consulting engineering firms.

Chapter 4 describes the quantitative and qualitative research methods used, and how both sets of data contributed to the research analysis.

Chapter 5 explores the factors driving the internationalisation of consulting engineering firms, the internationalisation strategies pursued, factors affecting internationalisation strategies, and the effect of internationalisation on the performance of firms.

Chapter 6 discusses the factors affecting the geographical choices, and the effects of international diversification on the risks facing firms. This chapter also reviews the endogenous and exogenous factors affecting the success of international subsidiaries.

Chapter 7 explores the effect of internationalisation on corporate governance and the organisational structure of firms. It also discusses how firms have organised their activities across a network of international offices in order to create new firm-specific advantages.

Chapter 8 provides a summary of, and conclusions from, the research, and considers possibilities for further research work.

Chapter 2 Literature Review and Research Framework

2.1 Introduction

This chapter reviews the literature related to internationalisation, especially as regards services firms. The chapter starts with reviewing the meaning and importance of globalisation and global strategy, and why firms pursue international expansion. It then reviews approaches such as Dunning's Eclectic Theory, the Uppsala Model, and the Transaction Cost Model, which consider issues of cost, location and psychic distance.

There are various contributions to the literature on services firms' internationalisation which have studied a specific factor affecting the internationalisation of firms in isolation, such as the psychic distance, previous internationalisation experience, country and political risks, mode of entry and so on; however, none have previously analysed in detail the combined effect, and the multidimensionality of the different contributing factors. We believe that the internationalisation success of firms relies on a combination of numerous factors, such as the entry mode and geographical choice, organisational and governance structure, and firm-specific advantages. The combined effect of these factors was thus studied in this research to provide a more comprehensive view of the internationalisation process.

There has been no previous comparable research on the internationalisation of the consulting engineering sector specifically. The purpose of this chapter is not to provide an exhaustive analysis of each theoretical perspective, but rather to summarise the main aspects and how these relate to this thesis, particularly regarding the consulting engineering sector, and to highlight where gaps exist, and how this research may provide additional information to fill these gaps.

2.2 Research Framework

The objectives of the thesis are to conduct an empirical and theoretical exploration of the following questions – to provide evidence concerning the propositions, to develop detailed studies of the propositions, and to consider the applicability of existing theories and suggest additions to and development of the literature. The four research questions are:

- i. Why do consulting engineering firms internationalise, and what are the factors affecting their internationalisation strategies?
- ii. How does internationalisation affect the performance of, and risk faced by firms?
- iii. What are the factors affecting the geographical choice of firms when internationalising, and what are the factors affecting the success of foreign subsidiaries?
- iv. How does internationalisation affect the corporate governance and overall business strategy of firms?

Dunning's Eclectic Theory, the Uppsala Model, Transaction Cost Theory, Real Options and Growth Options Theory, and Internalisation Theory were the main theoretical bases drawn upon for this research and for the investigation of factors driving the internationalisation of firms, factors affecting the internationalisation strategy of firms, the effect of internationalisation on the performance and geographical choice of firms, factors affecting the success of foreign subsidiaries, and the effect of internationalisation on the governance structure of firms.

Williamson (1975) in his Transaction Cost Theory argues it is likely for firms to internalise transactions within its own organisation and structure of governance when they are faced with risks of opportunism by other parties, when there are limited numbers of partners to choose from for market transactions, and uncertain or complex market condition. Dunning (1989) in his research on the importance of transaction costs in explaining the growth of multinational service activities, found that foreign direct investment tends to be the preferred entry mode for professional services activities rather than by contractual relationships. This is due to the risk of imitation of intellectual properties by competitors in a joint venture arrangement, and because FDI provides firms with the advantages of geographical diversifications. The Transaction Cost Theory was used as the basis

to review the effect of transaction costs on the internationalisation decision, entry mode selection, and organisational structures and operations of firms.

Dunning's (1993) Eclectic Theory argues that it is the configuration of the OLI advantages facing the firm and their strategic responses to them that determine the quality, geographical composition and industrial structure of international production. This study reviews whether *services* firms will respond in the same way as manufacturing firms, where internationalisation is part of their strategic response to market competition.

The Uppsala model examined the interplay between market commitment and knowledge, and current activities and commitment of firms. This was used as the theoretical basis for reviewing factors affecting the entry mode choice of firms, the speed of internationalisation, and factors affecting the success of internationalisation of firms.

The Real Options Theory argues that firms have opportunities to review their internationalisation strategies and commitments against market conditions and also against its own capacities. This was used as the theoretical basis for reviewing the entry mode choice of firms, the effect of internationalisation on the risks facing firms, and how firms have adapted their organisational structures for the effective operations of their international investments.

The last section of this chapter reviews the relevance of these theories to the internationalisation of consulting engineering firms, and how the research questions proposed in this study could help to fill gaps in the literature.

Table 2.1 below reports the areas of research, theoretical bases, and research questions for this study.

Table 2.1 Areas of research, theoretical bases, and research questions

Area of Research	Theoretical Bases	Research Questions
Factors driving internationalisation	Dunning's Eclectic Theory- Ownership (O), Location (L) and Institution (I) advantages	A review of factors driving internationalisation of firms. The effect of OLI advantages on the quality, geographical composition, and organisation structure of firms.
	Transaction Cost Theory	The effect of the transaction cost on the internationalisation decision of firms.
	Real Option Theory	A review of internationalisation as an option or opportunity for growth.
	International Diversification Theory	The effect of internationalisation on the risk of firms.
Factors affecting internationalisation strategy and entry modes choice	Real Option Theory Transaction Cost Theory Uppsala Model Internalisation Theory	A review of different types of internationalisation strategies (i.e. foreign direct investment, acquisition and international joint venture) and its advantages and disadvantages. The effect of these advantages on the entry mode selection of firms.
The effect of internationalisation on firm's performance	Real Option Theory Transaction Cost Theory Internalisation Theory	The effect of internationalisation on the performance and growth options of firms.
Choice of location and internationalisation outcomes	Dunning's Eclectic Theory Real Option Theory Transaction Cost Theory International Diversification Theory Uppsala Model	The effect of the country and firm-specific factors on the choice of location and internationalisation outcome of firms.
Corporate governance	Real Option Theory Transaction Cost Theory Internalisation Theory	The effect of internationalisation on the international resources management and organisation structure of firms. Factors affecting the horizontal and vertical integrations of firms.

2.3 Definition of Firm Internationalisation

The definition used for this study for internationalisation is 'the process of increasing involvement of firms in international markets'. Our key focus is on the factors which encourage the internationalisation of firms, why and how firms internationalise, and how internationalisation affects firm performance.

2.3.1 Measurement of Firm Internationalisation: Degree of Internationalisation

Various researchers have explored the degree of internationalisation using export intensity, where the degree of internationalisation is calculated as export sales over total sales (Cavusgil 1984; Burton and Schlegelmilch 1987; Stray, Bridgewater, and Murra, 2001). The degree of internationalisation used in this thesis is more broadly overseas turnover as a percentage of total turnover.

2.4 Deindustrialisation and the Services Sector

Over the last three centuries, the main source of wealth in market economies has switched from natural assets (notably land and relatively unskilled labour), through tangible created assets (notably buildings, machinery and equipment, and manufactured produces), to intangible created assets (notably knowledge and information of all kinds) which may be embodied in human beings, in organisations, or in physical assets (Dunning, 2002).

World Bank data (table 2.2) report that over 1971-2010 the share of services in GDP increased from 56.1% to 73.6% in developed countries, and 44.9% to 46.3% in developing countries. Table 2.3 (national and global production as a percentage of world GDP) reports that the bulk of services are produced at a national level (produced by enterprises in their own country), with only 2% of services being produced globally.

Table 2.2: Share of services in GDP of developing and developed countries

	Percentage of Services over Total GDP, %					
	Year 1971	Year 1980	Year 1990	Year 2000	Year 2005	Year 2010
World	53.6	56.1	61.4	67.1	69.0	70.13
Developed Countries	56.1	59.2	63.7	70.3	72.4	73.55 (High income countries)
Developing Countries	44.9	44.6	49.2	53.0	52.1	46.29 (Low income countries)
US	62.0	63.6	70.1	74.6	76.0	78.51
UK	54.0	55.5	63.0	70.7	74.8	78.48
China	23.8	21.4	31.3	39.3	39.9	44.20
India	37.8	39.6	43.8	50.5	54.1	54.64
Russia	-	-	35.0	55.6	54.8	61.44
Brazil	48.9	45.2	53.2	66.7	64.0	67.78

Source: World DataBank, *World Development Indicators*, The World Bank, 2016

Table 2.3: National and global production as a percentage of world GDP

Sector/ Location of output	Agriculture	Industry	Services	Total
National	5	26	61	92
Global	0	5	2	7
Total	5	31	63	100

Note: 'National production' is production by enterprises in their own country, 'global production' is production of foreign-owned enterprises. Total does not equal 100, due to rounding.

Source: World Bank, *World Development Report 1997* and *Global Economic: Prospects and the Developing Countries*, 1997

The UNCTAD *World Investment Report* 2015 highlighted the prominent role of services in global foreign direct investment (FDI), being the fastest growing component of FDI since the beginning of the 1990s, and now the largest part of worldwide FDI, accounting for 63% of the global FDI stock.

Several factors have encouraged the growth of services: one is the demand for new services from affluent customers with a higher expectation of life quality. Another is that as the world becomes more globalised with increasing cross-border investment, there is a need for services such as banking, accounting, legal, advertising, etc. to set up branches close to their manufacturing clients' foreign operations. Finally, the relaxation of government policies for inward foreign direct investment and privatisation in the post-1980s has caused increased overseas investment in the services sector, especially infrastructure services such as water, electricity, highways, and telecommunications (Cohen, 2007).

Technology advances in the last few decades, in particular in information processing and telecommunication, has been a major boost factor for the services sector, allowing services companies to operate effectively on a global basis (Cohen, 2007).

In the past, the internationalisation strategy of services firms was predominantly based on market seeking, but nowadays firms are increasingly adopting the efficiency-seeking strategy (offshoring). Globalisation has reduced the cost of transporting not just in a physical sense but also the transferring of information across geographical space. Information-based (non-tacit based) activities can be transferred to lower cost locations. By contrast, the creation of knowledge-driven innovative activities, which is based on tacit knowledge is not able to be transferred easily across distance (Audretsch, 2002). These activities are the key assets in retaining or enhancing the firm-specific advantages (FSA) of firms and is normally retained within the home base operation of firms.

Fairclough et al. (2012) argue that professional services firms (PSF) are usually knowledge-intensive, comprising highly-skilled individuals providing high-value advice to both industry and government, and are often formed as partnerships and in many ways are different from manufacturing companies in terms of ownership and management and in the way they are

regulated and treated by law. This study focuses on professional services firms, specifically consulting engineering firms with the UK as their home base.

2.5 Globalisation

This chapter focuses on the meaning and importance of globalisation and global strategy. Dunning (2002) identified four main events between the mid-1970s to the late 1990s which were believed to have a significant impact on the global economic activity and the ownership, location, and organisational modes of firms:

1. The growing importance of intellectual capital in an organisation's wealth creation, which includes both the asset creating and asset exploiting activities.
2. The increase in cooperative alliances and ventures between and within wealth creating organisations.
3. The liberalisation of both internal and cross-border markets.
4. The emergence of several new major economic players in the world economy.

There is a large literature on the forces which have contributed to globalisation (Michie, 2019). These include the development of technologies which facilitate the spread of knowledge and improved communication, the development of the global financial market, active expansion of firms, decoupling and decentralisation of activities within firms, and reduction of barriers for trade and investments.

Globalisation has provided multinational firms with opportunities to improve their competitive advantages (Sölvell and Birkinshaw, 2002). Equally, globalisation has created various challenges for multinational enterprises (MNEs), including (Inkpen and Ramaswamy, 2005):

- MNEs compete in a much more competitive environment as a result of a variety of social, economic, and cultural factors. MNEs must be internally differentiated in order

to respond to different environments across different geographical markets and sectors.

- Operating in global markets involves integration of corporate activities across borders and regions.
- MNEs must understand the customer's requirement both locally and globally and must have the ability to learn in multiple locations far from the home base.

Rugman and Verbeke's (2004) research on activities of the 500 largest MNEs revealed that few are successful globally. Their study indicates that an average of 80% of MNE sales is in their home region of the triad and many of the largest firms are regionally-based rather than truly global, in terms of their breadth and depth of market coverage. A truly-globalised, balanced geographical distribution across all regions is a rather unusual outcome of doing international business. The degree of globalisation and the geographical spread of consulting engineering firms across different world regions is discussed in chapter 3 to 6.

Globalisation has created a significant impact on the geography of manufacturing. When faced with competition from lower cost manufacturing in foreign locations, companies in higher cost countries have the option to switch to low-cost locations. Services firms are increasingly following a similar strategy, and have increased the trend of decoupling and decentralisation their activities. Chapter 7 of this thesis discusses the effect of the decoupling and decentralisation strategy on the competitiveness of consulting engineering firms.

2.6 Internationalisation of Firms: Underlying Theories

This section provides an overview of the literature used as the theoretical basis for this study. Section 2.7 discusses the applicability of these theories to the internationalisation of consulting engineering firms.

2.6.1 Dunning's Eclectic Theory

Dunning's Eclectic Theory on international production explained the use of ownership, location and internalisation advantages (OLI). Ownership advantages are those that are specific to a particular firm which enables it to take advantage of investment opportunities abroad. Locational advantages are those specific to a country, and it dictates the choice of production on site. Internalisation advantages are those that determine the foreign production arrangement of firms, such as either through the market or internal hierarchy of firms (Qian and Li, 1998).

Ownership Advantage (O)

Dunning (2000) argues there are three main kinds of firm or ownership-specific competitive advantages.

- i) Those relating to the possession and exploitation of monopoly power which are presumed to create some kind of barrier to entry to final product markets by firms not possessing them.
- ii) Those relating to the possession of a bundle of scarce, unique and sustainable resources and capabilities. These advantages will create a barrier to entry to firms which do not possess them.
- iii) Those relating to the competencies of the managers of firms, such as to identify, evaluate and harness resources and capabilities from throughout the world, and to

coordinate these resources in a way to best advance the long-term interest of the firm.

Dunning (1988) argued that for firms to compete with local firms of the host country, they must possess certain advantages specific to the nature or nationality of their ownership, and it must be sufficient for the firms to compensate for the cost of setting up and operating in host countries. Dunning also argued that the national level institution in a given country affects the kind of ownership advantages firms are likely to develop. On the other hand, national level institutions are also shaped by the activities of both indigenous and foreign-owned MNEs (Dunning and Lundan, 2008). There are institutional ownership advantages which could be of negative value to the assets of firms, imposed by home or host governments or by supranational entities, such as patent protection, banking regulation, transparency in laws relating to bribery and corruption, and safety procedures (Dunning, 2006).

Locational Attractions (L)

Locational attractions refer to the attractiveness of alternative countries or regions for MNEs to undertake their activities. The locational variables include the exchange rate, political risks, the regulations and policies of supra-national entities, inter-country cultural differences, risk diversification and geographical distance between the home and host country (Dunning 1979, 2000). This sub-paradigm states that the more the immobile endowments (which the firm will require to utilise together with the ownership advantages) favour a presence in a foreign location, the more firms will choose to augment or exploit their ownership or competitive advantages by engaging in FDI (Dunning, 2000). The eclectic paradigm has always recognised the importance of the locational advantages of countries as a key determinant of the foreign production of MNEs (Dunning 1998, 2000). A review of the literature of the 1970s and 1980s on the attractiveness of particular locations indicates that emphasis was most placed on (Dunning, 2006):

- (a) The costs and quality of particular factor endowments: resources (R) and capability (C);

- (b) The size, character, and growth of domestic markets (M);
- (c) The policies of host governments, such as taxes and fiscal incentives that might affect (a) and (b).

The role of government in influencing the location of service activities is of particular significance. There are a host of policies, regulations, and incentives which will influence the entry, performance, and exit of foreign investors. They may be encouraged by the investment promotion policies, international financial instruments and bilateral investment agreements provided by host governments. Some governments have made efforts in trying to attract foreign investment in services, especially in infrastructure projects (Dunning, 1989).

'I' Internalisation Factors

The internalisation sub-paradigm of the OLI provides an outline of alternative ways in which firms may create, organise and exploit their core competencies, in conjunction with locational attractions of different countries or regions (Dunning, 2000). For example, a firm's desire to internalise its market to create advantages, such as to produce value-added from them rather than to sell the right to do so to foreign firms (Dunning, 1993). The internalisation theory avows that in a condition where a firm has a set of ownership-specific advantages, and the locational advantages offered by a foreign country warrants the firm to locate value adding or asset augmenting activities, as long as the transaction cost and coordination costs of using external market or firms to provide intermediate products, information, technology, marketing techniques, etc. exceed those incurred by internal hierarchies, then it will pay for the firm to engage in FDI, rather than conclude a licensing or another market-related agreement with a foreign producer. In other words, the greater the net benefits of internalising cross-border intermediate product markets, the more likely a firm will prefer to engage in foreign production itself, rather than license the right to do so to external parties (Dunning, 2000). Dunning (1989) argued that firms are more likely to internalise market transactions in situation where they would prefer to retain internally their ownership advantages

(which are idiosyncratic, non-codifiable and comprise the core assets of firms and are not likely to be traded outside the firm), especially in the more volatile and hazardous international environment in which they were produced and traded.

O, L and I Advantages for Construction Management and Engineering Services Firms

Dunning (1989) reviewed the ownership (O), location (L) and internalisation (I) advantages for Construction Management and Engineering Services firms and their likely organisational forms. Table 2.4 summarises the O, L and I advantages, as discussed in Dunning (1989). The review indicates that the ownership advantages rely on the size, experience, and reputation of firms both in the home and foreign markets. Interaction with local clients to understand the local requirement and business network is important and enables firms to possess locational advantages. Firms may choose to engage in joint-venture activities to enable firms to interact with local firms or to possess local knowledge or networks and to reduce the risk due to unfamiliarisation of the local market.

Table 2.4: O, L and I advantages for Construction Management and Engineering Services Firm

	Construction Management Firms	Engineering Services Firms
Ownership (O) advantages	<ul style="list-style-type: none"> ▪ Size, experience and reputation. ▪ Government assistance ▪ Low labour cost (developing country) 	<ul style="list-style-type: none"> ▪ Experience in home and other foreign markets. ▪ Economies of size and specialisation. ▪ Economies of scope/ coordination.
Locational (L) advantages	<ul style="list-style-type: none"> ▪ Economies of concentrating technology intensive activities. ▪ On-the-spot interaction with clients and/or building firms. 	<ul style="list-style-type: none"> ▪ Customisation to local tastes and needs. ▪ Need for on-the-spot contact with customers and related producers.
Internalisation (I) advantages	<ul style="list-style-type: none"> ▪ Need for complementary local assets, risk spreading on large projects. ▪ Quality control. ▪ Good deal of subcontracting 	<ul style="list-style-type: none"> ▪ Joint ventures, to gain local experience expertise. ▪ Quality control. ▪ Knowledge often very idiosyncratic and tacit.
Organisation form	<ul style="list-style-type: none"> ▪ Mixture: Joint venture favoured to gain access to markets, or where partner(s) bring complementary assets to the venture. 	<ul style="list-style-type: none"> ▪ Mixture, but often professional partnerships. ▪ Some licensing.

In summary, Dunning (1993) argues it is the configuration of the OLI advantages facing firms, and their strategic response to them that determines the quality, geographical composition and industrial structure of international production. This study considers whether services firms respond in a similar way to manufacturing firms, where internationalisation is part of their strategic response to market competition and to increase their ownership advantages, which will be further discussed at the end of this chapter. Chapters 5 and 6 of this thesis use Dunning's Eclectic Theory as the theoretical basis to study the factors affecting the internationalisation of consulting engineering firms and their geographical choice and internationalisation outcomes.

2.6.2 Uppsala Model

The Uppsala model explains the characteristics of the internationalisation process of firms, and has generally been characterised as a behavioural internationalisation model, and a model of rational internationalisation (Johanson and Vahlne, 2009). The Uppsala Model was introduced in 1977 based on empirical observations on Swedish firms. It focuses on the gradual acquisition, integration and use of knowledge about foreign markets and operations, and on the incrementally increasing commitments to foreign markets. Typically, firms often develop their international operations incrementally, in small steps, rather than making a large foreign investment at a single point in time. Firms will incrementally build their foreign operations in culturally proximate countries. The market selection and the growth of MNEs is dependent on the experiential knowledge base, especially regarding the knowledge of the market involved (Barkema et al., 1996; Johansson and Vahlne, 1977). The 1977 Uppsala Model was revisited in 2006 and subsequently in 2009, where the focus has changed from uncertainty reduction to opportunity development and the relevance of business networks in determining the success of internationalisation of firms.

The two key dimensions of international expansion identified in the 1977 Uppsala model were the establishment chain and the psychic distance. During the chain establishment process, firms would subsequently formalise their entries through deals with intermediaries who represented the focal companies in the foreign market. As sales increase, they gradually begin to manufacture in the

host country and replaced the host country's representative with their own sales organisation (Johanson and Vahlne, 2009). Internationalisation frequently started in a foreign market with a short psychic distance to the home country. The company would then invest gradually in countries further away (Johanson and Wiedersheim-Paul, 1975; Vahlne and Wiedersheim-Paul, 1973). Johansson and Vahlne (1977) define psychic distance as the sum of factors preventing the flow of information from and to the market. This includes the differences in language, education, business practices, culture, and industrial development. These factors make it difficult for firms to understand the host country environment and has its origin in the liability of foreignness. The larger the psychic distance, the larger the liability of foreignness is (Johanson and Vahlne, 2009). The Uppsala model explains how experiential knowledge influences the decision of firms on the level of commitment and activities which spring from them. This then leads to the next level of commitment which will involve more experiential learning. Thus, the Uppsala model is a dynamic internationalisation model.

The 2006 Uppsala Model: Commitment and Opportunity Development

In the 1977 Uppsala model, Johanson and Vahlne emphasised that the learning and commitment of firms were important in reducing uncertainty, and it was assumed that opportunity development is an important outcome of commitment. The focus changed from uncertainty reduction to opportunity development in the 2006 Uppsala model. Opportunity development is the core of the business process, and the learning and commitment building of firms should be focusing on discovering and developing new opportunities for the improvement of their businesses. Johanson and Vahlne (2006) proposed that the opportunity development of firms in a country market is positively related to the mutual relationship commitment with other firms in the market. Business opportunities arise through learning and interaction between two or more firms following their relationship commitment. When a focal firm and another firm are mutually committed to future businesses, they are not only learning from each other, but will also be working together to identify opportunity for improving their businesses and create new knowledge - a shared social and intellectual capital (Johanson and Vahlne, 2006). The opportunities development process may be

unilateral where firms learn about each other's requirement, market, and network; it may well be a bilateral process where two firms interact to create new opportunities; it may even be a multilateral process where several firms become successively more committed (Johanson and Vahlne, 2006). A functioning business relationship could be considered as an asset and will provide advantages to firms involved. However, the relationship development with other firms will involve cost, is time-consuming and involves uncertainty. This is one of the important reasons why it takes time for firms to internationalise and to achieve high long-term performances (Johanson and Vahlne, 2006).

The 2009 Uppsala Model: The Importance of Business Network

Johanson and Vahlne revisited the Uppsala model in 2009. The new model explains the relevance of business networks in determining the success of internationalisation of firms. Business networks offer firms the potential for learning and building trust and commitment which is fundamental for internationalisation of firms. The 2009 Uppsala model focuses on the business network as a market structure in which the internationalising firm is embedded, and also on the corresponding business network structure of the foreign market (Johanson and Vahlne, 2009). The 2009 Uppsala Model focused on the lack of business network, relationship, knowledge, and commitment as reasons for uncertainty, and links indirectly to location specificity of firms, rather than focusing explicitly on the location specificity as the factors of uncertainty as in the 1977 model (Rugman and Verbeke, 2004). Johanson and Vahlne (2009) argued that the importance of existing business relationships has a considerable impact on the geographical choice and entry mode of firms during internationalisation. The influence of psychic distance in determining the success of firms when internationalising had become less significant in the 2009 Uppsala model. Short psychic distance will facilitate the development of relationship and learning, but this factor alone is insufficient for firms to identify and exploit opportunities in a new market.

The business network research in the 2009 Uppsala model involves two main agendas. The first is that markets are a network of relationships in which firms are linked to each other, and the insidership in a relevant network is a prerequisite for the success of the internationalisation of firms. Johanson and Vahlne (2009) labelled these webs of interconnected relationships 'business

networks'. The second is that the network of relationship offers the opportunity for mutual learning and building trust and commitment between firms. A reciprocal commitment between the firm and its counterparts is essential in fostering a successful business relationship (Johanson and Vahlne, 2009). Firms are considered 'outsiders' if they are not well-established in a relevant network. A firm may suffer from the liability of outsidership and foreignness if they do not have a relevant network position. The network which a firm is involved in will affect the firm's strategy on learning, building trust, developing commitment and opportunity development. The firm's understanding of such activities in the context of a business network is required to reduce its liability of 'foreignness'. The outsidership makes it impossible for firms to develop their business successfully and will hinder their internationalisation process (Johanson and Vahlne, 2009). The Uppsala model focuses on the interplay between market commitment, market knowledge, current activities and commitment and reviews the importance of commitment and business networks in opportunity development. This model forms the theoretical base for this study for reviewing factors affecting the entry mode choice of firms during internationalisation, the speed of internationalisation, and the factors affecting the success of the internationalisation of firms.

2.6.3 Transaction Cost Theory

Transaction costs are those incurred in economic exchanges, such as the costs for arranging, managing, and monitoring transactions across markets. This includes the cost of negotiation, drawing up contracts, managing the necessary logistics, and monitoring accounts receivable. The transaction cost theory views the basic choice in arranging economic transaction as either through market exchanges or internalising the process within the firm itself where they are governed by hierarchical relationships embedded in the organisation structure (Child et al., 2005). The Transaction Cost Theory became most widely known through the work of Oliver Williamson. In his 1975 paper, Williamson identified five key factors affecting the firm's decision whether to internalise the governance of transactions within the firm or to arrange the transaction through market exchanges. The five factors are: opportunism, bounded rationality, small numbers, uncertainty and complexity, and information impactedness. Opportunism refers to behavior that is self-interested

and deceptive. The notion of bounded rationality recognises that there are informational and other limits to the exercise of rationality (Child et al., 2005). Williamson (1975) argues firms will internalise the transaction within its own organisation when faced with the following:

- Human factors, such as the opportunism of other parties, which may pose a problem for the governance of transactions.
- Limited numbers of partners to choose from for market transaction (small numbers).
- Uncertain or complex market condition.
- Information impactedness where other parties may incur substantial cost to obtain accurate and adequate information relevant to the transactions.

Dunning (1989) considers the importance of transaction costs in explaining the growth of multinational service activities. The rapid growth of MNE activity in services is encouraged by the fact that many services are difficult or impossible to trade over space.

- Foreign direct investment tends to be the preferred entry mode for professional services activities rather than by contractual relationships due to:
 - a) The proprietary knowledge of firms is tacit and expensive to gain, but is easy to replicate once competitors have access to the knowledge.
 - b) Geographical diversification provides advantages to firms (for example, those relating to risk spreading and resources management such as people, goods, money, and information which can be managed more effectively within the MNE hierarchy).
- Firms will prefer minority joint ventures or non-equity agreements when there is a need for local specialised knowledge or when the services require local customisation.
- Some larger companies may involve turnkey projects with transitory nature, for example, in a large scale engineering project where joint venture with a local firm may

help the MNE firm win the contract from the government and to reduce the risk of expropriation.

The literature suggests that transaction costs have a profound impact on the operation, business strategy and organisational structures of firms. This study uses the Transaction Cost Theory as the theoretical basis for reviewing the effect of transaction costs on the internationalisation decision of firms, the entry mode choice and the corporate governance strategy of firms during internationalisation.

2.6.4 The Real Options Theory and Growth Option Value

The Real Options Theory was proposed by Myers in 1977 as an insight into viewing the discretionary future investment of firms as their growth options. The real options provide firms with the right, but no obligation, to undertake future decision whether or not to invest in these investments. It thus provides flexibility for firms to either reduce the downside outcome from their current investment by opting not to continue the current investment, or to exploit the emerging opportunities from their current investment. In the internationalisation strategy context, the Real Options Theory suggests that dispersed foreign direct investment (FDI) of firms provides a portfolio of options that enable firms to avoid downside outcomes by shifting their value chain activities across the country borders in response to changes in local demand, competitors' actions, foreign exchange rates, input prices, and other environmental contingencies. Therefore, the Real Options Theory suggests that multinationality reduces the downside risk of firms (Reuer and Leiblein, 2000).

Buckley and Casson (2009) argued that real options provide decision makers with the flexibility to respond when new information becomes available, thus reducing risk to firms. The real options review process of firms involves identifying information, foreseeing change, and putting into place a system that transfers information from its immediate recipients to the key decision-makers. International joint venture (IJV) enables firms to make a real investment with contractual options. IJV can be an optimum solution to governance choice in the situation where the source and cost of supply and the intensity and location of demand are uncertain. Child et al. (2005) reviewed the

benefit of real options in the context of the strategic alliance of firms during internationalisation. A buyer has the option of paying a relatively small charge upfront to hold the right to make a larger investment at a later stage at an agreed price through a strategic alliance arrangement. The benefit of waiting is that as the event unfolds, the uncertainty is expected to be clarified and the buyer will be able to make an appropriate decision whether to invest further, thus reducing the risk faced by the buyer.

2.6.5 Internalisation Theory

The Internalisation Theory explains the boundaries of organisations, targeting specifically on where boundaries lie, and how they shift in response to changing circumstances (Buckley and Casson, 2009). It also seeks to identify the optimum spatial and organisation arrangement of existing resources and capabilities of firms (Dunning, 2000). The Internalisation Theory is based on the following principles (Buckley and Casson, 2009):

- A firm's boundary is set at the margin where the further internalisation of markets will just be offset by costs.
- Firms tend to prefer the most cost-effective location for each of their activities and will consider its linkage with other activities when selecting the investment location.
- The firm's profitability, and the dynamics of its growth were based on a continuous process of innovation stemming from R&D.

Buckley and Casson (2009) argued that firms will internalise the market when the expected benefits of doing so outweigh the expected costs, such as in the case of strong ownership advantages, location advantages, and internalisation advantages. For example, a profit-seeking firm will internalise its immediate product markets up to a point where the benefits and costs are equalised. Dunning (2000) argues that a firm is likely to engage in the foreign production itself if the benefit of internalising cross-border intermediate product markets is greater than licensing the right to do so to a foreign firm. Foreign direct investment may be the preferred mode of entry for firms

where there are imperfect market conditions which make the export or licensing comparatively more expensive, and if they already have foreign operations (Buckley and Casson, 1981).

Coase (1937) argued that with the existence of an alternative coordination mechanism, the cheapest form of coordination would be selected in any given circumstance. It is assumed that the economy was in principle market driven and that firms would arise only when managerial coordination proved itself superior to the market. Based on the above argument by Coase (1937), Buckley and Casson (2009) concluded that:

- Firms can be born global and do not have to internationalise incrementally. Entrepreneurs create firms when opportunities are identified to generate profits. Big ideas with a global application will potentially incubate multinational firms.
- Economies of internalisation are not limited to licensing decision or internationalisation of firms. In fact, it provides the fundamental principle for the formation of firms and remains strategic throughout the operation of firms.
- The advantages exploited by multinationals are created, not endowed. Firms refine the productions or services through continuous knowledge development. This involves continuous feedback and innovation between the production, R&D and marketing.

2.6.6 Theories of the Growth of the Firm and Monopolistic Advantage

Penrose (1959) argued in *The Theory of the Growth of the Firm* that while firm size is a by-product of growth, there is no necessary limit to the growth of firms, which will depend rather on 'enterprising managers' and administrative effectiveness, whilst being limited by the extent of the growth of knowledge within the firm. Thus, Penrose argued that the growing experience of management, its knowledge of the resources within the firm, and the potential of using these in different ways, creates opportunities for further expansion of the firm. For Penrose, there is no necessary reason why a firm should limit the prospects of growth and productive opportunities to its existing markets, and from this follows a theory of diversification where firms may expand internationally when the existing market becomes less profitable and the prospect of new ones

become more attractive. Hence, *The Theory of the Growth of the Firm* sets out the forces that would lead one to expect firms – including consulting engineering firms – to expand internationally, and what the factors are that both encourage and restrict that process.

Hymer (1976) argues in his theory of liability of foreignness that firms setting up operations abroad face unavoidable costs in comparison to domestic firms. These additional costs may arise due to higher coordination costs, unfamiliarity of foreign firms with the local culture and markets, a lack of local network or political influence, or the firm's inability to promote their services to the local buyers. Thus, other things being equal, one could expect that a foreign firm will face competition disadvantages in comparison to a domestic firm. A lack of knowledge of local cultures and institutions will hamper performance, and increases the likelihood of foreign expansions failing. Firms operating abroad must therefore have some kind of firm specific advantage that compensates for the additional cost of operating abroad. This argument is pursued by Barney's resource-based theory, which argues that only unique strategic resources that are inimitable and non-substitutable can provide firms with the competitive advantages to compete, through the accumulation of tangible and intangible resources. This includes firm specific resources, capabilities, competencies and access to markets (Barney, 1991; Barney et al., 2001; Peng, 2001; Teece, 2009). Knowledge and valuable experience are seen as firm specific assets hard to imitate, and are thus factors that will distinguish the winner from the loser – or mere survivors – in global competition (Peng, 2001).

2.7 Application of Theories, Research Gaps, and Contributions to the Literature

This section considers the application of these theories to an understanding of consulting engineering firms' internationalisation, and the links between the research gaps identified and the research questions and hypotheses explored in this thesis. Various contributions to the literature look at certain aspects of the internationalisation of firms, or at the process in general, but there has not previously been an analysis of the internationalisation of *services firms* in particular. Our research aims to provide an extensive study of the journey of internationalisation of consulting engineering firms – from the factors encouraging internationalisation; to choice of location and

entry mode choice; risk mitigation strategies, corporate governance and performance of firms; and internationalisation outcomes. By studying the interplay between these various aspects of the internationalisation of firms, this research provides a comprehensive picture of consulting engineering firms internationalisation.

2.7.1 Why Consulting Engineering Firms Internationalise

The Eclectic Theory explains the influence of ownership (O), location (L) and institution (I) advantages on the international production of firms, postulating that firms must possess advantages specific to the nature or nationality of their ownership to compete with local firms of the host country, and these advantages must be sufficient to compensate for the cost of setting up and operating in host countries. Dunning (1988) and Kogut (1985) argue that firms carry out international operations if there are transaction gains likely to result from the common governance of activities in different locations, including enhanced arbitrage and leverage opportunities, market hedging, better coordination of financial decisions, multiple-sourcing strategy, the possibility of gains through transfer price manipulation, leads and lags in payments, and so on. There are also long-term factors which will influence whether firms invest in foreign countries such as the size of the domestic market, geographical distance between the home country and its market, psychic distance, and the industrial structure of investment (Dunning, 1979). The 'internalisation theory' of Buckley and Casson (2009) posits that firms will internalise the market when the expected benefits of doing so outweigh the expected costs, and that this will be influenced by exogenous factors such as policy changes and technological improvements, which may thus encourage the globalisation of firms.

There are similarities between the Eclectic Theory, the Transaction Cost Theory and the Internalisation Theory in explaining the root cause of the internationalisation of firms, where the focus has been predominantly on lowering transaction costs or achieving cost efficiency and to protect and utilise firm specific advantages. These theories, however, were developed predominantly with the international production of goods in mind, with a concomitant focus on tangible benefits, rather than focusing on the sort of factors and intangible benefits which has

encouraged the internationalisation of consulting engineering firms, such as the desire to develop a global brand, and enhance their international reputation. There are key motives for consulting engineering firms (CEFs) to internationalise: for market seeking and future growth, as well as to gain transaction cost benefits and improve cost efficiency via production in lower cost countries. The literature places inadequate emphasis on how firms have *capitalised* on their internationalisation activities to enable them to *develop* or gain further firm-specific advantages, and thus to increase the resilience of their business operations. Thus, Dunning's Eclectic Theory argues that firms must possess certain advantages specific to the nature or nationality of their ownership to compete with local firms of the host country. However, we find that firms develop their OLI advantages further *through* their international operations.

The Internalisation Theory focuses on explaining how firms optimise the use of their current assets; however, it tends to have a rather static approach, with insufficient emphasis on how firms organise their current activities to *create* future growth. The Real Options Theory and Penrose's *The Theory of the Growth of the Firm* argue that internationalisation provides firms with options for future growth due to the increase in market size. However, this view of internationalisation as a 'natural progression for growth' has been insufficiently developed in the literature. Internationalisation could provide firms with opportunities to develop their position in the international market, to capitalise on their global branding, and increase their resilience due to the different economic cycles in different world regions. The internationalisation of consulting engineering firms has been a strategic response of firms to international market opportunities, and should not be perceived as merely a process of optimising transaction costs or protecting firm-specific advantages. Rather, it has provided firms with an opportunity to *augment* their firm-specific advantages and to create future growth.

Dunning's Eclectic Theory, Transaction Cost Theory and Internalisation Theory also have not explicitly covered the full range of motivations at play. Some consulting engineering firms have expanded into developing countries for humanity reason, for example working on United Nations development projects to create a better world, or for natural disaster relief, rather than profit-making. The intangible benefits so gained are insufficiently captured by the existing theories.

The Real Options Theory argues that real options provide firms with the right, but no obligation, to undertake future investments, and in the context of the internationalisation of firms, a diverse portfolio of options of international investments enables firms to respond to changes in domestic or foreign markets by shifting their investments across different markets. The international diversification theory holds that a multinational corporation (MNC) has a lower systematic risk relative to similar domestic firms, based on the notion that MNCs have cash flows in different countries due to diversification. Rugman (1976) found risks facing the MNC were lower than for non-internationalised firms, with an inverse correlation between internationalisation and variance of profits. The literature on the relationship between internationalisation and systematic risk tends to support the conventional international diversification theory, which is expanding internationally decreases the systematic risk of firms owing to diversification benefits. However, multinational firms may increase their systematic risk owing to an increase in standard deviation of cash flows from international diversification, which offsets the lower correlation associated with diversification. We thus review the effect of internationalisation on consulting engineering firms' risks.

The existing theories reviewed in this chapter explain different aspects of the internationalisation of firms. The Electic Theory, Transaction Cost Theory and the Internalisation Theory explain the factors encouraging firms to internationalise (such as the OLI and transaction cost benefits), whilst the Uppsala Model, the Real Options Theory, the Risk Diversification Theory and Penrose's *The Theory of the Growth of the Firm* approach can be used to consider internationalisation as providing the firm with options for risk diversification and future growth.

Thus, our research proposition for 'why do consulting engineering firms internationalise' is as follows:

Consulting engineering firms internationalise to gain tangible benefits (increase turnover, market share, profitability, overall performance), and to develop firm-specific advantages (brand image, reputation, and future growth options).

2.7.2 Factors affecting the Internationalisation Strategies of Firms

The existing literature demonstrates that the entry mode choice of firms is contingent on a host of factors, such as transaction costs, market size and level of commitment, firm size, level of risk, psychic distance, and the nature of local market and competition.

The 1977 Uppsala Model and Real Options Theory suggest that a foreign direct investment (or organic growth) strategy provides firms with the opportunity for incremental investment and learning when internationalising. Contractor et al. (2003), Lu and Beamish (2004) and Abdelzaher (2012) argued that professional services firms are more likely to follow a more cautious internationalisation process due to the unique features of professional services.

In contrast to the 1977 Uppsala Model, Buckley and Casson (2009) argued that firms can be born global and do not have to internationalise incrementally. This is relevant for consulting engineering firms for two main reasons: firstly, the capital investment involved in FDI for a consulting engineering firms is usually lower than for a manufacturing firm due to the nature of the services offered, enabling them to expand internationally at a more rapid pace. Secondly, information and communication technologies enables firms to set up a regional office to serve several countries within the same region at once, again leapfrogging the incremental expansion process. Thus, the incremental expansion of firms postulated in the 1977 Uppsala Theory requires further investigation to determine its relevance for consulting engineering firms.

Johanson and Vahlne (2009) in the context of the 2009 Uppsala model, argued that a firm's internationalisation strategy is likely to be influenced by its existing relationships and networks, and that a functioning business relationship could be considered as an asset which can provide advantages to firms involved. This could be relevant to the internationalisation of consulting engineering firms, where firms have decided either to follow their client to invest abroad using the FDI strategy, or to involve a joint venture investment arrangement with their existing business partners to capitalise on their client's or partners market knowledge or network. Johanson and Vahlne argue, in the context of the 2006 Uppsala Model on commitment and opportunity development, that an acquisition is more likely to be successful following exchanges between the acquirer and acquiree to establish the commitment between the two parties.

From the Transaction Cost viewpoint, internationalisation of firms involves costs and resources starting from the strategy formulation stage through to the governing of the new foreign subsidiaries. Brouthers and Brouthers (2000) and Madhok (1997) show that the cost of governing a partner in a joint venture arrangement will have an impact on the survival of foreign subsidiaries. In the context of the entry mode choice of consulting engineering firms, the effect of transaction costs could become significant when firms are involved in international joint ventures (i.e. forming a consortium with other international competitors on large scale projects), or when firms are involved in mergers or acquisitions. The effect of transaction cost in governing an FDI is expected to be less significant for consulting engineering firms due to the nature of the services offered (i.e. there is no requirement to set up manufacturing facilities).

Dunning (2000) argued in the context of the Eclectic Theory's Ownership (O) and Internalisation advantages (I), that, firms are more likely to internalise their markets when they prefer to retain internally their ownership advantages, such as when operating in a more volatile and hazardous international environment. Williamson (1975) postulates that firms will internalise their transactions where there is a risk of opportunism by others. This argument highlights the importance of the level of control in affecting the internationalisation strategy of firms. A higher level of control is required where the investment involves the intellectual properties of firms, and where there is also a high risk of appropriation by others. This is particularly important for consulting engineering firms due to the nature of the services provided and the intellectual properties involved in the process.

There is an extensive literature on external and internal stimuli factors that influence the internationalisation strategy of firms; however, literature on the interplay between the external and internal stimuli and the firm's existing capacity, growth and internationalisation strategies, is scarce. The Uppsala Models (1977, 2006 and 2009) explained micro-level factors affecting the physical distance, the business network, and the commitment of firms, but not the macro-level factors such as economic strength, political stability, and institutional factors. We believe that the internationalisation strategy of consulting engineering firms is influenced not only by the firm's own internal factors, but also by its strategic response to the market – for example, a firm may carry out an acquisition to gain speedy entry due to a host government's major redevelopment schemes.

The main focus of the existing literature has been on tangible factors such as transaction costs, market size and level of commitment, firm size, level of risk, psychic distance, and the nature of local market and competition. There is little regarding the influence of intangible gains on firms' entry mode choice. For a publicly-listed consulting engineering firm, an acquisition of a major competitor in a developed market could increase investor confidence, thereby boosting the share price; or creating a regional hub may send a positive signal to global clients about its global strength and capacity, and also its long-term commitment to expanding the business in the region, thereby enhancing client confidence. Thus, it is important to consider the influence of such intangible gains on the internationalisation strategy and entry mode choice of firms.

There is little discussion in the literature on the relationship between critical mass and the existing degree of internationalisation of firms on the one hand, and the transaction costs of internationalisation on the other – for example, a firm could lower the transaction costs of setting up a new subsidiary in a country where the firm already has other well-established offices in the same region by deploying regional management, or through a shared services strategy. Resources can be deployed from the regional office to the new subsidiary as and when required, reducing the resource requirement of the new subsidiary, whilst enhancing the overall resilience of the firm. Thus, the critical mass and existing degree of internationalisation of firms may have an influence on their entry mode choice.

Dunning's Eclectic Theory highlighted the influence of locational attractions (L) – such as the exchange rate, political risks, regulations and policies of the host country, cultural differences, risk diversification and geographical distance between the home and host country – on the international production of goods. The entry mode choice of firms when investing in a developed market will be different from investing in a developing market due to the risk level and the local institutional arrangements. Despite the importance of country factors in influencing a firm's entry mode choice, there is insufficient literature in this area, in particular as regards the services sector. Our study thus reviews how firms adapt their strategies in response to host country factors.

We believe that the internationalisation strategy of firms is influenced by the interplay between the external and internal stimuli factors and the firm's existing capacities and future growth strategy (the growth ambition).

Thus, the research proposition for 'what are the factors affecting firms' internationalisation strategies?' is as follows:

The internationalisation strategy of firms is influenced by a combination of external and internal stimuli factors, and by the firm's existing capacities (both financial and technical) and future growth strategy. The firm's capability in crafting a strategy that optimises the interplay between these factors is important for the success of its internationalisation.

2.7.3 Internationalisation and the Firm's Performance and Risk

Johanson and Vahlne (2009) argue that the lack of knowledge of firms during internationalisation may affect their perception of the cost of internationalisation. The Real Options Theory argues that real options provide firms with the flexibility of whether to undertake any future investment when new information becomes available. The International Diversification Theory postulates that a multinational corporation has a lower systematic risk relative to similar domestic firms. Rugman (1979), Miller and Pras (1980) and Caves (1996) propose that foreign operations have the effect of stabilising overall returns of firms, as economic conditions tend to be uncorrelated across different international markets.

The literature on the effect of internationalisation on the performance of firms has suggested that foreign operations have the effect of stabilising overall returns. Internationalisation can be used as a risk mitigation strategy, by increasing the diversification of the businesses, and could provide firms with opportunities to augment their firm-specific advantages. However, research on internationalisation of consulting engineering firms is limited, so this study reviews the effect of internationalisation on the performance and risk diversification of such firms using both quantitative and qualitative research methods.

In contrast to the Uppsala Model, Real Options Theory and The Risk Diversification Theory, the Eclectic Theory, Transaction Cost Theory and Internalisation Theory, have not explicitly explained the effect of internationalisation on a firm's risk. For example, Dunning's Eclectic Theory on locational factor, has focused on host country factors in affecting the risk and performance of firms, with little on the *home* country factors, such as the home country's economic condition. The effect of the home country and the world economy will be reviewed in this study using both quantitative and qualitative methods.

The Eclectic Theory (OLI), Transaction Cost Theory and Internalisation Theory have also predominantly focused on microeconomic factors rather than exploring the effect of the macroeconomy (such as the regional economic cycle) on the risk diversification and performance of firms. For example, firms may improve their resilience by having a good spread of subsidiaries, due to the variation in the economic cycle in different world regions.

For the above reasons, chapter 5 of this thesis will review the correlation between consulting engineering firms' internationalisation and performance, using both quantitative and qualitative methods.

Thus, our research proposition for 'How does internationalisation affect the performance and risk of firms?' is as follows:

Internationalisation provides firms with the opportunity to enhance their firm-specific advantages. Global firms have the advantages of capitalising on their global branding and offering, as well as to enhance their resilience due to the different economic cycle in different world regions, in comparison to domestic firms. Internationalisation may improve the performance of firms if they are able to capitalise on their firm-specific advantages of being global, together with an appropriate risk mitigation strategy.

2.7.4 Factors Affecting the Geographical Choice of Firms when Internationalising, and Factors Affecting the Success of Foreign Subsidiaries

There is limited literature on the international geographical spread of consulting engineering firms, and whether they have pursued a regional or a global strategy. Rugman and Verbeke's (2004) research on the activities of the 500 largest MNEs revealed that most of the world's largest 500 companies have pursued regional, rather than global strategies.

Dunning's Eclectic Theory recognises the importance of locational advantages (L) on the internationalisation of manufacturing firms, and postulates that the locational choice of firms is influenced by the costs and quality of a particular factor endowments – resources and capability; the size, character, and growth of domestic markets; and the policies of host governments. Dunning also pointed out that the locational advantages are likely to be highly situational, and will differ widely between developed and developing countries. Even though Dunning's Eclectic Theory recognises the importance of locational advantages, it does not explicitly review the firm-specific locational advantages against the motives of firms (whether market seeking or efficiency seeking) during internationalisation. We believe that the motives of firms when internationalising will have a significant influence on their geographical choice. There is also little literature reviewing the influence of internationalisation strategy on the geographical choice of firms. The internationalisation strategy of firms, whether ad-hoc (eg following a client) or planned, will have an influence on the geographical choice of firms.

The Eclectic Theory postulates that firms must possess certain advantages specific to the nature or nationality of their ownership to compete with local firms of the host country. We review the application of the Eclectic Theory (which was predominantly based on the manufacturing sector) on factors influencing the success of international subsidiaries from the perspective of consulting engineering services firms.

The 2006 and 2009 Uppsala Models explain the interplay between market opportunity and commitment, with the 1977 Uppsala model postulating that firms will expand into culturally proximate countries, and incrementally into countries further away from the home country. However, there is little literature on the interplay between the perceived market opportunity and

perceived risk of firms in influencing their geographical choices, using the real operational data of firms. Johanson and Vahlne (2009) argue that the existing business relationships of firms influence their geographical choice and entry mode during internationalisation. We believe that the existing degree of regional critical mass and international coverage of firms will influence geographical choice and their domination of a specific market.

There is literature on the effect of the psychic/cultural distance on the success rate of new foreign subsidiaries (Uppsala Model, Barkema et al., 1997, Li and Guisinger, 1992), but we believe the influence of regional and host country's characteristics on the success of new foreign subsidiaries should include a wider spectrum of country-specific factors, including the host country's economic growth, human asset capability, political stability, institutional arrangements, and 'ease of doing business'.

Thus, the research proposition for 'factors affecting the geographical choice of firms when internationalising and the factors affecting the success of foreign subsidiaries' is as follows:

Geographical choice is influenced by internal (motives for internationalisation, risk perception, previous experience, existing degree of internationalisation, and international coverage) and external stimuli factors (market opportunity and country factors – economic condition, political stability and ease of doing business). Firms may increase the success of their new foreign subsidiaries by capitalising on their current firm-specific advantages, together with an appropriate locational choice and governing structure.

2.7.5 Effects of Internationalisation on Corporate Governance and Business Strategy

Dunning (2000) argued – based on the internalisation (I) sub-paradigm of the Eclectic Theory – that internationalisation provides firms with alternatives ways to create, organise, and exploit their core competencies, in conjunction with their locational specific advantages. Dunning's Eclectic Theory, Transaction Cost Theory and Internalisation Theories, all argued that firms will internalise if there are transaction cost or efficiency gains. However, these theories were developed

predominantly based on the international production of goods, and their application to services firms needs to be examined further. We believe that internationalisation provides services firms with the opportunity to improve on their resources efficiencies, creating the opportunity to develop new forms of organisational structure and global resources optimisation, and enabling them to capitalise on the different economic cycles in different world regions.

Dunning (2006) argued that the national level institutions in a country affects the kind of ownership advantages firms are likely to develop. Dunning and Lundan (2008) argue that firms will adapt their organisational structure to reflect the macro-institutional infrastructure of the host country, and the way in which firms adapt will determine outcomes. We believe that the firm's motive to internationalise – whether it is market seeking or efficiency seeking – will have an impact on its internationalisation strategy. Our research also reviews the influence of host country factors on a firm's governance strategy, including a review of the different types of organisational structures used by consulting engineering firms, including global and regional strategies, and how firms capitalise on their critical mass and firm specific advantages, and optimise their vertical integration.

Erikson et al. (1997) argued that internationalisation provides firms with the opportunity to learn about the foreign market, and the compatibility between the firm's existing resources and those needed in a particular foreign market. During internationalisation, a firm must develop structures and routines compatible with its internal resources and competencies, and that can guide the search for experiential knowledge about foreign markets and institutions. Carlson (1974) argued that experiential knowledge is country and firm-specific and is non-transferable. Our study will explore how firms could capitalise on their existing experience when internationalising by creating appropriate governance structures, such as using a regional hub arrangement.

Thus, our research proposition for 'the effect of internationalisation on the corporate governance and overall business strategy of firms' is as follows:

Internationalisation provides firms with opportunities to create new forms of corporate governance structure to optimise their performances and efficiencies.

2.8 Conclusion

From our review of the literature, the theoretical bases used in the study of the internationalisation of firms can be summarised as follows.

Firstly, existing theories reviewed in this chapter complement each other. Reviewing a single theory in isolation may not provide a complete perspective of the internationalisation of firms. It is the synthesis of theories that has enabled us to gain a more complete picture and wider perspective on the internationalisation of firms, ranging from factors encouraging internationalisation of firms and entry mode choice, to factors affecting the performance and success of the internationalisation of firms. Therefore, the subsequent chapters draw upon these theories to provide a comprehensive study of the internationalisation of consulting engineering firms, starting with the initial stages of internationalisation through to the post internationalisation stage.

Secondly, internationalisation provides firms with future growth options. Firms may be driven by market-seeking, deciding to grow beyond its own home country's boundary when the domestic market becomes saturated or highly-competitive. Internationalisation provides firms with the options and opportunities to grow beyond their home country for market and efficiency seekings.

Thirdly, internationalisation provides firms with opportunities to bolster ownership and competitive advantages, increasing their reputation, branding or portfolio. A firm's international operation may not only provide the firm with global opportunities, it may also benefit its home country office due to the increase in the client confidence due to its global businesses.

Finally, despite the fact that the internationalisation of firms may provide diversity to their investment portfolios, it may also increase the risk firms face due to greater exposure to the international market. Chapter 5 of this thesis thus explores the effect of internationalisation on the risks facing firms.

The subsequent chapters of this thesis continue to explore the application of these theories in analysing the internationalisation of consulting engineering firms, including the entry mode and geographical choice, and factors affecting the internationalisation outcomes of firms.

Chapter 3 The Consulting Engineering Sector

3.1 Introduction

This chapter provides an overview of the consulting engineering sector. Financial data for the top 20 UK based international consulting engineering firms were readily available from the FAME financial database, so these were used in the first instance, in what in effect is a pilot study reported in this chapter, for the research and data analysis reported in subsequent chapters, for which additional data were gathered, to cover the top 50 firms.

This initial study, using data for the top 20 firms, was aimed at providing a preliminary analysis to help determine the research direction, and to formulate the research questions and propositions at the initial stages of the research.

As it happens, the top 20 firms did contribute 90.7% of the total revenues generated by the top 100 firms in the industry, and thus serves as a useful initial sample, for the preliminary analysis, to provide an initial insight into the internationalisation of UK consulting engineering sector.

As for the top 50 firms, which were used in the work reported in subsequent chapters, these were responsible for 97.69% of the total revenue generated by the top 100 firms. The sample selection is discussed in section 4.3 of Chapter 4 (research design and methodology), below.

Why the Consulting Engineering Sector (CES)?

The World Trade Organisation Services Sectoral Classification List MTN.GNS/W/120 (1991) categorises consulting engineering services into two main sectors:

- The professional services, namely architectural services, engineering services, integrated engineering services and urban planning and landscape architectural services, which are services provided by qualified architects and engineers.

- The construction and related engineering services, which involve the physical construction and related engineering works.

The UK has the biggest consulting engineering sector in Europe, with a turnover of approximately 50 billion euro per year (ING Banking, *The Consulting Engineering Sector in Europe report*, 2008). Despite its significant contribution to the UK economy, there is only a limited literature on the sector.

The International Federation of Consulting Engineers (FIDIC) reported in 2003 that on average 84% of its member firms' turnover comes from domestic as opposed to international activity. This indicates that few consulting engineering firms are truly international or global firms. However, a review of the percentages of the overseas revenue of the UK based international consulting engineering firms (section 3.2 of this chapter) indicates that overseas revenue does make up a significant proportion of their revenue.

We believe that the particular characteristics of consulting engineering firms have shaped their governance structure and business strategy. As discussed in our literature review, the two main motives for consulting engineering firms internationalising are market seeking (exploration of new overseas opportunities) and efficiency-seeking (setting up production offices in lower cost countries). Existing theories such as the Eclectic Theory, Transaction Cost Theory and Internalisation Theories were created predominantly based on the international production of goods, and their focus has been on reducing transaction costs. The intangible benefits which have encouraged the internationalisation of consulting engineering (such as the desire for 'global' branding, and enhancing their 'global' reputation) may not be rather overlooked – or at least not sufficiently emphasised – in the existing literature. The risk mitigation strategies of consulting engineering firms during internationalisation are also deserving of further consideration. The consulting engineering sector is a knowledge-based professional services sector where the services provided will draw upon both information-based (non-tacit) and tacit knowledge, and these usually form part of the firm-specific advantages. When a consulting engineering firm is involved in an international project – for example through a partnering arrangement with local firms – the information-based knowledge such as design information are prone to imitation by domestic firms.

Thus, it is important for firms to select an appropriate partnering strategy to avoid exploitation of information by others, and to maintain their firm-specific advantages.

Traditionally, consulting engineering firms tend to start their internationalisation journey by following their existing clients, and expand their international offices through organic growth (Krull et al., 2012). However, recent trends suggest that large consulting engineering firms are increasingly looking to merger and acquisition arrangements to grow their market share more quickly. Existing internationalisation theories, such as the Uppsala Model and Internalisation Model, may not be so applicable to this latter development of the internationalisation strategy of consulting engineering firms.

The demand for consulting engineering services is usually project-based, which results in a degree of fluctuation and uncertainty in terms of the workload (Løwendahl, 2005; Von Nordenflycht, 2010). A governance structure that provides firms with the flexibility and capability to manage the dynamic change of demand, and ensure fluidity of resources, is thus important for the performance of firms. The resulting corporate governance arrangements and strategies used by firms are discussed in Chapter 7, and considered in relation to the existing literature.

3.2 The Degree of Internationalisation of Consulting Engineering Firms

As previously mentioned, the International Federation of Consulting Engineers (FIDIC) reported in 2003 that on average 84% of its member firms' turnover comes from domestic as opposed to international activity. The FIDIC data (table 3.1) also indicates that, on average, some 62% of its members' activities come from construction-related activity.

Table 3.1: Percentage of the share of various consulting engineering sectors

Consulting Engineering Sectors	% share of the industry
Construction	62
Production	14
Management consulting	5.5

Facilities management	2.3
Control and inspection	6
IT	2.8
Training	5.6
Architecture	3.4

Source: FIDIC 2003

The FIDIC data reported in table 3.2 below indicate that Western Europe has the highest percentages of engineers working internationally in comparison to other regions.

Table 3.2: Proportion of engineering consultants ‘working internationally’

Proportion of Engineering Consultants ‘working internationally’	Percentage
Western Europe	63.7
North America	15.8
Central and south America	4.2
Middle East and Africa	1.9
Asia	5.6
Eastern Europe	-
Oceania	8.8
Total:	100

Source: FIDIC 1982

The financial data of the top 20 UK based international consulting engineering firms ranked by both total and overseas revenue in 2013, were studied in this chapter. Table 3.3 provides an overview of the degree of internationalisation (measured as the overseas revenue over the total revenue) of the top 20 UK based international consulting engineering firms ranked by its ‘total revenues’.

The analysis indicates a very different result to the FIDIC data, where 55% of the firms studied has over 50% of their total revenue came from their overseas revenue, whilst a total of 65% of the firms has over 30% of their total revenue generated from overseas activities.

Table 3.3: Overseas revenue of top 20 UK based international consulting engineering firms, ranked by total revenue (in 2013).

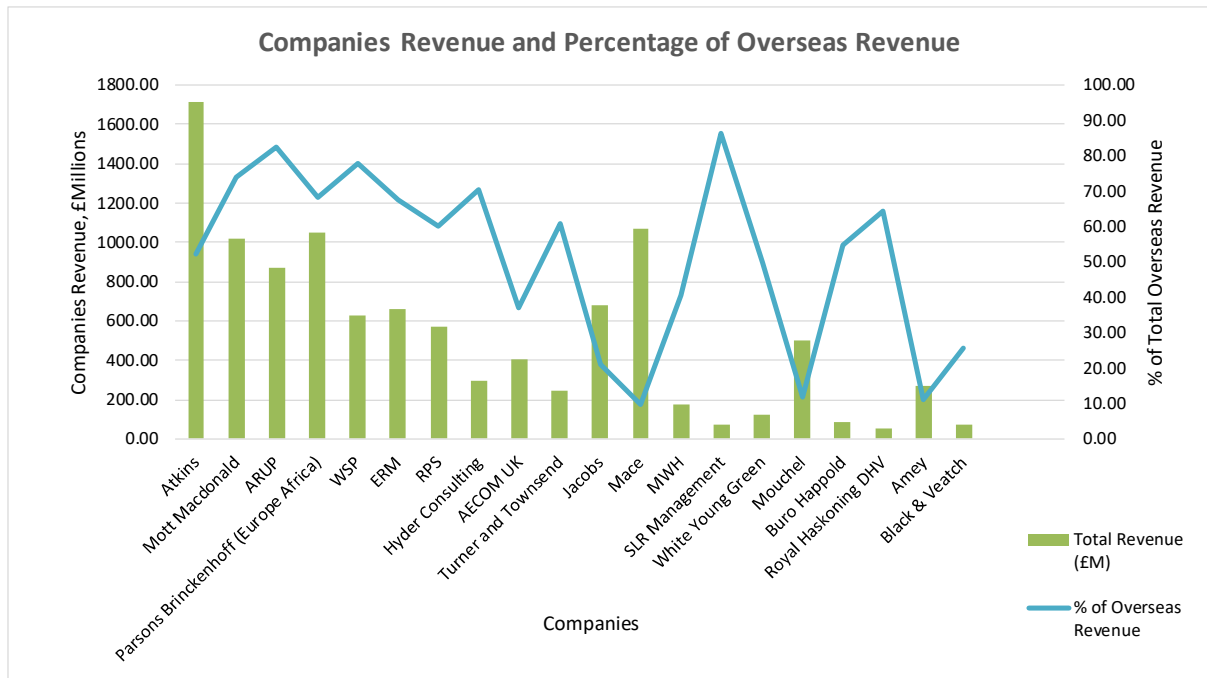
Percentages of Overseas Revenue	Numbers of firms	Percentage of firms, %		
More than 70%	4	20	55	65
60 to 70%	3	15		
50 to 60%	4	20		
40 to 50%	1	5		
30 to 40%	1	5		
20 to 30%	1	5		
10 to 20%	4	20		
Less than 10%	2	10		
Total number of firms	20			

Table 3.4 and figure 3.1 provide an overview of the total revenue and the degree of internationalisation (measured as the overseas revenue over the total revenue) for the top 20 UK based consulting engineering firms, ranked by their “total overseas revenue” (in 2013). A total of 60% of the firms studied has over 50% of their incomes generated from overseas activities, and 75% of them has approximately one-third of their total revenues contributed by their overseas revenues.

Table 3.4: Overseas revenue of top 20 UK based international consulting engineering firms, ranked by overseas revenue (in 2013).

Percentages of Overseas Revenue	Numbers of firms	Percentage of firms, %		
More than 70%	5	25	60	75
60 to 70%	5	25		
50 to 60%	2	10		
40 to 50%	2	10		
30 to 40%	1	5		
20 to 30%	2	10		
10 to 20%	2	10		
Less than 10%	1	5		
Total number of firms	20			

Figure 3.1: Revenue of top 20 UK based international consulting engineering firms (ranked by overseas revenue) and the percentage of overseas revenue over total revenue (in 2013).



Tables 3.3 and 3.4 and figure 3.1 show that overseas revenue is a significant part of the total revenue of the top UK based international consulting engineering firms. Thus, the performance of international offices could have a significant impact on the overall performance of firms. The significant contribution of overseas revenue towards the total revenue of consulting engineering firms observed in the initial study has provided a valid foundation for the formulation of the following research questions:

- Why do consulting engineering firms involve in international activities?
- What is the correlation between the degree of internationalisation and the performance of firms?
- How does the firm size affect the degree of internationalisation of firms?
- What is the effect of internationalisation on the risk and resilience of firms?
- How do firms integrate the operation of their international activities within the governance structure to optimise the overall performance of their firms?

Chapter 5, 6 and 7 discuss the factors driving internationalisation of firms, internationalisation strategy and the correlation between the degree of internationalisation and performance of firms, and the geographical choice and governance structures of firms, based on both quantitative and qualitative analyses.

3.3 Geographical Concentration of Consulting Engineering Firms

Further to the initial findings in section 3.2 of this chapter regarding the degree of internationalisation of consulting engineering firms, this section is aimed at providing a more detailed analysis of the geographical spread of overseas revenue intakes of firms. Figures 3.2 to 3.5 provide a graphical presentation of the spread of overseas revenues across different regions for the top 22 UK based international consulting engineering firms ranked by their overseas revenues in 2014.

Radar charts of overseas revenues of consulting engineering firms in figure 3.2 to 3.5 indicate that:

- Large consulting engineering firms tend to have a better geographical spread with a higher percentage of its revenues spreading across different regions in comparison to smaller firms.
- The majority of the firms studied tend to have a higher percentage of its overseas revenue generated from regions which has a smaller psychic or geographical distance to the home country, such as from Europe and North America.

The findings shown in figures 3.2 to 3.5 are consistent with the research carried out by Rugman and Verbeke (2004) on international activities of top 500 MNEs which indicates that very few MNEs are successful globally.

Figure 3.2: Geographical spread of firms' overseas revenue.

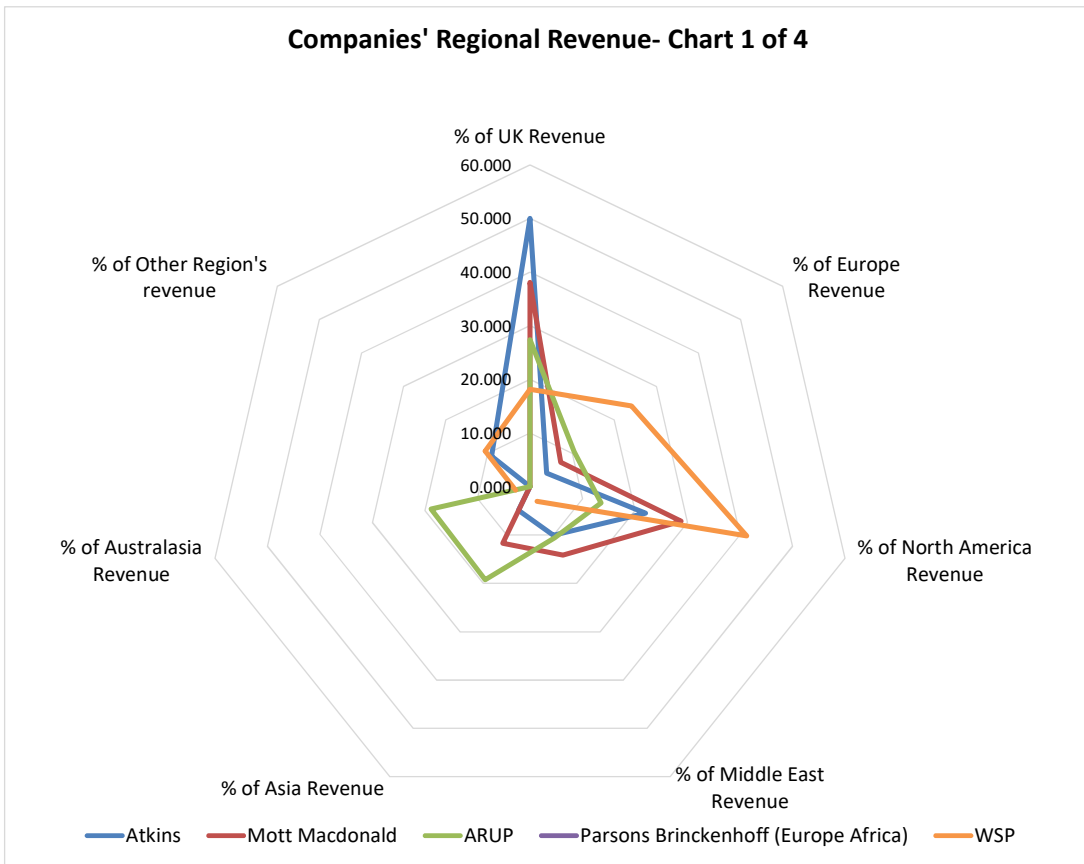


Figure 3.3: Geographical spread of firms' overseas revenue.

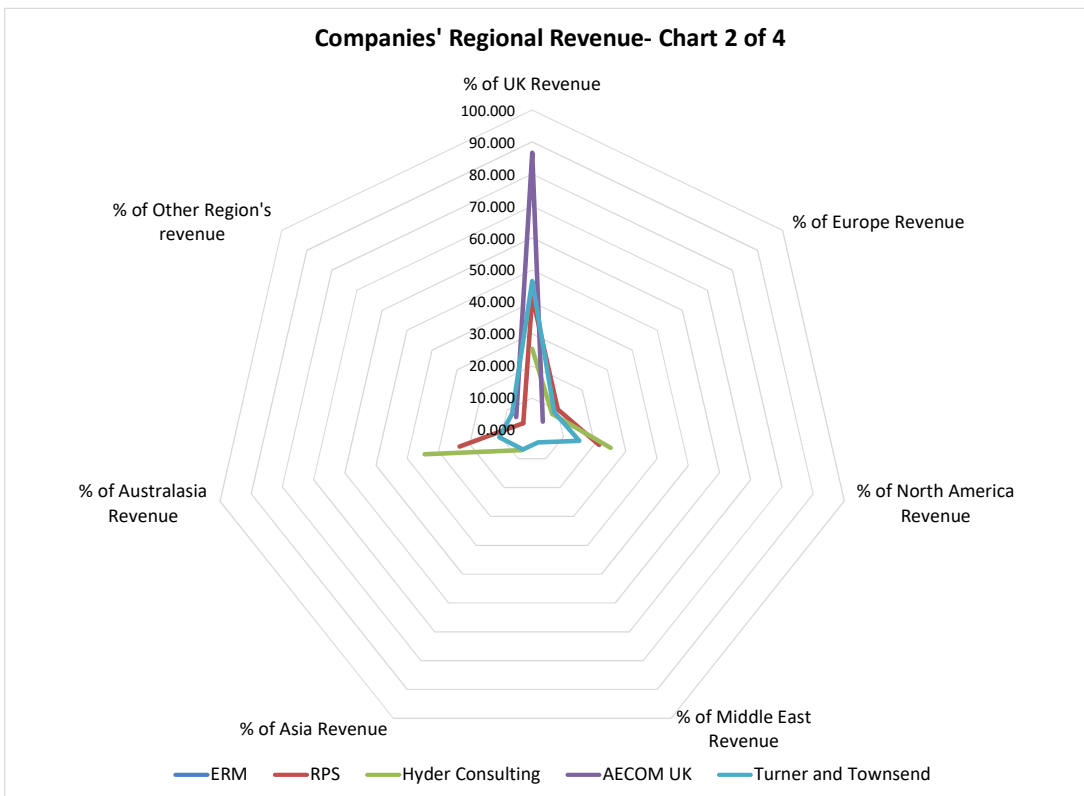


Figure 3.4: Geographical spread of firms' overseas revenue.

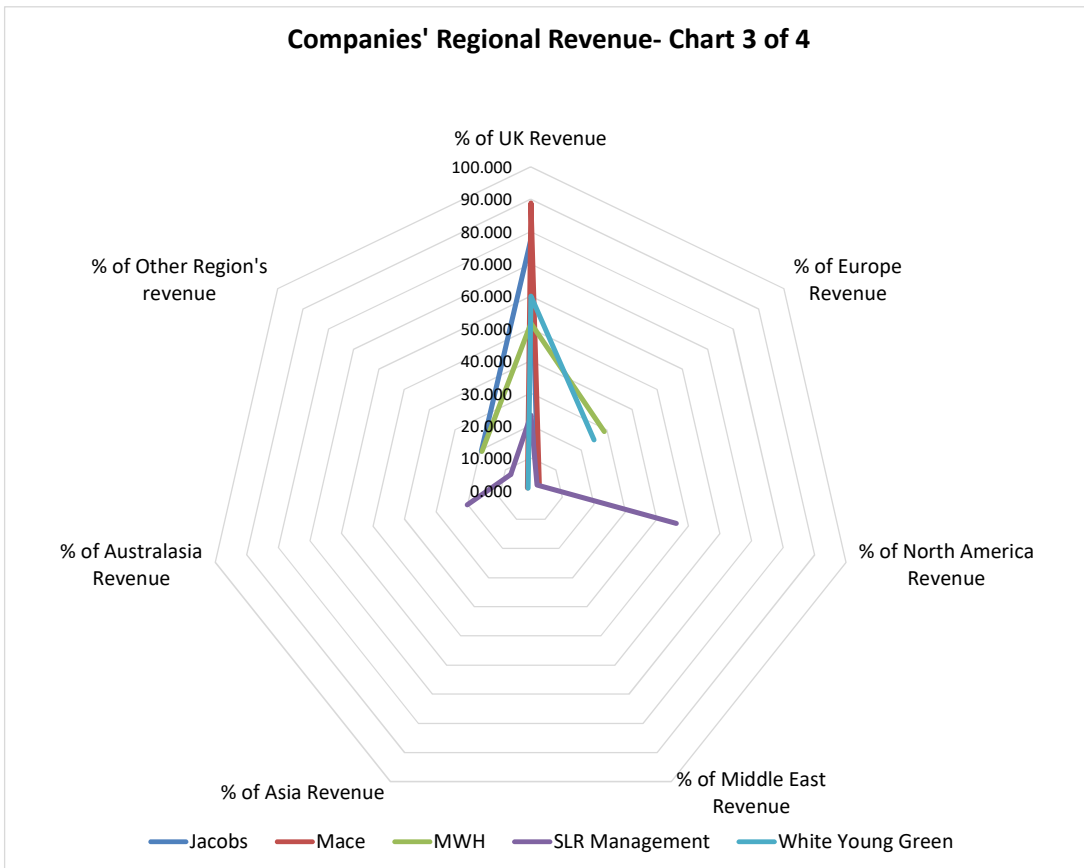
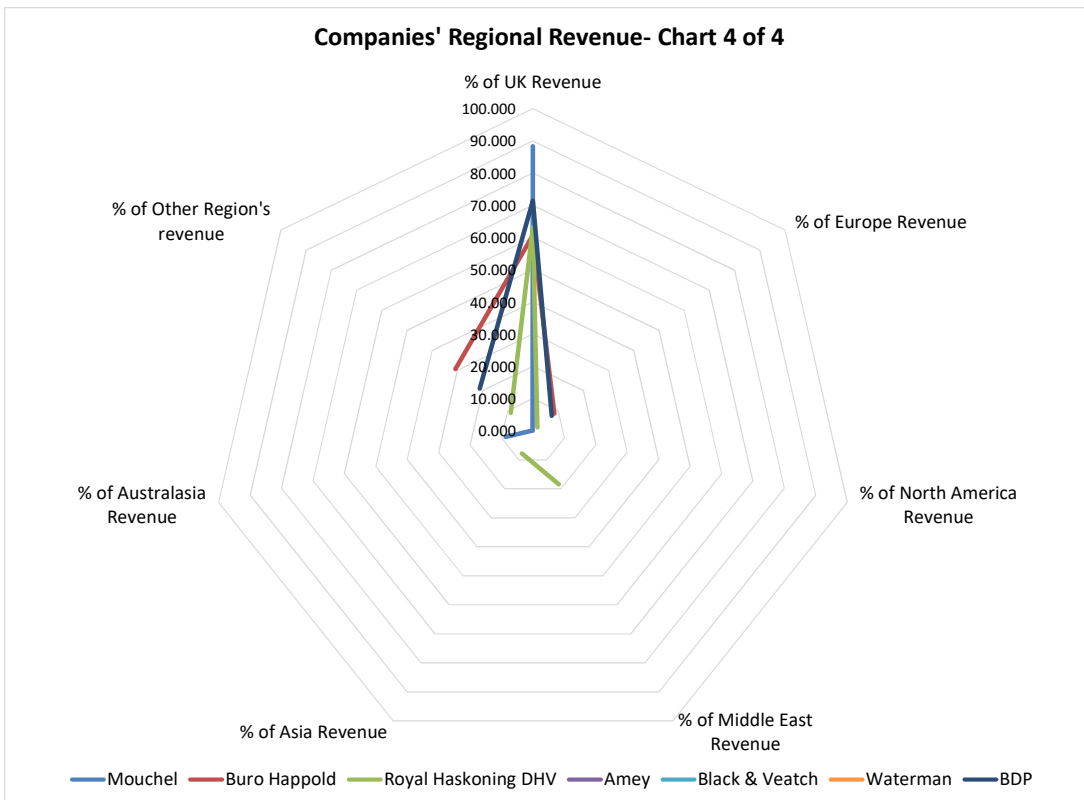


Figure 3.5: Geographical spread of firms' overseas revenue.



3.3.1 International Market Potential and the Effect on Geographical Concentration

The State of Business Report 2011 published by the Association for Consultancy and Engineering (ACE) UK have highlighted that 39% of the international firms surveyed have indicated that the biggest market of growth in 2010 is the Middle East region (39%). This was followed by the African (22%) and Australasian (17%) regions. Firms have also indicated that the European (53%) and the Middle Eastern regions (32%) are the markets that they are expected to enter in the near future. There is only a small percentage of companies which has indicated that they will enter the Asian markets such as Central Asia (11%) and South Asia (21%).

Figure 3.6: International Market Potential

(Figure 3.6 removed due to copyright: ACE Business State Report 2011)

The financial data analysis of firms as shown in figures 3.2 to 3.5 is consistent with the finding of the ACE State of Business Report 2011, where both data sets have shown that there are limited numbers of UK based consulting engineering firms which have a good geographical spread across all regions and most of the firms studied have concentrated their activities in the region which has a short psychic distance from their home country. The unfamiliarity of firms with the local market on issues such as the politic, planning, legal processes, and regulations could be the reason which explains why 32% of firms studied still intend on entering Western Europe despite earning expectations remaining stable (ACE, 2011).

3.3.2 Economic Growth and the Effect on Geographical Concentration

Saturation tests were carried out to review the average regional turnover of firms against the regional GDP growth as presented in figure 3.7 below. The “average regional turnover” of firms is calculated as “the average of the percentage of regional turnovers” of the top 20 UK based international consulting engineering firms, ranked by their overseas revenues in 2013.

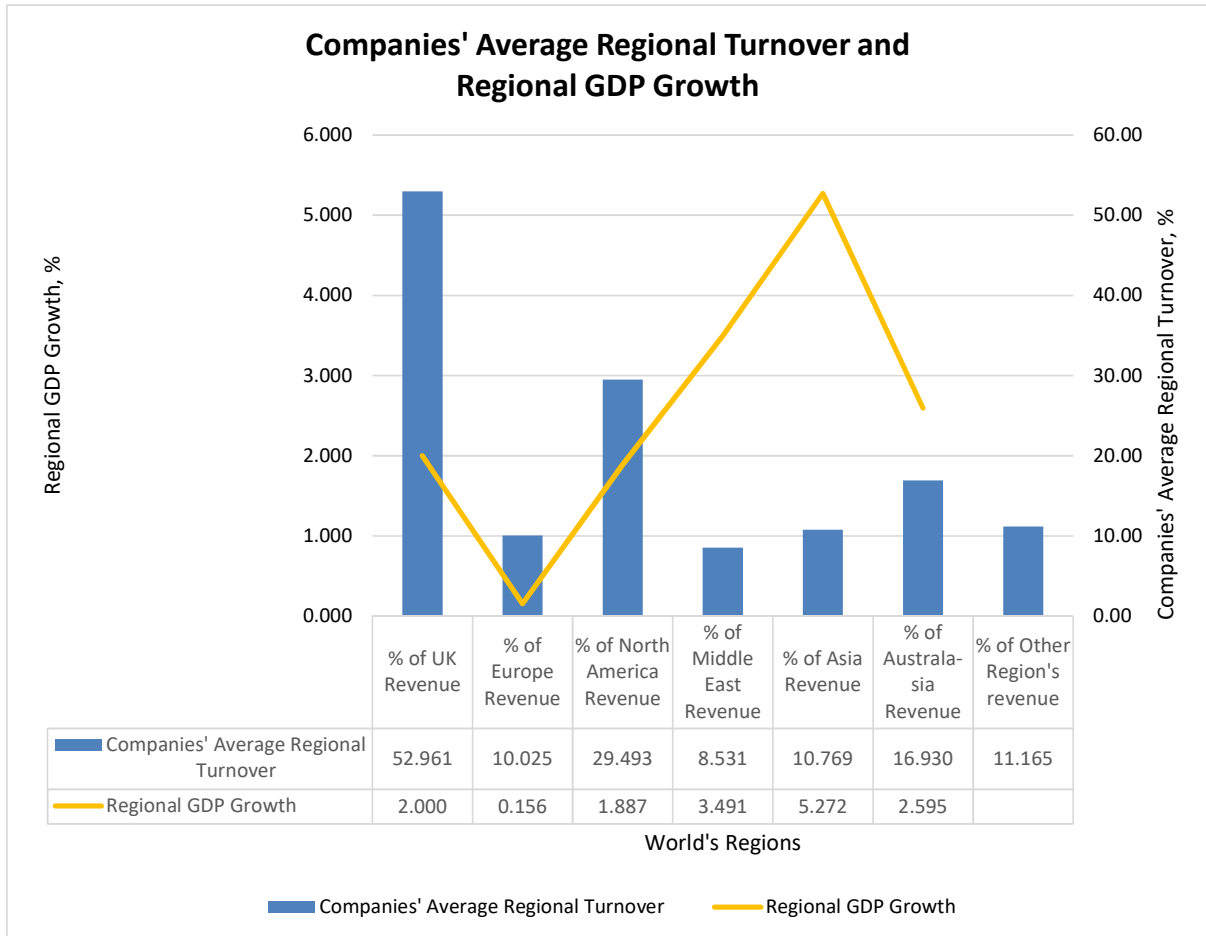
The result shows that a total of 53% and 30% of the turnover of firms came from the UK and North America respectively, despite the modest GDP growth at around 2% in both regions. There is only a small percentage of the turnover of firms which came from the Middle Eastern and Asian regions (at 8.5% and 10.8% respectively) despite the high GDP growth in both regions at 3.49% and 5.27% respectively. These findings are, again, shows a consistent trend with results published in the ACE State of Business Report 2011, where there is only a small percentage of companies interviewed which has indicated that they will enter the Asian markets such as Central Asia (11%) and South Asia (21%).

Potential factors which have influenced the decision of firms in investing in developing regions such as the Middle East and Asia are:

- Higher risk perception- some regions, such as the Middle East and Asia, are perceived as regions with a higher risk due to they are developing economies. The risk factors are discussed further in Chapter 5 based on findings from the questionnaires and interviews carried out with consulting engineering firms.
- Higher competition- those regions with a higher GDP growth and market potential will naturally attract other similar non-UK based international consulting engineering firms to invest in the region, therefore, increasing the intensity of the competition in the region. The combination of high competitions and a high risk level in the region could potentially make the investment less attractive to the UK based consulting engineering firms.

- Long psychic distance- developing regions, such as the Middle East and Asia, have a long psychic distance (both geographically and culturally) to the home country, and this could, therefore, affect the decision of firms to invest in these regions.

Figure 3.7: Average regional turnovers of firms and the regional GDP growth (2014).



3.3.3 International Competition and the Effect on Geographical Concentration

Qualitative research (using questionnaires and interviews) were carried out with top consulting engineering firms to determine the effect of international competitions on the decision of firms when investing in different world regions. Firms were asked to select a region with the highest competition and to explain why that specific region is perceived as the region with the highest competition.

All of the firms involved in the study have indicated that the Middle East and Asian regions were perceived as having the highest competition and concentration of international consulting engineering firms. This is due to:

- The strong economic growth in these regions has attracted international consulting engineering firms to operate in these regions. The traditional markets, such as the UK and US, are not growing as fast as before which has led to consulting engineering firms entering the faster-growing regions such as the Middle East and Asia.
- The western design is very much in demand in these regions, therefore there is no shortage of consulting engineering firms from the West operating in these regions.
- Those regions with high GDP growth such as the Middle East and Asian regions are still in the process of development, therefore has a high demand for infrastructures provision. Therefore, the work opportunities available in these regions have attracted international consulting engineering firms to invest in the region.
- Despite the fact that the Middle East region was perceived as a region with the highest competition, there is still a shortage of skills locally, therefore, providing opportunities for international consulting engineering firms to invest in this region.

In general, firms were faced with higher competition in regions with high GDP growth. There was only a small percentage of average turnover of firms which came from these regions (the Middle East at 8.5% and Asia at 10.8% as shown in figure 3.7) despite the high GDP growth in these regions. Some of the UK based consulting engineering firms were less-established in the Asia Pacific region due to the high local competition in the region, and it is very difficult for firms to

compete with local firms in terms of cost effectiveness. The factors affecting the geographical choice of firms are discussed in detailed in Chapter 6 below.

Firm-specific advantages are needed to compete with other companies investing in the same region. Hence the research agenda in Chapter 6 'Factors affecting the success of international subsidiaries' and Chapter 7 'Corporate Governance', where different types of organisational structures and international operational strategies of firms are analysed.

3.4 Conclusion

This chapter provides an overview of the international activities of the UK based international consulting engineering firms, which includes the degree of internationalisation and the effects of regional GDP growth on the performance of firms, and the effect of international competition and the regional psychic distance on the international geographical concentration of firms.

The financial data analyses of the total revenue and overseas revenues of the top 20 UK based international consulting engineering firms (ranked by total revenue) indicates that 55% of the firms studied has over 50% of their revenues generated from their overseas activities. A total of 65% of the firms studied has more than 30% of their total revenue came from overseas revenue. This indicates that international activities have played an important part in generating revenues for the top UK based international consulting engineering firms.

The analysis of the regional revenue of firms revealed that there were very few firms which have a good geographical spread across all regions, and most of the firms studied were concentrating their activities in regions with a short psychic distance from their home country. Larger firms tend to have a better geographical spread across all regions when compared against smaller firms. This may be due to the fact that smaller firms are less familiar with the operation of the international market and the perceived risk of internationalisation may have outweighed the potential gains.

The analysis of the qualitative study carried out with the top UK based consulting engineering firms has indicated that firms perceived regions with a high GDP growth such as Asia and the Middle East as regions with the highest competition. The analysis has also indicated that there is only a

small percentage of the revenue of firms which came from these regions, with average regional revenues of 8.5% from the Middle East and 10.8% from Asia. Firms are faced with strong competitions in regions with high GDP growths and are required to compete with both the international and domestic players.

The analysis of activities of consulting engineering firms in this chapter has led to the following research agenda. These research agenda have formed the basis of the research for subsequent chapters of this thesis.

- Factors driving internationalisation of firms.
- Internationalisation strategy and entry mode choice of firms.
- The correlation between the degree of internationalisation and the performance of firms.
- The effect of internationalisation on the risk and resilience of firms.
- The effect of firm size on the degree of internationalisation of firms.
- Factors affecting the geographical choice of firms.
- Factors affecting the internationalisation outcomes- factors affecting the success of foreign subsidiaries.
- The effect of internationalisation on the governance structure of firms.

Chapter 4 Research Design and Methods

4.1 Introduction

There are two common types of research styles in management studies- the inductive and the deductive methods. The inductive or exploratory research seeks to develop a new theoretical framework while the deductive research method seeks to test the proposition constructed from existing theories. Glaser and Strass (1967) and Eisenhardt (1989) in their research suggested the use of empirical research methodologies in inductive or exploratory research, such as the use of case studies, to help researchers to induce new theories. The empirical research methodologies were based on using the source of data collected from interviews and observations, and the theoretical framework is generated via continuous interplays between the analysis and data collection. The deductive research method was usually based on adapting the existing quantitative analysis, such as those generated from the correlational method; however, theories in management studies can also be tested using qualitative methods (such as using multiple case studies).

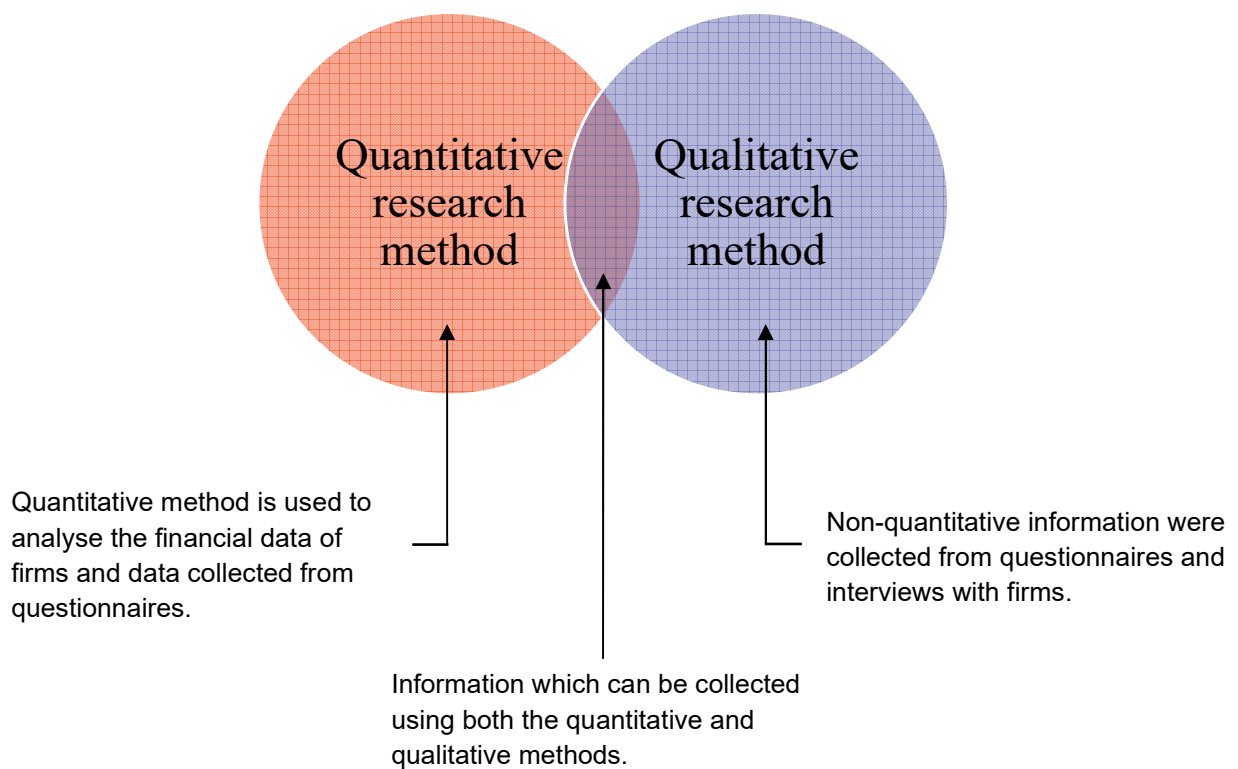
4.2 Research Questions, Design and Methods

Hackman (1992) pointed out that it is the research question that should drive the research methodology, not vice versa. The research methods employed in this research were based on explaining the questions and goals of the research.

This research was designed based on using both the inductive and deductive (quantitative and qualitative) research methodologies. Although both the quantitative and qualitative methods were originated from two very different and conflicting research traditions, they, in fact, share the very same objective- which is to produce valid inferences by the systematic use of well-established methods of inquiry (King, Keohane & Verba, 1994).

Quantitative analyses were carried out using the STATA and Excel statistical software to analyse the financial data of top UK based international consulting engineering firms (obtained from FAME database) and the data collected from questionnaires. Qualitative research methods (questionnaires and interviews), were used to gather the information which is not available in quantitative form. Qualitative research methods were also used to collect information which can be used to assess against the quantitative research findings. The interplay between the quantitative and qualitative research methods provides a more complete analysis and a wider perspective to this research. Any conflicts of results arise from using both methods provide opportunities for further reviews/ debates and interviews.

Figure 4.1: Quantitative and qualitative research methods used in this research.



Under the general research question of “**why services firms internationalised and how does the internationalisation of firms affect their performance**” this thesis seeks to explore the internationalisation journey of consulting engineering firms. There were four exploratory questions proposed for this research.

At the beginning of this research, financial data of consulting engineering firms were analysed using the statistical method to provide an initial overview the degree of internationalisation of the UK based international consulting engineering firms. An initial overview of the current internationalisation situation of firms provides a good foundation for the formulation of the research questions and propositions, and the design of the qualitative research framework (questionnaires and interviews). The qualitative research framework was designed to obtain the view of the top management of consulting engineering firms- it is their perspective, their view, and a language of their understanding that this thesis seeks. The existing theoretical frameworks were then used as a descriptive and interpretative tool in analysing the research findings.

Question 1: Why do consulting engineering firms internationalise, and what are the factors affecting their internationalisation strategies?

The focus of this question is to use the financial data of firms to understand the current situation of the degree of internationalisation of consulting engineering firms. The qualitative research method (questionnaires and interviews) were then used to explore as to why firms internationalised, why some of the firms have a higher degree of internationalisation when compare to others, what are the internationalisation strategies used by firms and what are the factors affecting the entry mode choice of firms.

Question 2: How does internationalisation affect the performance of, and risks facing firms?

Both the quantitative and qualitative analyses were carried out in parallel and independently, in order to review the effect of internationalisation on the performance and risk of firms. The correlation between the degree of internationalisation and performance of firms were analysed.

Interviews were carried out with top management to understand their views and perspectives on the effect of internationalisation on the risk and performance of their firms. Results from the quantitative and qualitative studies were analysed and reviewed against existing theories.

Question 3: What are the factors affecting the geographical choice of firms when internationalising, and what are the factors affecting the success of foreign subsidiaries?

Similar to the above, both quantitative and qualitative analyses were carried out in parallel and independently, in order to review the factors affecting the geographical choice of consulting engineering firms when internationalising. The statistical analysis of financial data of firms for different regions was used to review the geographical choice of consulting engineering firms. The top management of firms were asked in questionnaires and interviews about their locational preferences when internationalising and factors affecting their geographical choice.

The top management were also asked in the interviews about the factors affecting the success of their internationalisation outcomes. In this kind of research, definitions of success will inevitably be problematic. The intent of this question is aimed at finding out from the top management how well they think the internationalisation has helped in providing their firms with tangible and intangible advantages and what are the factors that they think has led to such advantages.

Question 4: How does internationalisation affect the corporate governance and overall business strategy of firms?

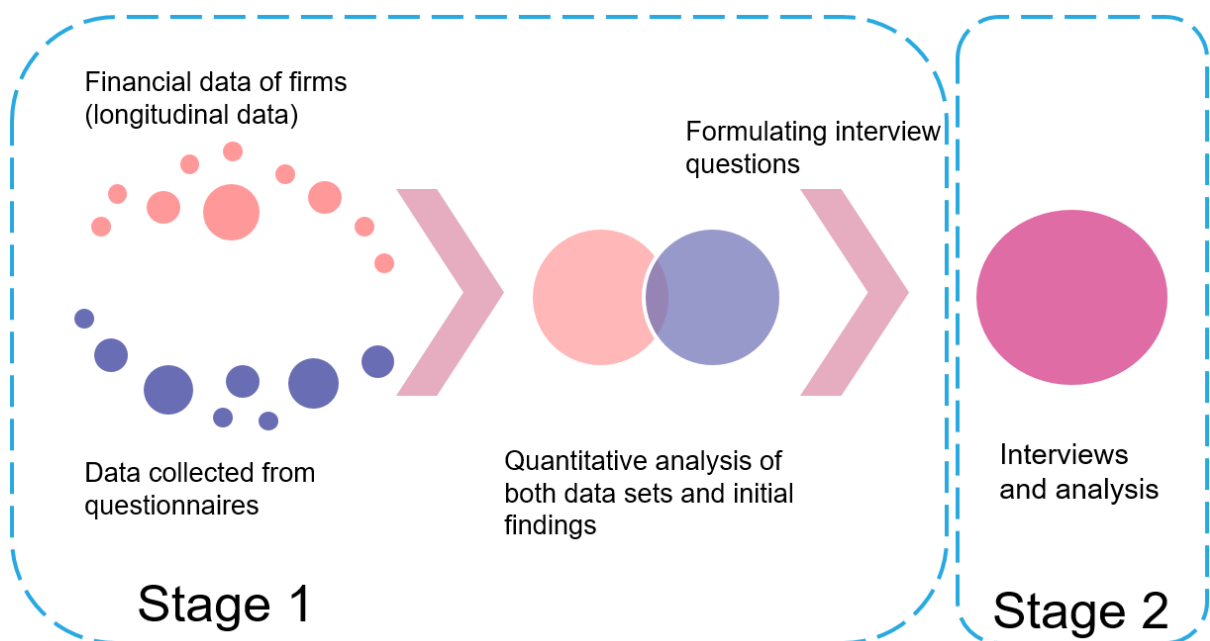
The focus of this question is about finding out from the top management of firms their views on how their firms have adapted their corporate governance and business strategy to incorporate their international activities and to optimise the performance of their firms.

The general objectives of this research will, therefore, be to carry out empirical and theoretical research on these four questions, to provide evidence and to develop a more detailed framework of internationalisation of services firms, adding to existing theories.

4.2.1 Dual Approach of Longitudinal and Cross-company Studies

This research adopts the route of having some form of formal theory concept in mind (as discussed in chapter 2) to shape the data collection, analysis and synthesis. The primary objective of using a dual approach of longitudinal and cross-company studies is to allow for dual stages (coarse and fine) observations, over a period of time, in order to study the research questions.

Figure 4.2: Flow chart showing various research stages.



Dual Research Stages

First stage: longitudinal financial data and questionnaires analyses

The first stage uses an inductive approach where both quantitative and qualitative methods were used to explore the research questions. The first stage is considered as an exploration stage with the aim to:

- Refining the research framework and researcher skills.

- Narrowing the research questions for more detailed investigations.
- Providing comparative data for generalisation and categorisation.

In other words, the stage 1 work is aimed at providing an overview of the current situation of the internationalisation of consulting engineering firms and to build the foundation for the second stage detailed research.

The first stage study includes for the cross-company studies in order to understand the internationalisation of consulting engineering firms:

- Quantitative analysis of longitudinal financial data of the top 50 UK based international consulting engineering firms.
- Questionnaires research- formulation and distribution of questionnaires to firms and to carry out quantitative and qualitative analyses for the information received from firms.

Second stage: Interviews and detailed analysis of information

The second stage research involves the interviews with top management or executives of the top 50 UK based international consulting engineering firms. Interviews in the second stage are aimed at:

- Finding out further evidence to support the first stage findings.
- Finding out potential factors that have led to the first stage findings or vice versa.
- Finding out the perspective, the view and the opinions of top management on research questions.

The final part of the research was pursued by means of analytical framing, analysis, and synthesis of the first and second stage findings. This research presents both the empirical data and qualitative information, with the aim to provide a more holistic view of the research questions.

4.3 Quantitative Research and Data Selection

The longitudinal financial data of the top 50 UK based consulting engineering firms (ranked by total revenue) were obtained from the FAME database and firm's annual report to determine the correlation between the degree of internationalisation and overall performance (measured as total turnover) of firms. The Ordinary Least Square Method (OLS) was used to determine the correlation between variables. The findings from the quantitative research were reviewed against the qualitative research analyses.

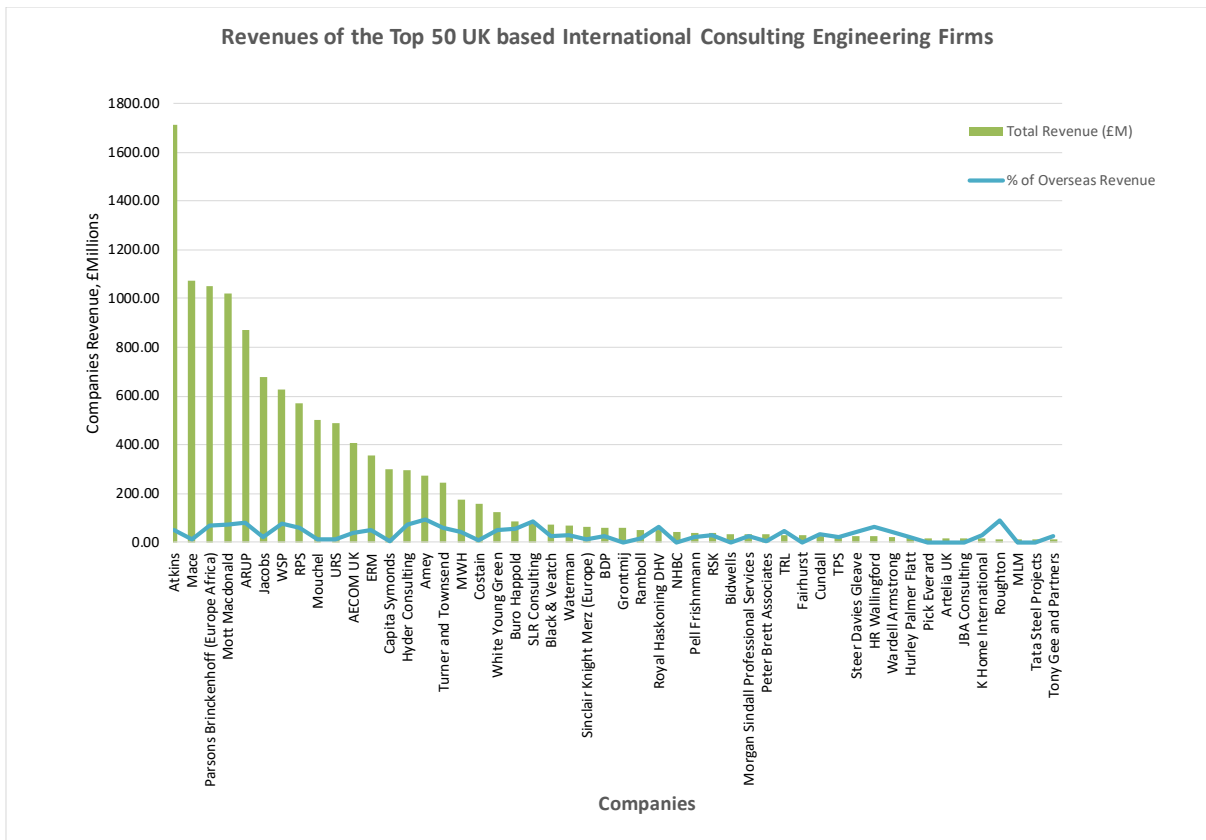
An analysis of the revenues of consulting engineering firms was carried out to determine the sample selection. The revenues of the top 50 firms are as shown in figure 4.3. Top 50 firms were used in the sample for the quantitative analysis based on the following observations:

- The proportion of the total revenues generated by the top 50 versus the top 100 firms- the analysis indicates that 97.69% of the total revenues generated by the top 100 firms comes from the top 50 companies. In other words, the top 50 firms represent a very high proportion of the total income generated by firms in the industry, therefore, it can be considered as a good representation of firms in the consulting engineering sector.
- There is a significant difference between the revenue of the largest firm and firms ranked between the 50th and 100th. The largest firm has a turnover of £1,711 million (M) whilst firms ranked 50th and 100th have revenue of £12.8 M and £3.3 M respectively. The revenues of firms ranked 50th and 100th is only 0.75% and 0.19% of the turnover of the largest firm. Due to the significant differences in terms of the size of firms (measured as revenues) between the largest firm and firms ranked between 50th to 100th, it is therefore proposed that the sample selection for the quantitative study includes only the top 50 firms.
- There is also a good variation of the percentages of overseas income within the top 50 firm's sample as shown in figure 4.3.

Further analysis was also carried out to review the proportion of the total revenues of the top 20 firms over the top 50 and 100. The result indicates that a significant proportion (91.71%) of the total revenue of the top 50 was generated by the top 20 firms. Therefore, the top 20 firms were used in

the Chapter 3 overview of consulting engineering sector in order provide a high level overview of the consulting engineering sectors, such as the degree of internationalisation of firms and the geographical concentration of firms in different world regions, and also to provide the initial information for the formulation of research questions. The use of the top 20 versus top 50 is limited to chapter 3 only and is considered to have a limited impact on the overall results.

Figure 4.3: The revenue of the top 50 UK based international consulting engineering firms (financial year 2013).



Source: FAME database

4.4 Qualitative Research

Qualitative approaches are ideal for the understanding of what is going on, delineation of context and unfolding of events over time, interpretations of environment and behaviour (Bryman, 1988). Qualitative methods were used to collect information on why consulting engineering firms internationalised, factors affecting the entry mode and geographical choice of firms, and how firms

adapt their international operational strategies to optimise performance, as quantitative data alone does not give sufficient insight on decision-making. This enabled us to gather a wide range of contextual and management related information, helpful for an understanding the internationalisation process and the effect of internationalisation on the performance and governance structure of firms over a period of time.

4.4.1 Research Questionnaire

A survey questionnaire was developed with the aim to obtain information that is not available in raw data format and to gather the initial view of the top management on the research questions. A survey questionnaire was developed in order to obtain information on the following key constructs:

- Factors affecting internationalisation of firms- perceived market opportunities, the importance of having an overseas presence.
- Internationalisation strategy of firms
- The effect of the home country's economy on the internationalisation strategy of firms
- Risk factors associated with the internationalisation of firms.
- Factors affecting the success of internationalisation outcomes of firms
- Internationalisation and governance structure of firms

A key priority when developing a questionnaire was to keep it relatively short in order to increase the response rate (Dillman, 1978). Therefore, I have developed a relatively short and simple semi-structured questionnaire, which lent itself to a degree of codification and quantification - with some questions being expressed in Likert-type measurement scales and others being open-ended, asking for opinions and views. The research questionnaire is included in the appendix of this thesis.

Questionnaires were distributed to the top 50 UK based international consulting engineering firms (ranked by total revenue). Questionnaire returns were received from 20 firms. Of these, 70% (i.e. 14) firms participated in the follow-up interviews. The data collected from the questionnaires returned were analysed using statistical methods, such as the Likert-type scale analysis. The results obtained from the quantitative and qualitative analyses during the first stage of research were used as the basis of the interview questions for the second stage of research.

4.4.2 Interviews

Interpretative methods (which is to study and acquire knowledge through the experience of people) were used in the second stage of this research. Interviews were carried out with the top management of companies in order to understand the perceptions and views of the top management teams on the internationalisation of firms, which is critical to the questions under this research study.

As previously mentioned, 70% (i.e. 14) firms who had responded to the questionnaire also then participated in follow-up interviews. These interviews provided information on areas that cannot be explained adequately using quantitative data alone, which includes the decision making on internationalisation strategy, risk management strategy of firms, and how firms have adapted their governance structure to optimise their efficiencies. These interviews provide further evidence with which to review the results and analysis obtained from the first stage of this research.

4.4.3 Qualitative Research Samples

Table 4.1 provides a summary of the sample of firms that returned the questionnaire, and participated in the follow-up interviews. There was a good representation from across the top 20 and top 50 firms for both the questionnaires and interviews: 11 out of the 20 firms returning the questionnaire were from the top 20 group, whilst the remaining participants were from the top 50. Chapter 3 above provides an overview of the degree of internationalisation of the top 20 firms, and

the geographical spread of their international investment. The followings are the key observations of the samples:

- Market share: the top 20 firms contributes 92% of the total revenue generated by the top 50 firms.
- Degree of internationalisation: a significant degree of internationalisation can be observed in the top 20 firms: 55% of the firms in the top 20 had over 50% of revenues from overseas, with 65% received over 30% of revenues from overseas. The top 20 to 50 firms had an average of 23% of revenues from overseas.
- Geographical spread of international activities: the top 5 firms have a good geographical spread of international activities across different world regions. However, there is a significant change in the patterns of the geographical spread of the international activities for firms outside the top 5 ranking, where these firms tend to focus their activities in regions with small psychic distance to the UK (i.e. North America, Europe and Australasia).

Nine of the top 20 firms participated in the interviews – close to the number (11) that had returned the questionnaire (see table 4.1). There were fewer participants from the top 50 firms in the interviews compared to those returning the questionnaire (from 9 down to 5). However, as mentioned in section 3 above, 92% of revenues generated by the top 50 firms were from the top 20 firms. Thus, the representation of the top 50 firms of the industry is expected to be less significant when compared to the top 20 firms, so the reduction in the top 50 firms in the interviews is expected to have limited impact on the findings.

Table 4.1: An analysis of the sample participated in the questionnaires and interviews.

	No. of firms participated in	
	Questionnaires research	Interviews
Top 20 firms	11	9
Top 50 firms	9	5
Total	20	14

4.5 Limitations and the Ethical Aspects of the Study

This research has received great support from the top management of large consulting engineering firms, based on the high numbers of questionnaires received and interviews carried out during this research. This research has generated significant interest from large consulting engineering firms due to the fact that internationalisation is one of the top agenda of their firm's operation and growth strategies, and there is limited academic research that has been carried in this area for the consulting engineering sector.

4.5.1 Research Methods

From the research methodology perspective, as discussed in the earlier section of this chapter, the qualitative research framework was designed to obtain the view of the top management of consulting engineering firms- it is their perspective, their view, and a language of their understanding that this thesis seeks. However, the validity of using a single executive is may be contentious. The intent of the study was to compare different executive perspectives on the strategy of internationalisation and how it affects their firm's performance and risk. These single respondents give both an individual perspective as well as one view of the internationalisation journey for the whole organisation. The view taken here is that the combined views of 20 executives (14 in the case of interviews) represent a valid sample from which to draw views on the internationalisation strategy of firms.

Due to the competitive nature of the industry, I was aware that firms may also decide to be selective in providing information when responding to questionnaires or during interviews, in order to protect their competitive advantages. Therefore, all firms participated in this research were reassured of anonymity, and that the information provided would be used for academic research purposes only. It is the assumption that by anonymising the companies participated in this research, I will be able to gather more accurate data and better insight of internationalisation of firms at the industry level.

As previously mentioned, this research was designed based on using both the quantitative and qualitative research methodologies, with the view that the interplay between the two research methods will provides a more complete analysis and a wider perspective to this research. Therefore, the view taken here is that by comparing the analysis results obtained from both the quantitative and qualitative method, I will be able to obtain a more accurate result for the study.

4.5.2 Research samples

The top 50 firms were used in the quantitative and qualitative research work of this study. As explained in sections 4.3 and 4.4.3 of this chapter, the sample analysis indicates that the data selected for the quantitative analysis and the samples participated in the qualitative research is considered to be a good representation of the firms in the industry. The potential issues of attrition bias were discussed in section 4.4.3 of this chapter and is expected to have a limited impact on this study.

As explained in in chapter 3 of this thesis, the top 20 firms where use in Chapter 3 to provide an overview of the consulting engineering sector. The use of the top 20 firms is limited to only this chapter and is expected to have limited impact on this research.

4.5.3 Ethical Aspects of the Study

The qualitative research was carried out with the top management of the leading international consulting engineering firms. Thus, based on the CUREC “Best Practice Guidance - Elite and Expert Interviewing”, this was viewed as a low risk research project, which involves interviewing experts and elite participants in the sector.

Prior to preparing the questionnaire and distributing them to top consulting engineering firms, I read the “Academy of Management’s Professional Code of Ethics”. Due to the fact that I am working in the industry as a professional engineer for one of the top consulting engineering firms, I understand that there are potentially some confidentiality issues if firms were asked to provide firm-

specific information which might affect their competitive advantages. Bearing this in mind, I used the Likert-type Scale method in formulating the questionnaire and ensuring that firms were asked to provide generic or non-sensitive information that does not affect their competitive advantages.

As previously mentioned, I also declared to firms at the beginning of the questionnaires and also prior to carrying out the interviews that the information that they have provided will only be used for research purposes and their responses will be completely confidential and anonymised. The top management of firms were asked to provide confirmation of their information such as name of the participants, name of the company, position, email and office address prior to filling in the questionnaires. The questionnaire has been reviewed by my research supervisor prior to distributing to firms.

Further to the questionnaire research, interviews were carried out with the top management of leading international consulting engineering firms. The purpose for carrying out interviews was to find out the underlying reasons which could explain the Likert-type scale information collected from the questionnaires. The interview procedure was in line with the CUREC Best Practice Guidance- Elite and Expert Interviewing. Due to the busyness level of the top management of firms, it would not be appropriate to request for a formal written consent process, for example: sending a lengthy formal consent form or interview transcripts for fact-checking may jeopardise the interest of top management to participate in the interviews. Therefore, emails were sent to the firms which has returned the questionnaires to find out if they would agree to participate in interviews. Firms which has agreed to attend the interviews have responded via emails. The email correspondences with firms were carried out using the University's email system.

Top management of firms were asked in interviews what are the reasons which had led to the Likert-type scale score in their questionnaire returns and firms were asked to provide the information only if they think that it is appropriate to do so. I have again, clarified to firms prior to starting the interviews, that I am a part-time research student who is also practising in the industry. The information provided will only be used for academic research purposes only and the participants will be anonymised in the research and also in the thesis.

I am also aware of the data security issues and I have taken appropriate measures to ensure that the data is protected and stored safely. The data collected from the questionnaire and interviews were stored in my personal laptop with encryption and the laptop is locked away when not in use. I have not uploaded and will not upload the data to any external server or cloud.

Chapter 5 Factors Driving Internationalisation

5.1 Introduction

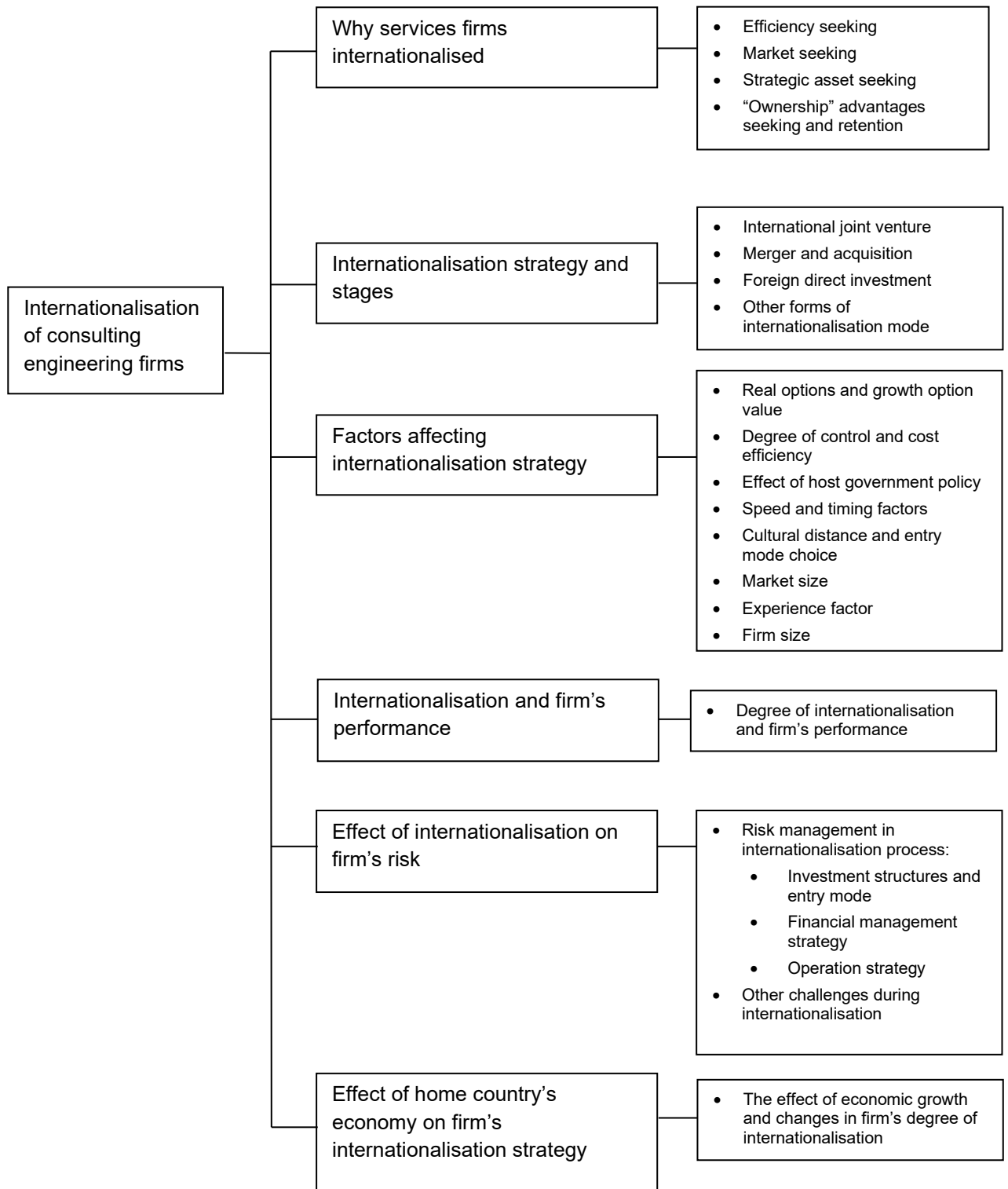
Financial data analyses of the top UK based international consulting engineering firms (as previously discussed in Chapter 4) have revealed that 55% of the top consulting engineering firms studied has over 50% of their incomes from overseas activities and 65% of the firms have more than one-third of their total revenues from overseas revenues. The initial review of the overseas and total revenues of consulting engineering firms has demonstrated that international activities are a significant part of the operation of firms. Therefore, it is important that this study explores the reasons as to why large consulting engineering firms pursued their internationalisation strategy and how the internationalisation process affects the risk and performance of firms.

5.2 Research Framework

This chapter discussed the factors driving internationalisation, internationalisation strategies and the effect of internationalisation on the performance and risk of firms. Research analyses carried out in this chapter were based on the financial data of firms and data collected from questionnaires and interviews with the top UK based international consulting engineering firms.

Figure 5.1 below provides a summary of the research framework used in this chapter.

Figure 5.1: Factors driving internationalisation and the effect of internationalisation.



5.3 Why Services Firms Internationalise

Internationalisation can be defined as “crossing of international borders to perform upstream and downstream value-chain activities” (Inkpen and Ramaswamy, 2005). According to Dunning’s Eclectic Theory on the ownership of firms, a firm serving the national market has various avenues for growth, and when it makes economic sense, the firm will venture into a foreign market and becomes an international firm (Dunning, 1980).

Globalisation has changed the landscape of the professional services sector. Historically professional services firms were small local organisations where services were delivered locally to consumers. In order to serve clients who are themselves already global, services firms are building their integrated ‘global professional networks’ so that they can provide services in countries which their clients operate (Brock, 2012).

Interviews carried out with large consulting engineering firms revealed that there are a series of internal and external stimuli factors which could lead to the internationalisation of firms. Internal stimuli factors generally arisen due to the operation need of the organisation, this includes:

- To provide growth options or opportunities for future growth
- To increase the performance, turnover and profitability
- To gain or increase international economic and technical advantages through internationalisation
- To gain or increase international competitiveness and market share
- To develop or enhance international reputation and brand image
- To reduce the risk of firms through achieving greater geographical diversification
- To support global clients

External stimuli factors, such as the competition in the domestic market, the home market economic condition and the economic growth of foreign regions, will encourage firms to internationalise their businesses. Firms interviewed have highlighted that the benefit of

internationalisation has outweighed not to internationalise, and this is especially important during the time when the home country's economy is facing a downturn.

The findings from interviews are consistent with existing literature by Barkema and Vermeulen (1998), Hitt et al. (1997), Lu and Beamish (2001), and Vermeulen and Barkema (2001), which have suggested that the motivation for internationalisation of firms include:

- To seek revenue growth opportunities
- To compete against global competitors
- To increase market power
- To support global customers
- To access global knowledge- to gain enhanced knowledge leading to stronger capabilities and innovation
- To achieve efficiency in managing value-chain activities- the economies of scale and scope

There is a wide array of options for firms to choose from during internationalisation, these options can range from the total localisation of services to the other extreme of total integration on markets and services on a global scale. Firms are required to carefully consider a wide array of strategic options when competing in the global market in order to optimise the performance of their firms. Inkpen and Ramaswamy (2005) explained that factors for considerations revolve around issues such as:

1. The nature of home country specific advantages and similar advantages that can be leveraged across the MNE's network of operations.
2. Determinants of the dynamics of industry competitions, such as concentration, rivalry, and strategic variety among competitors.
3. Product characteristics such as the nature of the technology involved, the relative power of branding, and physical features of the product and its use.

The findings from the qualitative study (questionnaires and interviews) were analysed and reviewed against the proposed hypothesis in sections 5.3.1 to 5.3.7 this chapter.

5.3.1 The Importance of Having an Overseas Presence

Questionnaires were distributed to the top UK based international consulting engineering firms to investigate why firms internationalised. The following potential factors were proposed in the questionnaires based on the review of existing literature and also from my own experience of working on international projects. Top consulting engineering firms were asked in the questionnaire to rate the importance of having an overseas presence based on the following factors, with 1 being the least significant and 5 being the most significant.

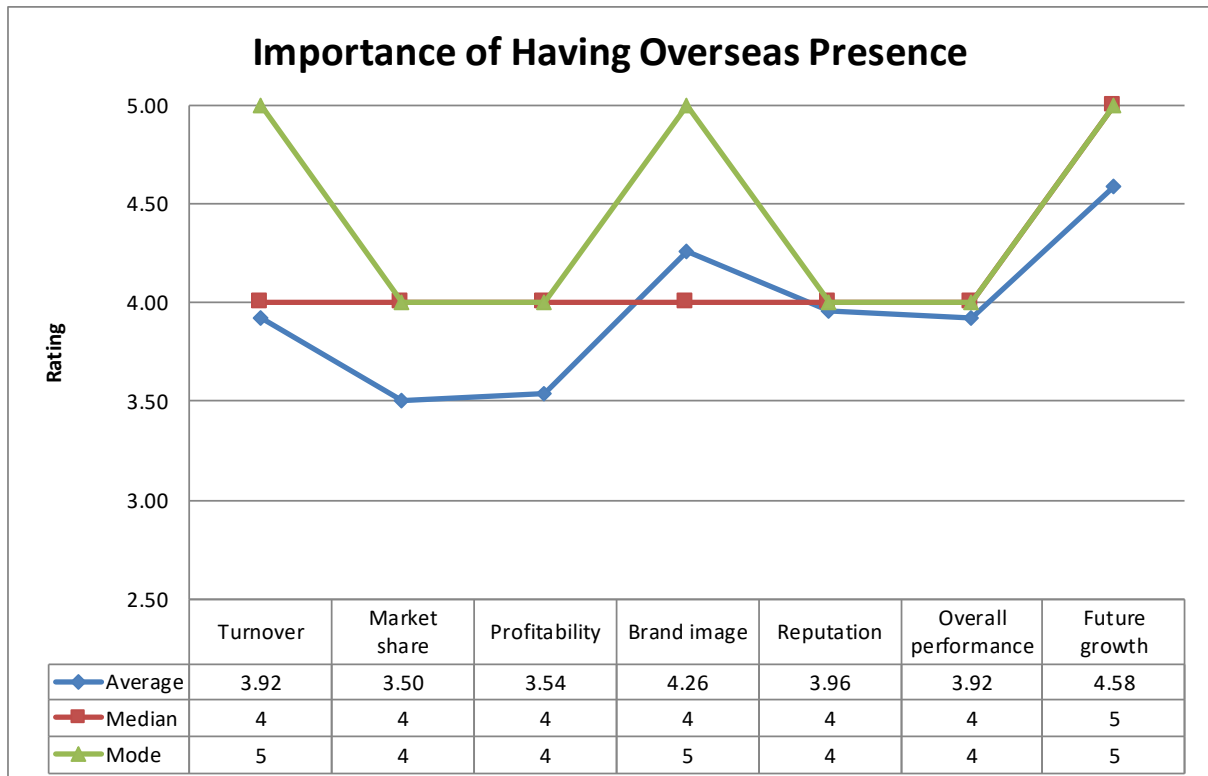
- Turnover
- Market share
- Profitability
- Brand image
- Reputation
- Overall performance
- Future growth

The average, median and mode scores for each of the factors (as listed above) are presented in figure 5.2. All of the factors stated above have an average score of 3.5 and above and with a median and mode score of 4 and above.

The “future growth” has the highest average score of all at 4.58, with a median and mode score of 5 out of 5. Firms perceived internationalisation as a long-term investment strategy that provides opportunities for the future growth of their firms. The “brand image” and “reputation” has a mean score of 4.26 and 3.96 respectively. This indicates that firms perceived that the internationalisation

of their firms will help in developing the international branding and reputation of their firms. The importance of internationalisation on the “overall performance” and “turnover” of firms has an average rating of 3.92, followed by the “market share” and “profitability” at 3.50 and 3.54 respectively.

Figure 5.2: Average, median and mode scores of various objectives for the overseas presence of firms.



Likert-type Scale Analysis

The data collected from questionnaires were analysed further using the Likert-type Scale Method based on a sample consisting of 25 respondents. The S score is obtained by summation across all the weighted categories. N is the number of respondents and r is the number of equally-spaced categories. V is the variance and Z score is calculated as:

$$Z = (S - (N(r+1))/2) / (\sqrt{N(r^2-1)/12})$$

Interviews were then carried out with top consulting engineering firms to collect further evidence to support the findings of statistical analyses of the data collected from questionnaires, and also in finding out the underlying reasons that may have contributed to the findings of questionnaire analyses. Interviews with firms have also provided further opportunities for finding out any further information that was not able to be collected using the questionnaire alone.

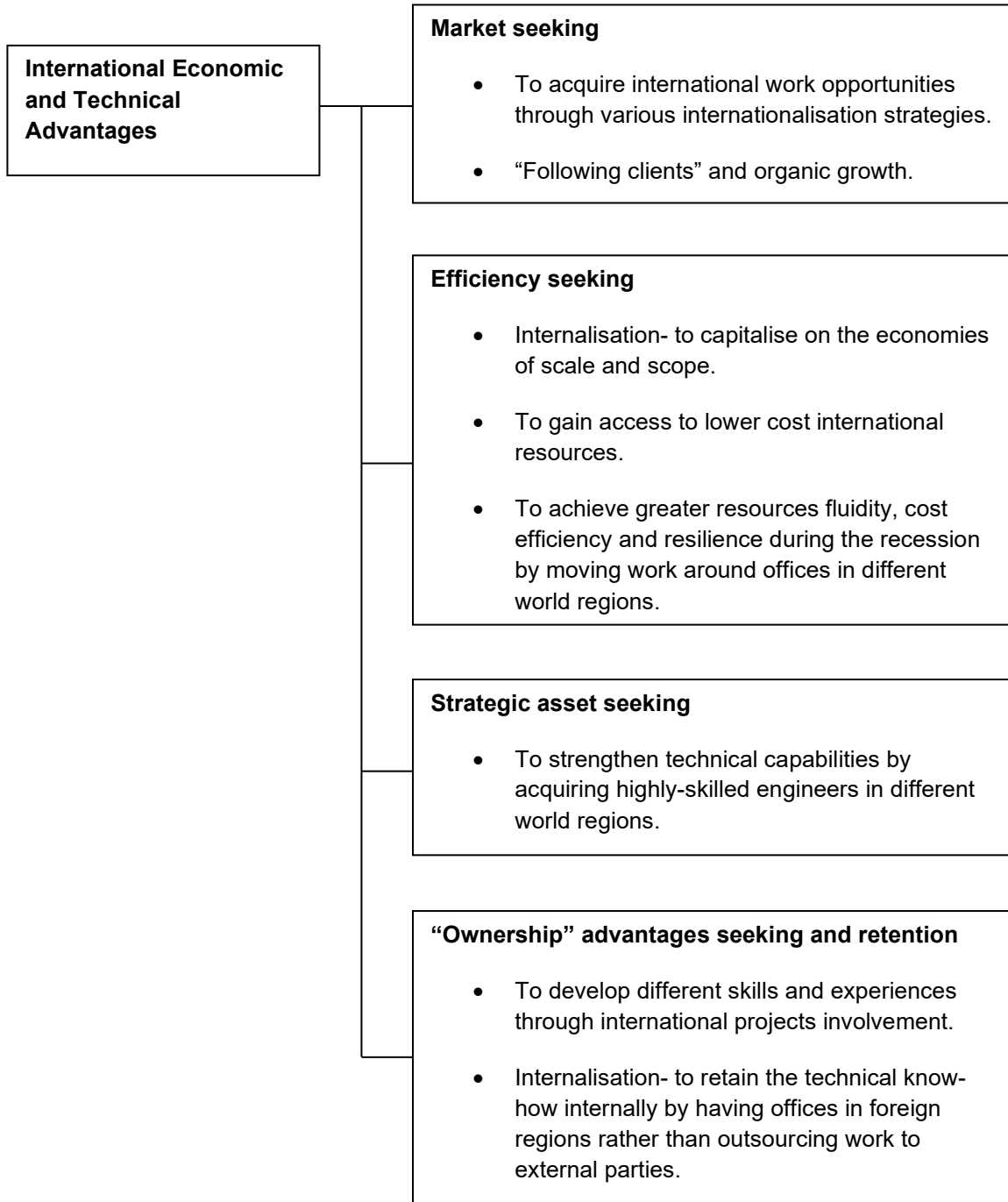
The findings from the Likert-type scale analyses, together with the supporting information from the interviews with top consulting engineering firms, are presented in section 5.3.2 to 5.3.7 of this chapter.

5.3.2 International Economic and Technical Advantages

Internationalisation of consulting engineering firms is driven by the economic and/ or technical advantages such as:

- i. Market-seeking- to explore a new market or demand base.
- ii. Efficiency-seeking- to gain access to lower cost resources and more efficient division of resources and specialisation.
- iii. Asset-seeking- to acquire additional resources.
- iv. Strategic asset seeking/ augmentation- to gain further access to strategic assets to increase the firm's "ownership" advantages.

Figure 5.3: International economic and technical advantages of firms.



i) Market seeking

The internationalisation of services firms can be reactive (demand-oriented) or proactive (market-seeking) (Majkga°rd and Sharma, 1998; Sharma, 1989- as cited in Krull et al., 2012). The reactive strategy is sometimes referred to as the “client following strategy” where firms follow and customise their services to key client’s requirement to invest overseas. Professional services firms are often dependent on a set of key clients whom they are likely to follow into new markets. For examples, firms are creating their global professional networks to serve global clients which requires their services globally. These global clients already have their global framework for expansion, therefore demand integrated professional services at their various international investment locations. Existing literature by Cohen (2007), Inkpen and Ramaswamy (2005) and Abdelzaher (2012) have highlighted the intangible benefits for firms to adopt the “client following strategy” when internationalised. There are growing numbers of firms which has involved in internationalisation not so much for to preserve their OLI advantages but as the reason for the perceived need to follow and serve their important home market clients who were building major manufacturing facilities overseas. Supporting global customers can be imperative, especially when the global customers hold a significant amount of bargaining power. Being on the client’s global expansion framework and staying close to the client is important for firms to continue to sustain or develop further their relationship with the client and securing long-term benefits.

Firms were asked in the questionnaires the significance of the “turnover” and “market share” as a factor in influencing their internationalisation decisions. The Likert-type scale analyses are presented in tables 5.1 and 5.2 below.

Turnover

Table 5.1: Likert-scale analysis of influence of turnover on internationalisation decisions.

Turnover					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	5	2	8	10
Weighted score	0	10	6	32	50
No. of correspondents, N=	25				
Summation of all weighted score, S=	98				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	3.32	At 0.01 level, p= 0.0005 <0.05 therefore the Turnover factor is significant			

The analysis indicates that the Z score of 3.32 is significant at .01 level and the value of S= 98 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires research have indicated that increasing the turnover of their firms is one of the factors driving their overseas presences.

Market Share

Table 5.2: Likert-scale analysis of influence of market share on internationalisation decisions.

Market share					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	3	6	12	3
Weighted score	1	6	18	48	15
No. of correspondents, N=	25				
Summation of all weighted score, S=	88				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	1.91	At 0.01 level, p= 0.0281 <0.05 therefore the Market Share factor is significant			

The analysis indicates that the Z score of 1.91 is significant at .01 level and the value of S= 88 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires research have indicated that overseas presence is important in increasing the market share of their firms.

Interviews with consulting engineering firms have revealed that their global clients tend to prefer to be working closely with a small set of consultants that they are familiar with, therefore it is important for firms to have a good geographical spread in order to provide their services globally. Firms intending to internationalise could also capitalise on their existing relationships and their network of clients to gain access to the foreign market, rather than entering the market on their own. This will, therefore, provides them with firm-specific advantages over those that do not possess existing relationships with multinational clients.

Consulting engineering firms have also highlighted in the interviews that the internationalisation of their firms could also increase their market opportunities in the home country. The significant economic growth in Asia has created a pool of international investors who are interested to invest

in the UK market. International consulting engineers with good international reputation and coverage will be able to capitalise on their existing network of foreign clients and to provide the services required by foreign clients in the home country market. In this instance, internationalisation has not only provided firms with market opportunities in foreign markets, but it has also enhanced the market opportunities of firms within their home country.

The findings from interviews have also indicated that smaller firms tend to deploy the “following the client” strategy when investing abroad and grow their international offices organically in a longer term. This strategy is perceived by smaller firms as a lower risk approach to internationalisation, by ensuring the work is already available prior to the internationalisation of their firms.

The proactive strategy (as discussed in Bagchi-Sen and Kuechler, 2000; Erramilli, 1990; Erramilli and Rao, 1990) emphasises that firms can create long-term competitive advantages by actively seeking new markets and clients. During the economic downturn (for example during the 2009 UK recession), professional services firms are being driven from the more-established home market into international arena due to the limited opportunities in the home market.

Interviews with top consulting engineering firms have revealed that strong competitions and the limited opportunity in the home market, coupled with the high demand in other regions for their skills have driven them to find new markets and clients. The top management sees overseas expansion as an essential part of the growth strategy of their firms. The home market has become saturated, and internationalisation enables firms to increase their market shares and turnovers. Large consulting engineering firms, which has access to funding and a bigger pool of resources, are taking proactive strategy in gaining their international market shares. They tend to acquire other firms or to create joint-venture with reputable and well-performed local firms to gain swift access to the targeted foreign market to increase their market share. This is due to larger firms have access to larger amount of fundings in comparison to smaller firms, and it is more likely that they will have the capacity to absorb the risks which arise from their international activities.

ii) Efficiency seeking

Firms internalise their markets in order to maximise rents from their ownership advantages (Buckley and Casson, 1976). Internalisation provides firms with the advantages of controlling and coordinating the resources owned by firms internally, rather than outsourcing their activities to external parties.

Firms were asked in the questionnaires to rate the importance of “profitability” in influencing the decision of firms to internalise their operations.

Profitability

Table 5.3: Likert-scale analysis of influence of profitability on internationalisation decisions.

Profitability					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	6	3	8	7
Weighted score	1	12	9	32	35
No. of correspondents, N=	25				
Summation of all weighted score, S=	89				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	2.05	At 0.01 level, p= 0.0202 <0.05 therefore the Profitability factor is significant			

The analysis indicates that the Z score of 2.05 is significant at .01 level and the value of S= 89 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires research have indicated that the profitability of firms is an important factor in influencing the decision to internalise their operations.

The findings from the interview indicate that one of the key reasons for large consulting engineering firms to expand internationally is for efficiency enhancement. Internationalisation provides firms with a higher degree of human assets fluidity and efficiency within the firm in comparison to domestic firms, in the form of:

a) Cost efficiency

Firms are able to perform a value-chain activity at a lower cost by establishing its own international design production offices in lower cost regions. This has, therefore, provided

firms with specific advantages to compete more efficiently against their competitors and to enhance their overall financial performance. Firms will also achieve a greater level of design production resilience by having its own centralised production offices in lower cost regions to eliminate the risk of under-performance by external parties.

Internationalisation provides large consulting engineering firms with the opportunities to capitalise on the economies of scale and scope. For examples, firms could achieve cost efficiencies by reducing the size of their design offices in higher cost regions and replaced them partly with “shared” design production offices in lower cost regions. Similarly, the “common or shared” services approach can be applied to the human resources management and research and development activities of firms to reduce the operation cost.

b) Resources fluidity and workload resilience

International presence provides firms with a higher degree of workload resilience and resources fluidity. As previously discussed in chapter 3, one of the key features of consulting engineering activities is that the demand for their services is usually ad-hoc and is project-based, which means there are a greater fluctuation and uncertainty in terms of its workload. Due to the different economic cycles in different world regions, firms with international offices have the flexibility of moving works around different world regions to improve on their resources and cost management, therefore providing firms with a higher degree of resilience during the economic downturn. For example, during 2009 economic downturn in the UK, large consulting engineering firms have moved some of their design productions from less-affected regions, such as the Middle East and Asia, back to the UK, and this has helped in reducing the impact of the economic downturn on their home country offices.

Internalisation provides firms with greater options and opportunities for enhancing the efficiency of their operations, therefore providing them with financial advantages in comparison to domestic competitors.

iii) Strategic asset seeking

Strategic asset seeking foreign direct investment relies on the intellectual capital of firms being located in more than one country, and that it is economically preferable for firms to acquire or create these assets outside, rather than within, their home countries (Dunning and Lundan, 2008).

According to Resource-based Theory, firms can gain competitive advantages by possessing unique strategic resources that are inimitable and non-substitutable. The accumulation of tangible and intangible resources will help firms to gain sustainable competitive advantages to ensure the uniqueness of their firms against other competitors. This includes the firm-specific resources, capabilities, competencies, and access to markets (Barney, 1991; Barney et al., 2001; Peng, 2001; Teece, 2009). Knowledge and valuable experience are seen as firm-specific valuable assets that is hard for others to imitate, and is a factor which will distinguish the winner from the loser or mere survivors in global competition (Peng, 2001). Child et al. (2005) explained that strategic resources are complex, tacit and difficult to record and are embedded in and dispersed throughout the organisation. Such capabilities are also subject to adaptation through evolutionary processes. Therefore, the organisation must be able to upgrade its resource and capability base both internally and externally as its environment changes. Static, unchanging competencies will eventually lose their relevance and stop generating advantages.

Internationalisation provides consulting engineering firms with the opportunities to explore and obtain different kinds of expertise and resources from other world regions. With a bigger pool of expertise to draw from, firms are able to develop firm-specific strategic assets and technical advantages to ensure the uniqueness of their firms and to distinguish themselves from their competitors. Strategic-assets and technical advantages also provide intangible benefits to firms with regards to their technical reputation. Firms with high technical expertise and large international footprint are more likely to attract the best people to work for them globally. This, in return, will enhance their firm-specific advantages even further.

iv) Ownership advantages

According to Dunning (1988), one of the conditions of international production is that it must be in the best interests of enterprises that possess ownership-specific advantages to transfer them across national boundaries within their own organisations, rather than to sell them, or their right of use, to foreign-based enterprises. In certain situation, internationalisation can be part of the firm’s strategy to protect or enhance its existing ownership advantages and to reduce those of their competitors. Firms were asked in the questionnaires the importance of internationalisation in enhancing their ‘reputation’.

Table 5.4: Likert-scale analysis of influence of reputation on internationalisation decisions.

Reputation					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	1	3	13	7
Weighted score	1	2	9	52	35
No. of correspondents, N=	25				
Summation of all weighted score, S=	99				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	3.46	At 0.01 level, p= 0.0003, <0.05 therefore the Reputation factor is significant			

The analysis indicates that the Z score of 3.46 is significant at .01 level and the value of S= 99 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires research have indicated that overseas presence is important in increasing the reputation of firms.

Interviews carried out with top consulting engineering firms have indicated that involvements in international projects have provided them with the learning opportunities to gain different types of experiences and skills, which has enhanced their ownership-advantages over their competitors. Firms have the opportunities to build their reputations by involving in major international projects, and this will provide them with firm-specific advantages over their competitors in securing future works.

Internationalisation also provides firms with the advantages of controlling and coordinating the resources owned by them internally, rather than outsourcing to external parties. The “internalisation” of activities will not only provide firms with the cost efficiency but will also prevent

the intellectual property of firms from imitation by external parties, therefore protecting the ownership-advantages of firms.

Consulting engineering firms usually adopt a collaborative working arrangement between the home country and host country offices when working on large international projects with high demand for resources and technical expertise. The collaborative working arrangement between international and home country offices allows firms to transfer their technical expertise between the two offices, and this will help in fostering the culture of collaborative learning in the longer term.

5.3.3 International Competitiveness

When operating in a global industry, firms must compete globally to gain competitive advantages over their competitors. The Market-power Theory explained that firms can improve their competitive success by securing stronger positions in their markets. The perceived competitive positions of firms will affect their strategies for growth. Porter (1980) (as cited in Child et al., 2005) argued that the relative position that firms occupy within their industry's structure determines the generic strategies that are the most viable and profitable for them.

Firms were asked in the questionnaires the importance of internationalisation in enhancing the brand image of firms.

Table 5.5: Likert-scale analysis of influence of brand image on internationalisation decisions.

Brand image					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	1	3	9	11
Weighted score	0	2	9	36	55
No. of correspondents, N=	24				
Summation of all weighted score, S=	102				
The expectationn of S, E(S)=	72				
Variance, Var (S)=	48				
z score=	4.40	At 0.01 level, $p < 0.00003$, < 0.05 therefore the Brand Image factor is significant			

The analysis indicates that the Z score of 4.40 is significant at .01 level and the value of S= 102 is significantly greater than the expected value of E(S) = 72. Therefore, firms participated in the

questionnaires research have indicated that overseas presence is important in increasing the brand image of firms.

Operating on a global scale provides consulting engineering firms with a host of tangible (the revenues) and intangible benefits. Firms can derive their intangible benefits from leveraging their global brands, the ability to provide exclusive global offerings for their clients and the knowledge and experience acquired from international projects involvement. The brand or reputation advantages- the “track record of being superb”, can provide firms with competitive advantages even in unfamiliar markets. The findings from interviews have indicated that it is important for firms to be internationally-recognised and to have the international credibility. Working internationally with signature architects and global clients provides firms with international portfolios and brand building opportunities. Aronson (2007), in his research on the upsurge in mergers of services firms, has provided a similar argument, where he rejected the popular claim that internationalisation of firms is simply a response to their client’s demand for global service delivery or ‘one-stop shopping’. He argued that the intensified competition between firms and the difficulty in measuring the quality of services means professional services firms have to compete on the basis of reputation.

One of the reasons for consulting engineering firms to expand globally is to protect or strengthen their international market position over their major competitors. Having a superior position and a prominent market share in the international market is important in gaining the client’s confidence. This will also provide firms with the advantage of scale especially when they are competing with other international firms in bidding for major international projects. This is consistent with existing literature by Knickerbocker (1973), Flowers (1976), Graham (1978) (as cited in Li and Guisinger, 1992), which have suggested that large MNEs often adopt a “follow the leader” or “exchange of threats” in their foreign investment strategy in order to secure competitive advantages over their competitors or as a defence strategy against their competitors. The “Industry-based view” argued that the right positioning of firms in the industry leads to their competitive advantages (Krull et al., 2012).

Internationalisation also provides consulting engineering firms with the access to different types of expertise from other world regions, and it is an effective strategy for firms to gain or secure their international competitiveness. This is consistent with Inkpen and Ramaswamy's (2005) argument that gaining access to knowledge outside the home country is often a strategic necessity for survival in the knowledge-based industry.

5.3.4 International Diversification

Financial data analysis of the top UK based consulting engineering firms (as previously discussed in chapter 3) indicates that consulting engineering firms are increasingly diversifying across the national border, with approximately 55% of firms have over 50% of their total revenues generated from overseas revenues. Therefore, what are the underlying internal and external stimuli factors that have encouraged firms to diversify internationally?

Interviews with the executives of top consulting engineering firms have revealed that the main reason for cross-border investment is for risk diversification and mitigation. Firms have perceived that the benefit of international diversification outweighs the risk. This is consistent with Rugman's Risk Diversification Theory (1979), which has suggested that MNEs will normally prefer to geographically spread the portfolio of their foreign investments rather than concentrating their investments in one region. Firms have perceived that risk can be mitigated by having a good geographical spread of upstream and downstream arrangement.

International investments, in particular, may provide options for firms to deal favourably with unanticipated future environmental changes that would otherwise pose considerable risk (Sanchez, 1993, 1995). Consulting engineering firms perceived internationalisation as a strong defensive strategy for generating revenues from a greater portfolio of markets and from different world regions. This will reduce the reliance of firms on a single market and will help to hedge against unforeseen events such as the economic downturn in the home country. A balanced and geographically well-spread portfolio of international investments will help firms in spreading the risk across different regions. International diversification provides firms with opportunities to capitalise on the different economic cycle in different world regions. For example, firms with offices in Asia

and Australasia were able to bring back work into the UK from countries with stronger growth, such as China and Australia, during the UK recession in 2009. This has helped in minimising the impact of the home country's economic condition on the performance and risk of firms and it has also provided firms with sustainable and stable revenues in the longer term.

Building from the Real Options Theory, networks of international investments of firms provide valuable options for addressing uncertainty in any given market (Allen and Pantzalis, 1996; Tang and Tikoo, 1999). The multinational investments of MNEs can be viewed as a collection of valuable options that permit the choice of moving activities from one country to another (Kogut and Kulatilaka, 1994). Consulting engineering firms are frequently faced with uncertainties of workload, owing to the cyclical nature of project availability and the ad-hoc demand of engineering services. By maintaining a diversified portfolio of international offices in different world regions, consulting engineering firms have the flexibility to compensate for the radical fluctuation of workload by moving work from one region to the other and adjust their operations in line with emerging conditions. In this situation, internationalisation has provided firms with the flexibility to coordinate multinational activities within a network of offices, therefore, enhancing the resilience and competitive advantages of firms over their competitors.

5.3.5 Growth Options and Future Growth

Growth is a means for achieving a higher firm's value and for guaranteeing the survival of the firm in the long term. The internationalisation of firms provides the opportunity for growth due to the deployment of its resources and capabilities in new areas (Canals, 1999).

Firms were asked in the questionnaire the importance of internationalisation in influencing the future growth of their firms. The analysis result indicates that the Z score of 5.59 is significant at .01 level and the value of $S = 114$ is significantly greater than the expected value of $E(S) = 75$. Therefore, firms participated in the questionnaires research have indicated that overseas presence is important in increasing the future growth of firms.

Table 5.6: Likert-scale analysis of influence of future growth on internationalisation decisions.

Future growth					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	0	3	5	17
Weighted score	0	0	9	20	85
No. of correspondents, N=	25				
Summation of all weighted score, S=	114				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	5.59	At 0.01 level, p<0.00003, <0.05 therefore the Future Growth factor is significant			

Findings from interviews with consulting engineering firms have indicated that firms perceived internationalisation as a natural progression for growth. In a globalised economy, internationalisation provides wider opportunities for firms. The growth will be limited to their home market if firms do not expand into the international market.

Corporate growth is unique and firm-specific (Geroski and Machin (1992)- as cited in Canals, 1999). Canals (1999) argued that corporate growth decisions and growth paths are influenced by external factors and the opportunities that its industry offers. Canals (1999) explained that it is the interaction of external opportunities and the internal context, such as the resources and capabilities that the company has been able to develop over time and some strategic decisions, that marks the firm's growth path in the future (Canals, 1999).

Kogut (1983, 1989) suggested that international firms have the options to tap into the growth opportunities in different countries, in which firms with only domestic operations cannot access. One of the main external stimuli factors which have encouraged the top UK based consulting engineering firms to grow into the international market is the limited opportunity in the home country. Firms are required to explore new markets in developing regions, and to follow the economic growth potentials in different regions to achieve a long-term sustainable growth. This finding accords well with Porter (1991) and Tong et al.'s (2008) arguments that the growth opportunities of firms are country-bound. The opportunities and constraints of firms are influenced by not only its firm-specific resources and capabilities, but is also affected by its proximate environment such as the geographic location and industry in which the firm is situated.

5.3.6 Optimum Size of Firm

Existing literature on the impact of the firm size on services firms (Ball and Tschoegl 1982; Terpstra and Yu 1988- as cited in Li and Guisinger, 1992) have shown that the firm size has a positive impact on the international behaviour of services industries such as in the banking and advertising sectors. Horst's (1972) (as cited in Tong et al., 2008) study on the relationship between the firm size and the decision of firms to invest abroad, has found that the firm size is a significant factor influencing the decision of firms to invest abroad.

One of the key findings from interviews with large consulting engineering firms is that internationalisation provides firms with opportunities to increase their firm size. Larger firm size provides firms with the scale advantage when it comes to international investments. For example, larger firms are more likely to have access to a larger amount of funding from their investors or from financial institutions and they also have bigger bases to absorb risks related to their international investments. These factors enable larger firms to make investments in high risk, unexplored markets to gain first-time mover advantages. This finding supports Kulatilaka and Perotti's (1998) study of strategic growth options, where under uncertainty and imperfect competition, firms that make early investments in a new market can gain a competitive advantage by pre-empting future growth opportunities.

The OLS analysis for the correlation between the total overseas revenue and the firm size can be found the OLS analysis section 5.6 of this chapter.

5.3.7 Summary of Qualitative Study

The following is a summary of our qualitative study on the importance of having an overseas presence (as reported above, sections 5.3.2 to 5.3.6), which tended to support our hypothesis:

Consulting engineering firms internationalise to gain tangible benefits (eg to increase their turnover, market share, profitability, overall performance), as well as to develop or gain firm-specific advantages (eg brand image, reputation, and future growth options).

Table 5.7: Summary of qualitative research analysis

The importance of having an overseas presence		
	Average scores	Likert-scale analysis Z-scores
Turnover	3.92	3.32 (p-value= 0.0005)
Market share	3.50	1.91 (p-value= 0.0281)
Profitability	3.54	2.05 (p-value= 0.0202)
Overall performance	3.92	3.18* (p-value= 0.0007)*
Brand image	4.26	4.40 (p-value= 0.00003)
Reputation	3.96	3.46 (p-value= 0.0003)
Future growth	4.58	5.59 (p-value= 0.00003)

* Refer to table 5.15 in section 5.6.2 of this chapter for the Likert-scale analysis.

Source: tables 5.1 to 5.6.

5.4 Internationalisation Strategy

Internationalisation can be seen as a process where firms expanded beyond the home country's border in order to acquire new markets, resources and capabilities. Firms have a choice of entry modes during internationalisation, which includes international joint ventures, merger and acquisition and foreign direct investment (greenfield start-ups).

The literature suggests entry mode choice is contingent on a range of factors including the level of ownership or control, the level of commitment, firm size, the level of risk, international experience, market size, psychic distance and the nature of local market and competition (Rosenbaum and Madsen, 2012; Hsieh et al., 2010; Madhok, 1996). Entry mode choice is also dependent on whether the firm has a short or long-term commitment to a specific market and the potential opportunities offered by that specific market. For example, the choice of strategy may be affected by whether it is a one-off decision made afresh every time an opportunity for international investment arises (i.e. on a project-by-project basis), or it may be based on a longer-term commitment to a specific market due to the future potential the market offers.

International business scholars such as Contractor et al. (2003), Lu and Beamish (2004) and Abdelzaher (2012) argued that professional services firms are more likely to follow a more cautious internationalisation process and it is the unique features of professional services firm that have prevented their otherwise expected rapid expansion. There are other researchers, on the other hand, argued that mergers and acquisition have become the recent trend for international expansion (Aronson, 2007; Baxter, 2010) (as cited in Brock, 2012). The requirement of firms towards size and critical mass has made greenfield entry strategy less feasible. Firms, have instead, favour merger and acquisition which provides them with instant access to the targeted markets and resources (Brock, 2012).

Entry mode choice is also dependent on the degree of controls required by firms, where entry modes with a higher degree of control will provide a higher degree of safeguards against partner's opportunism (Oxley, 1997, 1999; Williamson, 1985). Rosenbaum and Madsen (2012) explained in their research on the foreign entry mode choice of professional services firms that, firms prefer high control entry modes when there are high external uncertainties, such as when partnering with

unfamiliar firms and when the services delivered involve a high degree of tacit knowledge. Erramilli and Rao (1993) observed that firms have a lower tendency to share the control of their foreign operation if it involves high-intensity capital investment.

Experiential knowledge also plays a key part in influencing the entry mode choice of firms. Erramilli (1991) postulated a U-shape relationship between the experiential knowledge and the tendency of firms in adopting high control entry modes during internationalisation. Daniels, Ogram and Radebaugh (1976) and Shetty (1979) (as cited in Erikson, Johanson, Majkgard and Deo Sharma, 1997) reported a shift toward licensing and joint ventures as the experiential knowledge of firms grew. Davidson and McFetridge (1985) and Hedlund and Kverneland (1985) (as cited in Erikson, Johanson, Majkgard and Deo Sharma, 1997) showed a decrease in the reliance on wholly-owned subsidiaries as the foreign experience of firms increases.

Existing literature by Buckley and Casson (1996) (in figure 5.4 below) summarised the factors affecting the strategic choice of firms during internationalisation, such as the market size, pace of technological change, rate of interest, cultural distance, protection of independence, missing patent rights, economies of scope and technological uncertainty.

Figure 5.4: The impact of key explanatory factors on strategic choice of firms

Explanatory Factor	Notation	Strategy		
		Licensing	IJV	Merger
Market size	<i>x</i>	-	X	+
Pace of technological change	<i>f</i>	+	X	-
Rate of interest	<i>r</i>	+	X	-
Cultural distance	<i>d</i>	+	?	?
Protection of independence	<i>n</i>	+	+	-
Missing patent rights	<i>p</i>	-	+	+
Economies of scope	<i>s</i>	+	-	-
Technological uncertainty	<i>t</i>	-	+	+

Note: X indicates positive at a low value and negative at a high value.

Source: Buckley and Casson (1996).

One of the key findings from interviews with top consulting engineering firms is that the entry mode choice and internationalisation strategy of firms are influenced by the nature of the services offered

and the market and the client it is targeting. Many global markets are sensitive and saturated, therefore creating a niche and a bespoke identity and strategy is vitally important for the success of firms.

5.4.1 Internationalisation Mode Choice

Consulting engineering firms were asked in the questionnaires to provide information on the entry mode choice of their international investments. Firms were asked to provide information about the numbers of acquisitions, joint ventures and foreign direct investments that they have carried in the past, and the information collected from firms is presented in figure 5.5 below.

Figure 5.5: The entry mode choice of the top UK based international consulting engineering firms.

Company reference	Turnover (2011), £(M)	No. of Acquisition	% Acquisition of overall international investment	No. of Joint Venture	% Joint venture of overall international investment	No. of Foreign Direct Investment	% FDI of overall international investment	Total no. of international investment
1	1564.300	20	33.33	20	33.33	20	33.33	60
2	966.427	0	0.00	5	33.33	10	66.67	15
3	928.011	0	0.00	4	100.00	0	0.00	4
4	208.306	5	50.00	5	50.00	0	0.00	10
5	204.326	8	32.00	2	8.00	15	60.00	25
6	174.634	3	37.50	2	25.00	3	37.50	8
7	139.864	2	25.00	4	50.00	2	25.00	8
8	55.038	3	30.00	6	60.00	1	10.00	10
9	48.400	10	66.67	5	33.33	0	0.00	15
10	31.455	1	50.00	1	50.00	0	0.00	2
11	23.836	0	0.00	0	0.00	5	100.00	5
12	22.237	3	25.00	0	0.00	9	75.00	12
13	17.658	1	25.00	1	25.00	2	50.00	4
14	15.746	2	18.18	3	27.27	6	54.55	11
15	14.245	0	0.00	1	100.00	0	0.00	1
16	6.551	11	52.38	10	47.62	0	0.00	21
Total		69		69		73		

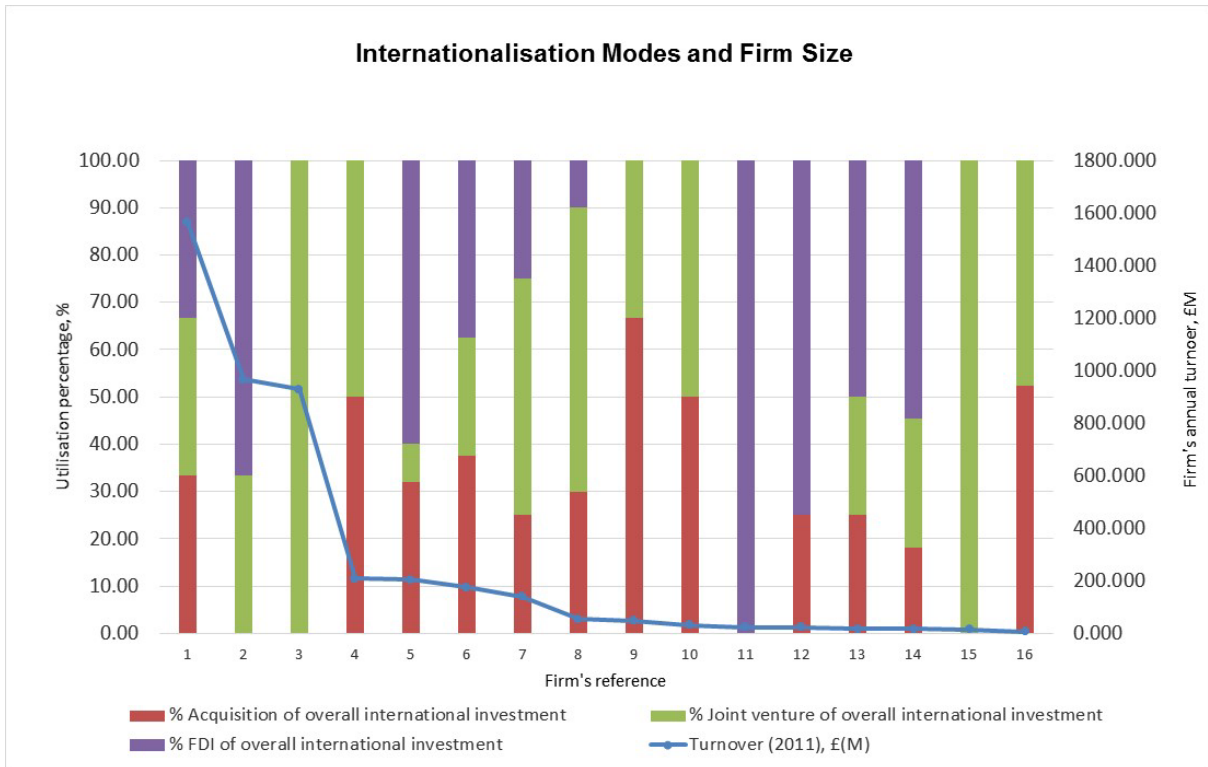


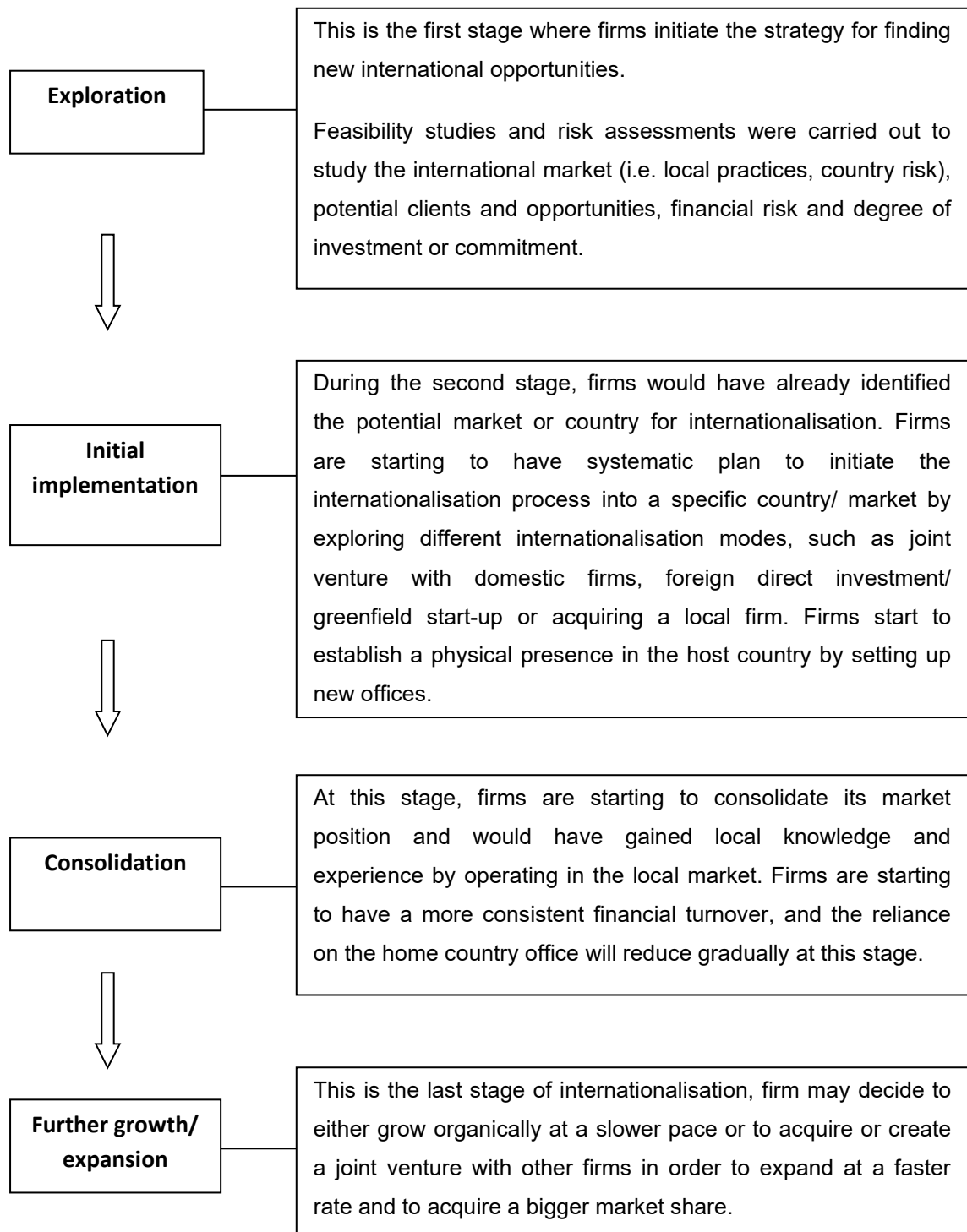
Figure 5.5 shows the percentages of different internationalisation entry modes adopted by firms and their firm size (measured as the total turnover of the firm). The analysis indicates that foreign direct investment is the most frequently used entry mode (73 in total), followed by acquisition and joint venture (both with a total of 69 each). The analysis shows that there is no consistent trend of the influence of the firm size and the entry mode choice of firms.

Interviews were then carried out with consulting engineering firms to gain an understanding of the internationalisation process of firms, factors affecting entry mode choice and the underlying reasons which may explain the findings from questionnaire analysis of entry mode choice of firms presented in figure 5.5. The findings from the interviews are explained in section 5.4.2 to 5.5.8 of this chapter.

5.4.2 Internationalisation Stages

Based on the interviews with consulting engineering firms, the internationalisation process of firms consists of four stages: exploration, initial implementation, consolidation and growth and expanding stage.

Figure 5.6: Internationalisation stages of firms.



Internationalisation strategy of firms could be either systematic or ad-hoc, and the entry mode choice of firms is influenced by both the external factors and the business needs of firms. The internationalisation stages as shown in figure 5.6, is based on firms adopting systematic internationalisation approach. The systematic approach of internationalisation of firms includes conducting formal strategic planning and market research, considering different countries and entry modes, developing risk management strategy and to obtain a long-term strategy for the international investment. However, there will be occasions where consulting engineering firms are required to adopt an ad-hoc internationalisation strategy. For instance, where a firm has to “move fast” in an internationalisation investment due to following an existing client or in a situation where a firm is faced with competition from competing firms and ad-hoc investment is required in order to protect the firm’s advantages. Therefore, ad-hoc international investment of firms could be a reactive strategy influenced by external factors, such as to secure its firm-specific advantages.

5.4.3 International Joint Venture (IJV)

Dunning (1993) defined cooperative alliance as cooperative relationships between firms, rather than market or hierarchical relationship, where each engages is complementary. Child et al. (2005) refer the cooperative strategy as the attempt by firms to realise their goal through cooperation with other firms rather than competing with each other. Cooperative alliance provides firms with the opportunities to have a pool of complementary strengths and to secure creative synergies between them.

The rationale behind the cooperative strategy is that it allows firms the opportunities to seek particular competencies or resources that they lacked, by securing the competencies through links with other firms. The cooperative alliance also makes it easier for firms to gain access to new markets, and to acquire opportunities for mutual learning and internalising of knowledge flow without incurring the full set-up costs of a merger (Buckley and Casson, 1996). For example, firms may gain access to the partner’s advanced technology and, or, to share the high cost of developing new technologies through research and development with the partnering firm.

Child et al. (2005) explained that cooperation with competitors may enhance a firm's position in the industry. It could be a defensive alliance against dominant firms, or an offensive alliance with stronger competitors to secure a better position in the industry. There are also scenarios, for example in some developing countries where partnering with local firms is the only possible ways of entering the market in the first instance. This section of the thesis discusses why and also in what situation would a firm adopt the IJV strategy when internationalising and what are the factors affecting the success of the IJV, such as the selection of JV partners, management and control, culture and organisational learning.

Motives for International Joint Venture

International joint venture (IJV) stems from the motives of firms to seek international presence and competitive advantages by working with other companies in foreign regions through cooperative arrangements. Child et al. (2005) and Kanter (1989) explained that alliances are partnerships between firms which are normally formed as a strategic response to major challenges or opportunities that the partners faced. There are three fundamental types of alliances:

- i. Multi-companies service consortia- normally this is formed by firms to achieve a large pool of resources to meet the requirement of large-scale activities.
- ii. Opportunistic alliances- this is the most unstable form of alliances where each partner supplies the competencies that the other lacks.
- iii. Stakeholder alliances- this normally refers to as a vertical alliance with companies at different parts of the value chain. For example, the supplier and producer complementary coalitions. This arrangement institutionalises previous interdependence, tends to be stable and are often quality or innovation driven.

From the interviews with consulting engineering firms, the followings have been highlighted by the top management as the key factors driving the IJV decision of firms. IJV provides firms with the following advantages over other forms of internationalisation strategies:

Internal stimuli factors for IJV:

- Economic advantages- partnering firms are able to share their resources and cost, to achieve economies of scale and to lower the transaction cost through vertical integration.
- Risk sharing- notably in terms of capital requirements, the opportunity to spread the financial risk between the partnering firms.
- Complementary alliance and resources dependency- sharing of technical or niche technical resources.
- Risk mitigation- IJV is predominantly project-specific and is usually based on short-term strategy. It provides partnering firms with opportunities for a swift withdrawal from the investment when required.
- Strategic advantages- to gain access to the partnering firm's specific assets such as:
 - To gain access to the new international market.
 - Learning and skills substitution- to gain additional resources, complementary skills and technical expertise.
- Geographical coverage- IJV provides firms with a wider geographical presence to achieve a stronger market presence.

External stimuli factors for IJV:

- The condition of the world economy- IJV reduces the capital investment of partnering firms in comparison to a wholly-owned arrangement, therefore reducing the financial risk of firms when there are turbulences in world markets and during high economic uncertainties.

- Local government policy and barrier in a foreign market- IJV provides firms with a quick entry into the market which is not able to be achieved by other means

The key findings from the interviews with consulting engineering firms are largely consistent with existing literature by Kogut (1989), Child et al. (2005) and Faulkner (1995), where the basic motivations for a joint venture are: (a) to achieve a lower transaction cost, (b) to gain a strategic position and enhance market power, (c) to gain additional resource and to acquire organisational learning opportunities and (d) to spread the financial risk. However, interviews with consulting engineering firms have also highlighted that the “country factor” has played an important role in influencing the IJV decision. IJV could be the only option for firms to access the local market due to the local government policy and investment restriction applied to foreign firms.

Economic Advantages

One of the key factors influencing the IJV decision of firms is the efficiency gains from the alliance. The efficiency criterion is in line with the Transaction Cost Theory, where companies will adopt the joint venture or alliance strategy if the transaction cost involved in doing so is perceived to be lower than other forms of strategic options.

There are two common motives for IJV arrangement carried out by consulting engineering firms:

1. Joint venture with similar size international or local competitors in order to access a local market or to bid for major international projects.
2. Joint venture with local firms with good technical skills in lower-cost developing countries to achieve cost efficiency in design production.

Kogut and Singh (1988) defined a joint venture as the pooling of assets in a common and separate organisation by two or more firms, who share joint-ownership and control over the use of these assets and the benefits arise from the cooperative arrangement. Based on the Transaction Cost Theory, firms may achieve greater efficiency and benefits through IJV due to economies of scale.

Firms may be able to minimise the cost of governing by sharing common assets and create unique assets which may not be available at a lower transaction cost.

Based on the Market Power Theory, firms may improve on their competitiveness through securing a stronger position in the market. A joint venture strategy may offer simultaneous advantages for cooperative firms to improve their positions within the market quicker than other strategies. For example, through IJV, consulting engineering firms are able to pull together a larger pool of resources (both technical and financial resources) to bid on large international projects. IJV enables firms to achieve sufficient critical mass to have a prominent position in the international market and provide a fast-track access to a certain market. This argument is also supported by the Increasing-returns Theory (as explained in Arthur 1989; Child et al., 2005; Bettis and Hitt, 1995), where firms are able to get a large share of the market early on to lock-in the customer and to dominate the market through IJV. The first mover advantage or early lead of firms in market share may be quickly magnified into a market dominance.

Efficiency-seeking IJV amongst consulting engineering firms in developing countries are becoming increasingly popular. Medium or small-scale consulting engineering firms, with limited resources in setting up an international production office, may consider a joint venture with local firms in developing countries to set up their production offices. Firms will, therefore, be able to capitalise on the lower wage resources in developing countries and reduce the cost of services production.

Consulting engineering firms have also highlighted that although the transaction cost would have an impact on the consideration for internationalisation entry mode choice, transaction cost on its own is insufficient in influencing the entry mode choice of firms. The transaction cost in IJV usually cannot be easily computed in detail before the IJV is made. Firms will usually take into consideration the intangible benefits of joint ventures, such as gaining fast-track access to a certain market, risk sharing or to acquire additional resources to improve on their market positions, when deciding on their internationalisation entry mode.

Risk Limitation

One of the significant factors leading towards a joint venture strategy, as opposed to acquisition, FDI and organic growth, is the requirement of firms to limit risk. Child et al. (2005) argued that globalisation and international economic uncertainties are stimuli for alliance formation. There are two main types of risks that consulting engineering firms were faced with when internationalising:

- Financial risk- risks associated with the financial investment of firms when internationalising.
- Operation and reputation risks- risks that arises due to insufficient local knowledge and experience when operating in the host country.

The spreading of the financial risk has been highlighted by Mariti and Smiley (1983), Porter and Fuller (1986)- as cited in Child et al. (2005), as the fundamental reasons for firms to form strategic alliances. Firms with limited financial resources may prefer to form strategic alliances with other firms to spread the financial risk. For example, by partnering with good local firms or with other international firms which are already operating in the host country, consulting engineering firms are able to reduce the overhead costs, therefore reduces the financial risk associated with their international investments.

Consulting engineering firms have highlighted in interviews that one of the main risks faced by firms when internationalising is having insufficient local knowledge and experience of operating in the market. This includes an insufficient understanding of the local client base, local institutional arrangement and local design standards. Cross-border collaborations with local firms allow them to develop vital knowledge and capabilities for their operations in foreign markets and to acquire knowledge about international markets. This reduces some of the risks related to the internationalisation process of firms and thus making the entry into the foreign market easier. This is supported by Child et al.'s (2005) argument that cross-border collaboration is likely to increase the chances of success of firms in foreign markets, and is directly and positively linked to the internationalisation of knowledge-based services firms. Knowledge-based services firms should be able to draw additional benefits from collaborations with local firms, such as their partner's greater

knowledge of the foreign market, language and culture, network and other factors, which will make entry into foreign market easier for firms, therefore increasing the likelihood of success. Firms are able to generate a strategy or to create resources that is adaptable to the local market and their clients' requirements when they have better knowledge of the foreign market.

IJV provides firms with the intangible benefits of capturing the local knowledge from local partnering firms, and this will speed up the learning process during the initial stages of internationalisation, therefore de-risking the internationalisation process.

Market Entry and Speed

One of the key motives of strategic alliance of firms is to gain quick access or entry to a new market. Interviews with consulting engineering firms have revealed that due to the cyclical nature of the economy in different world regions and the inconsistency of the availability of opportunities, consulting engineering firms may require to be a "hunter" (where firms bid for projects in a country and move on after completing the project), rather than to be a "farmer" involving in a longer-term investment when internationalising. The key advantages of IJV is that it is quicker to set up in comparison with other forms of internationalisation strategy, and is usually carried out on a project-by-project basis. Firms may gain fast-track access to new markets and to remove the local barriers by partnering with local firms. The fast-track entrance to the market may provide firms with the early mover advantage and lock-in potential customers to provide a surer route to success. This is supported by Faulkner's research findings (1995) where he claimed that the speed to market is an important factor leading towards the strategic alliance between firms. The internal development of firms such as FDI would take longer and acquisition would require a higher level of investment.

In a situation where the internationalising firm has a long-term investment strategy (rather than on a project-by-project basis), partnering with another firm with equal resources and competencies through a strategic alliance is perceived as a symbiosis process and the fastest means of achieving market presence for both firms.

Consulting engineering firms have also viewed IJV as a “transitory arrangement” in a situation where there is a lack of knowledge or understanding of a specific market, the absence of local network and when it is necessary for firms to cooperate with local firms in order to start working in the country (i.e. the local government’s restriction which makes IJV compulsory). In an IJV arrangement, collaboration with local partners provides firms with opportunities to learn about the market and to access the local network of clients. The IJV approach enables the firm to gain a wider and more diverse knowledge of a specific market and it is perceived by firms as a lower risk option, in comparison to the greenfield investment.

Emerging markets are clearly attractive for firms from developed economies, however, its business environment is usually complex and in-flux and is generally lack of well-developed legal systems. Consulting engineering firms have also highlighted in interviews that IJV is an attractive strategy for firms when internationalising into emerging economies due to the advantages offered by IJV as mentioned above. However, it is unclear as to whether the foreign partner would still prefer to cooperate with the local firm in the longer term, especially after they have absorbed the local firm into their global market. Equally, the local firm or government may decide to eliminate the reliance on foreign firms.

Learning, Resources and Expertise

One of the key reason for the cooperative alliance of firms is to gain additional resources at a quicker speed. There are two distinct rationales for firms to involve in a cooperative alliance with other firms: (a) skill substitution and (b) learning. The former aims at meeting a need in the short term, whereas learning aims to develop competencies for the longer term. A strategic alliance is generally formed because each party feels that there is inadequate skills or resources within the organisation and is willing to learn from each other. In the skills substitution arrangement, normally the stronger partner will take over a specific part of the joint venture, and there will be little learning between the two parties (Child et al., 2005).

Interviews with consulting engineering firms have highlighted that their firms have carried out IJV with other international firms predominantly on a project-by-project basis. Strategic joint ventures

were very often used to enlarge the pool of engineering talent required to deliver successfully technically complex projects. IJV or alliance provides firms with the opportunities to tap into their partner's knowledge assets without committing to a single market price or buying the partner in whole or part.

Real Options

Kogut (1991) described an equity joint venture (EJVs) as real options for firms 'to expand and acquire'. The argument for this statement is that when a firm is considering investing in a new market that is perceived as attractive but is unfamiliar to the investing firm, the firm is faced with a high level of uncertainties. A joint venture provides the firm with the opportunities to learn about the new technology, product, or market in a way that allows the entrant access to some share of the current revenue stream, but full access to developing knowledge about the putative investment, all for a fraction of the investment of a full acquisition. The capital saved can be used for further investment in the future when uncertainties are reduced or when the investment offers a more positive future outcome. If the joint venture investment fails to perform, the firm has the option of selling the share to a third party or the joint venture can be dissolved. This has, therefore, provided firms with greater flexibility than does either outright ownership or an alternative involving no equity stake (Buckley et al., 2004).

Consulting engineering firms have highlighted in the interviews that cooperative alliance can be seen as a real option for firms to learn more about the market with a relatively small amount of investment and without any major commitment. IJV with local firms has provided them with the opportunities to learn about the foreign market and as a preparation strategy for setting up their own offices in the future, at a lower level of investment in comparison to the greenfield investment or acquisition. IJV provides firms with the access to the local network of clients and the opportunities to understand the local institutional arrangement. Firms can then decide after a period of time and also based on the performance, whether to continue to invest in the host country or to move on to work on other international projects in a different country.

Factors affecting the Performance of IJV

Selection of Joint Venture Partners

A good strategic and cultural fit is important for ensuring the success of IJV. Similarities and equal strengths of the two joint venture parties will help in creating the synergy to the joint venture, which includes:

- Similar strengths and size between the two parties will reduce the risk of dominance by one party.
- A similar level of technical capacities and resources between the two parties will speed up the collaboration process or to create the synergy between them.
- Similar objectives between the two parties when embarking on the IJV.

Managing the Joint Venture- Corporate Governance, Controls and Mutual Learning

Consulting engineering firms have highlighted in interviews that based on their previous experience, carrying out an international joint venture is more challenging than a domestic joint venture. This is due to the fact that the joint venture firms have to operate in an unfamiliar international environment.

The key challenges for firms involved in international joint ventures include:

- Country risk- risks that arise from the lack of understanding of the host government's regulatory or institutional requirement.
- Cultural differences- the psychic distance between the home and host countries could affect the collaboration between the two joint venture parties.
- Financial risk- those that are related to security of investment due to working with the other party.

- Market risk- lack of opportunities due to the over-estimating of the market network of the other party.
- Risk of appropriation- risks that are related to the appropriation of the intellectual property by the other party.
- Management risk- risks that arise due to mismanagement of different parties in a situation where the IJV involves more than two parties.

Therefore, finding a reputable and reliable local partnering firm and exercising an appropriate level of control is important in mitigating the risk in an international joint venture. Child et al. (2005) defined corporate governance for a joint venture as “the process of control over and within a JV that aims to reduce risks to its owners and to ensure that its activities bring a stream of acceptable returns to those owners in the long term”. The control exercised in a joint venture are divided into three aspects:

- The degree of controls
- The extent of the activities
- The control strategy or mechanism

Child et al. (2005) argued that the extent of controls may depend on the informal practices of firms and is not necessarily based on its contractual and ownership rights. Cooperation between firms usually works best if both firms perceived that they have sufficient controls over the strategic direction of the alliance.

Firms interviewed have highlighted that the degree of control in an international joint venture is dependent on the following factors:

- Previous experience of working with the partnering firm- lower level of controls will be required if the partnering firms have already developed an appropriate level of trust in previous collaboration.

- The amount of investment involved- the higher the amount of investment, the higher the level of controls will be required to safeguard the investment.
- The level of risk of appropriation- a higher degree of control is required when the IJV involves activities which may compromise firm-specific advantages of firms, such as firm-specific intellectual properties.

It is important that the collaborative firms take into consideration both the 'strategic level' and 'operation level' requirements when deciding on the control strategy and extent of activities to be controlled. For example, in an international joint venture between an international consulting engineering firm with a high level of technical expertise and a local firm which is familiar with the local market, the international firm may want to have a higher level of control when it comes to strategic planning and direction of the IJV, whilst giving the local firm a higher level of controls for operation-related activities.

Apart from exercising a balanced level of controls, the mutual learning between the joint venture parties also plays an important role in creating value for the joint venture. An informal agreement to exercise mutual learning between the two collaborative parties (i.e. reduction of organisation barrier and openness of communication) at the beginning of the joint venture is important in ensuring successful learning between the two parties.

5.4.4 Merger and Acquisition

Kogut and Singh (1988) defined acquisition as “the purchase of stock in an already existing company in an amount sufficient to confer control”. Acquisition can be a strategic option for consolidation and reorganisation, as a vehicle for growth and could also be a form of cooperation strategy with other players in the industry (Faulkner et al., 2012).

Consulting engineering firms have indicated in interviews that gaining immediate access to a new market or opportunities is the main reason for firms to carry out acquisitions. Despite the increasing popularity of the merger and acquisition in recent years amongst larger firms, the majority of the firms interviewed have indicated that acquisition is a less preferred strategy in comparison to the joint venture or foreign direct investment due to the risk of integration failure and the risk of diluting the company’s culture post-merger. This is supported by several other research studies on post-merger of companies (King et al., 2004; Schoenberg, 2006; Zollo and Meier, 2008; Hitt et al., 2012) that acquiring firms create little or no value from M&A and most of the firms engaging in M&A activity did not achieve the sought-after performance target. This could be due to inappropriate selection of targets, the premium payment is too high, ineffective integration post-M&A and an inability to create synergy.

However, Hitt et al. (2012) argued that if the M&A target is selected appropriately and the acquisition is implemented effectively, it could achieve the synergy and create value for the firm. It is also not always economical for firms to add to the existing capacity in an industry when expanding overseas, and that for this reason, it is sometimes better for firms to make acquisitions instead. When a greenfield expansion is uneconomical, firms can gain strategic advantages by being the first to acquire a target facility (Buckley and Casson, 2009). Tsang and Yip (2007) have found that acquisitions have lower hazard rates than greenfield investments in developed countries.

Therefore, this section of the thesis reviews the motives of cross borders M&A of firms and factors affecting the performance of M&A, such as the effect of national and corporate cultures on M&A performance of consulting engineering firms.

Motives for Merger and Acquisition (M&A)

Cross-border M&A has become an increasingly common strategy adopted by firms to create value in a competitive global market. M&A provides firms with the advantage of economies of scale and scope and access to new knowledge and technologies. Existing literature have highlighted that the key motivations for firms to acquire target firms in foreign countries are: to increase market power, to enter new markets, to remove entry barriers and to increase its efficiency and to gain access to new knowledge and technologies (Brakman et al. 2008; Hitt et al. 2001- as cited in Hitt et al., 2012).

Consulting engineering firms have highlighted that the main factor for selecting acquisition or merger during internationalisation is the immediate benefits gained from the process, which includes:

- To gain immediate access to new markets.
- To create immediate financial gain- to create an immediate boost to the share price of public-listed firms in the stock market due to major acquisitions of firms abroad.
- To acquire new capabilities.
- To enhance the brand and reputation of firms.
- To enhance value creation of firms.
- To reduce the effect of country-specific factors, such as the psychic distance between the home and host country.

To Gain Immediate Access to New Markets and New Capabilities

Cross-border M&As provide firms with the immediate access to the market and the opportunities to acquire the knowledge of how to operate in a foreign market effectively, to exploit local business network and to discover unknown resources and services (Barney, 1991; Sirmon et al., 2007; Smit, 2001). Cross-border mergers and acquisitions are increasingly being used by professional services

firms to acquire new, readily available capabilities and to promote lateral movement of professionals, as part of their global capability-building strategy (Chen, 2008- as cited in Hitts, 2012). Based on the resource-based view, cross-border M&A provides firms the entry into foreign countries in order to acquire local resources (human resources, technology and local business networks) and to gain access to government officials (Barney, 1991; Sirmon et al., 2007).

Consulting engineering firms have indicated in the interviews that larger firms are likely to adopt acquisition as their international strategy when entering a new market or region. Acquisition enables the acquiring firm to immediately obtain a readily-available market, framework and skills by acquiring the targeting firm. Acquisition and mergers are usually carried out by larger firms and on a scale which is sufficient to create an immediate impact on their market entry and also to boost their companies' share prices.

Large consulting engineering firms have also perceived acquisition as a lower risk option in comparison to the other forms of internationalisation strategies, due to the readily-available market and skills obtained from the acquired firm. Acquisitions provide firms with the full authority to exercise its control on the acquired firm, and this eliminates the risk of conflicting of interests between parties which may happen in a joint venture investment. It also enables the acquiring firm to internalise its firm-specific assets and advantages, therefore reducing the risk of appropriation by local firms.

Smaller firms, however, have expressed concern about the risk involved in carrying out an acquisition due to a large amount of capital investment involved which could create significant financial risk for their firms. Smaller firms usually do not have sufficient financial backing or acquisition expertise to support a cross-border acquisition, therefore have perceived acquisition as a higher risk internationalisation strategy.

Brand and Reputation

One of the key factors for consulting engineering firms to internationalise is to increase its global reach and to build on its international reputation. Acquisition of a competing firm with good track

records in both international and local markets could create an immediate boost to the brand and reputation of the acquiring firm in the host region or country. For example, in the consulting engineering sector, different world regions tend to be dominated by different key players. Acquiring a key player in the region will provide the acquiring firm with the immediate domination of the market.

Value Creation

Hitt et al. (2001) and Vermeulen and Barkema (2001) argued that cross-border M&A could be an important strategy for firms to continuously create value and to compete in the fiercely competitive global market. Cross-border M&A represents the strong commitment of firms and is aimed at creating value in the long term, by expanding acquirers' knowledge base and resource (Hitt et al., 2012).

Despite the fact that large consulting engineering firms perceived acquisition as a lower risk option in comparison to the IJV or greenfield investment, they have also indicated that it is important that the targeting firm is selected carefully so that its culture, technical ability and operation model are aligned with the acquiring firm.

The differences in size and technical ability between the acquiring and acquired firms are likely to influence the value creation of the acquisition. If the targetted firm is too small or has a much lower technical capacity than the acquiring firm, the acquisition is unlikely to have an impact on value creation. The potential effect on value creation will increase when the size or technical capacities differences between the two parties are reduced. In contrast to the IJV (where similarities of firms will enhance the synergy of collaboration), if the acquiring and acquired firms are of similar size, there could be potential issues of integrations between the two parties, which could lead to value loss rather than value creation. Firms have also highlighted that previous acquisition experience is also an important factor in driving value creation post-acquisition due to the learning from previous acquisitions.

Country Factors

Consulting engineering firms have also highlighted that the host country institutional factors such as the political institutions, economic condition and regulations, has had an impact on their decision on internationalisation mode choice. Firms are more likely to carry out acquisitions or mergers when investing in developed countries with short psychic distance, and has a high level of political stability and transparency in the government institutional arrangement. For example, large consulting engineering firms have indicated that when entering a more mature and stable market such as North America, Western Europe, and Australia, acquisition or merger is likely to be their preferred entry mode. This is due to acquiring firms in a host country that has a short psychic distance and greater similarities with the home country will help to ease the integration post-acquisition, and therefore, the M&A is likely to be more successful.

Factors Affecting the Performance of M&A

There is an increasing number of cross-border acquisitions in the last two decades, owing to the rapid development of the global competitive landscape. A cross-border acquisition is complex, and it is challenging for firms to create the value desired from such acquisitions (Hitt et al., 2012). There are various factors affecting the performance of M&A, and they can be categorised into the pre-acquisition and post-acquisition stages. The key factors affecting the performance of firms at the pre-acquisition stage includes:

- The acquiring firm's acquisition capabilities and previous acquisition experience.
- The acquiring firm's prior performance.
- The method of payment for the M&A.

Factors affecting the performance of M&A at the post-acquisition stage includes:

- The differences in organisation and national cultures between the acquiring and acquired firms.

- The ability of the acquiring firms to integrate the targeting firm within its operating model.

The acquiring firm must be very careful in selecting targets, especially because of higher information asymmetry and they have to integrate the newly acquired firm quickly and effectively in order to enjoy the potential advantages the acquired firm affords (Hitt et al., 2012).

Difficulties in finding a suitable firm to acquire have been highlighted by large consulting engineering firms as one of the key challenges when it comes to acquisition. One of the top consulting engineering firms interviewed has indicated that acquisition could potentially dilute the firm's culture. The firm perceived its operation model as an integrated one, bolting on another organisation obtained through acquisition could cause friction within the organisation and create unforeseen latent risks.

The M&A strategy is less preferred by smaller consulting engineering firms when entering a new market and is perceived as a higher risk strategy when compared to the IJV or international alliances. The M&A strategy is also perceived by smaller consulting engineering firms as a long process which will take up a significant amount of their resources compare to FDI, and this could have a negative impact on their organisation performance.

5.4.5 Foreign Direct Investment (FDI)

FDI is a financial process where companies generate incomes from at least one country outside their home country. It is usually carried out by firms with the intent to have a sufficient level of ownership to ensure a partial or full control of the management of an organisation located outside the home country. FDI may involve the transfer of capital from the parent company to the foreign subsidiary which may not be easily reversible (Cohen, 2007).

The stylebook of the International Monetary Fund (IMF) and the Organisation for Economic Cooperation and Development (OECD) defined a foreign subsidiary as “an incorporated enterprise with a foreign investor having more than 50 percent equity ownership”.

FDI in Consulting Engineering Sectors

Based on the interviews with the top UK based international consulting engineering firms, FDIs in the consulting engineering sector can be outlined as follows:

- **Timescale and impact on performance.** FDI grows slower than the IJV and acquisition and does not normally provide an immediate impact on the performance of firms. Therefore, this strategy is less preferred by large public-listed consulting engineering firms where immediate performance boost is required to create an impact on their share prices.
- **Capital investment.** FDI usually starts with a moderate amount of investment and grows organically over a longer term. Smaller consulting engineering firms prefer FDI as their international strategy due to the smaller critical mass and lower financing requirement.
- **The speed of growth.** FDI tends to grow organically at a pace in which the parent company feels comfortable with, and is tailored to suit the requirement of the parent company. The foreign subsidiary is usually led by the senior management or personnel relocating from the home country to the host country.

- **Localisation.** The effective dissemination of the home country's culture in the newly-created foreign subsidiary is the key to a successful FDI investment. Resources are normally recruited locally to gain client's confidence through localisation.

FDI as an Organic Expansion Strategy

A total of 87% of the firms participated in interviews has confirmed that FDI is their main internationalisation strategy. FDI is an organic expansion strategy and is perceived by firms as a low risk and low capital investment strategy. The international office is usually set up due to following clients to work on major international projects. During the project delivery stage, firms could explore the new international market and decide whether there are sufficient opportunities for them to remain in the host country or region, once existing commissions have been completed.

During the start-up stage, the new international office is usually led by the senior management of the home country, with a good percentage of resources deployed from the home country. As the international office grows organically, the expat resources will then be replaced gradually with local resources.

The organic growth of FDI can be viewed as a real option which provides firms with the opportunity to expand at a rate which is comfortable to their parent companies, without committing a large amount of upfront investment or resources.

Flexibility and Cultural Fit

One of the key distinguishing features of greenfield FDI investment, when compared to the acquisition or IJV, is that it is established from scratch and does not come with established workers and practices (Slangen and Hennart, 2008). Interviews with large UK based international consulting engineering firms have revealed that non-public-listed consulting engineering firms tend to prefer the FDI in comparison to acquisition or IJV due to the flexibilities it offers. FDIs can be

created to suit the need and culture of the parent company and allow firms to grow at an acceptable pace.

Motives for Foreign Direct Investment

There are four main factors which motivate multinational corporations to carry out FDI (Dunning, 1993):

- i. Market seeking
- ii. Resources seeking
- iii. Efficiency seeking
- iv. Strategic asset seeking

Market seeking FDI

Consulting engineering firms have indicated in the interviews that non-public-listed consulting engineering firms tend to deploy FDI as their internationalisation strategy, instead of IJV or acquisition. This is due to the majority of the investments carried out by non-public-listed consulting engineering firms were considered on the basis of opportunities (opportunistic strategy) or to follow their existing clients to go abroad. In the situation where a foreign subsidiary was set up initially to follow its existing clients who invest abroad, the firm can decide in longer term whether to be a “hunter” (to leave the host country after the project is completed) or to be a “farmer” (to continue to operate and to find new opportunities in the host country). FDI is a slow, organic growth strategy and it is expected to take longer to establish in comparison to IJV or acquisition.

Instead of following their existing clients, firms may carry out geographically-focused, market-oriented FDI and expand into large growing markets such as China and India. Firms may set up small foreign offices to be closer to foreign clients and local networks and export the design work back to the home country. This will provide firms with the advantage of having a more diverse

range of markets with relatively modest investment, therefore, reducing their reliance on the home country market.

One of the reasons why FDI strategy is attractive to non-public-listed consulting engineering firm is that it involves smaller capital investment during the initial set up in comparison to IJV and acquisition. Similar to other knowledge-based services sectors, there is no requirement for consulting engineering firms to set up large-scale production facilities when internationalising into a foreign country, and the cost of FDI (for example, setting up or mobilisation cost for foreign office) is relatively low. However, a wholly-owned or majority-owned FDI may face unfavourable conditions from the host government when competing against local firms, for example, the host country government's restriction on foreign-owned subsidiaries bidding on government-funded projects, and discriminations due to local regulations.

Efficiency seeking FDI

The main focus of efficiency-seeking FDI in consulting engineering sector is about finding alternative locations for production to achieve cost-efficiency and this is more common amongst the big players in the sector. The geography focus for the efficiency-seeking FDI will be low-cost countries with abundant of skilled resources. For example, large consulting engineering firms have set up design production hubs in India for drawings and design calculation productions to serve their global offices in different world regions. This will provide firms with the transaction cost benefit and therefore, increasing their firm-specific advantages.

Strategic asset seeking FDI

The purpose of strategic asset seeking FDI is aimed at obtaining a specific skills set that is unavailable in the home country market to improve the firm-specific advantages of firms or to strengthen its position in the market. For example, consulting engineering firms set up offices in knowledge clusters in foreign countries with the aim to access the knowledge and transfer it back to the home country office to gain a specific knowledge or technical skills. This is consistent with

Cantwell and Piscitello (1997) findings, where multinational firms are increasingly engaging in FDI to gain particular knowledge sources at specific locations.

5.4.6 Other Forms of Internationalisation Modes

Virtual Presence: The Creation of a Regional Hub

Firms can deliver services internationally without setting a material presence in the host country with the creation of a regional hub. Resources can be flown in from the regional hub to work on a project in a specific country within the same region without setting a physical presence in the country. The regional hub strategy provides firms with a shared pool of regional resources and is a cost-effective way of managing the peaks and troughs of the workload in different countries within the same region.

Symbiosis Presence within the Wider Parent Company Group

Some of the consulting engineering firms interviewed have indicated that they are part of the wider parent company group. By “piggybacking” on the other groups within the same parent company, firms are able to set presence in the foreign region without having to commit to excessive setting up and mobilisation cost, and to share the experience of other groups and increase the speed of learning. This includes the shared-use of office premise, sharing of local business network and knowledge of local institution arrangement, regulations and understanding of local risks and practices.

5.5 Factors Affecting Internationalisation Strategies

Based on the information obtained from the qualitative study, the internationalisation strategy of consulting engineering firms is influenced by the following exogenous and endogenous factors.

The exogenous factors include:

- Foreign country government institutions' restrictions and regulations
- The differences in cultural background between the home and host country and the local requirement of the industry
- The potential requirement for firms to have a physical presence in the foreign country
- The foreign market size and potential
- The host country's risk profile

Endogenous factors are those mainly unique to the organisation, which includes:

- The future growth potential and growth options of firms
- Tangible and intangible benefits gained from the investment, such as market-seeking, cost-efficiency and ownership-advantages
- The speed of internationalisation
- The previous international experience of firms
- The parent company's firm size

5.5.1 Real Options and Growth Option Value

Consulting engineering firms have highlighted in interviews that international joint venture is perceived as a real option when internationalising in comparison to other forms of internationalisation strategy. Firms are faced with a high level of uncertainties when they invest in a new market that is perceived as attractive but is unfamiliar to them. Therefore, IJV with local firms

provides consulting engineering firms with the opportunities to learn about the foreign market, and as a preparation strategy for setting up their own offices in the future. IJV provides firms the access to a local network of clients and the opportunities to understand the local institutional arrangement. Once the local market network is established, and the investment has achieved a consistent performance of growth, firms could decide whether to set up their own office in the host country or to invest further in the joint venture investment. Therefore, IJV is perceived by consulting engineering firms as real options due to a greater level of flexibility and the learning opportunities that it offers in comparison to the acquisition or FDI, and at a fraction of the cost of a full acquisition or FDI investment.

5.5.2 Degree of Control and Cost Efficiency

Different types of entry modes can provide firms with a different degree of control for mitigating the risk of knowledge misappropriation (Contractor and Ra, 2002; Malhotra, 2003; Oxley, 1999). Existing literature on the entry mode choice of consulting engineering firms can be divided into two main streams. First, scholars tend to emphasise the distinct features of knowledge-intensive services where firms tend to seek a higher degree of control if the services provided are inseparable and require a high level of customisation (Patterson and Cicic, 1995; Philippe and Le'ó, 2011). Second, scholars focused on different types of entry modes available and the degree of controls associated with different types of entry modes (Bouquet et al., 2004; Malhotra, 2003; Sluyterman, 1998).

Consulting engineering firms have indicated in interviews that the acquisition or FDI is the preferred internationalisation strategy when their firms require a higher level of control over its investments. In a joint venture arrangement, a higher level of control is necessary when operating in situations where:

- Knowledge sharing is necessary to create the synergy or greater value in a collaborative arrangement, and there is a risk of appropriation of firm-specific knowledge by other parties.

- There is a high level of transactions or investments involved, or there is a high risk of opportunism by the collaborative parties.
- The firm is collaborating with unfamiliar parties where the level of trust is not yet established.

5.5.3 Effect of Host Government Policy

Existing literature by various scholars such as Eden and Miller (2004), Xu and Shenkar (2002) and Hitt et al. (2012) have indicated that regulatory, normative and institutional distance of the host country will have an effect on the entry mode choice of firms.

Interviews with large consulting engineering firms have revealed the followings as the two main factors affecting the entry mode choice of firms in relation to the host government policy:

- The host country's government restriction in limiting wholly-owned foreign investment- some foreign governments have applied a restriction on foreign firms, such that a firm which is wholly-owned by a foreign parent company is not permitted to submit a tender for government-funded investment projects. Therefore, finding a local sponsor, i.e. joint venture with a local firm, is necessary for firms to apply for the opportunity to work on the government's investment projects.
- Ease of entry to the country and in obtaining the work permit for expat- when operating in countries where firms are faced with difficulties in obtaining the work permit, a joint venture with local firms or M&A may be necessary for firms to establish a local base in a faster pace in comparison to FDI.

5.5.4 Speed and Timing Factors

Large consulting engineering firms have indicated in interviews that the speed of internationalisation is affected by the parent company's firm size, the availability of investment

capital, the motive of investment, market condition and opportunities, risk profile and the local government policy.

Consulting engineering firms have revealed that smaller firms tend to prefer using the sequential entry mode such as international joint venture or foreign direct investment (greenfield investment) due to it is quicker to set up an IJV or FDI in comparison to M&A and is usually carried out on a project-by-project basis. Firms may gain fast-track access to new markets and remove local barriers by partnering with local firms. Fast-track entrance to the market may provide firms with the early mover advantage and to lock-in potential customers to provide a surer route to success.

Firms have also viewed IJV as a transitory arrangement where there is a lack of knowledge or understanding of a specific market, the absence of local network and in a situation where it is necessary for firms to cooperate with local firms to start working in the country. IJV provides opportunities for firms to learn about the market and create local network before setting up their own subsidiaries and is perceived as a lower risk option in comparison to the greenfield investment.

In contrary, large public-listed consulting engineering firms have indicated in interviews that gaining immediate access to a new market or opportunities is the main reason for firms to carry out acquisitions. Larger firms are likely to adopt acquisition as their international strategy when entering a new market or region. Acquisition enables the acquiring firm to obtain immediately a readily available market, framework, and skills by acquiring the targeting firm. FDI grows at a slower pace in comparison to the acquisition and does not provide an immediate impact on the performance of firms. Firms have also indicated that it is important in a M&A that the targeting firm is selected carefully so that its culture, technical ability, and operation model are aligned with the acquiring firm.

Large consulting engineering firms also perceived acquisition as having a lower risk in comparison to other forms of internationalisation strategy due to the readily-available market and skills from the acquired firm. An acquisition provides the acquiring firm with the full authority to exercise its control on the acquired firm and, therefore, eliminates the risk of conflicting of interests between parties.

Smaller firms, however, have viewed the acquisition as a high-risk option due to the large capital investment involved and this could create significant financial risk for firms.

5.5.5 Cultural Distance and Entry Mode Choice

Existing literature on the impact of cultural distance (CD) on the entry mode choice of firms showed mixed-results. Erramilli and Rao (1993) and Boyacigiller (1990) in their research on services firms have found that there is a positive correlation between the CD and entry mode choice of firms, where a lower CD leads to a lower degree of control and vice versa. In contrary, Kogut and Singh (1988) and Kim and Hwang (1992) have found in their research of the manufacturing sector that firms preferred using entry mode with a low level of control when investing in countries with a high CD to their home country.

Cultural differences can happen either at the organisational or national level or both. Top management of consulting engineering firms have highlighted during interviews that the organisational cultural differences have influenced their entry mode choice during internationalisation. The impact of cultural differences between the host and home country is especially significant in the case of an acquisition. Firms are concerned about the difficulties in finding the organisational and culturally-fit targets and the risk of diluting the firm's culture at the post-acquisition phase. Firms, however, have indicated that the effect of cultural distance in a joint venture arrangement is more manageable in comparison to an acquisition. This is due to, by definition, that the joint venture is a separate entity to the parent company. Any negative impact due to the cultural friction will be contained within the joint venture investment, and it will have less of an impact on the parent company's organisation. Therefore, the joint venture strategy provides firms with an alternative solution for issues ensuing from an acquisition.

Consulting engineering firms have also highlighted in interviews that FDI resolves the issues related to organisation cultural differences. Greenfield wholly-owned investments avoid the post-merger or acquisition integration issues associated with M&A and also the issues of control and sharing of proprietary assets associated with joint venture investments. However, in a situation where the FDI involves a firm entering a new country or region, the firm will be faced with issues

generated by the national cultural differences, and it could suffer from the liability of foreignness. Therefore, it is likely for firms to carry out incremental FDI when investing in countries with large cultural distance, in order to facilitate experiential learnings. This is consistent with The Uppsala Model - the model of rational internationalisation (Johansson and Vahlne, 1977, 1997), where CD has shown to be influencing the timescale of expansion and experiential learning of firms. Firms will incrementally build their foreign operations in culturally-proximate countries and to expand outwards gradually. Joint venture and organic growth FDIs provide firms with options to gradually establish their presence in the host country.

5.5.6 The Influence of Market Size on Strategic Choice

The top management of large consulting engineering firms have indicated in interviews that firms are more likely to carry out acquisitions in developed or matured market such as in the North American region, in comparison to developing regions. This is due to the size of the readily-available market and the lower risk associated with developed countries. International joint venture or foreign direct investment is the preferred strategy when entering a new market in developing countries or markets which has a higher risk and psychic distance, such as in parts of the Asian region.

This is consistent with Buckley and Casson (1996) research findings on the influence of market size and volatility on the strategic choice of firms. Mergers are favoured by firms if the market size is large and the volatility is low (where the market is stable). IJVs are favoured by firms in a balanced situation where the market size is medium, and the volatility is moderate. Licencing is favoured by firms where the market size is low, and the volatility is high.

The impact of market size and volatility on strategic choice was summarized as shown in table 5.8 below.

Table 5.8: The impact of market size and volatility on the strategic choice of firms

	Volatility	
Market size	Low	High
High	Merger	IJV
Low	IJV	Licensing

Source: Buckley and Casson (1996).

5.5.7 The Influence of Experience on Strategic Choice

Based on interviews with large consulting engineering firms, the influence of previous experience on the strategic choice of firms can be divided into two main categories:

- First, are those related to the experience or capacity of firms in carrying out certain types of internationalisation strategy. For example, larger firms are more likely to have the experience or capacity in carrying out an acquisition in comparison to smaller firms due to the resources or capitals available. Therefore, the likelihood of selecting acquisition as an entry mode is higher amongst larger firms in comparison to smaller firms.
- Second, are those related to the outcomes of previous experience in carrying out certain types of internationalisation strategy. For example, a firm which has not been successful in previous acquisition may perceive it as a higher risk strategy due to its previous experience and may not have benefitted from learning from its previous experience.

Therefore, based on the scenarios mentioned above, it could be argued that the experience factors could have either a positive or negative impact on the entry mode choice of firms during internationalisation.

5.5.8 The Influence of Firm Size on Strategic Choice

Hymer (1960) (as cited in Tong et al., 2008) has emphasized the importance of the size of firm and the diversity of products. Within any industry the Hymer hypothesis seems most relevant since if only size matters, the reason any one firm within the industry decides to invest directly in foreign countries is to compete with the other oligopolists (Tong et al, 2008). Horst's (1972) (as cited in Tong et al., 2008) study on relationship between firm's size and the decision to invest abroad has found that firm size is a significant factor influencing the decision to invest abroad.

As previously discussed in section 5.4.1 of this chapter, the analysis of the data collected from questionnaires shows that there is no obvious indication of the influence of firm size on entry mode choice of firms. The top management of consulting engineering firms were then asked in the interviews whether their firm size has influenced their entry mode choice. Firms have indicated that their firm size has had an influence on their entry mode choice. For example, large public-listed consulting engineering firms have indicated that they would prefer to carry out acquisitions due to they have a "bigger base" that provides them with easy-access for capital and are able to absorb the risk associated with their acquisitions. On the other hand, non-public-listed large consulting engineering firms have indicated a preference for IJV and FDI due to the financial risk and lack of experience in operating in the international market. However, top management of firms have also indicated that the influence of firm size shall not be viewed in isolation from other factors. The entry mode choice of firms is affected by a range of endogenous and exogenous factors (as explained in earlier sections), including the parent company firm size. Firms have indicated that the firm size on its own is insufficient to influence their decision on entry mode choice.

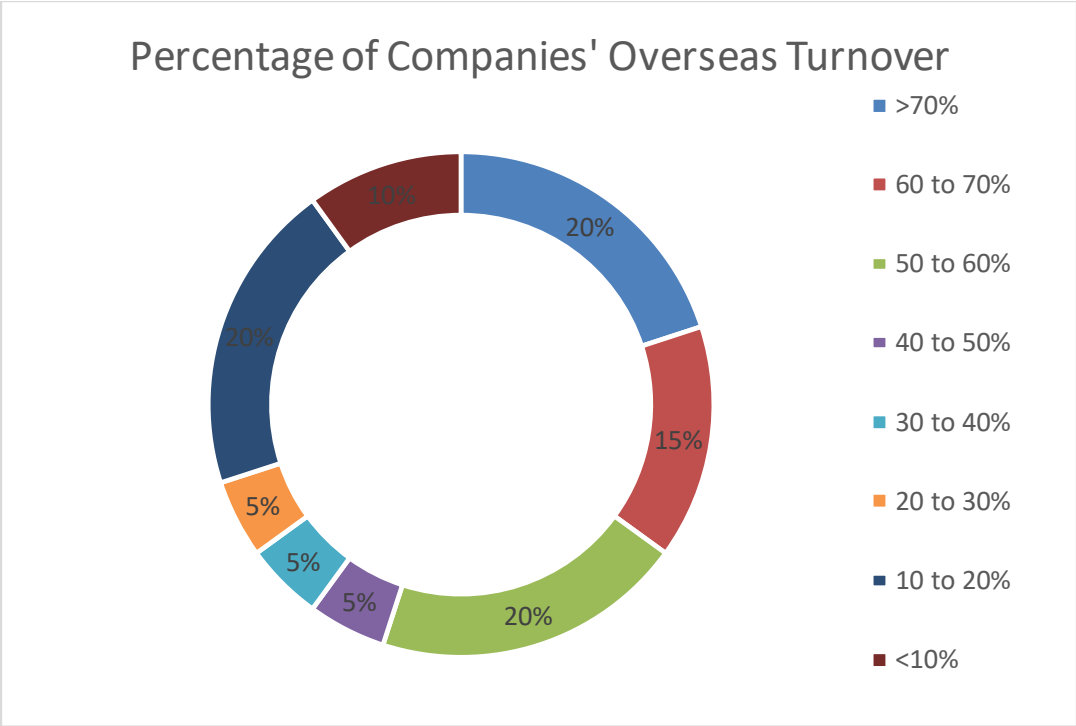
5.6 Internationalisation and Firm Performance, Firm Internationalisation and Economic Growth, and Internationalisation and Firm Size

The main aim of the quantitative and qualitative studies reported in this section is to investigate the effect of firms' internationalisation on their performance, and to consider the factors affecting the decision by firms to internationalise, as follows:

- Internationalisation and Firm Performance
- Internationalisation and Economic Growth
- Internationalisation and Firm Size

A review of the literature on - and theories regarding - the internationalisation of firms and their performance were reported in section 2.7.3 above. The International Diversification Theory postulates that a multinational firm has a lower systematic risk relative to similar domestic firms; Rugman (1979), Miller and Pras (1980) and Caves (1996) proposed that foreign operations have the effect of stabilising overall returns. According to the *State of Business Report 2010* published by the Association for Consultancy and Engineering (ACE) UK, a total of 44% of the consulting engineering firms surveyed indicated their business strategies were affected by the 2009 recession. The announcement of large fiscal stimulus packages on infrastructure projects in other countries encouraged consulting engineering firms to increase their investments in those markets to compensate for the UK's economic condition. As reported in section 3.2 above, our analysis of the top 20 UK based international consulting engineering firms indicates that 55% received over 50% of their revenues from overseas, and 65% received over 30% of revenues from overseas. This section reports the results of linear regressions used to test the association between the above variables using a dataset of 50 firms.

Figure 5.7: Overseas revenue of top 20 UK based consulting engineering firms, ranked by total revenue (2013).



5.6.1 Ordinary Least Square (OLS) Regression

OLS regressions were used to investigate the correlation between:

- i) Internationalisation and firm performance.
- ii) Internationalisation and UK and world economic growth.
- iii) Internationalisation and firm size.

Ordinary Least Square (OLS) regressions were carried out using STATA, based on the following financial data and explanatory variables:

Data

As reported in chapter 4 above (research design and methodology), a sample of 50 top consulting engineering firms was derived from the FAME database. The annual financial data (panel data) of firms from 2000 to 2010 were used for the fixed effect panel estimation. The sample is an unbalanced panel; the database was missing financial data for some firms in some periods, and the firms with too many periods of missing data were dropped. The available observations for each explanatory variable are reported in tables 5.10a & b.

Explanatory variables

The firm's profit after tax was used as a measure of performance, and overseas revenue was used to measure the firm's international investment. Other explanatory variables were the firm's total asset and liabilities, firm size (measured by number of staff), and the UK and world GDP growth, with a dummy variable for the global recession (year 2009 with global recession = 1; all other years without global recession = 0). The reason for the use of logs for profit after tax, total overseas revenue, and asset and liability of firms is that the data generation process for these variables is not linear, but exponential, so logs were used to transform the data into a linear form suitable for linear regression.

Table 5.9: Table of variables (definition and source).

Variables	Definition and Source of Data
LogPATax	Log of annual profit of firms after tax (1 unit = £1m) (Source: FAME database and firm's annual report)
LogTORev	Log of annual overseas revenue of firms (1 unit = £1m) (Source: FAME database and firm's annual report)
LogTAsset	Log of total assets of firms (1 unit = £1m) (Source: FAME database and firm's annual report)
LogTLiab	Log of total financial liabilities of firms (1 unit = £1m) (Source: FAME database and firm's annual report)
NoStaff	Firm size (measured by number of staff) (Source: firm's annual report)
UKGDP	UK's GDP growth rate (%) (Source: United Nations Conference on Trade and Development- UNCTAD statistic- UNCTADstat)
WGDP	The world's GDP growth rate (%) (Source: United Nations Conference on Trade and Development- UNCTAD statistic- UNCTADstat)
Glorec	Global recession (Year 2009 with global recession = 1; all other years without global recession = 0) (Source: United Nations Conference on Trade and Development- UNCTAD statistic- UNCTADstat World's GDP growth rate)

Descriptive Statistics

Descriptive statistics of the variables used in the OLS regression is summarised in tables 5.10a & b below. The summary table indicates the number of observations, along with the mean, standard deviation, and minimum and maximum values for each explanatory variable.

Table 5.10a: Summary statistics of explanatory variables

Variable	Obs	Mean	Std. Dev.	Min	Max
PATax	441	4.581	13.524	-128.342	102.300
TORev	297	55.603	103.005	0.014	590.476
TAsset	439	83.080	132.399	-37.463	874.300
TLiab	429	68.387	125.114	0.013	959.200
NoStaff	419	2017.296	3098.765	5	17047
UKGDP	528	1.788	2.258	-4.920	3.915
WGDP	528	2.976	1.759	-1.660	4.349
Glorece	528	0.091	0.288	0	1

Table 5.10b: Summary statistics of explanatory variables: with log values for total profit, overseas revenue, asset and liability variables.

Variable	Obs	Mean	Std. Dev.	Min	Max
LogPATax	371	0.864	1.531	-4.135	4.628
LogTORev	297	2.409	1.993	-4.269	6.381
LogTAsset	429	3.530	1.435	-4.343	6.773
LogTLiab	429	3.076	1.752	-4.343	6.866
NoStaff	419	2017.296	3098.765	5	17047
UKGDP	528	1.788	2.258	-4.920	3.915
WGDP	528	2.976	1.759	-1.660	4.349
Glorece	528	0.091	0.288	0	1

Correlation between Explanatory Variables

The correlation between explanatory variables is summarised in table 5.11 below. The numbers shown in the correlation matrix are Pearson correlation coefficients, ranging from -1 to 1.

Table 5.11: Correlation matrix for explanatory variables.

	LogPATax	LogTORev	LogTAsset	LogTLiab	NoStaff	UKGDP	WGDP	Glorec
LogPATax	1.000							
LogTORev	0.639	1.000						
LogTAsset	0.735	0.811	1.000					
LogTLiab	0.540	0.601	0.739	1.000				
NoStaff	0.635	0.703	0.774	0.631	1.000			
UKGDP	-0.158	-0.186	-0.164	-0.144	-0.101	1.000		
WGDP	-0.045	-0.119	-0.073	-0.074	-0.059	0.896	1.000	
Glorec	0.113	0.150	0.127	0.115	0.080	-0.941	-0.834	1.000

Internationalisation and Firm Performance

OLS regression equation

$$\text{LogPATax}_{it} = B_i + B_1 \text{LogTORev}_{it} + B_2 \text{LogTAsset}_{it} + B_3 \text{LogTLiab}_{it} + B_4 \text{NoStaff}_{it} + B_5 \text{UKGDP}_{it} + B_6 \text{WGDP}_{it} + \text{Glorec}_t + \varepsilon_{it}$$

(Equation
5.1)

OLS Regression Summary

A summary of the OLS regression results is presented in table 5.12 below, with standard errors (in parentheses) for each explanatory variable. The OLS analysis indicates that the variables are statistically significant ($\text{prob} > F = 0.0000$) and the regression model has explanatory power. The R-squared is 0.451, indicating that 45% of the variation is explained by the model. The Log total overseas revenue variable is significant at the 5% level, so the null hypothesis can be rejected. Thus, the relationship between the Log Profit after tax and the Log value of total overseas revenue is unlikely to be due to chance.

The OLS analysis indicates a positive correlation between the Log value of profit and the Log value of overseas revenues. Firms with higher overseas revenues tend to have higher post-tax profits, even when controlling for their size (measured by assets, liabilities, staff numbers), other trends in the economy (GDP, etc), and factors specific to each firm (eliminated by the fixed effects regression). The highest-performing firms are those most likely to be able to compete internationally, so it could be argued that firm performance drives internationalisation, or internationalisation drives firm performance. All we can say is there's a positive association between firm performance and internationalisation. We return to the question of causation in section 5.6.2.

Table 5.12: Summary of the OLS regression.

VARIABLES	(1) Model 1
LogTORev	0.195** (0.0822)
LogTAsset	0.857** (0.355)
LogTLiab	-0.394 (0.265)
NoStaff	0.000124*** (4.65e-05)
UKGDP	-0.225** (0.112)
WGDP	0.239*** (0.0765)
Glorec	-0.454 (0.525)
Constant	-1.985*** (0.656)
Observations	239
Number of companies	38
R-squared	0.451

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Firm Internationalisation, the Home Country and World Economic Growth

To examine what determines internationalisation, we considered the relation between the control variables:

OLS regression equation

$$\text{LogTORev}_{it} = B_0 + B_1 \text{LogTAsset}_{it} + B_2 \text{LogTLiab}_{it} + B_3 \text{NoStaff}_{it} + B_4 \text{UKGDP}_{it} + B_5 \text{WGDG}_{it} + \text{Glorec}_{it} + \varepsilon_{it}$$

*(Equation
5.2)*

OLS Regression Summary

A summary of the OLS regression is presented in table 5.13 below, with standard errors (in parentheses) for each explanatory variable. The OLS analysis indicates that the variables are statistically significant ($\text{prob} > F = 0.0000$) and the regression model has explanatory power. The R-squared is 0.565, indicating 57% of the variation is explained by the model. The UK and world GDP growth variables are significant at the 1% level, so the null hypothesis can be rejected. Thus, the relationships between the Log value of total overseas revenue and the UK and world GDP growth values are unlikely to be due to chance. The OLS analysis indicates there is a negative correlation between the Log value of total overseas revenue of firms and UK GDP growth, and a positive correlation between the Log value of total overseas revenue of firms and world GDP growth. The negative growth of UK GDP (less opportunity in home country) and positive growth of the world economy may have encouraged firms to explore opportunities overseas, thereby increasing their overseas revenue. Interviews were conducted with the top management of firms (reported in section 5.6.2 below) to explore this.

Table 5.13: Summary of the OLS regression.

VARIABLES	(1) Model 1
LogTAsset	0.366 (0.242)
LogTLiab	0.323* (0.187)
NoStaff	2.43e-05 (3.56e-05)
UKGDP	-0.331*** (0.0841)
WGDP	0.167*** (0.0581)
Glorec	-1.076*** (0.404)
Constant	0.00756 (0.465)
Observations	279
Number of companies	38
R-squared	0.565

Standard errors in parentheses

*** p<0.01, ** p<0.05, * p<0.1

Internationalisation and Firm Size

$$\text{LogTORev}_{it} = B_1 + B_1\text{NoStaff}_{it} + B_2\text{UKGDP}_{it} + B_3\text{WGDP}_{it} + \text{Glorec}_t + \epsilon_{it}$$

(Equation
5.3)

OLS Regression Summary

A summary of the OLS regression is presented in table 5.14 below, with standard errors (in parentheses) for each explanatory variable. The OLS analysis indicates that the variables are statistically significant (prob>F =0.0000) and the regression model has explanatory power. The R-squared is 0.453, indicating that 45% of the variations is explained by the model. The ‘no. of staff’ variable is significant at the 1% level, so the null hypothesis can be rejected. Thus, the relationships between the Log value of total overseas revenue and the number of staff is unlikely to be due to chance. The OLS analysis indicates a positive correlation between the Log value of total overseas revenue and the number of staff (a measure of firm size). Larger firms may have more capacity to bid for international work, so larger firm size may encourage internationalisation. Conversely, taking on international projects may generate greater profits, allowing the firm to employ more specialists and so raising staff numbers. Again, interviews were conducted with top management (as reported in section 5.6.2 below) to explore this.

Table 5.14: Summary of the OLS regression.

VARIABLES	(1) Model 1
NoStaff	0.000151*** (3.49e-05)
UKGDP	-0.616*** (0.0796)
WGDP	0.348*** (0.0578)
Glorec	-1.929*** (0.413)
Constant	2.208*** (0.180)
Observations	288
Number of companies	39
R-squared	0.453

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

5.6.2 Questionnaires and Interviews

Internationalisation and Firm Performance

Firms were asked in the questionnaires the importance of internationalisation in influencing the overall performance of their firms. The analysis result indicates that the Z score of 3.18 is significant at .01 level and the value of $S = 97$ is significantly greater than the expected value of $E(S) = 75$. Thus, for the firms returning the questionnaires, overseas presence is important in increasing performance.

Table 5.15: Likert-type Scale analysis of influence of overall performance on internationalisation decision.

Overall performance					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	1	8	9	7
Weighted score	0	2	24	36	35
No. of correspondents, N=	25				
Summation of all weighted score, S=	97				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	3.18	At 0.01 level, $p= 0.0007$, <0.05 therefore the Overall Performance factor is significant			

Interviews were conducted with the top UK based international consulting engineering firms where the top management were asked about the effect of internationalisation on the performance of their firms. All those interviewed reported that internationalisation had increased their firm's performance over the long term. Firms indicated that internationalisation provides their firms with avenues for growth, opportunities to gain firm-specific advantages (economic and technical advantages), and enhances their resilience against external competition and adverse economic conditions. The majority of firms interviewed highlighted the importance of international diversification in improving their firm's resilience in the face of economic risk. Due to the different economic cycles in different world regions, firms had been able to reduce the impact of the UK economic downturn by having a good spread of offices in different world regions. Large consulting engineering firms indicated it is important to get the ratio of home and overseas revenue right; some aimed to achieve a ratio of 50/50. The studies of the effect of internationalisation on the performance of firms using both the quantitative analysis (the OLS analysis of the financial data of firms) and the qualitative research

(questionnaire analyses and follow-up interviews) indicated consistent results, that the overall performance of firms is positively correlated to the degree of internationalisation.

The Effect of Home Country Economic Growth on Firm Internationalisation

Questionnaires were distributed to consulting engineering firms and the data collected were analysed using the Likert-type scale analysis. Follow-up interviews were then carried out with firms that had participated in the questionnaire research. Firms were asked in the questionnaires to rate whether the 2009 UK recession has increased or decreased the degree of internationalisation of their firms, with 1 as significantly decrease and 5 as significantly increase. The data collected from questionnaires were analysed using the Likert-type Scale Method based on a sample consisting of 24 respondents. The S score is obtained by summation across all the weighted categories. N is the numbers of respondents and r is the numbers of equally-spaced categories. V is the variance and Z score is calculated as:

$$Z = (S - (N(r+1))/2) / (\sqrt{N(r^2-1)/12})$$

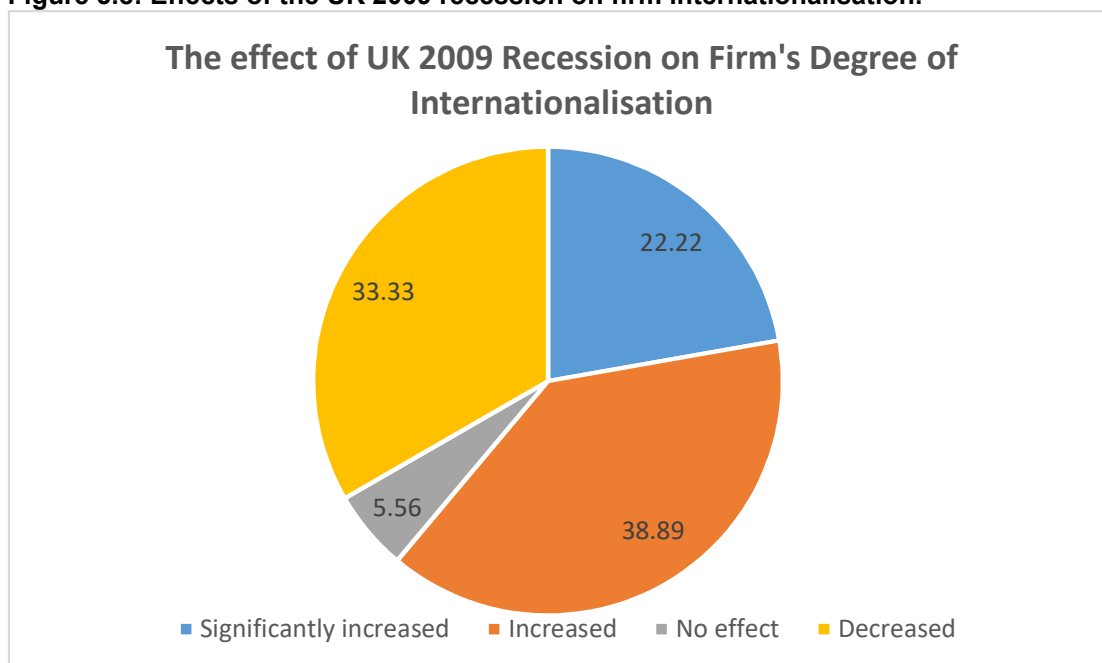
Table 5.16: The effect of the 2009 UK recession on degree of internationalisation.

Do you think whether the 2009 recession has increased or decreased the degree of internationalisation of your firm? (1= decreased, 5= increased)					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	3	5	7	9
Weighted score	0	6	15	28	45
No. of correspondents, N=	24				
Summation of all weighted score, S=	94				
The expectationn of S, E(S)=	72				
Variance, Var (S)=	48				
z score=	3.25	At 0.01 level, p= 0.0007 <0.05 = significant, therefore the 2009 recession has increased the degree of internationalisation			

The Z score of 3.25 is significant at .01 level and the value of S = 94 is significantly greater than the expected value of E(S) = 72. Thus, firms indicated that the 2009 recession had *increased* their degree of internationalisation. The findings from the qualitative research are consistent with the findings from the quantitative analysis. Consulting engineering firms indicated in interviews that the UK 2009 recession had an impact on both the short and long-term internationalisation strategy of their firms. The majority of the firms interviewed indicated that the recession increased or accelerated their international expansion in short term.

Figure 5.8 shows that 61% of the firms interviewed indicated that the 2009 UK recession increased the degree of internationalisation of their firms, with only 33% indicating it decreased the degree of internationalisation of their firms. Firms explained in the interviews that the UK recession increased competition, with fewer opportunities available, and this encouraged the top management of the firms to focus their attention on international markets. The lack of opportunity in the home market had driven firms to widen their involvement in the appropriate international markets and sectors quicker than they would have done otherwise. Firms which indicated a decrease in their firm's degree of internationalisation during the 2009 UK recession explained that the slowdown of their international expansion was due to lack of resources (both capital and human resources) as a result of the scaling back of their operation in the home country during recession. In this situation, rather than expanding their international operations, firms brought back international work to their UK offices. The recession also impacted on the long-term strategy of firms, with the majority of firms interviewed indicating that the recession encouraged them to place emphasis on the diversification of their business, ensuring that their business has a balanced and sustainable revenue from both the UK and foreign regions. A few of the top consulting engineering firms indicated that their firm's ultimate goal is to have over 50% of their total turnover being generated from outside the UK.

Figure 5.8: Effects of the UK 2009 recession on firm internationalisation.



Source: Findings from the interviews with consulting engineering firms.

The quantitative (OLS regression) and qualitative studies on internationalisation and firm performance and size, and the influence of home country and the world economy on internationalisation yield consistent findings, and support our proposed hypothesis.

5.7 The Effect of Internationalisation on Consulting Engineering Firms' Risk

Apart from measuring the impact of internationalisation on the performance of firms, this study has also examined the effect of internationalisation on the risk of firms. The majority of the consulting engineering firms participated in the interviews have indicated that the benefit of internationalisation outweighed not to internationalise. Internationalisation provides firms with the opportunity to achieve a balanced and diversified portfolio and reduces their reliance on a single market. Firms managed to create a wider and more diverse client base as a result of their international involvement, and this has provided them with the resilience to mitigate the risk arises from changes in the market and economic conditions. The Chief Finance Officer of one of the top international consulting engineering firms said:

'Business is international, people are international. The upside is so much more beneficial. Internationalisation is the way to go.'

The internationalisation process, however, on the other hand, has exposed firms to new risks that arise from their international operations. However, firms interviewed have perceived these risks as 'manageable' and the risk arises from not internationalising is perceived to be far greater than those that arise from the internationalisation process.

The top management of consulting engineering firms were asked in the interviews regarding the key risks that will affect their internationalisation investment decisions. The findings from the interviews can be summarised into five main categories:

- Political risk
- Financial risk
- Market risk
- Foreign exchange risk
- Reputation risk

5.7.1 Political Risk

The political risk (also referred to as environmental or country risk) incorporates factors influencing the stability of the host country's political, economic, and social environment, as well as its governmental actions pertaining to capital repatriation, credit and equity ownership restrictions, legal requirements, tax codes, laws for protection of patents, local personnel and product usage, bureaucratic procedures, etc.

According to Feinberg and Gupta (2009), the country risk and FDI are negatively associated, yet considerations such as the rapid economic growth and low production cost, are driving MNEs to significantly increase their FDI into high-risk countries.

All of the consulting engineering firms participated in the interviews have indicated that the political risk is the main risk factor affecting their decisions on investment location choice and their long-term investment strategy. This is mainly revolved around the issues of risks to personnel working in a high risk country and how the work could be delivered safely.

5.7.2 Financial Risk

Financial risk was ranked as one of the highest priority by consulting engineering firms participated in the interviews. The key considerations include:

- The predicted expenditure and profiles of returns from the foreign investment.
- The mobility of finance or asset- the ability to relocate the profit earned in a specific country back to the home country. For example, Brazil has a very inward working policy where foreign firms are faced with difficulties when it comes to relocating their earnings or assets back to their home country.
- The security of payment, such as issues related to late payments and the likelihood of getting paid by clients.
- Oppressive contracts and unfair conditions which may pose a financial risk to the firm.

5.7.3 Market Risk

Consulting engineering firms are faced with different types of market risk during internationalisation, and the risk is significantly affected by the level of understanding of firms about the market. The market risk includes:

- Lack of understanding of the foreign market condition- whether there is genuinely a market as envisaged and whether it is strategically the right place for investment.
- Lack of local network in the foreign market to provide the work opportunities.
- Competitions from local competitors.

5.7.4 Foreign Exchange Risk

Consulting engineering firms interviewed have indicated that the foreign exchange risk is one of the risk factors to be considered, however, it will not have the same degree of impact as the political or financial risks. One of the hedging or risk mitigation mechanism is that firms will express their preference to be paid in the home country or major currencies when working on overseas projects. Foreign exchange risk is lesser of an issue if the firm has local workforces where they are paid in local currency. This is consistent with Reeb et.al.'s (1998) research finding, where the exposures of firms to foreign exchange fluctuations will systematically increase the variation of foreign returns in domestic currency.

5.7.5 Reputational Risk

One of the key risk faced by consulting engineering firms when venturing into an unknown, immature market is the reputational risk. Firms have highlighted in the interviews that the biggest risk is not understanding the design standards or requirement in the local context and the local market requirement, which could lead to the damage to its reputation.

5.7.6 Other Challenges Faced by Consulting Engineering Firms when Internationalised

Liability of Foreignness

One of the key challenges faced by consulting engineering firms during internationalisation is the liability of foreignness, this includes:

- Lack of understanding of the local market.
- Lack of local networks or sponsors.
- Lack of understanding of local institutional, legal structures and regulations.
- Lack of understanding of the services deliverables.
- Lack of understanding of local cultures and languages.

International Resources

International resources mobilisation has been highlighted by consulting engineering firms as the key issue when setting up new offices abroad. Top management has highlighted that it is important for firms to arrange for the right leadership from the home country to set up the new operation abroad to increase the likelihood of success of their new subsidiaries.

The ACE State of Business Report (2011) has shown a very similar finding to this study, where the political and financial risks (late payments) are the two key issues faced by firms when working internationally.

5.8 How Firms Mitigate Risk When Working in High Risk Regions

Firms were asked in the interviews what are the measures that have been taken by their firms to mitigate the risk when investing in high-risk regions. The majority of the firms interviewed have indicated that a detailed assessment of the investment decision is required to be in place prior to investing in a high-risk region. Factors for consideration include the investment structures and entry mode, financial management and operation strategy.

5.8.1 Investment Structures and Entry Mode

One of the measures for firms to reduce their risk during internationalisation is to review the investment structure, the degree of investment and the short and long-term strategy for carrying out the international investment. Both the desktop research and local data collection are equally important for firms to understand the local market when working in a high risk or new market.

The majority of firms interviewed have indicated that a sensible level of investment is important when working in high-risk regions to reduce the overhead cost. During the initial stage, firms tend to avoid high setting-up cost by initialising their operations using resources from geographically proximate offices and increase their operation gradually in that specific country over a period of time. A similar strategy applies when firms are working in countries with high security risk, where firms prefer to utilise resources from geographically proximate offices rather than setting up a permanent office in that specific country. The main reason for such an arrangement is to reduce the duration and risk of personnel working in the country.

Some of the smaller consulting engineering firms with a smaller pool of resources, have indicated that subcontracting themselves to large consulting engineering firms or contractors have reduced their exposure to risk arising from foreign operations. This type of contracting structure allows the smaller firms to 'learn' from the larger firms and allows them to gain international market experience gradually.

As previously mentioned, partnering strategies such as international joint ventures with local firms or acquisitions of local firms, could provide firms with a quick access to the local market and mitigate the market risk. Firms have also adopted the 'following the client' strategy when it comes to working in a

high-risk country. Partnering with the client who has a global coverage and wealth of experience working internationally, will reduce the exposure of firms to risk associated with the liability of foreignness and ensuring a more consistent workload.

5.8.2 Financial Management Strategy

Consulting engineering firms highlighted in interviews that it is important for firms to have a good financial management strategy in place prior to investing in high-risk regions and also during its operation stage. Firms highlighted that one of the key issues of investing in high-risk regions is that there is a higher risk of not getting paid for the services provided. Therefore, it is important for firms to have a strict choice of clients where the client's reputation and background were assessed prior to the investment.

To mitigate the risk of not getting paid, firms request advanced payments to ensure projects are cash positive throughout. Some of the firms interviewed indicated that they are selective while working in high-risk regions, work only with their long-term clients in these regions.

When working in high risk developing countries where there is a higher risk of local currency fluctuation, firms have also expressed their preference to be paid in major currencies in order to mitigate the foreign exchange risk.

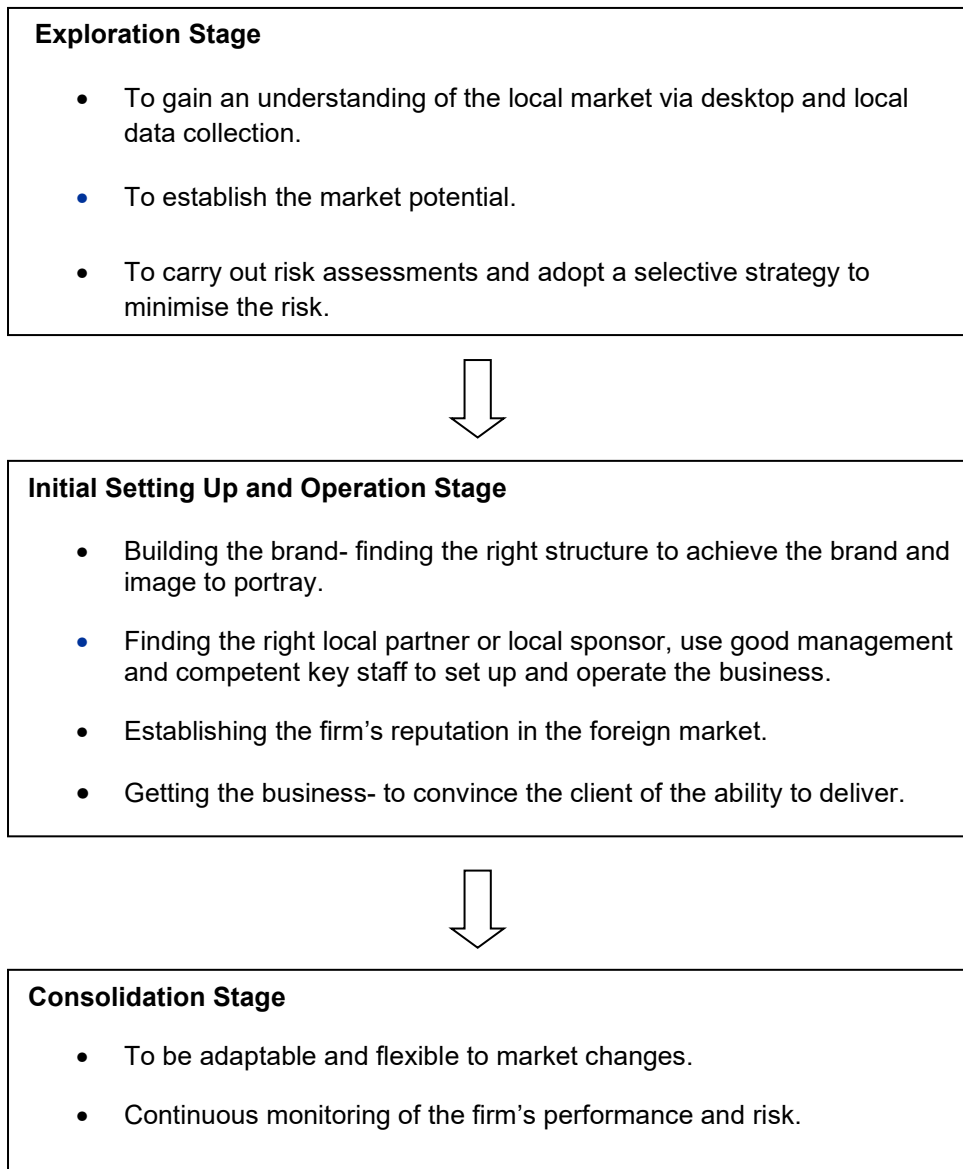
Centrally-funded financial support and help from the home country office in managing the new subsidiary and supporting it through difficult trading are crucial at the start-up stage of the foreign subsidiary. This will enable the foreign subsidiary to compete competitively with other firms in the market to gain new business and to develop a good client base.

5.8.3 Operational Strategy

The key concern for consulting engineering firms when operating in high-risk regions is the lack of understanding of the local market and the local business network. The followings are the key

operation strategies that firms have adopted to overcome the challenges of investing in high risk regions:

Figure 5.9: Risk mitigation measures of firms when working in high risk regions.



5.8.4 Quantitative and Qualitative Analyses: Were Firms with a Higher Degree of Internationalisation Less Affected by the 2009 Recession

Internationalisation diversifies the operation of firms, therefore reducing their concentration on a specific market. Being multinationals could enhance the resilience of firms against the home country's economy swings. It also enables firms to capitalise on the different economic cycle in different world regions, which will help in sustaining their business in the long-term.

Questionnaires were distributed to top UK based international consulting engineering firms. Firms were asked to rate whether a higher degree of internationalisation has helped in stabilising the overall performance of their firms during the 2009 recession, with 5 indicating that internationalisation has significantly helped in stabilising the performance during recession and 1 indicating the opposite.

Table 5.17: The effect of internationalisation on the performance of firms during recession.

Did the degree of internationalisation of your firm help in stabilising the firm's overall performance during recent recession?					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	1	4	8	11
Weighted score	0	2	12	32	55
No. of correspondents, N=	24				
Summation of all weighted score, S=	101				
The expectationn of S, E(S)=	72				
Variance, Var (S)=	48				
z score=	4.26	At 0.01 level, $p = 0.00003 < 0.05 = \text{significant}$, therefore the internationalisation of firm has helped in stabilising the firm's overall performance during recent recession			

The Likert-type Scale analysis indicates that the Z score of 4.26 is significant at .01 level and the value of S= 101 is significantly greater than the expected value of E(S) = 72. Therefore, firms participated in the questionnaires have indicated that the internationalisation of their firms is important in stabilising their overall performance during the recession.

All of the firms interviewed reported that internationalisation has significantly helped in stabilising the performance of their firms during the 2009 UK recession. The diversification of market and geography, broader spread of clients, sectors and incomes have provided firms with a higher level of resilience and stability. Firms are able to manage the ride of the economic cycles in different world regions by having wider international coverage. Internationalisation provides firms with the opportunities for continuous growth in other regions while the home country is experiencing a prolonged economic recession.

5.9 Conclusion

This chapter studies the factors influencing the internationalisation decision and strategy of the UK based international consulting engineering firms, the effect of internationalisation on the performance and risk of firms, and the effect of home country's economic condition on the degree of internationalisation of firms. An overall summary and conclusion of this study can be found in chapter 8 of this thesis.

The analyses of the financial data of consulting engineering firms have revealed that overseas revenue is a significant part of the overall revenues of firms, with more than 55% of the firms studied has more than 50% of their revenues generated from their overseas activities. Therefore, the performance of foreign subsidiaries is expected to have a significant impact on the overall performance of firms.

The statistical analyses of data collected from qualitative studies on the factors influencing the internationalisation decision of firms have indicated that the following stimuli factors have had a significant effect in encouraging firms to internationalise abroad.

- External stimuli factors- the slow economic growth and the saturation of the home country's market.
- Internal stimuli (firm-specific) factors- to increase the turnover, market share, profitability and overall performance of firms; to provide growth options or opportunities for future growth; to increase internal technical and economic advantages through internalisation; to gain international competitiveness and market share; to develop an international reputation and brand image; and to reduce the risk of firms through achieving a greater geographical diversification.

The quantitative and qualitative studies of the effect of internationalisation on the performance of firms have shown that internationalisation has had a positive impact on the overall performance of firms in the context of increasing the firm-specific advantages of firms. The OLS regression of the financial data of top UK based international consulting engineering firms shows that the overall performance of firms is positively correlated with the degree of internationalisation of firms. The findings of the

quantitative and qualitative studies are consistent with existing theories, including Dunning's Eclectic Theory where internationalisation has increased the ownership, locational and internalisation (OLI) advantages of firms, such as:

- Economic advantages- to increase the market share, firm size and technical resources; efficiency-seeking by using lower cost resources in developing countries.
- Strategic-asset seeking and technical advantages- building the global brand and enhancing the reputation and technical excellence of firms through internationalisation and international talent recruitment.
- Internationalisation has increased the resilience of firms through international diversifications.
- Internationalisation provides growth options and opportunities for the future growth of firms.

Despite the benefit gains from the internationalisation, firms are also exposed to new risks that arise from their international operations. Firms are faced with the political risk, financial risk, market risk, foreign exchange risk, and reputation risk when internationalising. In the qualitative study of the effect of internationalisation on the risk of firms, the top management of consulting engineering firms have revealed that the benefit of internationalisation outweighs the risk associated with internationalisation and the main reason for their cross-border investments is for risk diversification and mitigation. Internationalisation provides firms with the opportunity to achieve a balanced and diversified portfolio and to reduce their reliance on a single market. This is consistent with Rugman's Risk Diversification Theory which suggests that MNEs normally prefer to geographically spread the portfolio of foreign investments rather concentrating their investments in one region.

Internationalisation also provides firms with the opportunity for global resources optimisation, therefore improving the resilience of firms. The different economic cycle in different world regions has caused inconsistency of work opportunities in the global consulting engineering sectors. Therefore, internationalisation enables firms to manage the inconsistency of workload by re-allocating and sharing of their work across their international offices.

Consulting engineering firms have also viewed the internationalisation of their firms as a natural progression for growth. Internationalisation provides opportunities for firms to increase their firm size and to increase their market share, and this is consistent with the Growth Options Theory. A larger firm size provides firms with the scale advantage when venturing into a new international market.

The Transaction Cost Model postulates that a firm will seize the opportunity to displace a market if transaction costs can be reduced in the process. Buckley and Casson's Internalisation Theory explains that firms will internalise their market when the expected benefits outweigh the expected costs. Consulting engineering firms have revealed in interviews that one of the main reasons for large consulting engineering firms to internationalise into developing regions is to increase their cost-efficiencies. Setting up production offices in lower cost developing regions provides firms with the cost advantage against their competitors.

Our quantitative study of the internationalisation strategy of consulting engineering firms, reported in section 5.4.1 and figure 5.5, indicates that foreign direct investment is the most frequently used entry mode of firms, followed by acquisition and joint venture. Our quantitative analysis was based on the data collected from the questionnaires where firms were asked to provide information on the numbers of acquisitions, joint ventures and foreign direct investments that they had carried out, and the total number of investments for each of these entry modes were calculated. The reasons for firms to use foreign direct investment as their entry mode choice were explored in qualitative research and outlined in section 5.4.5. FDI is an organic expansion strategy, and is perceived by firms as a low risk and low capital investment strategy. It can be viewed as a real option which provides firms with the opportunity to expand at a rate comfortable for their parent companies, without committing to a large amount of investment upfront.

The qualitative analysis of the questionnaire data on firms' entry mode choice indicates that the following factors influenced the entry mode choice of firms when internationalising:

- Endogenous factors: the motive of internationalisation; the future growth potential and growth options of investment; tangible and intangible benefits (market-seeking, efficiency-seeking or ownership advantages seeking); the market entry speed; previous

international experience of firms; the parent company's firm size; existing business networks of firms; and the requirement for a physical presence in the host country.

- Exogenous factors: the host country's profile (such as government policy, restrictions, regulations, and economic growth); the psychic distance between the home and host country; the foreign market size and potential.

In the qualitative study, large consulting engineering firms have expressed their preferences to use a proactive strategy or to gain speedy entry into the new market, such as by acquiring other firms in the market. This is due to their firm size has provided them with the scale advantages such as easy access to fundings and higher capacity in absorbing the risk associated with internationalisation. Large consulting engineering firms have indicated in this study that internationalisation is an important strategy for increasing their market share or international growth. International growth of firms will increase investors' confidences, therefore increasing the valuation of firms. This is consistent with Myer's Growth Option Value Theory, where an increase in the value of growth options will increase the overall value of firms. Smaller firms, however, prefer the organic growth (such as FDI) when internationalising due to having limited resources and experience. A summary of the benefit-risk review of the different types of internationalisation strategy is presented in chapter 8 of this thesis.

The OLS quantitative analysis of the effect of the home country's economy on the internationalisation of firms has revealed that the two parameters are negatively correlated. This study has also reviewed whether firms with a higher degree of internationalisation is less affected by the 2009 UK economic recession. The quantitative and qualitative analyses have revealed that firms have indicated that the internationalisation of their firms is a significant factor in stabilising their businesses during the UK economic recessions. The diversification of revenues from different world regions has provided firms with a higher level of resilience and stability during the home country's economic recession.

6.1 Introduction

This chapter explores the geographical choice of consulting engineering firms when internationalising, factors affecting the geographical choice of firms, and the effect of geographical diversification on the performance of firms. Factors affecting the success of international subsidiaries are explored in the later part of the chapter.

Dunning (2009) argued in his research that more attention needs to be given to the importance of locational choice of firms due to it is a variable affecting the global competitiveness of firms. The location configuration of firms does not only provide the location (L) specific advantages, but it will also provide new ownership (O) specific advantages to firms. As firms become more multinational and geographically diverse, the structure and location portfolio of firms will become more critical in their global competitiveness. A well-structured and well-coordinated locational choice strategy enables firms to harness new competitive advantages and be more efficient in deploying their home-based assets.

Existing literature on the locational choice of firms can be categorised into three main strands. The first strand (Storper, 2001; McCann and Mudambi, 2004; Mudambi, 2008) focuses on understanding the locational choice of firms by relating the factors affecting the decisions to the transaction costs associated with the organisation of knowledge related spillovers. The second group of researches (Porter, 1994, 1998, 2000) focused on the way in which the locational strategies of firms may add to their global competitiveness. This strand of studies (Rugman and Verbeke, 2003) have also placed emphasis on clusters and networks (the role of multinational firms in leveraging and helping to upgrade the industrial cluster in countries they are operating in) and the role of national institutions in affecting the quality of resources and capabilities. The third strand of researches have highlighted the importance of the higher education and institutional infrastructures in locational choice, and the researches by Meyer (2001), Meyer and Peng (2005) and Dunning (2008) have supported this hypothesis.

Various researchers have demonstrated that with the increased in knowledge-intensive services activities, multi-national firms are increasingly seeking locations which offer the economic advantages and institutional facilities in order to fully utilised their core competencies (Dunning, 2009). Inkpen and Ramaswamy (2005) explained that firms should make an explicit choice about the location of value-chain activities in order to leverage the location-specific advantages when crafting their internationalisation strategy.

6.2 Factors Affecting Geographical Choice

One of the most important aspects of the internationalisation process of firms is the decision-making on where the foreign subsidiary should be situated. Generally, firms are more likely to invest in countries where their analyses indicate a relatively high probability that financial gain will exceed the risk associated with the investment (Cohen, 2007). Therefore, the purpose of this chapter is to explore the factors affecting the geographical choice of consulting engineering firms when internationalise.

Firms are affected by both the country and firm-specific factors when deciding on their locational choice. The country-specific factors include the market potential, geographical distance, the host country's characteristics and its cultural distance with the home country, the quality of human resources available and the host country government's institutional structure and policy. Firm-specific factors are those that are internal to a firm, such as the purpose of the investment (whether it is a market seeking or efficiency seeking investment), the firm's previous international network and experience, the financial arrangement and the effect of the firm's locational choice on its existing advantages.

As previously discussed in chapter 4, analyses of the regional turnovers of the top UK based international consulting engineering firms have revealed that:

- Large consulting engineering firms tend to have a better geographical spread with a higher percentage of its revenues spreading across different regions in comparison to smaller firms.

- The majority of the firms studied tend to have a higher percentage of its overseas revenue generated from regions which has a smaller psychic or geographical distance to the home country, such as from Europe and North America.

Further to the above initial findings in chapter 4, questionnaires were distributed and interviews were carried out with the top UK based international consulting engineering firms to investigate the underlying factors affecting the geographical choice of firms when internationalising.

6.2.1 International Market Potential

Consulting engineering firms have highlighted in interviews that there are several factors which are considered to be of importance when assessing the attractiveness of a foreign market:

- The market size and growth potential
- Servicing costs
- The host country's social, political and economic environment

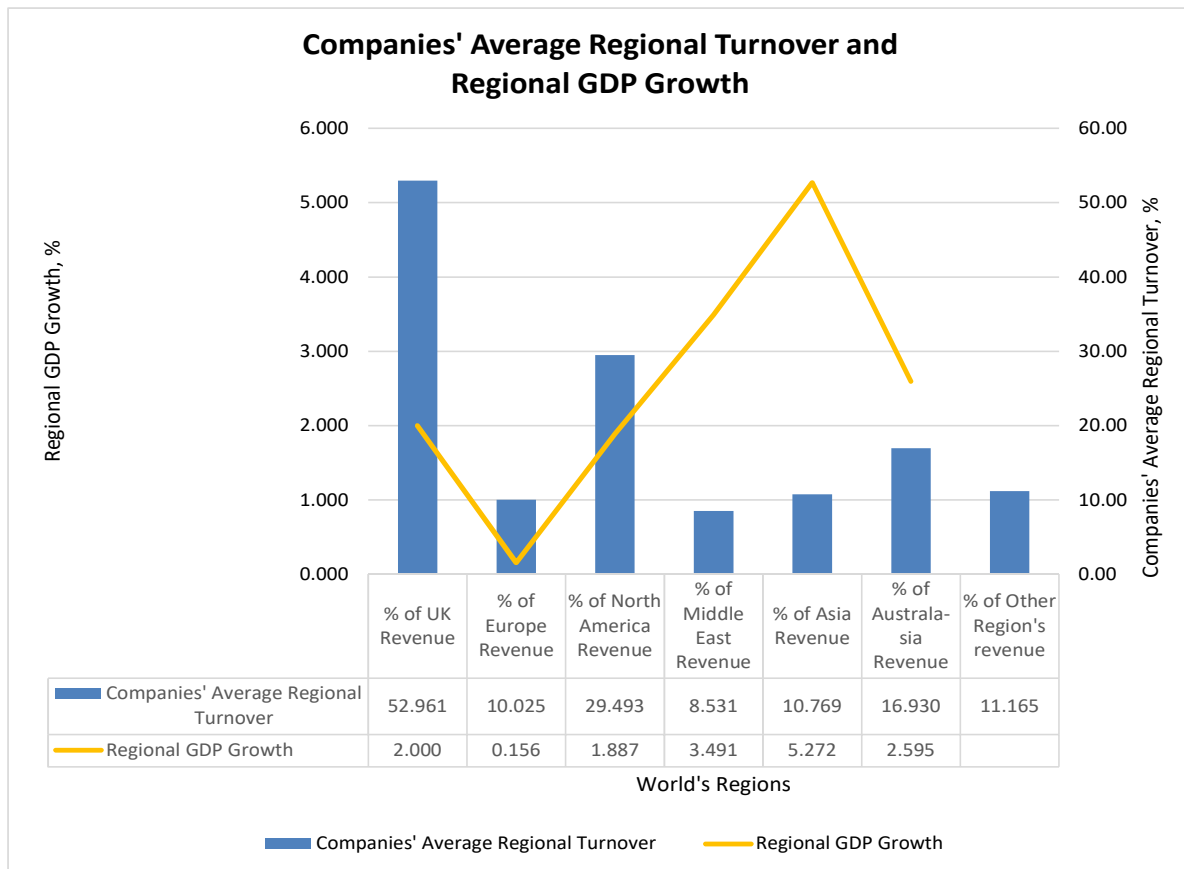
The firm's motives for internationalisation, whether it is a market-seeking investment or efficiency-seeking will have an effect on its geographical choice. A market-seeking investment is normally drawn to large economies with strong private and government investments and a high GDP growth. All of the consulting engineering firms interviewed have indicated that market potential is the most significant factor when deciding on their geographical choice. This is consistent with Li and Guisinger's (1992) research finding which indicates that the market size of the host country has had a positive and significant effect on foreign investments of multinational firms. Efficiency-seeking investments in consulting engineering sector usually involve firms setting up their design production offices in lower wages developing countries which has an abundant of technical staffs with higher education qualifications, such as in India.

Firms interviewed have also highlighted that emerging markets with high GDP growth will usually provide significant growth opportunities for their firms in comparison to the mature market. Inkpen and Ramaswamy (2005) refer emerging markets as markets in countries that have significant potential for

growth following a prolonged period of infrastructural, economic, institutional, and, or political weakness. In an emerging market where the consulting engineering sector is underdeveloped and with fewer competitions from local firms, consulting engineering firms are able to capitalise on their expertise in providing specialised services in the local market. For example, the main constraints that firms are faced with when investing in emerging markets is a relatively weak physical infrastructure. The developing country government's plan in providing massive infrastructure improvements to attract foreign investors has provided consulting engineering firms with early opportunities to enter the market.

Quantitative studies were carried out based on the financial data of firms to study the regional turnover of UK based international consulting engineering firms. Figure 6.1 and 6.2 below provide a graphical presentation of the regional revenues of the UK based top international consulting engineering firms and the regional GDP growth of different world regions. The analysis shows the effect of the GDP growth on the regional revenues of firms. On average, the revenues of firms from the European region is relatively low in comparison to the North American and Australasian regions, potentially due to the low growth in the region. However, on the other hand, despite the high GDP growth in Asia, the average turnover of firms in the region is still lower than other developed regions such as the North American and Australasian regions. Firms were asked in the interviews regarding the potential factors which has led to the higher turnover of firms in regions such as North America and Australasia. Firms explained that their preference to invest in the North American and Australasian regions is due to the fact that these are developed markets, with lower political and economic risks, and has a lower psychic distance to the home country in comparison to the Asian region. Despite the high economic growth in the Asian region, firms have expressed concern about the political risk in some of the developing countries in the region, therefore, the level of investment in the region is still lower than in developed regions.

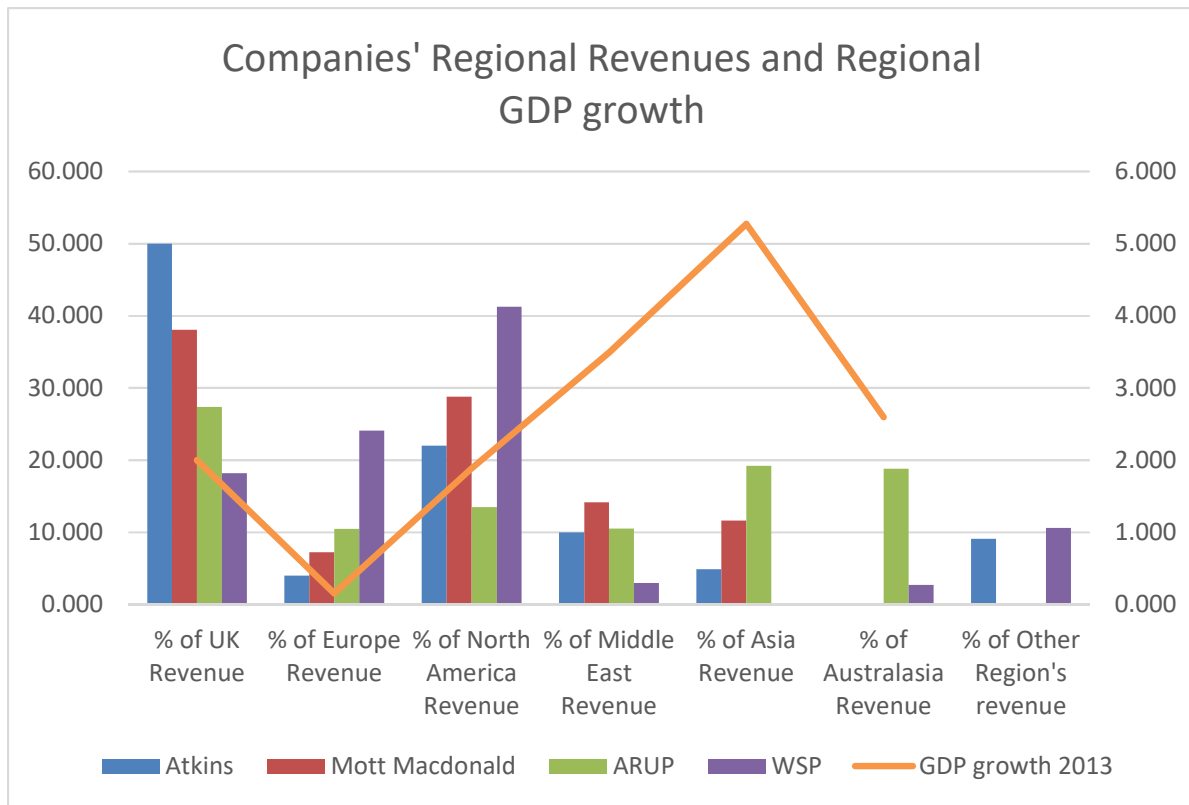
Figure 6.1: An analysis of the average regional revenues of the top UK based international consulting engineering firms and the regional GDP growth of different world regions.



Source: FAME database and UNCTAD (2014).

The graph in figure 6.2 shows the spread of overseas revenues of the top 4 UK based consulting engineering firms in different world regions. The analysis indicates that the proportion of revenues from different regions differs between firms. For example, the analysis indicates that Atkins has a higher proportion of their incomes from the North American region, whilst the other firm, Arup, has a higher proportion of their income from the Asian region. This initial finding has led to further investigations in the next section of this chapter, where both quantitative and qualitative methods were used to study the relationship between firm's perceived market opportunity, regional GDP growth and firm size.

Figure 6.2: A detailed analysis of the regional turnover of the top 4 UK based international consulting engineering firms and the regional GDP growth of different world regions.



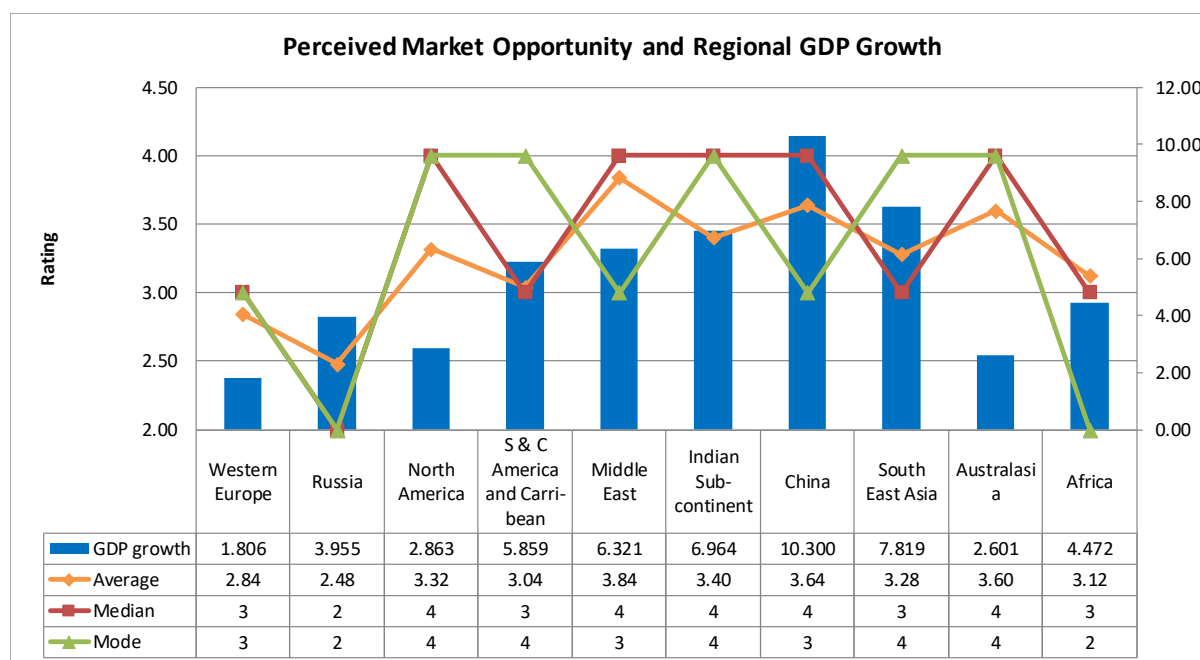
Source: FAME database and UNCTAD (2014).

Perceived Market Opportunity

Questionnaires were distributed to consulting engineering firms to gather information on the perception of firms on market opportunities in different world regions. Figure 6.3 shows the analysis of the data collected from questionnaires. Firms were asked to score 1 to 5, with 5 indicating that the region has the highest opportunity and 1 indicating that the region has the lowest opportunity. The analysis shows that developing regions generally have a higher market opportunity score in comparison to developed regions. The Middle East has the highest average rating at 3.84, followed by China at 3.64 and Indian Sub-continent at 3.40. Developed regions with high cultural similarity to the UK and a high political stability level, such as the Western European, North American and Australasian regions, have a relatively high score despite the modest economic growth in these

regions. On the opposite, Russia despite its high GDP growth at 3.955, has scored relatively low for the perceived market opportunity at 2.48.

Figure 6.3: The questionnaires analysis of the perceived market opportunities (average, median and mode scores) of top UK based international consulting engineering firms and the regional GDP growth of different world regions in 2010.



Source: FAME database and UNCTAD (2010).

Further to the questionnaires analysis, interviews were carried out with consulting engineering firms in order to investigate the underlying reasons which may provide explanations for the findings of the questionnaires analysis. The followings are the key factors that firms have identified as having an effect on their perceptions on market opportunities:

- i. The region's GDP growth rate has had an impact on the perceived market opportunities. High GDP growth presents the opportunities for continuous development of infrastructures in the region. For example, the Middle East and East Asian regions are perceived as high opportunities regions due to the government-funded infrastructure investments.
- ii. The cultural similarity has had an influence on the perceived market opportunities for the region. For example, English speaking countries and those countries with historical

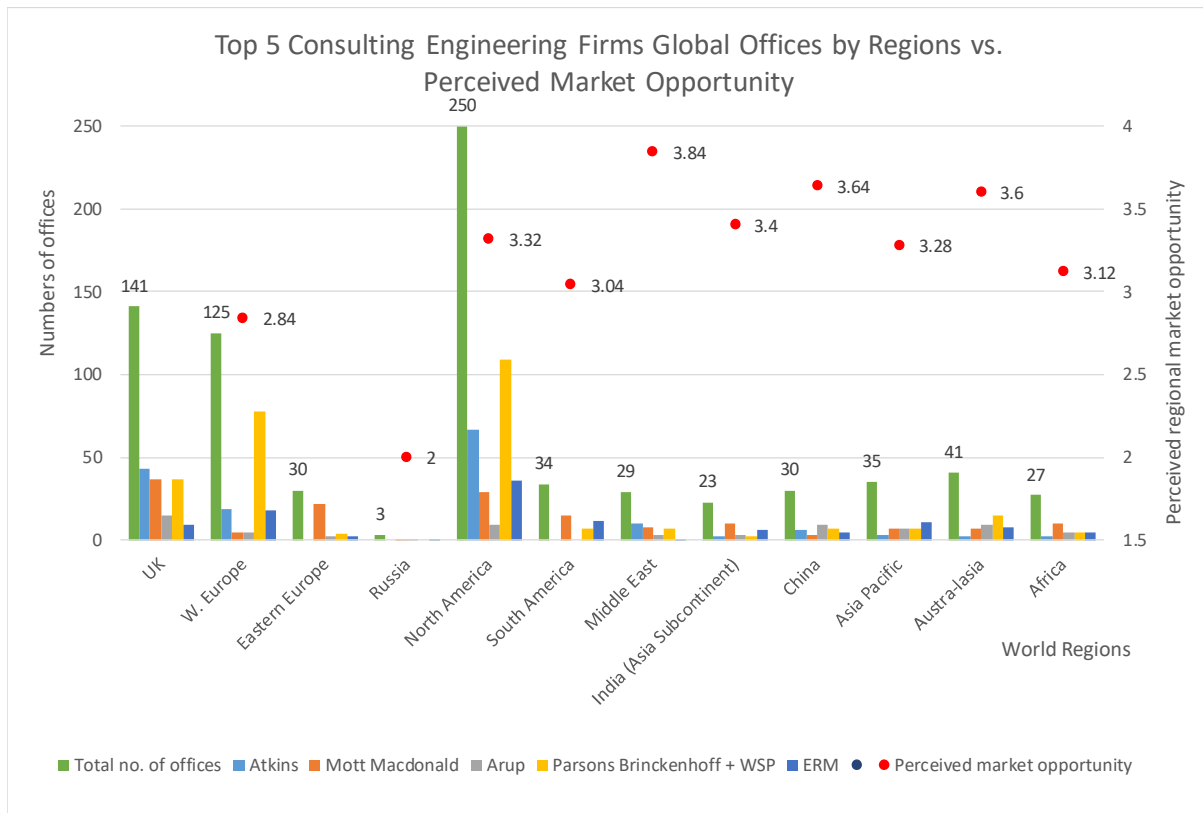
connections such as North America and Australia are perceived as countries with good opportunities due to firms having a good understanding of the market.

- iii. Firms perceived the developed region as a more mature market. The economic and political stability in developed regions, such as in Western Europe and North America is the main factor which has attracted firms to invest in these regions, despite the modest GDP growth in the region.

Quantitative and Qualitative Studies: A Comparison of the Perceived Market Opportunity and the Size of the Regional Operations of Firms

A detailed study was carried out to analyse the numbers of regional offices for the top 5 consulting engineering firms against the perceived market opportunity data obtained from questionnaires and the results were presented in figure 6.4. The number of regional offices in the region was used as an indicator of the size of the firm's operation in the region. The analysis indicates no obvious correlation between the perceived opportunities and the size of operation of firms in different world regions.

Figure 6.4: An analysis of the numbers of regional offices of the top 5 consulting engineering firms and the perceived market opportunity data obtained from questionnaires.



Despite the high perceived market opportunity in developing regions (such as in the Middle East and China), firms do not have as many offices in these regions in comparison to developed regions such as North America and Western Europe. There are a couple of reasons which may explain the findings and they can be relayed back the Uppsala Theory where speed (time factor), psychic distance and the interplay between the market opportunity and commitment have had an impact on the internationalisation of firms.

Interviews were carried out with consulting engineering firms to investigate the underlying reasons which may provide explanations for the analysis as shown in figure 6.4. The first reason is related to the timing of the economic development or modernisation in certain regions. The North American and Western European regions had experienced major economic developments or reformations at a much earlier time than the developing regions, such as the Middle East and China, where major economic developments had just happened in the past 30 to 40 years. Therefore, firms would have had established their international offices in developed regions such as North America and Western Europe, much earlier than in the developing regions, and their international offices in these regions have grown and expanded over time. Therefore, the size of their operations in developed regions is expected to be bigger than the developing regions despite the fact that these regions have a lower perceived market opportunity than developing regions.

The second reason is that despite the high market opportunity in the developing regions, these regions were also perceived by firms as higher risk regions. Therefore, firms may have adopted the strategy of limiting the size of their physical presence and offices in these regions due to uncertainties and have decided to export their design works back to their home country office as part of the risk mitigation strategy of firms.

6.2.2 Regional Characteristics and Cultural Distance

Culture is complex and intangible and it is difficult to conceptualise or to put a scale on culture (Boyacigiller et al., 1996). Ghemawat (as cited in Inkpen and Ramaswamy, 2005) have identified the four aspects of distance, namely cultural, administrative, geographic, and economic distance. Cultural distance (CD) includes language, cultural, social and religious differences. The administrative distance relates to a country's institution and how it defers to those in another country. For example, some countries have a low administrative distance despite having a high geographical distance, due to their previous political connections or colonial ties. The geographic distance is the miles between the two countries whilst the economic distance is the differences between the relative wealth or income of the people in the two countries.

The geographical choice of firms can be affected by several factors. Johanson and Vahlne (1977) explained that the geographical choice of firms is affected by the psychic distance between the home and host country, which is defined as the "sum of factors" affecting information to the market. This includes the differences in language, education, business practices, culture, and industrial development. Firms typically enter market closer to their home country, and as experience increases, firms will enter international markets further away from their home country. Buckley and Casson (1976) and Davidson and McFetridge (1985) explained that factors such as the language, political stability and the level of development, market size and sophistication affect the "distance" between two countries.

As previously mentioned in the literature review chapter, Hymer (1976) in his work on disadvantages faced by foreign firms when competing against purely domestic firms have explained that when competing against a purely domestic firm, foreign firms suffered from the lack of information about the host market and market discrimination against outsiders. Rugman and Verbeke (2005), building on Hymer's research (1976) have extended the concept of "liability of foreignness". Zaheer (1995) defined "liability of foreignness" as "the additional costs of doing business abroad that result in a competitive disadvantage for an MNE subunit". Existing literature (Dunning, 1977; Zaheer and Mosakowski, 1997) have suggested that the greater the liability of foreignness, the worse the performance of the foreign subsidiary unless the parent company has substantial resources to assist

in overcoming issues related to the liability of foreignness. Kostova and Zaheer (1999) and Zaheer and Mosakowski (1997) have suggested that one of the best-known methods for overcoming liability of foreignness is for firms to acquire the market experience in a host country and through isomorphism (being similar to local firms).

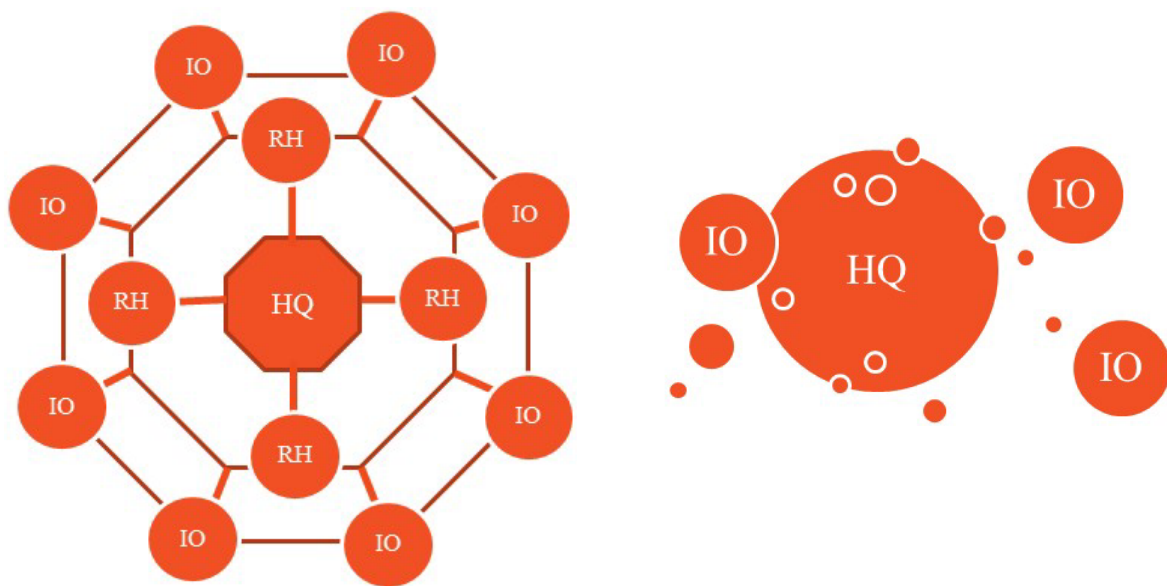
The Regional Hub: 'Spiderweb' Internationalisation Strategy

Firms can achieve economies of scale with the creation of regional hub rather than operation at country level. Consulting engineering firms have highlighted in the interviews that firms are using the 'spiderweb' approach to overcome the liability of foreignness when expanding into a new country or market. Firms are increasingly setting up regional hubs to serve proximate markets or countries rather than expanding directly from the home country's headquarter. For example, one of the large consulting engineering firm interviewed is utilising its offices in Hong Kong and Australia, as the regional hubs to serve the other smaller markets or international offices such as Singapore and other East Asian countries. The spiderweb approach is consistent with the Johanson and Vahlne (1977) Uppsala Model which explains that firms start their operations from a culturally and geographically proximate country and then expand gradually into more distant countries. In this instance, consulting engineering firms have expanded their new offices from their regional hubs, rather than expanding directly from their home country offices.

The spiderweb approach enables firms to overcome the liability of foreignness by capitalising on their existing experience in culturally similar countries, therefore reduces the issues related to cultural differences. The geographical proximity of a regional hub to the new market also reduces the internationalisation and management cost, therefore creating firm-specific advantages for firms when competing against other competitors. The spiderweb approach also provides firms with the flexibility of not having to create a local office in the new market during the start-up stage. Due to the geographical proximity of the regional hub to the new market or country, resources can be flown into the country as when it is required. This strategy reduces the capital cost of internationalisation of firms and creates a more efficient approach for managing the regional resources.

Zaheer et al. (2012) explained that, essentially, international management is a management of 'distance', which includes coordinating activities across time zones, miles and it is also about managing the cultural, administrative and economic distances between the host and home countries. The expansion of firms from the regional hub provides the new international office with the access to local resources which can be deployed quickly and more efficiently as when it is required. Therefore, firms have utilised the spiderweb approach to extract the locational bound FSA of their regions hubs to overcome issues of the liability of foreignness and to capitalise on their existing networks within the region when entering a new market or country.

Figure 6.5: The regional hub: Spiderweb arrangement versus headquarter focused internationalisation strategy.



HQ- Headquarter (Home country office)
 RH- Regional hub
 IO - International office

There are various existing literature which support the use of the regional approach by consulting engineering firms to overcome the liability of foreignness when internationalising into a new market. Rugman and Verbeke (2008) have found that when services firms enter markets with a high cultural

distance, the quality of services delivered is at risk. Knowledge-based services firms, such as consulting engineering firms, rely heavily on their firm-specific advantages (FSA) and will aim at capitalising their FSA and seek markets which they can exploit their existing FSA (Rugman, 1981). As cultural distance (institutional, cultural, economic components) increases, the non-locational bound FSA becomes decay, and there is a need to complement the FSA with new locational bound FSA specific to the new market (Rugman and Verbeke, 2008). Abdelzaher (2012) explained that for professional services firms to succeed, they need to be closely embedded within the host market and establish strong social ties with local partners to successfully serve their function as providers of knowledge-based solutions. Doh et al. (2009) and Kundu (1994) (as cited in Abdelzaher, 2012) explained that due to the nature of the services provided (for example, high level of client dependency and importance of customisation), it is important for professional services firms to seek markets that speak the same language or share intellectual understanding and to be geographically proximate to the home country office.

Some of the firms interviewed have revealed that they have been, in the past, entering markets with high psychic distance directly from their home country's offices, despite having few or no prior experience of the market. This situation tends to happen when firms have to adopt either the "follow the client" strategy or to enter the market where there is project availability or requirement for specialist skills, with fewer considerations given to the psychic distance.

6.2.3 Geographical Human Asset: Capability and Adaptability

The geographical choice of firms when expanding internationally is dependent on the motives for expansion, such as whether it is market-seeking or efficiency-seeking. The aspect of human asset capability and adaptability becomes vital to the geographical choice of consulting engineering firms when it comes to setting up international production offices. There are two main reasons why large international consulting engineering firms are increasingly setting up their international production offices or hubs in developing regions. First, firms have to achieve greater efficiencies to compete in the saturated home market. Therefore, firms have to look abroad for lower wage human resources. Second, the shortage of skilled engineers in the home country has encouraged firms to look abroad,

for example in engineering clusters or regions such as in India, where there is an abundance of highly-skilled engineers and technical personnel.

The geophysical attraction of industry clusters, such as in Bangalore, where the higher education system has produced an abundance of low wage but highly-skilled engineers and technicians, has encouraged consulting engineering firms to set up their international production offices in the region. The success of the international production office relies heavily on the capability (absorptivity and adaptability) of the human assets available in the host country or region. Park et al. (2012) defined absorptivity as the “ability to understand new knowledge”. The characteristics and capability of the human assets are particularly important in knowledge transfer and acquisition due to learning initially takes place at an individual level. Minbaeva et al. (2003) explained that a sufficient level of human assets, such as high level of highly-skilled managers and engineers, is seen as a clear measure of absorptive capacity. Therefore, the effective transfer of firm-specific advantages (both the tangible and intangible knowledge) from the home country to the host country offices relies on the absorptivity of human asset in the host country and it is an important factor in ensuring that the new production office is able to create new specific-advantages for the parent company as set out in the internationalisation objective.

Table 6.1: The labour force with tertiary education in different countries, as a percentage of its total population.

Country	Labour force with tertiary education (% of total population, year 2010)
United Kingdom	35.4
India	9.8
Poland	26.3
Singapore	27.6

Source: World Bank (2016).

6.2.4 Previous International Experience and Network

Previous international experience and existing network of firms have been found to have an impact on their geographical choice. All of the consulting engineering firms interviewed have indicated that their previous international experience and existing network is very relevant when it comes to making a decision on geographical choice. This is consistent with Erramilli's (1991) research on the foreign market entry behaviour of firms where it was found that a firm's preference for a similar market is influenced by its previous international experience. Firms prefer to enter markets of greater similarity to their home country due to lack of previous experience. As the experience of firms increases and firms becomes more geographically-diverse, they will internationalise into markets that are culturally less similar to their home country.

The majority of the large consulting engineering firms interviewed have highlighted that it is easier to grow their businesses in countries or regions where they have adjacent offices or investments. This has re-affirmed the advantages of utilising the "spiderweb" strategy when firms are internationalising as previously discussed section in 6.2.2 of this chapter. The "spiderweb" strategy is also supported by Zaheer and Manrakhan (2001) and Arregle et al. (2009) research outcomes which indicate that firms utilise agglomeration strategy as an attempt to overcome the liability of foreignness when venturing into a new region or country. Rugman and Verbeke (2005) have highlighted that firms will incur additional costs when internationalising into a new country or region due to the institution and cross-border differences between the host and home country. The agglomeration or clusterisation approach provides firms with shared organisational arrangements for their adjacent offices within the same regional hub. The close relationship between offices within the same regions enables the knowledge and organisation resources sharing between them. Therefore, the creation of the regional hub has provided firms with flexibilities, reduction in transportation cost and the benefit of economies of scale.

Consulting engineering firms have also indicated in the interviews that the existing network of international clients will have an impact on the geographical choice of firms. Firms may decide to undertake the "following the client" approach to follow their major clients to invest abroad, despite not having prior experience or knowledge of the new market.

6.2.5 Market Distance and Size

All of the firms participated in the interviews have indicated that the market size is one of the main factors affecting their geographical choice when internationalising. Large consulting engineering firms interviewed have indicated that the geographical distance is not a consideration factor for their geographical choice if the market size is large enough. Larger firms have explained that due to their existing coverage of international markets and their regional hubs- the “spiderweb” organisation structure, their expansions into a more geographical distance market can be carried out from their regional hubs instead of expanding directly from their home country offices. This strategy provides firms with the cost efficiencies (including the transportation, management and coordination costs) and also reduces the risk associated with the liability of foreignness.

In contrary, smaller firms have perceived that entering markets further away from their home country will incur higher investment and they will take into account the geographical distance in their geographical choice when investing abroad. Smaller firms usually have limited access to investment capitals and do not have the support of a regional hub, therefore, they are in a disadvantaged position when competing against larger firms in countries with a higher psychic or geographical distance.

6.2.6 Clusterisation: Follow the Leader Strategy

Large consulting engineering firms have indicated in the interviews that the clusterisation of foreign consulting engineering firms tend to occur in large markets where there is a lack of local expertise. Firms have existed side-by-side in markets where opportunities are high. One of the firms interviewed has indicated that firms are able to locate the potential opportunities by analysing the market selection of competing firms. Instead of following the industry leader, smaller firms have explained in the interviews that they prefer to follow their clients when investing abroad and this is perceived as a lower risk strategy in comparison to venturing into an unknown territory.

6.2.7 Country Factors: Legal Institutions and Regulatory Processes, Political and Economic Stability

North (1990) defined institutions as “the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interactions”. In the interviews with consulting engineering firms, it was revealed that one of the key factors affecting the geographical choice of firms is how business-friendly the investment climate is in the host country. There is a myriad of factors which affect the perception of firms of the investment climate in a potential host country, and the consideration of firms on balancing the risk and potential returns. This includes the attitude of the host country’s government towards foreign investments, the quality of governance, the political and economic stability, and restriction of capital outflows and trade barriers.

Firms have highlighted in the interviews the issues of the restriction of capital outflows from the host country as the main factor which has affected their investment decisions. The fiscal policy of the host country’s government, such as the corporate tax rate, monetary policy and the interest rate of borrowing, will also have an impact on the attractiveness of the host country for investment. Other informal institutional factors such as the availability of highly-skilled technical professionals and management staffs, level of corruption and the level of safety and security are amongst other influential factors affecting the geographical choice of firms.

Host Country Government Policy towards Foreign Direct Investment (FDI)

Guisinger’s (1992) in his research on FDI in the services sector has highlighted that the openness of the host country has had a positive influence towards the FDI in the services sector in the country. The attitude, action and inaction of the host country (whether the government policies are over accommodating, neutral or negative) will determine the investment attractiveness of the host country. High institutional distance (i.e. strong government restriction) will reduce foreign entries.

Cohen (2007) has outlined a series of different strategies that a host country government can adopt towards encouraging FDI into the country. First, is the passive open door strategy with very few or no structure plan to support it, for example, in the United States where the government will leave it to the

market mechanism to decide the amount of FDI. The second option is an open-door policy, backed up by a well-structured programme to maximise inward FDI. For example, the minimal risk and maximum profit objectives of a host government such as providing the political, economic and social stability, investment incentives, minimal restriction, efficient infrastructures and highly-skilled workforce will encourage foreign firms to invest in the country. A government which has genuinely-committed to facilitating inward FDI and a clear division of the national and local government authority will make itself look more attractive to foreign investors.

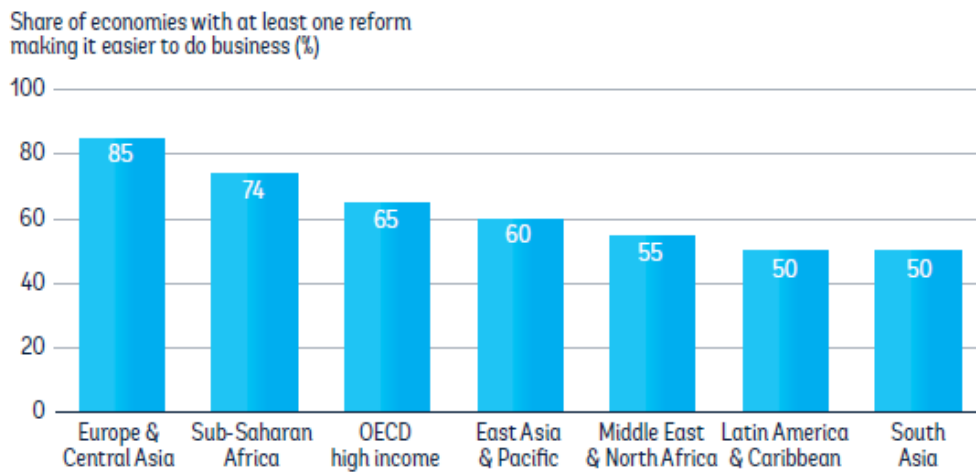
The standard types of FDI incentives offered by a host government can be divided into three categories: reduction in the corporation's tax liability, provision of financial incentives such as direct grants, and subsidies in infrastructures and exemption from import duties. The reduction in corporation tax liability could include deferring the corporate income and property tax for a fixed number of years, accelerated depreciation allowances and tax credits for domestic reinvestment of profits. The financial incentive, such as direct grants, could include for covering one or more of an MNE's expenses in getting a subsidiary up and running (Cohen, 2007).

On the opposite end of the scale, the host country's government may decide to apply the political agenda of applying restriction on inward FDI (for example a mandatory screening process of foreign companies) which may deter multi-national firms from investing in the country. Governments in many emerging markets have provided subsidies to local firms or have exercised regulatory control over foreign firms to protect their local firms and to remove the ability of foreign firms to compete with local firms (Inkpen and Ramaswamy, 2005). Firms have explained in the interviews that some countries will require a foreign firm to have a joint venture with a local firm to be awarded the government-funded projects and the local firm has to be the major shareholder of the joint venture.

The World Bank Group publication "Doing Business 2015" (as outlined in figure 6.6 below) indicates that Europe and Central Asia have the largest share of economies with at least one reform in making it easier to do business in, based on the 2013/ 2014 surveys. The report has revealed that more than 80% of the economies globally covered by the surveys have had an improvement towards their ease of doing business index and it is now easier to do business in most parts of the world. Examples where countries have made starting business easier:

- India has made starting business easier by considerably reducing the registration fees.
- China has eliminated the minimum capital requirement by replacing it with the requirement for a capital verification report from an auditing firm. It has also reduced the employers' social security contribution rate in Shanghai and has enhanced the electronic system for filing and paying taxes.
- Mexico has improved on the access to credit by amending its insolvency and proceedings law.
- Russia has eliminated the requirement to deposit the charter capital before the registration of a company and has also made transferring property easier by eliminating the need for notarization.

Figure 6.6: Europe and Central Asia have the largest share of economies with at least one reform in “making it easier to do business” with, based on the 2013/ 2014 surveys.



Source: World Bank: Doing Business (2015).

Ease of Doing Business Ranking

The World Bank has published the “Ease of Doing Business” ranking in the “Doing Business report 2016” where the world economies are ranked based on ease of doing business, with 1 being the easiest to 183 being the most difficult to do business with. A good (low) score on the ease of doing business index means the regulatory environment is conducive to the operation of businesses. Singapore, New Zealand and Hong Kong were ranked the top 3 countries for “Ease of Doing Business”. Singapore and Hong Kong also have one of the highest foreign direct investment inflow at 21.93 and 39.87% of their GDP respectively.

Table 6.2: The top 50 countries on the “Ease of Doing Business” ranking.

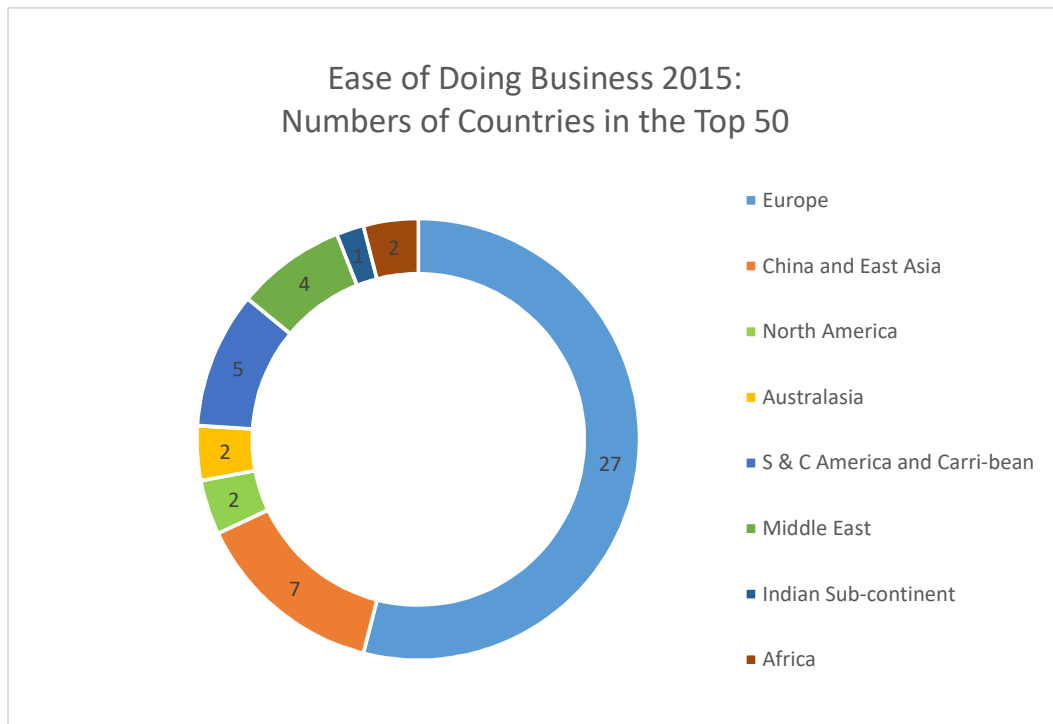
Ease of Doing Business Ranking 2015	Country	Foreign direct investment, net inflows (% of GDP)
1	Singapore	21.933
2	New Zealand	2.227
3	Hong Kong SAR, China	39.870
4	Denmark	-0.198
5	Korea Republic	0.702
6	Norway	2.118
7	United States	0.757
8	United Kingdom	1.521
9	Finland	5.441
10	Australia	3.185
11	Sweden	-0.444
12	Iceland	4.379
13	Ireland	34.594
14	Germany	0.217
15	Georgia	9.966
16	Canada	3.202
17	Estonia	5.932
18	Malaysia	3.138
19	Taiwan	-
20	Switzerland	3.244
21	Austria	1.877

22	United Arab of Emirates	2.520
23	Latvia	2.807
24	Lithuania	0.726
25	Portugal	5.393
26	Thailand	0.919
27	Netherland	5.484
28	Mauritius	-
29	Japan	0.197
30	Macedonia, FYR	0.538
31	France	0.281
32	Poland	3.170
33	Spain	2.478
34	Columbia	-
35	Peru	3.892
36	Montenegro	10.829
37	Slovak Republic	0.085
38	Bulgaria	3.475
39	Mexico	1.866
40	Israel	2.204
41	Chile	8.526
42	Belgium	-3.781
43	South Africa	1.64
44	Czech Republic	2.373
45	Armenia	3.472
46	Rwanda	3.697
47	Puerto Rico (U.S.)	-
48	Romania	1.941
49	Saudi Arabia	1.063
50	Qatar	0.495

Source: World Bank: "Doing Business 2015- Going Beyond Efficiency" and World Bank Open Data (2016).

Figures 6.7 below shows the numbers of countries in the “Ease of Doing Top 50 ranking 2015” for different world regions based on the World Bank Open Data 2016. Europe has the highest numbers of countries (a total of 27) in the top 50, followed by China and East Asia, North America and Australasia.

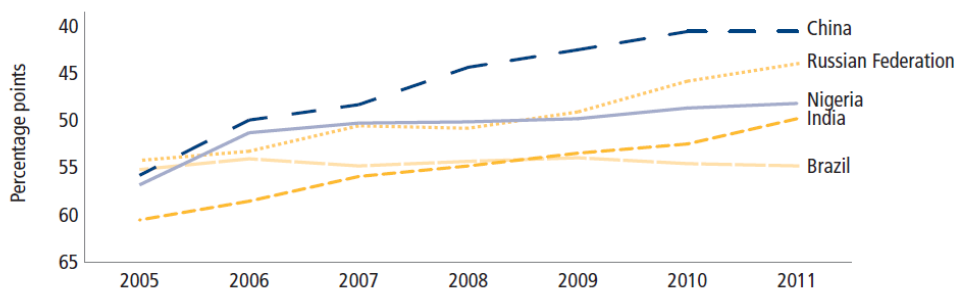
Figure 6.7: The numbers of countries in the region on the “Ease of Doing Business” top 50 ranking.



Source: The World Bank Group “Doing Business 2015- Going Beyond Efficiency and World Bank Open Data (2016).

Large developing economies such as Brazil, Russia, India and China (BRIC) have made steady progress towards the frontier index published in the World Bank Doing Business 2012 and 2015 report, which has made it easier for firms to start doing business in these countries. Despite the improvement on the ease of doing business index, the BRIC country’s ranking for Ease of Doing Business is still significantly lower than the majority of the developed economies.

Figure 6.8: The progress of the BRIC countries towards the frontier index.



Source: World Bank: Doing Business 2012 “Doing Business in a More Transparent World”.

Starting a Business Indicator

The World Bank Group have also published the “Starting a business Indicator” in the “Doing Business 2015- Going Beyond Efficiency”. The “Starting a Business Indicator” is defined as “the number of calendar days needed to complete all required procedures to legally operate a commercial or industrial firm”. Requirements may include obtaining necessary licenses and permits as well as completing any required notifications, verifications, and inscriptions for the company and its employees with relevant authorities. The measure captures the median duration that incorporation lawyers indicate is necessary to complete each procedure (World Bank Group, 2014).

Table 6.3: The top 10 countries on the World Bank Group “Starting a Business Indicator 2014” ranking.

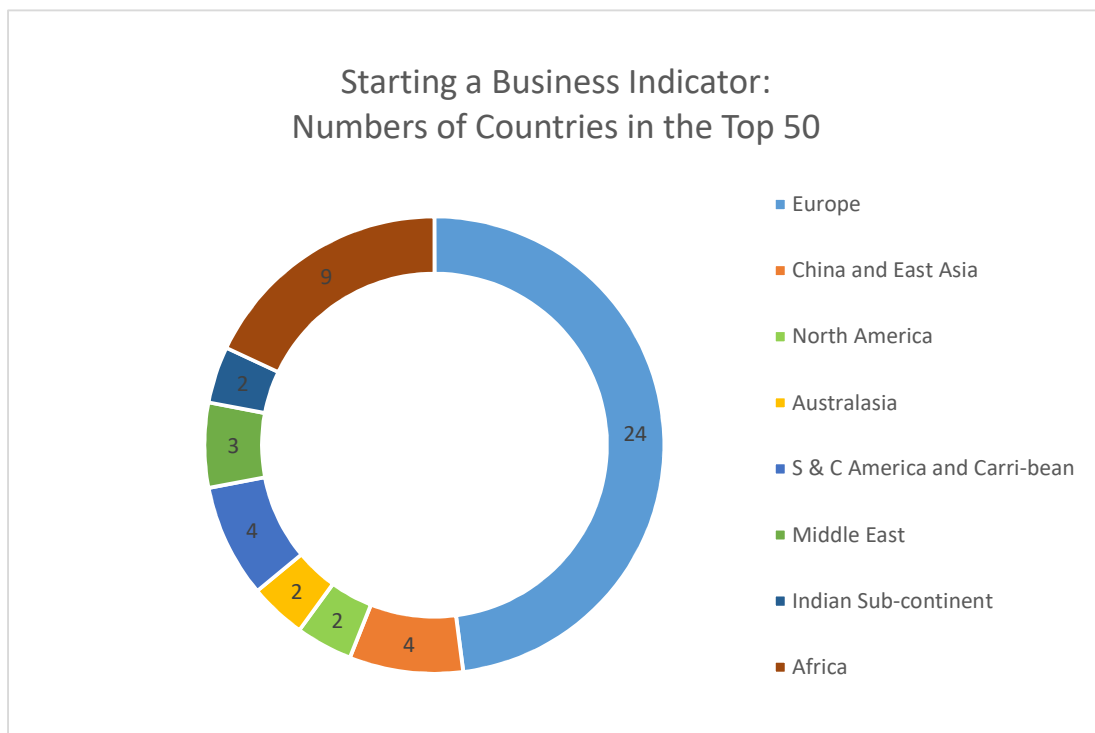
Starting a Business Indicator	Country
1	New Zealand
4	Georgia
4	Macedonia, FYR
5	Australia
5	Hong Kong, China
5	Portugal
5	Singapore

6	Armenia
7	Lithuania
8	Belgium

Source: World Bank: "Starting a Business Indicator 2014".

Figure 6.9 below shows the numbers of countries in the top 50 for different world regions, based on the World Bank Group "Starting a Business Indicator 2014". Europe has the highest numbers of countries in the top 50, and this is then followed by the China and East Asian region.

Figure 6.9: The numbers of countries in the region in the "Starting a Business Indicator" top 50 ranking.



Source: World Bank: "Starting a Business Indicator 2014".

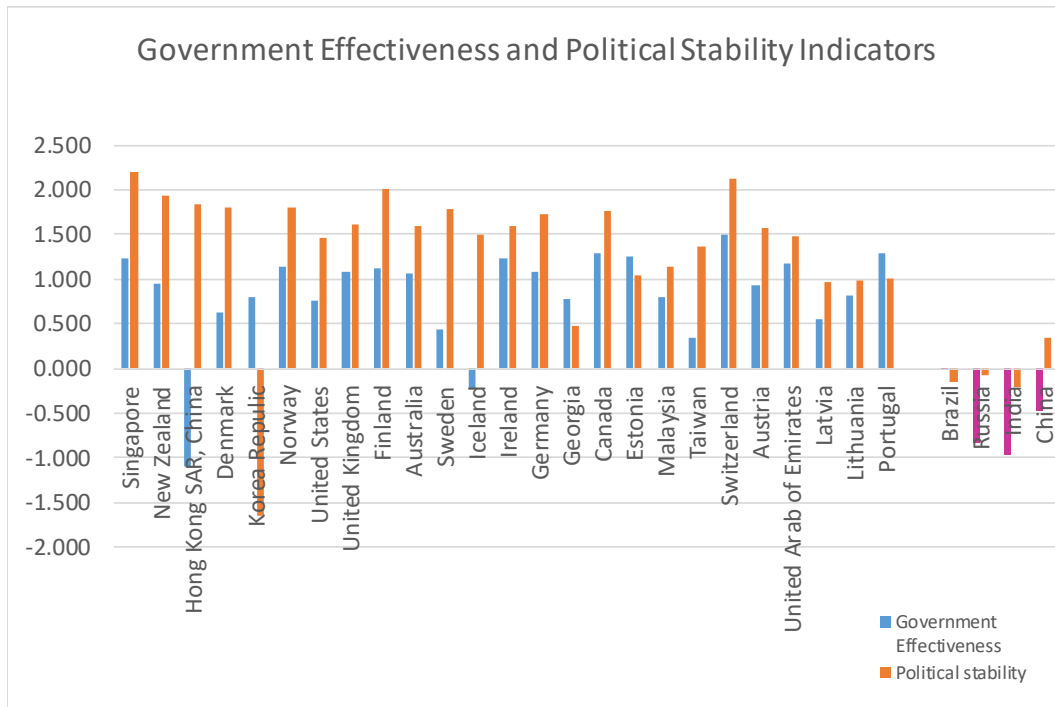
Political and Social Stability and Good Governance

Consulting engineering firms have indicated in the interviews that the political and social stability of a country is one of the most important factors affecting the geographical choice of firms. The political instability, potential sudden change in government policies, bureaucratise approval structures (which is the breeding ground for bribery and corruption) are major concerns for firms when operating in emerging markets.

Figures 6.10 & 6.11 show the “government effectiveness”, “political stability”, “rules of law” and “controls of corruption” indicators for the “Ease of Doing Business” top 25 countries and BRIC (data source: World Bank, 2014). The “Government Effectiveness” indicator captures the perceptions of the quality of public and the civil service, the degree of its independence from political pressures and the credibility of the government’s commitment to such policies. The “Political Stability and Absence of Violence/Terrorism” measures the perceptions of the likelihood of political instability and/or politically-motivated violence, including terrorism. The “rules of law” indicator captures the perceptions of the extent to which agents have confidence in and abide by the rules of society, as well as the likelihood of crime and violence. The “Control of corruption” indicator captures the perceptions of the extent to which public power is exercised for private gain. The estimate gives the country’s score on the aggregate indicator, in units of a standard normal distribution, i.e. ranging from approximately -2.5 to 2.5 (World Bank Group, 2014).

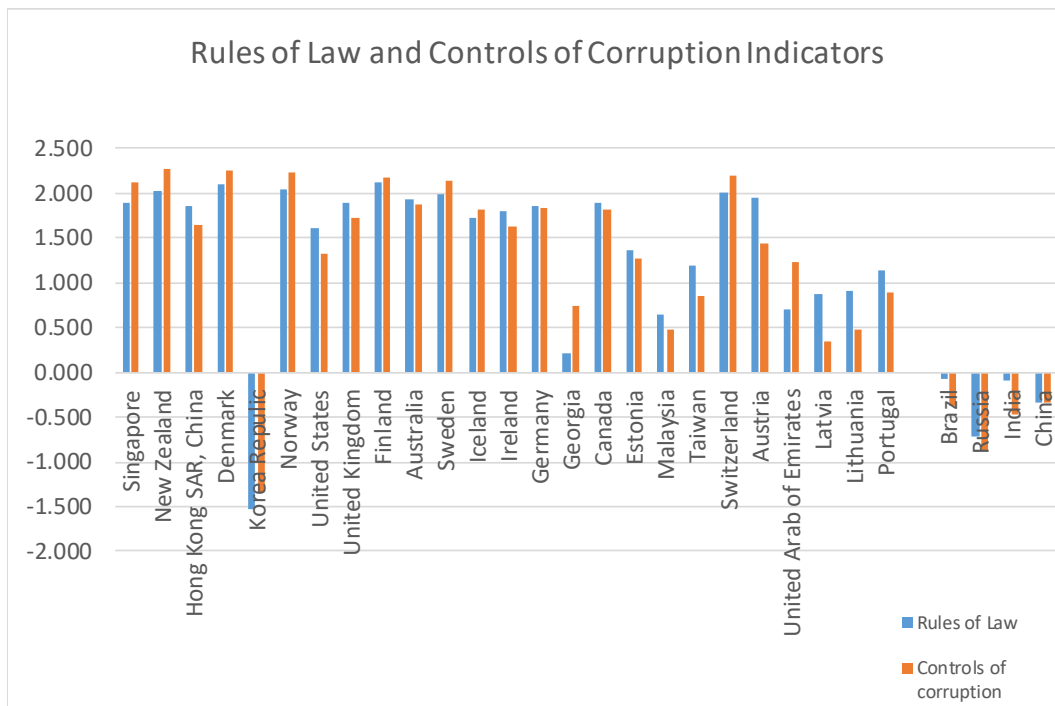
In general, the World Bank indicators revealed that the developed countries have a higher score for the “government effectiveness”, “political stability”, “rules of law” and “controls of corruption” in comparison to developing countries. This is consistent with the interview’s finding where consulting engineering firms has expressed concern about issues related to the host country’s government institutional effectiveness and political stability when operating in developing countries.

Figure 6.10: The “government effectiveness” and “political stability” indicators for the “Ease of Doing Business” top 25 countries and BRIC.



Source: World Bank (2014).

Figure 6.11: The “rules of law” and “controls of corruption” indicators for the “Ease of Doing Business” top 25 countries and BRIC.



Source: World Bank (2014).

Business Regulations and Legal Infrastructure

Legal system plays an important role in enforcing rules to protect property rights, patents and to enforce commercial contracts. Consulting engineering firms have expressed preferences to work in countries where there is a well-structured legal system and the government is committed to enforcing the law and treat foreign firms on an equal basis as local firms. In emerging markets where there is an inadequate legal framework, firms are faced with the risk of misappropriation of intellectual property by local firms or partners.

The World Bank Group publication “Doing Business 2015” has identified the 11 areas of business regulations that will have an impact on starting a business, and this includes the complexity and cost of regulatory processes and the strength of legal institutions.

Table 6.4: The complexity and cost of regulatory processes.

Complexity and cost of regulatory processes	
Starting a business	Procedures, time, cost and paid-in minimum capital to start a limited liability company.
Dealing with construction permits	Procedures, time and cost to complete all formalities to build a Warehouse.
Getting electricity	Procedures, time and cost to get connected to the electrical grid.
Registering property	Procedures, time and cost to transfer a property.
Paying taxes	Payments, time and total tax rate for a firm to comply with all tax regulations.
Trading across borders	Documents, time and cost to export and import by seaport.

Source: “Doing Business 2015- Going Beyond Efficiency”.

Table 6.5: The strength of legal institutions.

Strength of legal institutions	
Getting credit	Movable collateral laws and credit information systems.
Protecting minority investors	Minority shareholders’ rights in related-party transactions and in corporate governance.

Enforcing contracts	Procedures, time and cost to resolve a commercial dispute.
Resolving insolvency	Time, cost, outcome and recovery rate for a commercial insolvency and the strength of the insolvency legal framework.
Labour market regulation	Flexibility in employment regulation, benefits for workers and labour dispute resolution.

Source: "Doing Business 2015- Going Beyond Efficiency".

Financial System and Capital Market

Consulting engineering firms have highlighted in the interviews that the ease of access to local funding, taxation and the restriction of capital outflows are amongst the factors affecting the investment decision of firms. A local financial system that is willing to lend to foreign firms will help in attracting foreign investors. In most of the emerging markets, the banking networks are owned partly or in full by the government and lending to foreign firms is normally not a priority. Local firms with a good link to the government usually have a preferential access to the government-owned banks in comparison to foreign firms. Large consulting engineering firms have also expressed concerns about the restriction of capital outflows in some developing countries where firms are unable to relocate their profits back to their home country.

Table 6.6 shows the "Total tax rate (% of profit), Credit-Strength of Legal Rights Index and Strength of Investor Protection Index" for the "Ease of Doing Business" top 25 countries. The total tax rate is the measures of the amount of taxes payable by medium-sized businesses after accounting for deductions and exemptions, expressed as a share of commercial profits. The total tax rate is designed to provide a comprehensive measure of the cost of all the taxes a business bears (World Bank Group, 2014).

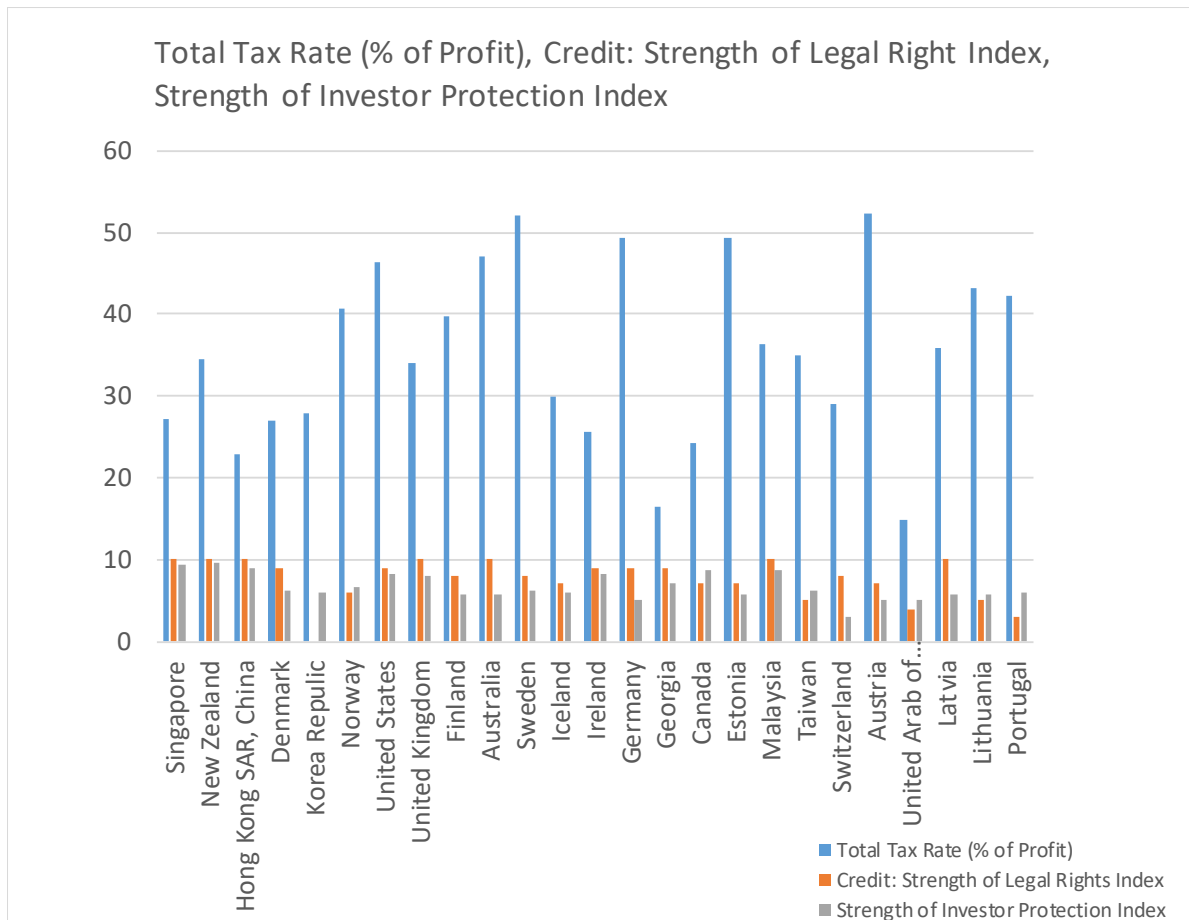
Figure 6.12 shows the graphs for the "Total tax rate (% of profit), Credit-Strength of Legal Rights Index and Strength of Investor Protection Index" indicator for the "Ease of Doing Business" top 25 countries. The strength of legal rights index measures the degree to which collateral and bankruptcy laws protect the rights of borrowers and lenders and thus facilitate lending. The index ranges from 0 to 10, with higher scores indicating that laws are better designed to expand access to credit (World Bank Group, 2014).

Table 6.6: The “Total Tax Rate (% of Profit)”, “Credit: Strength of Legal Right Index” and “Strength of Investor Protection Index” for the “Ease of Doing Business” top 25 countries.

Ease of Doing Business Ranking 2015	Country	Total tax rate (% of Profit) (Year 2013)	Credit: Strength of legal rights index (Year 2013)	Strength of investor protection index (0 to 10) (Year 2013)
1	Singapore	27.1	10	9.3
2	New Zealand	34.6	10	9.7
3	Hong Kong SAR, China	22.9	10	9
4	Denmark	27	9	6.3
5	Korea Republic	27.9	-	6
6	Norway	40.7	6	6.7
7	United States	46.3	9	8.3
8	United Kingdom	34	10	8
9	Finland	39.8	8	5.7
10	Australia	47	10	5.7
11	Sweden	52	8	6.3
12	Iceland	29.9	7	6
13	Ireland	25.7	9	8.3
14	Germany	49.4	9	5
15	Georgia	16.4	9	7
16	Canada	24.3	7	8.7
17	Estonia	49.4	7	5.7
18	Malaysia	36.3	10	8.7
19	Taiwan	35	5	6.3
20	Switzerland	29.1	8	3
21	Austria	52.4	7	5
22	United Arab of Emirates	14.9	4	5
23	Latvia	35.9	10	5.7
24	Lithuania	43.1	5	5.7
25	Portugal	42.3	3	6

Source: World Bank: Doing Business Project (2013).

Figure 6.12: The graphical presentation of the “Total Tax Rate (% of Profit)”, “Credit: Strength of Legal Right Index” and “Strength of Investor Protection Index” for the “Ease of Doing Business” top 25 countries.



Source: World Bank: Doing Business Project (2013).

6.2.8 Regional and Country Risks and International Investment Geographical Choice:

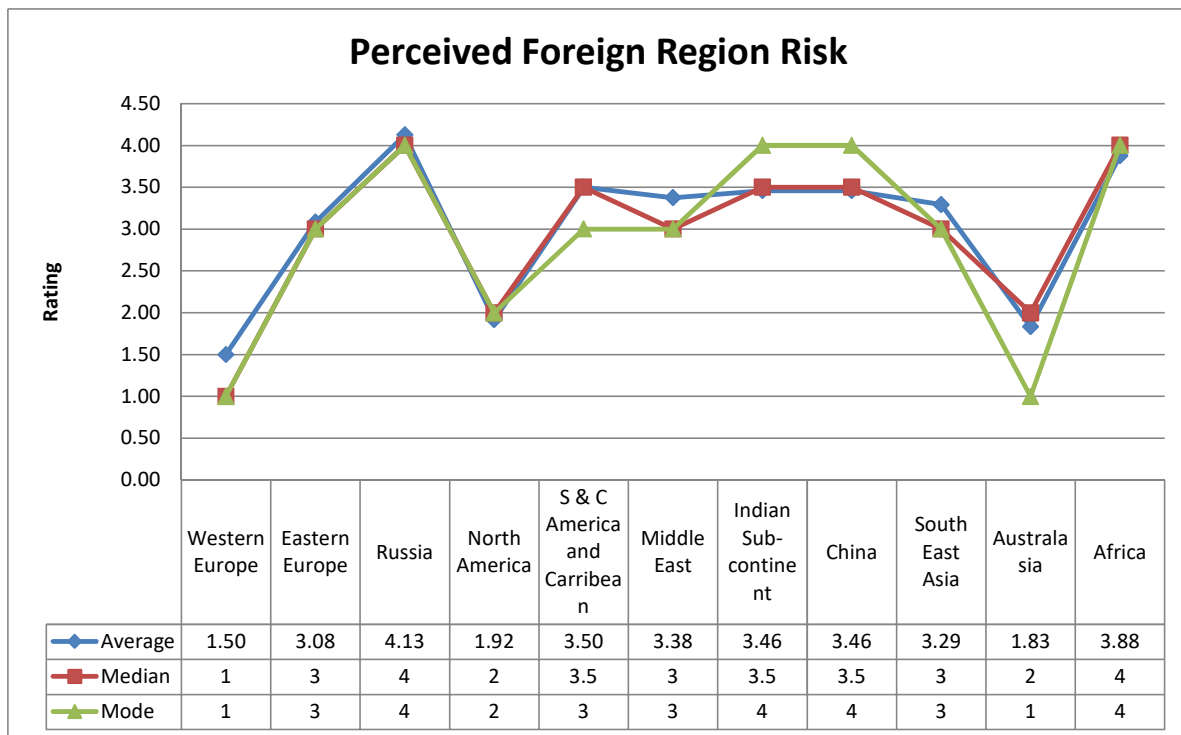
Qualitative Analysis

Questionnaires were distributed to the top UK based international consulting engineering firms where the top management of firms were asked to rank the perceived foreign region's risks, with 1 being the region with the lowest risk and 5 being the region with the highest risk. The foreign region risk includes the political, economic, financial, foreign exchange and international liquidity risks.

The aim of this qualitative analysis is to study the effect of the risk perception of consulting engineering firms on their locational choice when internationalising. The risk perception data collected from the questionnaire were also compared against the World Bank "Ease of Doing Business" indicator 2015.

Figure 6.13 shows the analysis of the risk perception of firms for different world regions obtained from questionnaires. Russia is perceived as the highest risk region with an average score of 4.13 and this is followed by Africa with an average rating of 3.88. Regions such as South East Asia, China, Middle East, Indian sub-continent, Eastern Europe and South and Central America and the Caribbean have received average ratings of between 3 and 4. Developed economies such as Western Europe, North America and Australasia, are perceived as regions with lower risk with average ratings of between 1 and 2.

Figure 6.13: The average, median and mode of the perceived foreign region risk of firms.



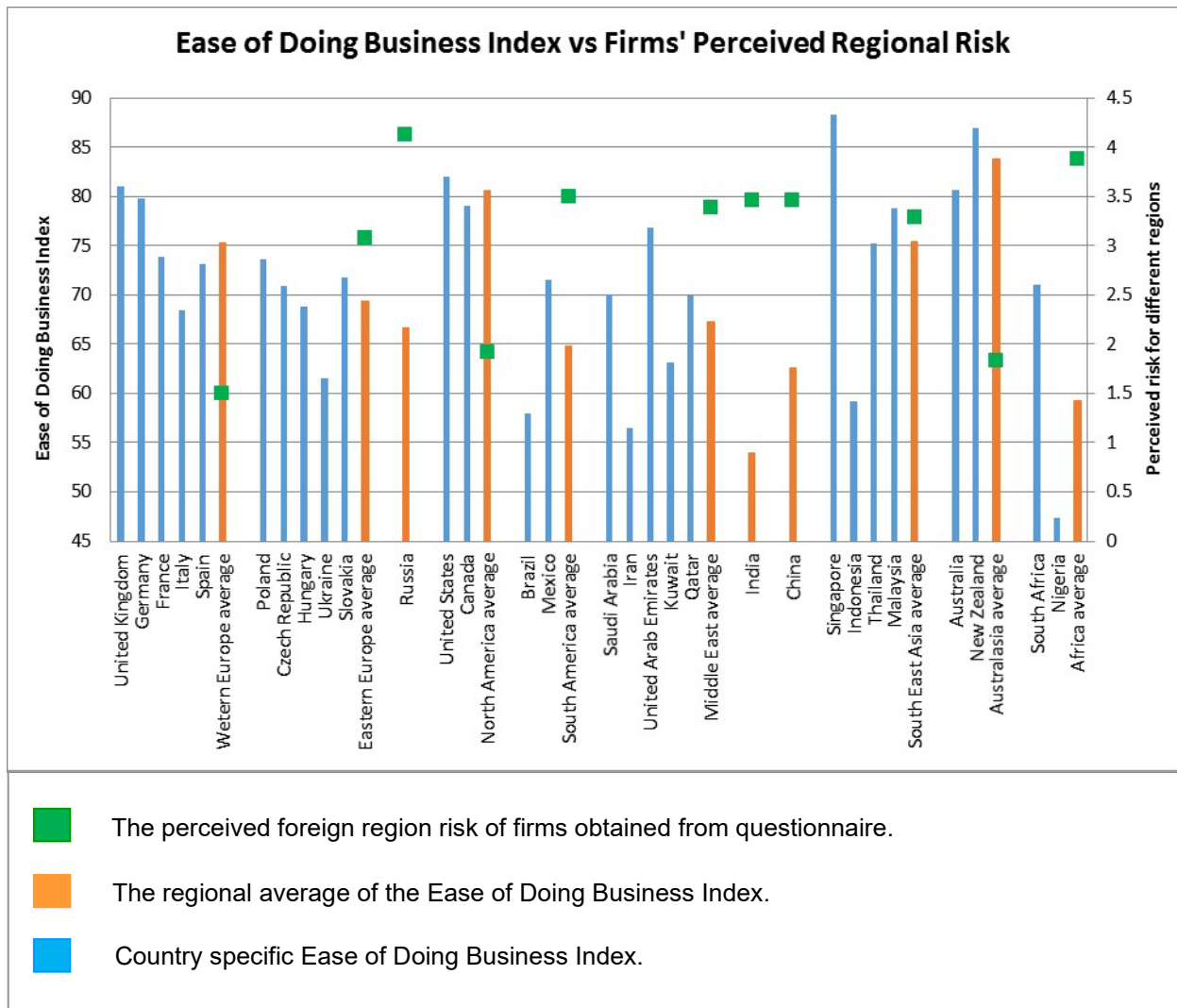
In general, emerging economies are perceived by firms as having a higher risk in comparison to developed economies. The risk perception of firms is consistent with the World Bank’s government and regulatory effectiveness indicators, as previously outlined in this chapter.

Firms have explained in interviews that the risk perception for developing countries is very much affected by the degree of understanding of the market. The biggest risk faced by consulting engineering firms when investing in developing market is not understanding the design standards in the local context or the lack of understanding of local market requirements. One of the top consulting engineering firms has explained that, by definition, the consulting engineering services is a viable service in any urbanised society. Therefore, they will work in anywhere if they have got the right people, subject to a stable economy and political situation. Firms have explained in interviews that the majority of their investments in new countries or regions have started from opportunities rather than risk evaluations, where most of their international expansion were considered on the basis of opportunity or following their existing clients.

Russia is perceived as having the highest risk due to the lack of understanding of the market, political risk and the widespread of corruption situation. The immature market, such as Africa, has been associated with political and economic instability and corruption. The Middle East region is also perceived as a high-risk region due to high political and cultural risks and the fact that the client or the country's government is the ruler of law and there is no recourse around it.

The perceived regional risk data obtained from questionnaires were then reviewed against the World Bank Data "Ease of Doing Business Indicators 2015". As previously explained, the higher the figure for the perceived risk indicates that the region is perceived by firms as having a higher risk. On the opposite, the higher the "Ease of Doing Business" Indicators indicates that the easier it is for firms to carry out their businesses in the region. The analysis shows that there is a consistent trend between the perceived regional risk data obtained from the questionnaires and the World Bank Data "Ease of Doing Business" Indicators. The analysis indicates that regions with a high risk perception score, for example, Russia and Africa, also have a low "Ease of Doing Business" Index, whilst developed region such as North America and Australasia have a low "perceived risk" figure and a high "Ease of Doing Business" Index.

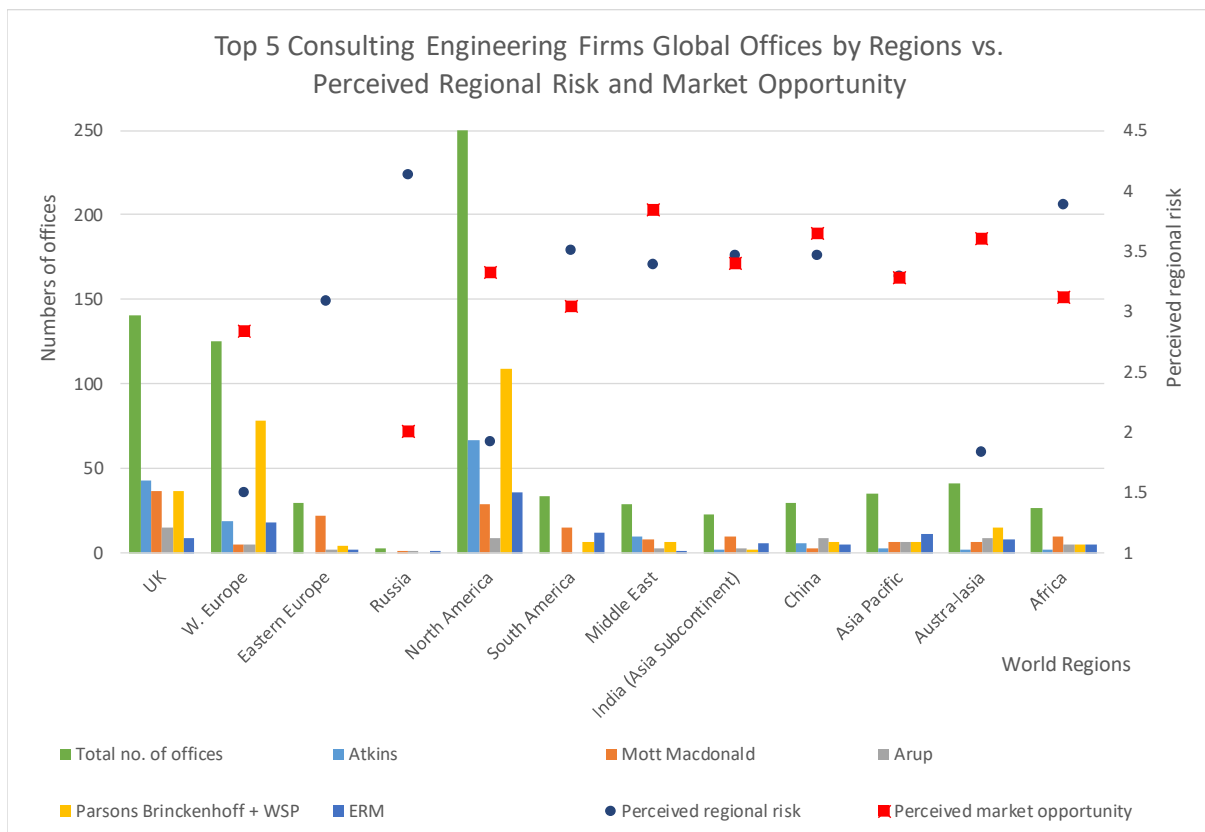
Figure 6.14: The analysis of the perceived regional risk of firms obtained from the questionnaires and the World Bank Data “Ease of Doing Business Indicators 2015” for different world regions.



The data of the perceived regional risk and market opportunity of firms obtained from questionnaires were also reviewed against the numbers of regional offices of top 5 UK based international consulting engineering firms to study the relationship between the size of the regional operation of firms and their perceived market opportunities and risks. The numbers of regional offices in the region were used as an indicator of the size of the firm’s operation in the region. The analysis indicates that, in general, firms have a higher number of offices in regions with a low perceived risk and high market opportunities, such as North America, Western Europe, and Australasia. This is then followed by the Asia Pacific, China and India where these regions are perceived as regions with medium risk and high opportunity. Firms have the lowest numbers of offices in regions with high perceived risk and low

opportunity, such as in the South American and African regions. Therefore, this study indicates that there is a positive relationship between the size of firm's regional operation and the perceived market opportunity, and a negative relationship between the size of firm's regional operation and the perceived risk.

Figure 6.15: The perceived regional risk and market opportunity of firms obtained from questionnaires and the number of regional offices of the top 5 UK based international consulting engineering firms.



6.3 Factors Affecting the Success of International Subsidiaries

Firms are faced with both internal and external challenges when internationalising their businesses abroad and their responses to these challenges, such as the adaptation of their firm's structure and resources, will have an implication on the success of their new foreign subsidiaries. Therefore, this section is aimed at exploring the factors affecting the success of international subsidiaries by asking questions such as: What does it take for firms to succeed overseas? How do firms implement their strategies to achieve effective international expansions and operations? Based on the Real Options Theory, firms will decide on their entry mode choice based on a combination of external factors and their firm's own internal characteristics, to optimise their business operations. Therefore, it is important that this study reviews the factors affecting the success of foreign subsidiaries and the factors affecting the overall performance of firms.

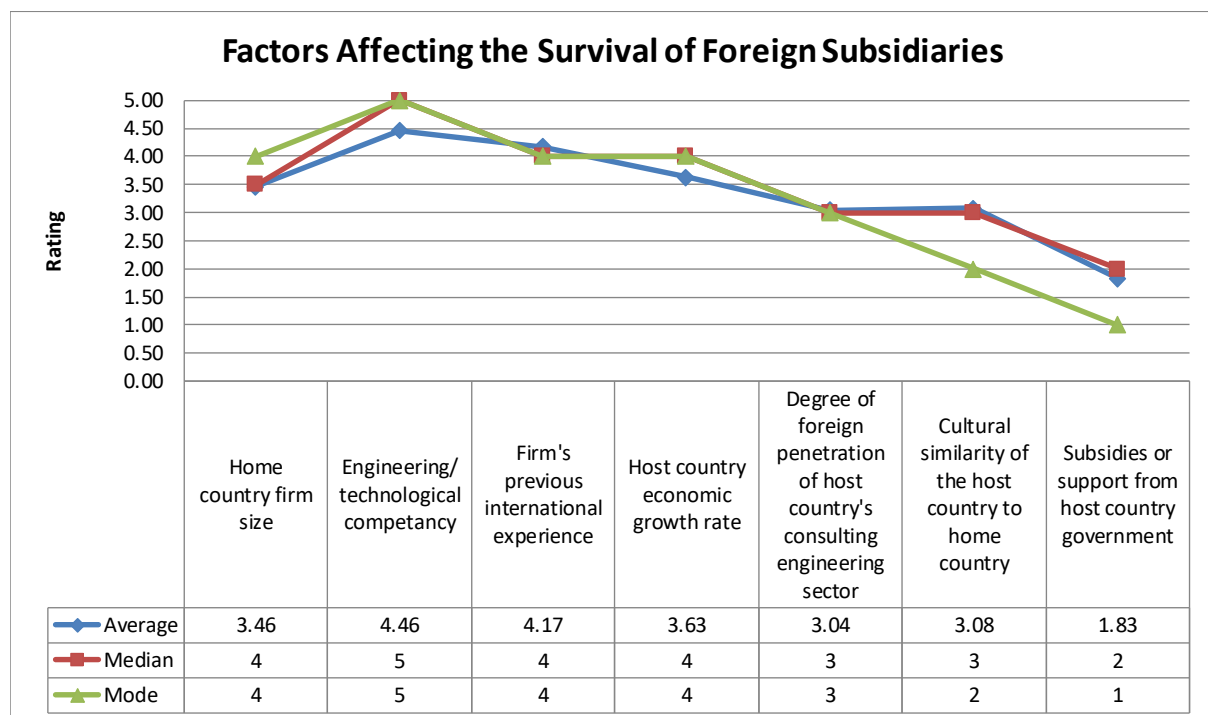
Top consulting engineering firms were asked in the questionnaire to rate the importance of the following factors in affecting the survival of their foreign subsidiaries, with 1 being the least significant and 5 being the most significant:

- The home country firm size
- Engineering and technological competency of firms
- Previous international experience of firms
- The host country economic growth rate
- The degree of foreign penetration of the host country's consulting engineering sector
- The cultural similarity of the host country to the home country
- Subsidies or supports from the host country government

The average, median and mode scores of different factors affecting the survival of foreign subsidiaries are presented in figure 6.16. All of the factors stated above have an average, median and mean score of 3 and above, except the “cultural similarity” and “the host country’s government support”.

“Engineering and technological competency” has the highest average score of 4.46, with a median and mode score of 5 out of 5. The “firm’s previous international experience” and “home country firm size” have a mean score of 4.17 and 3.46 respectively. This indicates that firms have viewed their previous international experience as an important factor in affecting the survival of their foreign subsidiaries due to the experiential learning from their previous internationalisation activities. The “host country economic growth rate” has an average rating of 3.63, followed by the “degree of foreign penetration of host country consulting engineering sector” and “culture similarity” at 3.04 and 3.08 respectively. The “Subsidies or support from host country government” has the lowest score at an average of 1.83.

Figure 6.16: Factors affecting the survival of foreign subsidiaries.



The data collected from questionnaires were analysed further using the Likert-type Scale Method based on a sample consisting of 25 firms. The S score is obtained by summation across all the

weighted categories. N is the number of respondents and r is the number of equally spaced categories. V is the variance and Z score calculated as:

$$Z = (S - (N(r+1))^2) / (\sqrt{N(r^2-1)/12})$$

Sections 6.3.1 to 6.3.10 outlines the questionnaire analyses for factors affecting the survival of foreign subsidiaries using the Likert Scale method.

Interviews were then carried out with the top management of firms, with the aim to explore the underlying reasons which may explain the findings of the questionnaires analysis.

6.3.1 Home Country Firm Size

The home country firm size is an important factor affecting the survival of the foreign subsidiaries (Audretsch, 1995). According to Zimmerman and Zeitz (2002), large firm size will serve as a positive signal to lower the concerns of potential customers regarding the liability of foreignness of firms. A large firm size implies the existence of slack resources that enable the firm to get over the early lean period of its operations, therefore increasing the larger firm's odds of survival. Zeng et al. (2013) and Barkema et al. (1996) have highlighted that more well-established, larger and more profitable MNEs have a greater likelihood of FDI success due to the advantage of additional resources available within their firms.

Caves (1996) suggested that MNEs have to be successful firms at home in order for them to compete successfully in international markets. This is due to firms are faced with the sunk cost of setting up production facilities when internationalising, and therefore only the most productive firms will invest abroad (Castellani and Zanfei, 2004).

Table 6.7: Likert-type Scale analysis of influence of firm size on survival of foreign subsidiaries.

Home country firm size					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	2	9	9	4
Weighted score	1	4	27	36	20
No. of correspondents, N=	25				
Summation of all weighted score, S=	88				
The expectation of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	1.91	At 0.01 level, p= 0.0281 <0.05 therefore the home country firm size factor is significant			

Table 6.7 shows the Likert-type scale analysis of the influence of the home country's firm size on the survival of foreign subsidiaries. Firms were asked to rate the importance of the home country firm size in influencing the survival of their overseas subsidiaries, with 5 indicating that the home country firm size has a significant impact on the survival of the foreign subsidiary and with 1 indicating the opposite. The analysis indicates that the Z score of 1.91 is significant at .05 level and the value of $S=88$ is greater than the expected value of $E(S) = 75$. Therefore, firms participated in the questionnaires study have indicated that the home country's firm size is a significant factor in influencing the survival of foreign subsidiaries.

The result of the Likert-type scale analysis is consistent with the findings obtained from the interviews with top consulting engineering firms. The top management of large consulting engineering firms have explained in the interviews that their scale advantage allows them to invest abroad due to having a broader base of assets and resources and a bigger breath of skills. Having a larger base in the home country provides firms with specific advantages, such as the skills-sharing between the home country offices and the host country subsidiaries. The skills-sharing between the home and host countries enables larger firms to enhance the quality of work and technical ability of their foreign subsidiaries at a faster speed in comparison to smaller firms.

The top management of firms have also highlighted that the home country firm size provides the perception of the capacity of a firm. The brand overlay, support, and involvement of the well-established home country's office provide clients (especially the government agency's clients) with confidence. This will enhance the opportunities of foreign subsidiaries in obtaining works from their local clients. Larger home country firms are also believed to have a greater investment capacity and are better in managing risks associated with the operations of their foreign subsidiaries.

Having a bigger home country base also provides foreign subsidiaries with greater flexibilities in terms of international resources mobilisation. Larger firms with good international coverage are likely to have a greater pool of resources located in different world regions. With strategic supports and coordination from the home country's office, foreign subsidiaries could be supported by resources from neighbouring countries or regions when there are insufficient resources within the foreign subsidiaries, therefore, providing the foreign subsidiaries with resourcing flexibilities. Having the

support of a large home country's office will also enhance the foreign subsidiary's confidence for future growth.

6.3.2 Technological Competency

The questionnaire analysis indicates that consulting engineering firms have chosen the "Engineering and technology competency" as the most important factor affecting the survival of foreign subsidiaries. Based on the Knowledge-based View, knowledge is the most widely-recognised source of growth and competitive advantage (Grant, 1996; Barney, 1986- as cited in Abdelzaher, 2012; Scott-Kennel and Batenburg, 2012). According to Casillas et al. (2009) the internationalisation of firms is both an outcome and source of knowledge. Scott-Kennel and Batenburg (2012) have found that the success of the internationalisation of firms is most influenced by the internal and tacit knowledge of firms. The tacit knowledge in its nature is difficult to articulate and codify, and therefore, the transfer and dissemination of tacit knowledge across the organisation is limited by the geographical distance and time between the home and host countries (Abdelzaher, 2012).

Technological competencies are important intangible assets that are difficult for other firms to emulate. Mudambi and Zahra (2007) have found that entrants who had high levels of technological competencies had a higher probability of survival. The industry factors are important in short-term performance windows, whereas firm-specific factors are more crucial for the superior long-term performance of firms.

Various researchers have found that the internationalisation patterns of professional services firms (PSF) are influenced by its tacit assets, the skills of employees, reputation, relational capital, and learning capabilities (Erramilli and Rao, 1993; Greenwood et al., 2005; Hitt et al., 2006; Shukla and Dow, 2010; Teece, 2003). Hitt et al. (2006), Barney and Arikan (2001) and Sirmon et al. (2007) argued that for PSF to be successful internationally, firms must possess appropriate resources for their international expansions. Hitt et al. (2006) argued that clients usually choose the firm with the strongest human capital or technical expertise to meet the complex needs of international markets.

Therefore, firms with strong human capital are more likely to expand into the international markets and to have large-scale international operations.

Table 6.8 shows the Likert-scale analysis of the influence of technological competencies on the survival of foreign subsidiaries. Firms were asked to rate the importance of the technological competencies in influencing in the survival of overseas subsidiaries, with 5 indicating that technological competency has the most significant impact on the survival of the foreign subsidiary and with 1 indicating the opposite. The analysis indicates that the Z score of 5.30 is significant at .05 level and the value of S= 112 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires study have indicated that the technological competency of firms is a significant factor in influencing the survival of foreign subsidiaries.

Table 6.8: Likert-type scale analysis of influence of technological competency on survival of foreign subsidiaries.

Engineering/ technological competency					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	0	4	5	16
Weighted score	0	0	12	20	80
No. of correspondents, N=	25				
Summation of all weighted score, S=	112				
The expectation of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	5.30	At 0.01 level, p= 0.00003, <0.05 therefore the Engineering/ technological competency factor is significant			

The findings from the interviews with the top management of consulting engineering firms support the findings of existing literature and the Likert-scale analysis in figure 6.35 as shown above. The top management of firms have indicated that possessing good technical skills and having highly-skilled people is the key to success when internationalising. When investing in a new country, firms have to compete with the well-established local firms. Therefore, it is important that foreign subsidiaries are able to differentiate themselves from local firms by offering clients the technical skills that local firms are incapable of providing. The other firm-specific advantages that a foreign firm possesses over a local firm is the global experience that the foreign firm could offer. The track record and experience of working on international mega-size developments is a good indication of the skills and work quality that foreign firms could offer. Foreign firms with good technical skills and experience could also have an influence on the local design practices in the host country, bringing added value practices to their clients' projects.

However, possessing valuable knowledge and specialist resources on its own is insufficient for firms to achieve competitive advantages when internationalising into or operating in an international market. The knowledge and specialist resources have to be managed and deployed effectively in order for firms to achieve their competitive advantages when operating internationally. The top management of consulting engineering firms have highlighted that in order to compete with local firms, it is important that they are able to tailor the services offered to suit the requirement of the local market and to add value to their clients' activities. This is particularly important for consulting engineering firms due to the use of different design codes, standards, and practices in different countries. Participation in external professional networks and key research projects and providing technical support in influencing the local design practice allows international firms to gain their legitimacies and to grow their reputations in the local market.

6.3.3 Previous International Experience and Experiential Learning Capacity

Johanson and Vahlne (1977) discussed the importance of managers' international experiential knowledge in obtaining foreign market opportunities and expansions of firms. The experience of individuals working on international projects is an advantage for firms in the context of internationalisation (Coviello and Martin, 1999). Experiential knowledge provides firms with the framework for perceiving and formulating opportunities. Firms will experience the liability of foreignness and will face the unfamiliarity and discrimination cost when internationalising into new markets. The liability of foreignness is expected to decrease over time as firms are starting to accumulate their market knowledge. Market experience of the host country enables firms to make more-informed decisions when internationalising (Johanson and Vahlne, 1977; Tschoegl, 1987; Zaheer and Mosakowski, 1997).

Table 6.9 shows the Likert-type scale analysis of the influence of the previous international experience and network of firms on the survival of foreign subsidiaries. Firms were asked to rate the importance of the previous international experience of firms in influencing in the survival of overseas subsidiaries, with 5 indicating that previous international experience has the most significant impact on the survival of the foreign subsidiary and with 1 indicating the opposite. The analysis indicates that

the Z score of 4.17 is significant at .05 level and the value of S= 104 is significantly greater than the expected value of E(S) = 75. Therefore, firms participated in the questionnaires study have indicated that the previous international experience of firms is a significant factor in influencing the survival of foreign subsidiaries.

Table 6.9: Likert-type scale analysis of influence of previous international experience on survival of foreign subsidiaries.

Previous international experience					
Rating	1	2	3	4	5
No. of times this rating was chosen	0	1	4	10	10
Weighted score	0	2	12	40	50
No. of correspondents, N=	25				
Summation of all weighted score, S=	104				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	4.17	At 0.01 level, p= 0.00003, <0.05 therefore the Previous International Experience factor is significant			

Top management of consulting engineering firms have highlighted in interviews that previous international experience provides a track record for firms when internationalising into a new market. It is easier for a firm to gain recognition from new clients or in the new country if it is already an international firm, therefore making it easier for it to venture into the new market. Firms with existing international operations also have the capacity to draw on resources from different world regions to provide their new clients with the expertise required, therefore providing specific advantages to firms.

Mudambi and Zahra (2007) have highlighted the importance of the international experience of the top management of firms in influencing the survival of foreign subsidiaries. Knowledge about the social and market conditions improves the odds of successfully implementing the chosen mode of entry. Eriksson et al. (2000) have found that the experiential knowledge structure of firms is influenced by their first international steps. Li et al. (2011) (as cited in Scott-Kennel and Batenburg, 2012) argued that a firm's previous international activities, together with strong human capital, are important predictors of its international commitments. The top management of consulting engineering firms have highlighted during the interviews the importance of the selection of the management team of the new foreign subsidiary. It is important for the manager to have sufficient international experience, good

local knowledge and the capability to manage local resources effectively, in order for the foreign subsidiary to succeed.

Various researchers such as Gulati et al. (2009) and Park (2010) (as cited in Park et al., 2012) have found that the firm's previous experience has the potential to boost its learning capability. Tsang (2002) (as cited in Park et al., 2012) argued that firms with previous experience are more effective learners than inexperienced firms, therefore contributing towards the absorptive capacity of firms. Li et al. (1995) have found that the risk of failure of international expansion is significantly reduced if the firm has previous international experience.

Experiential learning is a continuous learning process, and it is also vital in developing the firm's internationalisation capability (Cort et al., 2007). There are various pieces of literature which emphasise on the importance of the experiential knowledge in influencing the success of internationalisation of firms. In the context of internationalisation, Blomstermo et al. (2004) referred "experiential knowledge" as the knowledge that firms accumulate by being active in foreign markets and the capabilities of firms to exploit the knowledge in an ongoing and effective way. During the internationalisation process, firms have to seek experiential knowledge on clients, markets, local institutions or government and cultures. Butler et al. (1996), Cohen and Levinthal (1990), Eriksson and Chetty (2003), Faulconbridge (2006), Magnusson et al., (2009) and Malhotra (2003) explained that firms have the opportunities to accumulate a variety of knowledge, develop absorptive capacity, reduce uncertainty and to enhance the awareness for new opportunities when operating in different locations. Fang et al. (2007) argued that firms with a high level of experiential knowledge are more likely to make a more appropriate decision during the internationalisation process, such as to select partners, locations and information systems in foreign locations. Interviews with the top management of consulting engineering firms have revealed similar findings. Firms tend to have more practical knowledge in the market research and the internationalisation process and operation if they possess previous international experiences. Firms with previous international experiences are more aware of the risk associated with the internationalisation of their firms, therefore will be able to tailor their risk mitigation strategy appropriately, such as by choosing an appropriate entry mode, and to make a more informed decision regarding market selection.

6.3.4 Relational Capital

Various researchers (Coviello and Martin, 1999; Løwendahl, 2005; Malhotra, 2003; Von Nordenflycht, 2010 and Warf, 1996) have argued that, in general, networks and relationships of firms can lead to their competitive advantages and provides opportunities for future work. Hitt et al. (2006) and Lambert et al. (2000) have highlighted that the capability of building an effective relationship with clients is a crucial asset to professional services firms. The joint benefits experienced by both parties in a relationship is referred to as “relational capital” (Dyer and Singh, 1998), and this involves the understanding of both parties to shared meaning, commitment, and norms of reciprocity (Granovetter, 2005). The relational capital consists of three main components: trust, information transfer, and joint problem solving. The three components are inter-related, where trust leads to information and knowledge generation, thus allows more joint problem-solving (Hitt et al., 2006). Malhotra (2003) argued that relational capital such as personal contacts, relationships and employees’ knowledge of the host country, are complementary to the technical knowledge of the firm.

The findings from interviews with top management of consulting engineering firms support the existing literature where existing relationships with international clients could lead to opportunities in the new region. One of the key factors for consulting engineering firms to internationalise is to follow their existing clients. Following their clients to invest abroad could provide firms with the opportunities to build on their international reputations, gaining access to other multi-national clients and also to develop the relationship with foreign governments. This is particularly important for firms in securing government-funded development projects or to obtain the government’s approval for privately-funded projects when working with private sector clients. Firms have highlighted that to maintain a good relationship with their clients, they have to be responsive to their needs and have the capacity to add value to their international operations.

6.3.5 Host Country Economic Growth

High industry growth rates improve the odds of survival for international new ventures (Mudambi and Zahra, 2007). Host countries with high economic growth are full of opportunities and are ripe for

exploitation, and new firms may capitalise on emerging niches, instead of competing head to head with established companies (Shrader et al., 2000; Zahra et al., 2000; Mudambi et al., 2007).

Table 6.10 shows the Likert-type scale analysis for the influence of the host country economic growth rate on the survival of foreign subsidiaries. Firms were asked to rate the importance of the host country economic growth in influencing the survival of overseas subsidiaries, with 5 indicating that host country economic growth has the most significant impact on the survival of the foreign subsidiary and with 1 indicating the opposite. The analysis indicates that the Z score of 2.19 is significant at .05 level and the value of $S = 90$ is greater than the expected value of $E(S) = 75$. Therefore, firms participated in the questionnaires study have indicated that the host country's economic growth rate is a significant factor in influencing the survival of foreign subsidiaries.

Table 6.10: Likert-type scale analysis of influence of host country's economic growth rate on survival of foreign subsidiaries.

Host Country Economic Growth Rate					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	2	6	13	3
Weighted score	1	4	18	52	15
No. of correspondents, N=	25				
Summation of all weighted score, S=	90				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	2.19	At 0.01 level, $p = 0.0143 < 0.05$ therefore the Home Country Economic Growth Rate factor is significant			

Consulting engineering firms have explained in the interviews that, in general, good economic growth in the host country has helped in the survival of the foreign subsidiaries due to there are more opportunities available. However, it was highlighted by firms that it is the growth of specific sectors related to the consulting engineering services, in particular, the growth of construction and infrastructures sectors, which will have more influence on the survival of the foreign subsidiaries in comparison to the host country's overall economic growth.

6.3.6 Intensity of Foreign Penetration and Competitiveness

The effect of local density on the performance of foreign subsidiaries have been largely ignored in existing literature on the internationalisation and performance of firms. Hannan and Carroll (2000)

defined density as “a measure of numbers of firms in a population or industry competing for similar resources”. The degree of the density of an industry tends to varies across geographic areas, within a region or a country, due to industry often cluster in a location that provides abundant resources (Porter, 1996). The density of a population or industry also varies over time as the population matures. The institutional pressure is usually high in the early stages of the population but is gradually taken over by the competitive pressure as the population matures. Firms operating in mature industries are faced with higher competition and weaker institution pressure in comparison to firms operating in new industries (Baum and Singh, 1994; Hannan and Carroll, 1992, 2000).

Miller and Eden (2006) have suggested that the performance of foreign subsidiaries is negatively affected by the local density of the industry. This is due to the fact that foreign subsidiaries located in a high-density environment are faced with stronger competitive pressure than those located in a low-density environment.

Table 6.11 shows the Likert-type scale analysis for the influence of the intensity of foreign penetration and competitiveness on the survival of foreign subsidiaries. Firms were asked to rate the importance of the intensity of foreign penetration and competitiveness in influencing in the survival of overseas subsidiaries, with 5 indicating that the intensity of foreign penetration and competitiveness has the most significant impact on the survival of the foreign subsidiary, with 1 indicating the opposite. The analysis indicates that the Z score of 0.21 is insignificant at .05 level. Therefore, firms participated in the questionnaires returns have indicated that the intensity of foreign penetration and competitiveness does not have a significant influence on the survival of the foreign subsidiaries.

Table 6.11: Likert-type scale analysis of influence of intensity of foreign penetration and competitiveness on survival of foreign subsidiaries.

Degree of Foreign Penetration					
Rating	1	2	3	4	5
No. of times this rating was chosen	2	5	10	6	2
Weighted score	2	10	30	24	10
No. of correspondents, N=	25				
Summation of all weighted score, S=	76				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	0.21	At 0.01 level, $p=0.4168 > 0.05$ therefore the Degree of Foreign Penetration factor is insignificant			

The findings from the interviews with consulting engineering firms have revealed mixed results. Some of the firms interviewed have indicated that the high intensity of foreign penetration of the host country's industry will increase competition, therefore creating price competition which will lead to a lower financial performance of firms. The high competition will also reduce the opportunity available for firms to create new international venture, and therefore, reducing the likelihood of firms in winning new projects. However, large-scale public-listed consulting engineering firms with niche expertise and experience in specific areas, such as in the mega-scale infrastructure sector and pharmaceutical industry, have highlighted that the intensity of foreign penetration and competitiveness does not influence the survival of foreign subsidiaries. The technical knowledge and experience possess by their firms have created firm-specific advantages that their competitors in the sector are not able to overcome.

6.3.7 Cultural Distance and Liability of Foreignness

The Uppsala model postulates that firms will expand first in proximate countries then gradually expanding further away from their home country when more knowledge is gained. Learning how to manage the aspect of the foreign culture is a necessary condition for firms to achieve successful operations abroad. Culture has been defined as the 'programming of the mind' (Hofstede, 1980). Culture affects a company's organisational structure, systems, and processes (Greenwood and Hinings, 1993). Hofstede (1980) have found that cultural differences can be categorised into four main aspects: uncertainty avoidance, individuality, tolerance of power distance and masculinity-femininity. Barkema et al. (1997) and Shaver et al. (1997) have highlighted that cultural differences between the host and home countries may have a negative impact on the survival of foreign subsidiaries. Li and Guisinger (1992) have found that the cultural distance has had a significant effect on the failure of foreign subsidiaries. However, the impact of cultural distance on foreign subsidiaries is expected to reduce gradually over time. They have also found that the impact of cultural distance exists in the early stage of internationalisation but it has generally disappeared in the later part of internationalisation. Similar to manufacturing firms, services firms prefer to enter a highly-developed

and culturally-similar market when internationalising and then, gradually expanding into a less developed and culturally less similar market to their home country.

Hymer (1976) has implied that the lack of knowledge of local cultures and institutions reduces the performance of foreign subsidiaries and increases the failure rate of foreign expansions. However, Kogut (1983) has proposed that multinational firms can reduce their exposures to uncertain environmental contingencies by transferring their resources across borders through a globally maximising network. Having subsidiaries operating outside the home market may provide firms with unique options which are unavailable to purely domestic firms, such as options for sourcing inputs and locating production, marketing, or other value chain activities.

Sullivan and Bauerschmidt (1990) have found that managers have not perceived any differences in cultural barriers during the internationalisation of firms. The survey carried out by The Association for Consultancy and Engineering (ACE) UK (2008) has revealed that the Middle East region, which has a long psychic distance with the UK, is the most popular region for consulting engineering firms planning to expand their business overseas. This indicates that consulting engineering firms may not see the psychic distance as a barrier to entry when internationalising.

Table 6.12 shows the Likert-type scale analysis of the influence of the cultural similarity on the survival of foreign subsidiaries. Firms were asked to rate the importance of the cultural similarity in influencing in the survival of overseas subsidiaries, with 5 indicating that the cultural similarity has the most significant impact on the survival of the foreign subsidiary, with 1 indicating the opposite. The analysis result indicates that the Z score of 0.49 is insignificant at .05 level. Therefore, firms participated in the questionnaires have indicated that the cultural similarity of the host country does not have a significant influence on the survival of the foreign subsidiaries.

Table 6.12: Likert-type scale analysis of influence of cultural similarity on survival of foreign subsidiaries.

Cultural similarity of the host country to home country					
Rating	1	2	3	4	5
No. of times this rating was chosen	1	8	6	7	3
Weighted score	1	16	18	28	15
No. of correspondents, N=	25				
Summation of all weighted score, S=	78				
The expectation of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	0.49	At 0.01 level, $p = 0.3121 > 0.05$ therefore the Cultural similarity factor is insignificant			

The top management of consulting engineering firms have highlighted in the interviews that despite the fact that the cultural similarity of the host country does not affect the survival of their foreign subsidiaries, firms do suffer from the liability of foreignness due to the lack of understanding of the local market and practices when venturing into a foreign region or country. The differences of practices in the local market could lead to the potential mismatch of the client's expectation and the scope of services delivered by the foreign subsidiaries.

The above finding is in line with existing literature, where, in comparison with domestic firms, foreign firms are faced with several disadvantages due to their unfamiliarity with the local market, practices, and regulations when investing in a new market. These disadvantages are known as the "liability of foreignness" (Hymer, 1976) and this will typically incur additional costs to foreign firms (Salomon and Wu, 2012). Zaheer (1995) has identified the four main sources of liabilities of foreignness: the lack of familiarity of the operation of the local market, the lack of legitimacy of the foreign firms in the view of local clients and suppliers, the cost of transport and coordination and the restriction imposed by the host country. The additional cost incurred due to "liability of foreignness" is believed to have a negative impact on the performance and survival of foreign subsidiaries (Zaheer and Mosakowski, 1997). Mata and Freitas (2012) have found that foreign subsidiaries which are owned by larger firms, those with a larger amount of intangible assets and are more profitable with less debt, are less likely to exit the market. In line with the theory of international operation of firms by Hymer (1976), firms operating abroad must have some kind of firm-specific advantages that compensate for the additional cost of operating abroad.

Various researchers have highlighted the effect of cultural differences on the ability of firms to learn from their international investments. Johanson and Vahlne (1977) and Petersen et al. (2008) have suggested that the cultural differences create a gap between a firm's existing knowledge and the knowledge requires in order to be successful in its international investment. The cultural differences affect the firm's ability to learn the important local information such as local business networks and institutions and communications with local partners (Hocking et al., 2007). However, firms interviewed have highlighted that the degree of the liability of foreignness faced by firms or the lack of familiarity with the local market may decrease over time as they acquire more experience from operating in the

local market. The coordination between the home and host country offices may also improve over time.

Barkema et al. (1997) have found that firms are less likely to terminate their foreign investments prematurely if they have entered the culturally-distant market incrementally. Fast expansion of firms into a culturally-distant market may affect their abilities to learn from their early expansions. This may also prevent firms from allocating sufficient resources and effort necessary for their expansions, therefore increasing the likelihood of causality misspecification. Rapid expansions in a culturally-dissimilar market may also compromise the skills development required to operate in foreign cultures (Zeng et al., 2013).

The top management of consulting engineering firms have indicated in the interviews that cultural dissimilarity does not have a significant impact on the survival of the foreign subsidiary if firms are able to adopt a localised organisational structure within the foreign subsidiaries. Firms have indicated that for the majority of the investments that have been carried out, they were able to utilise local technical expertise or resources and their investments were registered locally and managed by the local people, with the support from other regional offices within the same region. The localisation strategy removes the barrier created by the cultural dissimilarity between the home and host country and mitigates the risks associated with the liability of foreignness.

The localisation approach that consulting engineering firms have adopted is similar to the acculturation approach proposed by Shenkar (2012), where the acculturation of firms was assumed to have reduced the cultural distance of the host country. Acculturation is defined as 'changes induced in systems as a result of the diffusion of cultural elements in both directions' (Berry, 1980). Firms may have made anticipatory adjustments to reduce the cultural distance or gap prior to entering the host country. The staffing strategy of firms will have an impact on the acculturation process. Staffing is a way to bring groups or individuals with different cultures into a system. The appointment of the senior management of the foreign subsidiary will influence the acculturation process. Shenkar (2012) has highlighted the importance of having bicultural individuals at a senior level within an organisation in closing the cultural distance between the host and home countries. Due to their familiarities with both

cultures, such individual will be able to bring the two cultures together by serving as an ambassador or interpreter of culturally-embedded signals and behaviours.

Consulting engineering firms have highlighted in the interviews that, in general, the organic growth (expansion at a gradual pace) is their preferred mode of entry when investing in an unfamiliar foreign market. This will allow their foreign subsidiaries the opportunities to have a more effective experiential learning, therefore reducing the effect of cultural dissimilarity. This is consistent with the findings from various researchers, which shows that firms can mitigate the liability of foreignness and issues arises from the cultural distance by adopting appropriate strategies when internationalising. Delios and Heisz (2000) and Martin and Salomon (2003) have suggested that firms can manage the liability of foreignness through their entry mode choice. For example, it is more likely for firms to choose FDI than the IJV when they have had more experience in a country (Stopford and Wells, 1972). Firms can also limit their exposures by choosing countries based on the strategic fit between the host and home countries (Henisz and Delios, 2001; Henisz and Macher, 2004; Holburn and Zelner, 2010). Firms may also reduce the liability of foreignness by pursuing the local isomorphism strategy, by imitating the practices of domestic firms (Miller and Eden, 2006; Zaheer, 1995).

6.3.8 Geographical Distance

Rugman and Verbeke (2008) in their research on the world's largest 500 firms (of which 300 are services firms) have found little evidence that services MNEs are operating globally and most of the services MNEs have adopted a regional rather than a global approach. One of the constraints shown by services MNEs is the lack of flexibility in adapting the upstream and downstream activities separately, or in selecting activity locations as a function of supply side considerations. A high geographical distance between the host and home countries could potentially affect the performance of foreign subsidiaries due to the fact that consulting engineering firms are required to deliver their services closed to their clients. High inter-regional distance can create a significant burden of adaptation and coordination of the upstream and downstream activities of consulting engineering firms.

6.3.9 Host Country Government Policy and Support

Several countries have used subsidies or incentive scheme to promote foreign investments in their countries. Companies that received government subsidies or other types of supports are better positioned than their rivals to overcome the liability of newness, thus improving the odds of survival of companies (Mudambi, 1998).

Restriction of investments of foreign firms imposed by the host country's government can create a barrier for the entry of firms into the host country's market. For example, the government policy such as the requirement for foreign firms to employ a certain percentage of local people in the host country's subsidiaries will limit the resources selection and will create challenges such as difficulties in obtaining the technical expertise required. The restriction on the equity or ownership of foreign firms by the host country's government will also limit the flexibility and international partnering choice of a firm.

Table 6.13 shows the Likert-type scale analysis of the influence of the subsidies or support from the host country government on the survival of foreign subsidiaries. Firms were asked to rate the importance of the subsidies or support from the host country government in influencing in the survival of overseas subsidiaries, with 5 indicating that the government support has the most significant impact on the survival of the foreign subsidiary, with 1 indicating the opposite. The analysis result indicates that the Z score of -4.17 is significant at .05 level. Therefore, firms participated in the questionnaires have indicated that the subsidies or support from the host country government is a significant factor in influencing on the survival of foreign subsidiaries.

Table 6.13: Likert-type scale analysis of influence of subsidies or support from host country government on survival of foreign subsidiaries.

Subsidies or support from host country government					
Rating	1	2	3	4	5
No. of times this rating was chosen	11	9	2	2	1
Weighted score	11	18	3	8	5
No. of correspondents, N=	25				
Summation of all weighted score, S=	45				
The expectationn of S, E(S)=	75				
Variance, Var (S)=	50				
z score=	-4.17	At 0.01 level, $p= 0.00003 < 0.05$ therefore the subsidies or support from Host Country Government factor is significant			

The findings from the interviews with top consulting engineering firms have revealed mixed results. Firms have indicated that the host country's government support is important when they are internationalising into developing regions or countries, and it is less significant when firms are investing in developed countries. For example, when working in the Middle East, most of the projects are funded by the government or organisations with closed links to the government. Therefore, the government policies related to foreign investors tendering for projects and working in the country will have a significant influence on the survival of foreign subsidiaries. The government's taxation arrangement in the host country will also influence the survival of foreign subsidiaries. A higher taxation rate for foreign investors will create economic disadvantages for foreign subsidiaries, and therefore, reduces the competitiveness of foreign subsidiaries in comparison to local firms.

6.3.10 Summary of Qualitative Study

The following is a summary of the qualitative study on factors affecting the survival of foreign subsidiaries, as reported in sections 6.3 to 6.3.9 above.

Table 6.14: Summary of qualitative research analysis

Factors affecting the survival of foreign subsidiaries		
	Average scores	Likert-scale analysis Z-scores
Home country firm size	3.46	1.91 (p-value= 0.0281)
Engineering/technological competency	4.46	5.3 (p-value= 0.00003)
Firm's previous international experience	4.17	4.17 (p-value= 0.00003)
Host country economic growth rate	3.63	2.19 (p-value= 0.0143)
Degree of foreign penetration of host country's market	3.04	0.21 (p-value= 0.4168 > 0.05- therefore, insignificant)
Cultural similarity of host country	3.08	0.49 (p-value= 0.3121 > 0.05- therefore, insignificant)
Subsidies or support from host country's government	1.83	-4.17 (p-value= 0.00003)

Source: tables 6.7 to 6.13.

6.4 Conclusion

This chapter studies the factors influencing the geographical choice of the UK based international consulting engineering firms and the factors affecting the success of internationalisation outcomes of firms. An overall summary and conclusion of this study can be found in chapter 8 of this thesis.

The geographical choice of firms when internationalising is affected by both the country-specific and firm-specific factors. A well-structured and coordinated locational choice strategy enables firms to harness new competitive advantages and be more efficient in deploying their home-based assets. A firm's motives when internationalising, whether it is a market-seeking investment or efficiency-seeking investment will have an impact on its geographical choice.

The quantitative study of the financial data of the regional turnover of consulting engineering firms revealed that there are very few firms which have a good geographical spread across different world regions. Our finding is similar to Rugman and Verbeke's (2008) research on the world's largest 500 firms (of which 300 are services firms), where they found little evidence that services MNEs are operating globally, with most adopting a regional rather than a global approach. The saturation test of regional turnover of firms indicates that most of the firms studied have concentrated their international activities in regions with short psychic distance to the home country, such as Europe and North America. There is only a small percentage of the overseas turnover of firms which comes from developing regions, such as Asia and the Middle East, despite the high economic growth in these regions.

The statistical analyses of the financial data of firms and the data collected from qualitative studies on the factors influencing the geographical choice of firms indicate that the following stimuli factors have had a significant effect in influencing the geographical choice of firms when internationalising.

- The international market potential of the host country
- The cultural similarity between the home and host countries
- Previous international experience and existing networks of firms

- Geographical distance and the market size
- The country factor of the host country
- The capability and adaptability of the human asset in the host country

The statistical analysis indicates that the international market potential of the host country is a significant factor in influencing the geographical choice of firms. The quantitative and qualitative studies of the relationship between the perceived market opportunity, the regional GDP growth, the regional turnover and the size of the regional operation of firms reveal the following outcomes:

- The data obtained from the questionnaires indicate that firms perceived developing regions, such as the Middle East and China, as having the highest market opportunity. Firms have indicated that emerging markets with high GDP growth provides a bigger growth opportunity for firms in comparison to mature markets.
- The analysis of the regional turnover of firms and the regional GDP growth indicates that firms have the highest proportion of their incomes generated from developed regions such as North America and Australasia, despite the modest economic growth in these regions. Firms prefer to invest in developed regions, such as North America and Australasia, due to a lower political and economic risks, and a lower psychic distance between these regions and the home country. Despite the high economic growth in the Middle East and Asia, firms have expressed their concerns about the political risk in these regions. The size of the market has also had an influence on the perceived market opportunity of firms. For example, despite the modest economic growth in North America, the work opportunities in North America is still very high due to it is the largest economy in the world.
- A detailed study of the regional firm size and the perceived market opportunity of firms indicate that despite the high perceived market opportunity in developing regions such as the Middle East and China, firms do not have as many offices in the developing regions in comparison to the developed market such as North America. This is due to firms have entered the developed market much earlier than in the developing regions, and the size

of their operations in the developed region have expanded over time. Therefore, firms have larger offices in developed regions in comparison to developing regions. Firms have also perceived developing regions as higher risk regions despite the high economic growth in these regions. Firms have adopted the strategy of limiting the size of their operation in the developing region as part of their risk mitigation strategy, and have exported the work back to their home country offices.

The Uppsala model postulates that the geographical choice of firms is affected by the psychic distance between the home and host countries. Rugman and Verbeke (2008) have found that when services firms enter markets with high cultural distance, the quality of their services is at risk. This study has found that consulting engineering firms are increasingly using the regional or “spiderweb” approach when venturing into a new market as part of their strategy to overcome the cultural distance between the home and host countries. The regional or “spiderweb” approach enables firms to capitalise on the experience and knowledge of their regional hubs when venturing into a new market with long psychic distance to the home country, therefore reduces the effect of the liability of foreignness.

Firms have indicated in the qualitative study that their previous international experience has influenced their geographical choice. It is easier for firms to grow in countries where they have adjacent offices and existing business networks, such as using the regional or “spiderweb” approach when internationalising into a new market. This is consistent with the Uppsala model which postulates that firms are able to exploit their existing business relationships during internationalisation.

In the qualitative study of the effect of the market distance and size of the host country on the geographical choice of firms, large consulting engineering firms indicate that the geographical distance of the host country is not a consideration factor if the market size is large enough. This is due to larger firms tend to have a wider geographical coverage in different world regions which provides them with the flexibilities to expand from their regional hubs into a geographical distance market, therefore overcoming the issues of physical distance between the home and host country. Smaller firms, however, have indicated that the effect of the market distance is significant on their geographical choice due to their smaller international coverage in comparison to larger firms.

The qualitative and quantitative analysis of the perceived market risk and country factors indicates that the political and economic risks and the social stability of the host country are the main factors influencing their geographical choice. This quantitative analysis of the data obtained from questionnaires indicates that emerging economies or developing regions are perceived by firms as having a higher risk in comparison to developed countries. The political instability and the sudden change in the host country's government policy is the main concern for firms. The quantitative analysis of the perceived risk data obtained from questionnaires and the World Bank *Ease of Doing Business* Index shows that there is a consistent pattern between both sets of data. The result indicates that developed regions such as North America and Australasia have a low 'perceived risk' and a high *Ease of Doing Business* Index, whilst developing markets such as Russia and Africa has a high 'perceived risk' and a low *Ease of Doing Business* Index.

The aspect of the capability of the human asset in the host country is a significant factor in influencing the efficiency-seeking FDI of firms. As previously mentioned in chapter 5, one of the motive for firms to internationalise their businesses is for efficiency-seeking due to the cost competition in the home market. Lower cost developing regions with an abundance of highly-skilled engineers are attractive locations for firms to set up their international design production offices.

The success of international subsidiaries is influenced by both the external environment and the characteristics of firms. The quantitative analyses of the data collected from qualitative studies of the factors influencing the success of international subsidiaries indicate that the following stimuli factors have had a significant effect in influencing the success of international subsidiaries:

- The firm size in the home country
- Engineering and technological competency of firms
- Previous international experience of firms
- The host country economic growth rate

The quantitative analysis indicates that the subsidies or support from the host country government and the cultural similarity of the host country to the home country are insignificant in influencing the success of international subsidiaries.

The home country firm size provides the perception of the capacity of the firm. Large consulting engineering firms have indicated that their scale advantage allows them to invest abroad due to having a broader base of assets and resources, and bigger breath of skills. The brand overlay, support, and involvement of the well-established home country's office will provide clients (especially the government agency clients of the host country) with confidence. This is consistent with the existing literature by Zimmerman and Zeitz (2002) that a large firm size will serve as a positive signal to lower concerns of potential customers regarding the liability of foreignness.

Firms have indicated in the questionnaires study that the engineering and technological competency of firms is the most important factors affecting the success of international subsidiaries. International subsidiaries must be capable of offering clients the technical skill that is not available in the foreign market in order to differentiate themselves from local firms. This is consistent with Dunning's Eclectic Theory which postulates that in order for firms to compete with local firms of the host country, they must possess certain advantages specific to the nature of their ownership, and it must be sufficient for firms to compensate for the cost of setting up and operating in host countries.

Previous international experience provides firms with specific advantages in the context of firms capitalising on their existing international reputation and branding, experience, and resources when internationalising into a new market. It is easier for firms to gain recognition from their new clients if they are already a well-established international firm. Firms are also able to draw support and resources from their existing international offices when venturing into a new market. Firms with previous international experience are usually more aware of the risks associated with international operations and will be able to tailor their internationalisation strategy appropriately to mitigate the risk of internationalisation.

The quantitative and qualitative studies of the effect of the host country's economic growth on the survival of foreign subsidiaries indicate that good economic growth, especially the construction and infrastructure sectors in the host country, has helped the survival of the foreign subsidiaries due to

there are more opportunities available. This is consistent with existing literature by Mudambi and Zahra (2007) that high industry growth rates improve the odds of survival of new ventures.

The quantitative analyses of the data obtained from questionnaires indicate that the influence of cultural similarities of the host country and the host country's government support on the success of the foreign subsidiaries are of insignificance. However, firms have indicated in the interviews that firms do suffer from liability of foreignness due to lack of understanding of the local market and practices when venturing into a new market. This is consistent with Hymer's proposal of the "liability of foreignness" where the lack of knowledge of local cultures and institutions reduces the performance of foreign subsidiaries and increases the failure rate of foreign expansions. Firms have adopted the regional or "spider web" or the organic growth strategy to mitigate the effect of liabilities of foreignness when investing in a new market. Firms have indicated in the interviews that the effect of the host country's government support on the success of foreign subsidiaries is more significant in developing countries where most of the development projects are funded by the government. The host government's restriction on foreign investments, such as the restriction on the equity or ownership of foreign firms and a higher taxation rate for foreign investors will affect the performance of international subsidiaries.

In summary, the geographical choice of firms when internationalising and the performance of foreign subsidiaries are affected by both endogenous and exogenous factors. Endogenous factors (such as the firm size, capacity, existing international experience and the capability of the firm to mitigate internationalisation risk) and exogenous factors (such as market opportunities, economic growth, the host country's government policy, and political stability) will affect the geographical choice and the performance of the foreign subsidiaries. A well-planned internationalisation strategy and a strategic locational choice could help firms in mitigating the internationalisation risks, therefore increasing the success rate of new foreign subsidiaries.

7.1 Introduction

The involvements of firms in cross-border economic activities provide opportunities for the creation and exploitation of new institutional forms (Dunning and Lundan, 2008). Dunning (2003) explained that a firm's profitability and its growth rate is determined by the combination of exchanges (vis-a-vis the market) and value-adding functions (innovation, productions, etc.). The operation of a multinational enterprise (MNE) is far more sophisticated than a purely domestic firm due to the multi-country environment it is operating in. As the internationalisation pressure increases, for example, when new markets become viable, the MNEs must adapt their organisational structures to include for the increasing complexity and scope of operations. MNEs require the ability to create a strategy that combines their firm-specific advantages with location-specific competitiveness to distinguish themselves from domestic firms. The strategy should take into account the internal and external factors, which includes the location-specific advantages, industry-level competitiveness, MNEs' own internal resources and skills, in order for MNEs to become a successful international player. Innovation in some MNEs will allow them to outperform others (Inkpen and Ramaswamy, 2005).

Inkpen and Ramaswamy (2005) referred the corporate governance as "the top management process that manages and mediates value creation for, and value transference amongst, various corporate claimants (including society at large), in a context that simultaneously ensures accountability towards these claimants." Corporate governance affects the corporate practices and business environment, such as the roles and responsibilities of boards and top management, board committee structure and makeup (audit, compensation, etc.), management compensation and rewards, the market for corporate control, the relations among firms, shareholders, and creditors, employee and union relationships with firms, the behaviour of the firm under financial distress, types of corporate financing and payouts and social responsibilities.

Internationalisation has created new challenges for the corporate governance of firms, such as how do firms disseminate best practice across their international operations in order to be a better and

bigger firm. The internationalisation of consulting engineering firms also requires the skills and experience related to the management of growth, such as acquiring new offices, management of staffs, building operation efficiencies, modifying the existing organisational structure and creating a new form of organisational structure or corporate governance system. The top management of some of the larger UK based international consulting engineering firms have indicated in the interviews that the ultimate goal of the internationalisation strategy of their firms is to achieve a 50/50 ratio for the domestic and international turnovers. The top management of one of the largest firms have stated in the interview that "In order to achieve the ambition of creating a global, sustainable and successful consultancy with over 50% of total turnover being generated from outside the UK, it will require a change in the recruitment strategy and the degree of flexibility across the firm in order to provide more services to the global clients".

Therefore, it is important that this chapter reviews the governance strategies of the top UK based international consulting engineering firms as they expand internationally and geographically further away from the home country, and how they have adapted their corporate governance strategies in order to provide the optimum structure for the operation of their firms.

7.2 Organisational Structure

Inkpen and Ramaswamy (2005) in their research on the critical strategic issues which have impacted upon global competition and strategy of firms, have suggested various organisational structures (multinational, global and transnational) for international firms, and the appropriateness of these for different operation scenarios.

7.2.1 Multinational Organisation

The multinational strategy provides MNEs with the ability to carefully customise a set of value in response to the country-specific requirement and this usually requires localising most or all of the value-added activities in each country. Whilst the foreign subsidiary operates under the structure of the MNE, the country manager has a significant role in determining the strategic positioning and

marketing approach. The headquarter has limited influence in articulating the global mandate for the foreign subsidiaries.

In general, MNEs will benefit from the multinational organisation arrangement under the following conditions:

- Where there is a significant variation in consumers' preferences from one country to another and the services offered is required to be adapted to the local requirement.
- Local regulations which require a significant amount of local resources involvements in the production of the services.
- The local market is large enough and is sufficient to provide the economy of scale, such as in China and India.

One of the disadvantages of the multinational organisation approach is that when a MNE is operating in a small-scale market, it limits the ability of the MNE to coordinate its activities in different countries, and therefore, it is unlikely for the MNE to benefit from the economy of scale (Inkpen and Ramaswamy, 2005).

7.2.2 Global Organisation

The main objective for firms to adopt the global organisation structure is to maximise their operational efficiency through the economy of scale. The global organisation structure offers firms the opportunities to capitalise on the economy of scale through standardisation. This approach is typically utilised in situations where the client's preferences are invariant, and the efficiency and operation costs are the key drivers for competitive advantages of firms.

The global organisation approach allows the headquarter to decide on the MNE's global competition strategy. Typically, the core competencies and activities of the MNE, such as those related to the design skills, research and development, are located in the home country. Downstream activities, such as sales and marketing, are carried out by the foreign subsidiaries in locations where their clients are based and the services offered are adapted to the local requirements. The global

organisation approach provides MNEs with the benefit of superior operating cost and access to location-specific advantages (Inkpen and Ramaswamy, 2005).

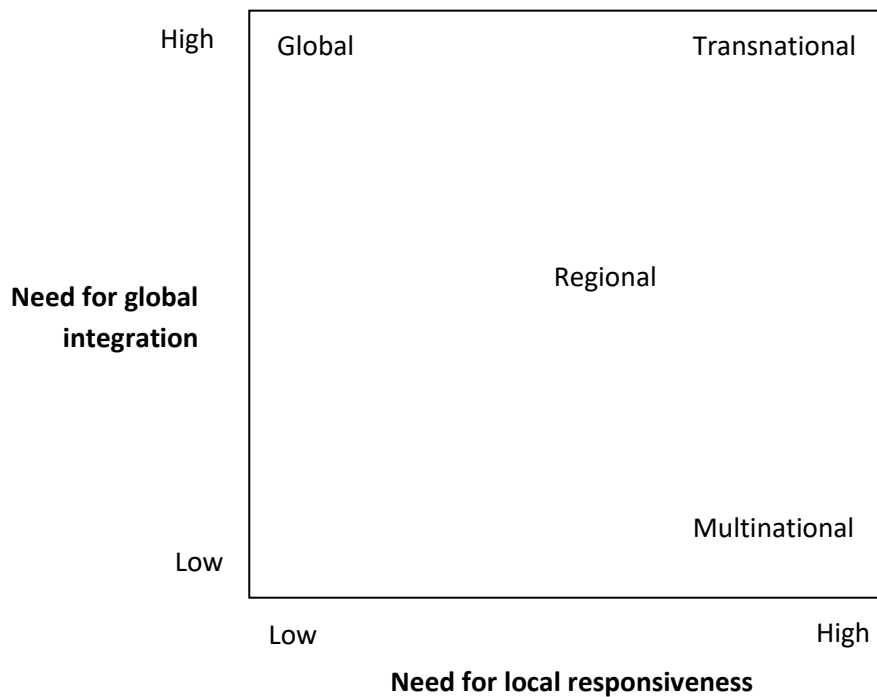
A global organisation will generally work if:

- It is crucial for MNEs to achieve the economy of scale for cost-effectiveness.
- The industry is less subjected to limiting tariff and non-tariff area that prevents the free flow of goods and services across borders.
- The variation in customer preferences across the host country markets are relatively small and can be addressed at a local level without significant impact on the opportunities to achieve the economy of scale.
- The industry is populated with MNEs that has the ability to capitalise on the cross-border synergy and benefitted from the significantly better cost structure than their local rivals.

7.2.3 Transnational Organisation

The 'transnational organisation' approach is aimed at achieving an optimum balance between achieving global integration and scale efficiency (the global approach) and the need for localisation and flexibility (the multinational approach). In contrast to the multinational and global organisation structures, the transnational organisation approach seeks to create operation of specific activities outside the home country, capitalising on the location-specific advantages that the foreign subsidiaries offer (Inkpen and Ramaswamy, 2005).

Figure 7.1: Broad international strategy types.



Source: Inkpen and Ramaswamy (2005).

In contrast to the global organisation structure, the transnational approach decentralised activities should the other location offer location-specific advantages that outweighed the benefit of centralising the operation in the home country. This structure alleviates the typical limitation faced by a global organisation, which is the inability of the headquarter to respond rapidly to the changes in the local market. The transnational approach also provides the opportunity to eliminate duplication of operations, creating a more effective resources management structure. For example, in the multinational approach, many activities or functions are decentralised and are carried out individually by the foreign subsidiaries, leading towards sub-optimal resources utilisation. The transnational approach provides organisations with the opportunities to build scale-efficient subsidiaries without duplication. The foreign subsidiary's role is no longer seen as the vehicle to deliver the services, but it has an important role to create new ideas, knowledge, expertise and resources to the wider organisation (Inkpen and Ramaswamy, 2005).

In general, the characteristics of transnational approach are (Inkpen and Ramaswamy, 2005):

- Decentralisation of specific activities to capitalise on location-specific advantages.
- Decentralisation of assets across subsidiaries.
- Decentralisation of assets across subsidiaries.
- Incorporate a formal knowledge management structure that encourages the knowledge sharing and best practices.

The transnational strategy enables firms to adapt to the changing business environment by incorporating both the formal and informal elements into their organisation structure. The formal knowledge flow and expertise transfers are coordinated through formal hierarchical link while informal relationships are foster through meetings between subsidiaries managers and job transfers (Inkpen and Ramaswamy, 2005).

7.2.4 Consulting Engineering Firms' Operation Strategies: Global, Regional or Local

The organisation structure of services firms relies heavily on the unique characteristics of the services that they offered. In contrast to manufacturing firms, professional services firms suffer from the inseparability of the value chain activities (Ball et al., 2008; Rugman and Verbeke, 2004- as cited in Abdelzaher, 2012). The following unique characteristics of consulting engineering services will have an impact on the choice of organisation structures.

i. Customisation and localisation

- The services provided has to be tailored and customised to meet the specific client's requirement.
- The services provided has to comply with local regulations, such as the conformity of the design with country-specific design codes and practices.

- The ownership of the foreign subsidiary has to comply with the local government restrictions, such as the restriction on wholly-owned subsidiaries by foreign firms.

ii. The need for a local presence

- Due to the requirement for customisation of services for the client, frequent communications and interactions with the client is a prerequisite for the delivery of unique and high-quality services to the client. Therefore, a local presence in the host country is necessary for consulting engineering firms to serve their local clients.
- The local presence in the market also enables firms to identify new opportunities and to enhance their business networks.
- There are requirements for firms to attend the construction sites or to set up their design offices on construction sites for megascale projects during the project delivery.

iii. Competitiveness

- Foreign subsidiaries are usually faced with cost pressures from domestic or other international competitors, therefore requiring a cost-effective organisation structure in order to compete effectively with others. For example, foreign consulting engineering firms are usually involved in large-scale projects, providing niche skills that the domestic firms are incapable of providing. Working on large-scale projects usually involves a significant amount of resources, therefore a cost-effective management structure is required in order for the firm to be competitive.

iv. Quality of services

- Foreign firms are usually employed by clients due to their technical competencies and experiences such as to provide the niche skills required for a project. Therefore, it is important for firms to choose an organisation approach that provides a good balance of control over the quality of the services delivered and the flexibility for the local subsidiary to carry out its operation based on the local requirement.

The Regional Strategy

In the interviews with consulting engineering firms, top management of firms have highlighted that larger firms, which has a larger number of well-established international subsidiaries, are using the regional approach (the “spiderweb” arrangement), instead of a global (wholly-centralised) or multinational (wholly-localised) strategy. An example of the regional strategy adopted by one of the largest consulting engineering firms: a regional board is set up to manage the subsidiaries within the region and every subsidiary will have a representative at the regional board level. The regional chairman is responsible for growing the business within the hub and extending the diameter of the hub. The regional chairman will report to the management executive of the firm, and the management executive will report to the main board of the firm. As the firm’s overseas turnover increases, the role of the regional hub is becoming more significant, and the role of the home country is becoming less significant.

The regional approach offers the following advantages in comparison with the global or local strategy:

- **Resources management**

The regional hub provides the firm with a shared pool of resources and is a cost-effective way of managing the peaks and troughs of workload in different countries within the region. As the regional hub is geographically closer to the subsidiaries within the region than the home country office, it also reduces the coordination and transportation cost. The diversification of workload of the subsidiaries and the “regional resources migration” within the region enables the firm to manage its resources effectively, therefore providing the cost benefit to the firm. The regional hub also provides the sense of “wider community” within the region where employees are part of a bigger regional community rather than on a country-by-country basis.

The regional hub approach also provides firms with the flexibility of not having to set up a local office in the new market during the start-up stage, when internationalising into a new market or country. Due to the proximity of the “regional hub” to the new market or country, resources can be flown into the country as when it is required. This reduces the capital cost of internationalisation and creates a more efficient way for the management of regional resources based on project availability.

▪ Customisation and localisation

The majority of the construction projects that consulting engineering firms have been involved in were bespoke and unique in nature. From the interviews with consulting engineering firms, the top management have highlighted that the customisation of services to meet the client's need and frequent communications with the client is a prerequisite for delivering a successful project. A good size local office supported by the regional hub will be able to facilitate frequent communications with the client at a closer distance in comparison to the global arrangement, therefore achieving the "localisation" requirement.

The regional hub approach also enables the services to be tailored to the local requirement on a "regional" scale due to the cultural similarity between countries in the same region, therefore providing firms with the benefit of economy of scale. For example, a regional hub based in Hong Kong is used to serve both its own and neighbouring markets with a high level of cultural similarities, such as the mainland China and South East Asia.

The regional hub is also geographically closer to the potential market or country in comparison to the global headquarter, therefore increasing the likelihood of the firm in identifying future opportunities. The regional approach will also help the firm to overcome the liability of foreignness when expanding into a new country or market due to its local network and knowledge. This approach enables firms to overcome their liability of foreignness by capitalising on the existing experience in culturally similar countries, therefore reduces the cultural differences between the home and host countries. The geographical proximity of the regional hub to the new market also reduces the internationalisation and management costs, therefore creating firm-specific advantages for firms when competing against other competitors.

The regional hub structure is aimed at providing a good balance of control and opportunities for the localisation of foreign subsidiaries. It provides the foreign subsidiaries with the opportunities to have a different working culture to the home country office due to the local culture, whilst receiving appropriate control and support from the regional hub located at a proximate distance in comparison to the global arrangement. A transparent and flexible arrangement between the

home and host countries offices will help in optimising the benefit of the regional hub arrangement.

▪ **Economy of scale**

The regional administrative hub provides the shared-services and opportunities for assets sharing between the foreign subsidiaries within the same region, thus avoiding duplication of central services and costs within each subsidiary. Large consulting engineering firms usually have sufficient numbers of well-established foreign subsidiaries in the same region to achieve economy of scale, whilst creating flexibility to suit the local requirement. The regional hub arrangement will reduce the cost of management and coordination due to its geographical proximity to the foreign subsidiaries, in comparison to a global management structure.

Despite the potential benefit provided by the regional hub strategy, smaller firms with lower numbers of foreign subsidiaries have indicated in their interviews that their foreign subsidiaries are managed locally with the support from their home country offices. This is due to smaller firms do not have sufficient numbers of foreign subsidiaries within a region in order to achieve the economy of scale. The regional hub strategy will only provide the cost-benefit when firms have achieved sufficient degree of internationalisation or scale of operation within the region.

7.3 Horizontal and Vertical International Investments

A traditional MNE is both vertical and horizontally integrated, where each division is interlocked into linkages with other divisions within the firm. As globalisation intensified, MNEs are faced with the competition on cost and growing recognition of the cost of integration (Buckley and Ghauri, 2004). In the low growth and high-cost competition scenario, MNEs may need to switch their productions to a cheaper source, providing MNEs with the cost flexibility. This arrangement will discourage the vertical integration within MNEs and increases the creation and development of horizontal networks.

Interviews with the top management of consulting engineering firms have revealed that large consulting engineering firms have adopted the vertically-integrated, horizontally-diversified strategy in order to compete effectively in international markets. Many of the large consulting engineering firms

have created their own production offices in a lower cost country in order to facilitate the production activities of their engineering services. The foreign production office is usually created as a separate entity to the main organisation and is set up mainly to support the design production activities. For example, one of the largest UK based international consulting engineering firm has set up a production office in India, where there is an abundance of engineering graduates and technicians at a much lower cost in comparison to the home country. The production office is responsible for the lower technicality and repetitive design and drawing productions, based on the standard template created by the home country office. This strategy has created a cost-effective internal supply chain for the home country offices and other international subsidiaries to enable the services to be delivered at a lower cost, therefore increasing the firm's competitiveness and achieving the economy of scale.

However, it may not always be possible for smaller firms to create their own production offices in a lower cost country due to the capital investment involved and there may not be sufficient work available to achieve the economy of scale. Therefore, smaller consulting engineering firms may outsource the production of their services to engineering services production firms in a lower cost country. For example, there are clusterisations of engineering drawing and design productions companies in Bangalore, India. Some of the smaller consulting engineering firms have subscribed to the services offered by engineering services production firms and have outsourced some of their lower end drawing and engineering design productions to external production offices in Bangalore. This approach provides them with the flexibility or option to use the services only when it is required, therefore eliminating the overhead cost of having their own foreign production offices.

The ability of firms to 'mix and match' their outsourcing or horizontal diversification strategies will provide firms with the flexibilities to achieve the cost-effectiveness and to optimise their resources management.

7.4 International Resources Integration

International resources integration and management is an important aspect of consulting engineering business. Optimum resources management could enhance the firm's competitiveness in a global market. Interviews with UK top consulting engineering firms have revealed that generally overseas works are carried out locally by foreign subsidiaries to offer cost-effective services to their clients. For large-scale projects, supports will be provided by the home country office, typically during the concept or scheme design stage. At the detailed design stage, the work could be carried out by both the home country office and the foreign subsidiary, with the support from their international offices. Firms have also adopted the horizontal integration strategy (as discussed in section 7.3 of this chapter) where international production offices were used to provide cost-effective resources for the home country or international works. For technically complex projects where the foreign subsidiary does not possess a high level of expertise, the technical expertise is usually deployed from the home country office or other larger international offices. From the interviews, firms have revealed that as their firms become more global, resources integrations on a global scale is very important to ensure the performance and operation of their firms. Therefore, it is important for firms to develop their international resources integration strategy and tools to achieve the optimum resources management within their firms.

7.4.1 Integrated Management System

Sölvell and Birkinshaw (2002) argued that the practices of the MNE represent the emerging source of competitiveness in the knowledge economy. Practices are the 'way things are done' by the MNE and can be transferred at low cost, and can potentially be applied at a global scale from the outset. But at the same time, they are difficult to manage due to they are usually embedded in their local environment. Managing practices on a global scale could present both challenges and opportunities for firms. Perlmutter (1969) explained that MNE can have either ethnocentric, polycentric, or geocentric attitudes. Ethnocentric practices were originated from the head office and are applied uniformly across all international offices. Geocentric practices could emerge anywhere in the world and are applied and adapted as appropriate.

The majority of the large consulting engineering firms participated in the interviews have informed that they have developed their own integrated management system to manage and disseminate practices across all offices globally. Foreign subsidiaries are required to operate based on the group's corporate strategy and integrated management system, with local changes which take into account the local regulations and requirements. The integrated management system is aimed at standardising the operating procedures throughout the practice and ensuring that the quality of work delivered to their clients meets the requirement set by their firms.

7.4.2 Innovation and Dynamic Capabilities

Innovation and the dynamic capability of resources could be enhanced by having a high level of fluidity of knowledge within the firm. The fluidity of knowledge could be improved by using the common codes of communication and interaction, especially when the knowledge is difficult or costly to codify (Sölvell and Birkinshaw, 2002). From the interviews with consulting engineering firms, it was revealed that large consulting engineering firms with good global coverage, have created virtual global knowledge portals or networks within their firms. The global knowledge network is then subdivided into the regional knowledge networks to facilitate local requirements and practices in different regions.

The global and regional knowledge networks serve as an interactive platform where the firm could disseminate technical updates and best practices to their technical staffs within the firm in an effective way, unrestricted by the geographical distance. Technical staffs could also share their knowledge and innovative creation on the knowledge network or to seek technical expertise globally within the firm. Having an effective global network for communication and dissemination of knowledge is necessary for enhancing the innovation and dynamic capability of resources within the firm.

It was also revealed in the interviews with top consulting engineering firms that top management attitudes towards a high trust culture is important in developing innovative capabilities within the firm. Employees are more likely to be innovative and to implement positive changes in their work if they are given more trust by the management. Rewards for innovation rather than routine operation could enhance the degree of innovation and dynamism within the firm.

A good understanding of the different strengths and expertise possessed by different countries or regions is essential in order to integrate the capabilities into the firm's overall competencies. The majority of the large consulting engineering firms interviewed have developed the skills matrix for different countries or regions and is accessible to their employees on the firm's skills network. This approach provides the firm with a transparent review of the existing competencies and highlights the areas requiring further development. It also provides the global offices with the information on where to seek the technical expertise required within the firm globally.

7.4.3 Fluidity and Adaptability of Resources

As previously mentioned in the literature review chapter, Hymer's resource-based view emphasised that a firm's competitive advantages are dependent on its resources and capabilities (as cited in Barney, 1991). A high degree of flexibility, fluidity and adaptability within the firm's internal resourcing structure is essential for the firm to manage the environmental volatility and to maintain its competitiveness. Consulting engineering firms have revealed in the interviews that firms have utilised various global resources management strategies in order to achieve optimum global resources management. The various strategies adopted by firms have provided them with the flexibilities to cope with the rapid changes in the regional and global demands.

Global resources migration strategy

The global resources migration strategy is used by large consulting engineering firms with the aim to exchange or relocate expertise between offices in different countries due to there is a demand for a specific type of expertise. Technical staffs could be assigned to the other offices on a short, medium or long-term basis, based on either a planned or ad-hoc assignments. The numbers of staffs involved are usually quite small due to the cost of relocation.

Regional resources migration strategy

Regional resources migration strategy involves relocating staffs to different countries within the same region. This strategy is usually adopted in order to mitigate a sudden increase in the demand in a specific market. Staffs could be relocated temporarily from the regional hub or larger offices within region to other offices within the same region to provide additional resources and supports. This strategy allows the regional hub to optimise the resources management within the region, providing the flexibility to mitigate the rapid changes in the regional market.

International projects migration strategy

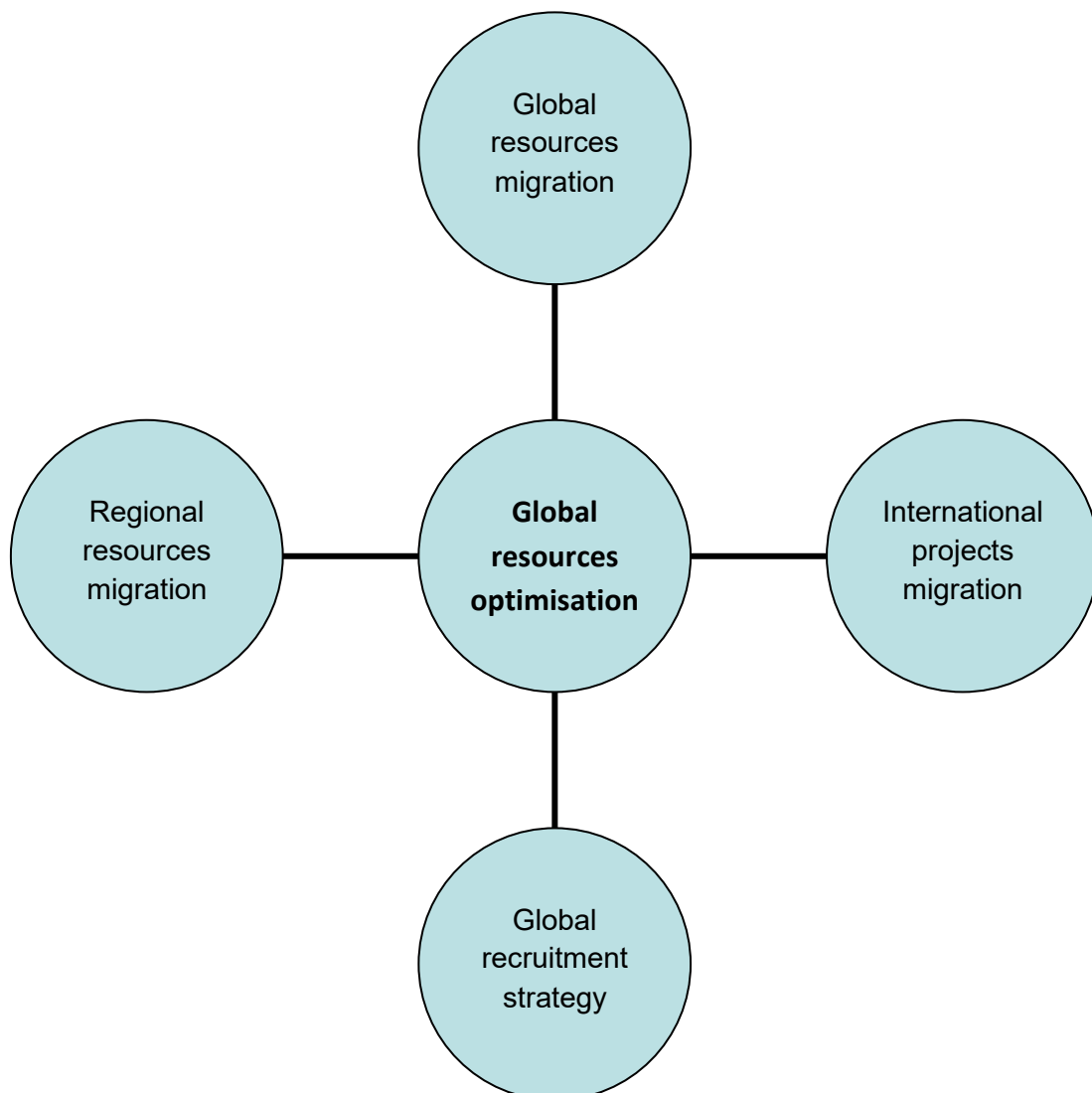
Relocating staffs internationally could incur significant relocation costs if the numbers of staffs involved are significant. Instead of relocating the technical staffs to the host country's office, large consulting engineering firms have "relocated" the large-scale international projects back to the home country office or to other larger offices when the international office does not have sufficient capacity to deliver the project. The advancement in information technology and communication has created a virtual work environment which enables the international office to work together with the other offices globally. The international office which has been awarded the project remains as the project manager and local contact for the client, whilst the home country or other larger offices will be responsible for the design delivery. This strategy provides the following advantages:

- The additional resources from the home country or other offices could be made available at a faster speed due to there is no relocation of staffs involved.
- This approach will be more cost effective in comparison to the staff's relocation strategy, therefore reducing the overhead cost and long-term resources commitment within the international office.
- It provides international offices with the access to a wider pool of expertise within the home country or other larger offices due to the design delivery will be carried out either in the home country or in other larger offices.

Global recruitment strategy

Some of the large consulting engineering firms have created an international talents recruitment programme within the UK, where international graduates are recruited from the UK universities for vacancies in their home countries' offices. The recruitment of graduates who have studied in the UK is expected to help with the cultural assimilation strategy for the international offices and therefore reduces the cultural barriers.

Figure 7.2: The global resources optimisation strategy, based on the model utilised by one of the largest UK based international consulting engineering firms.



7.4.4 Decoupling of Activities

The development in information and communication technologies have provided consulting engineering firms with the opportunities to optimise their resources integration on a global scale. Driven by the pressure of cost, firms have set up international production offices in lower-cost countries, where there is an abundance of skilled resources, and have relocated part of their design production activities to their international production offices.

The key characteristics of a typical international production office:

- Incur lower production cost in comparison to the home country.
- Usually located in developing, lower cost countries where there is an abundance of skilled engineers available and where there is a high proficiency level in English.
- Specialised in a more repetitive, less complex design production.
- High productivity rate due to the repetitive nature of the design work.

Potential benefits offered by the offshore production office include:

- Provides firms with competitive advantages due to the lower production cost and a faster production speed.
- Provides firms with the access to a wider pool of highly-skilled human resources at a lower cost.
- Provides opportunities for cost saving which can be used to fund the firm's expansion and future growth.
- Opportunities to redeploy the home country offices' staffs to develop new skills or to carry out more complex design.

The following are examples of downstream activities provided by the international production offices within the consulting engineering practices:

- Repetitive calculation productions based on the home office standard calculation templates.
- Design models and drawings productions using computer-aided packages.

Factors Affecting the Success of Design Offshoring

The quality of the work produced by the international production office is one of the key factors affecting the success of design offshoring. Good quality work reduces the risk associated with the cost of rectifying errors and potential delays on projects. Firms could enhance the quality of work by implementing the integrated management system globally to ensure that all employees are working towards the same protocol and standard of work. The following measures could be used to reduce the inconsistency in the quality of work produced include:

- Project charter to clearly set out the objectives and design protocol.
- The creation of a country or region specific design guidelines to ensure the consistency of design.
- The use of standard calculation spreadsheets for carrying design works.
- To carry out the design progress monitoring, design quality assurance review and project overall quality assurance review.

The overall management and coordination of works between the home country and the international production offices are important in ensuring that all design packages are properly organised and assigned to the relevant offices, taking into account the resources available and the complexity of the task. The capability and experience of the project manager play a key role in ensuring the success of the design delivery.

Good internal IT and communication system that is well supported in both the home country and international production offices is essential in ensuring effective communication between all parties

involved. Virtual meeting environment with the facility to share the “live” design model online will enhance the coordination and review of the design.

7.5 Conclusion

The organisation structure of firms relies on the nature of the services offered. The unique characteristics of consulting engineering services, such as the need for customisation and localisation and the need for local presence have encouraged firms to utilise a “regional” operation strategy. A regional strategy enables the regional hub to support the foreign subsidiaries within the region at a closer distance in comparison to a global operation strategy. This strategy also enables foreign subsidiaries within the same region to share a common pool of resources and assets, with the aim to achieve the economy of scale and to increase the competitiveness of firms.

When operating in a global market, consulting engineering firms are faced with the competition on cost from other competitors and the increasing cost of global integration of their firms. A well-planned strategy for optimising both the horizontal and vertical integrations within the organisation structure is important in increasing the competitiveness of firms. A well-structured global resources integration structure provides firms with the flexibility to cope with the environmental volatility. A high level of resources fluidity and adaptability allows firms to relocate their resources quickly in order to cope with the external changes and to maintain their competitiveness. The cost pressure faced by firms when competing in an international market has encouraged them to set up international production offices in lower-cost countries such as in India, where skilled engineers are available at a lower cost.

The development in communication and information technology has provided firms with the option for global migration of international projects, instead of the migration of human resources. Some of the larger consulting engineering firms have relocated the design element of their international projects from the host country back to the home country office or to other larger offices globally. This approach reduces the cost associated with the migration of human resources and enables large international projects to be supported by larger offices with a higher level of expertise.

Large consulting engineering firms have also developed their own integrated management system in order to manage their international operation and to disseminate good practices effectively across their firms. Foreign subsidiaries are required to operate based on the group's corporate strategy and integrated management system, with local changes which take into account the local regulations and requirements. The implementation of an integrated management system enables the standardisation of operation procedures, ensuring the quality of work delivered by all offices within the firm and enables cross offices working arrangement in order to achieve optimum resources management.

The main asset for consulting engineering business is its people. Therefore, having a well-coordinated international resources optimisation strategy is essential for the global success of firms. The discussion in this chapter revealed that internationalisation provides firms with opportunities to create a new form of corporate governance structure to optimise their performances and efficiencies, therefore supports the hypothesis proposed for this study.

Chapter 8 Summary and Conclusion

8.1 Introduction

This thesis focuses on the internationalisation of consulting engineering firms in the context of risk management and the geographical choice of firms. Our four research questions (chapter 4: research design and methodology) were:

- i. Why do consulting engineering firms internationalise, and what are the factors affecting their internationalisation strategies?
- ii. How does internationalisation affect the performance of, and risks facing firms?
- iii. What are the factors affecting the geographical choice of firms when internationalising, and what are the factors affecting the success of their internationalisation outcomes?
- iv. How does internationalisation affect the corporate governance and overall business strategy of firms?

These research questions were addressed using both quantitative and qualitative research methods, with the findings reported and discussed in chapter 5, 6 and 7. This concluding chapter provides a summary of these discussions, and considers the extent to which these findings are consistent with the existing literature. The literature on the internationalisation of consulting engineering firms specifically is naturally rather limited. This chapter therefore ends with a discussion on what these findings mean for the internationalisation process of consulting engineering firms, and what lessons might have more general relevance, as well as considering an agenda for future research.

8.2 Approach, Emergent Findings and Contributions to the Literature

Having reported on our research findings, we are now in a position to revisit the four research questions, above.

8.2.1 Question 1: Why do consulting engineering firms internationalise, and what factors affect their internationalisation strategy?

i) Why do consulting engineering firms internationalise?

We analysed the financial data of the top 50 UK based consulting engineering firms in order to review their internationalisation, and the factors related to this. We found a positive correlation between internationalisation and firm performance (as reported in section 5.6). The question of why they internationalise, and the factors affecting the internationalisation outcomes were then put to the top management of consulting engineering firms via a questionnaire, with follow-up interviews to gather further information and insight.

The research reported in chapter 5 revealed a series of external and internal stimuli factors that had led to the internationalisation of firms. Internal stimuli factors are those that arise due to the operational needs of an organisation, including: to provide options or opportunities for future growth; to improve the performance, turnover and profitability of firms; to gain or increase economic and technical advantages through internalisation; to gain or increase international competitiveness and market share; to develop or enhance international reputation and brand image; to reduce risk through greater geographical diversification; and to support global clients. External stimuli factors include the degree of competition in the national market, the home market's economic condition, and the foreign region's economic growth. The firms that we surveyed and interviewed as part of this research reported net benefits from the internationalisation of their firms, especially when the home country's economy was stagnant. These findings lend support to Dunning's Eclectic Theory (OLI), the Risk Diversification Theory, the Uppsala Model, the Real Options Theory, Transaction Cost Theory, and Internalisation Theory.

Dunning's Eclectic Theory on international production discussed the use of ownership, location, and internalisation advantages (OLI), where firms must possess certain advantages specific to their firms for them to compete with local firms, and the firm-specific advantages must be sufficient to compensate for the setting up and operating costs in foreign countries. The findings from this study support Dunning's argument that firms must possess certain technical advantages over domestic

firms when internationalising. However, this study also illustrates how internationalisation provides firms with the opportunities to enhance their competitive advantages. Operating in a global market can enhance a firm's reputation, for example through branding, technical experience, and client confidence due to its global business. Consulting engineering firms indicated the important for their firms to be internationally-recognised. Operating on a global scale provides consulting engineering firms with tangible (the revenues) and intangible benefits. Intangible benefits can be derived from leveraging their global brands, exclusive global offerings, and knowledge and experience from international project involvement. The brand or reputational advantages – the 'track record of being superb' – can provide firms with competitive advantages even in unfamiliar markets. Internationalisation may also provide firms with a more diverse pool of resources for efficiency-seeking due to the variation in economic cycles and labour cost in different world regions.

These findings support the Resource-based Theory, which argues that unique strategic resources that are inimitable and non-substitutable can provide firms with competitive advantages. Firms can gain sustainable competitive advantages through the accumulation of tangible and intangible resources. Internationalisation provides consulting engineering firms with the opportunities to explore and obtain different kinds of expertise and resources from other regions. With a bigger pool of expertise to draw from, firms are able to develop their firm-specific strategic assets and technical advantages in order to ensure the uniqueness of their firms and to distinguish themselves from their competitors.

The Risk Diversification Theory suggests that MNEs will normally prefer to geographically spread the portfolio of their foreign investments rather than concentrating their investments in one region. Firms interviewed have perceived that the internationalisation risk can be mitigated by having a good geographical spread of upstream and downstream arrangement. In exploring the influence of internationalisation on the performance of firms, the OLS quantitative analyses of the financial data of top consulting engineering firms have revealed that there is a positive correlation between the degree of internationalisation and the performance of firms. This is supported by the findings from the qualitative studies carried out with the executives of top consulting engineering firms, where firms revealed that the main reason for cross-border investments is for risk diversification and mitigation. This is consistent with Rugman's Risk Diversification Theory.

Consulting engineering firms indicated that they perceived internationalisation as a natural progression for growth. Internationalisation provides firms with future growth options, consistent with Real Options Theory. This is also consistent with Dunning's Eclectic Theory on the ownership advantages of firms, where a firm serving the national market has various avenues for growth, and when it makes economic sense, the firm will venture into a foreign market and becomes an international firm. A larger firm size provides firms with the scale advantages when internationalising into a new international market. It was found that larger firms prefer a proactive strategy in gaining international market shares, and they will usually internationalise at a higher speed due to the availability of funds and their capacities in absorbing the risks associated with internationalisation. On the other hand, smaller firms tend to prefer organic growth due to their limited resources and experience. The study on the influence of internationalisation on the option value of firms shows that international growth is important for the valuation of firms. This is especially important for large publicly-listed consulting engineering firms, where international growth and opportunities will increase their investors' confidence on the future growth of firms, and therefore, increase the valuation of their firms. This is consistent with the Myer's Growth Option Value Theory, where the international market provides opportunities for growth, therefore increasing the value of growth options and the overall value of firms.

The transaction cost model (Williamson, 1975 and 1985), in rationalising the growth of a firm, predicts that a firm will seize the opportunity to displace a market if transaction costs can be reduced in the process. Similarly, Dunning and Kogut et al (1988) argued that firms will carry out international operations if there are transaction gains likely to result from a common governance of activities in different locations. Buckley and Casson's Internalisation Theory argue that firms will internalise their market when the expected benefits outweigh the expected costs. This study indicates that one of the reasons for large consulting engineering firms to pursue their internationalisation strategy is to achieve efficiency gains and resilience enhancement. Internationalisation provides firms with opportunities in the context of cost efficiency, resource fluidity and workload resilience. Setting up international design production offices in lower cost regions can provide firms with the ability to compete more efficiently. Different economic cycles in different world regions have caused

inconsistency of workloads in consulting engineering sectors, such that internationalisation can assist firms to optimise global resources.

Our study of the influence of the home country's market condition on the degree of internationalisation found that the saturation of the home market and the 2009 economic recession encouraged consulting engineering firms to increase their international activities. Our study suggested that the 2009 recession had an impact on both the short and long term internationalisation strategy of firms. In the short term, the majority of firms interviewed indicated that recession had increased or accelerated their international expansion. Firms had carried out explorations in new regions due to their stagnant or even shrinking operations in the UK and Europe. The recession had also impacted on the long-term strategy of firms – the majority of firms interviewed indicated that the recession had encouraged them to place increased emphasis on diversification, ensuring that their businesses secured a balanced and sustainable revenue stream from across both the UK and foreign regions.

In summary, the findings of this study suggest that:

- i. Internationalisation is positively correlated to the overall performance of firms;
- ii. Internationalisation provides opportunities for firms to enhance their competitive advantage through market-seeking (turnover, market share, and firm size), efficiency-seeking (profitability), strategic-asset-seeking (intellectual capital), and 'ownership' advantages (reputation, brand image) and
- iii. Internationalisation provides firms with the additional options for future growth opportunities.

Our research findings, therefore, suggest that the answer to our question 'why do consulting engineering firms internationalise' is that:

Consulting engineering firms internationalise to gain tangible benefits (increased turnover, market share, and profitability), and to develop firm-specific advantages (brand image, reputation, and future growth options).

ii) What are the factors affecting the internationalisation strategy of firms?

Our study of the entry mode choice of consulting engineering firms indicates that both endogenous and exogenous factors have influenced the entry mode choice of firms. The endogenous factors include:

- i. The motive of internationalisation: the short and long-term strategies of firms;
- ii. Creating future *options* for international investment;
- iii. Tangible and intangible benefits: whether market-seeking, cost-efficiency, or to create ownership advantages;
- iv. The market entry speed: whether it is an immediate entry or organic growth;
- v. The risk level: the degree of controls required for the foreign investments;
- vi. The previous international experience of firms;
- vii. The firm size of the parent company;
- viii. Existing business networks of firms; and
- ix. The requirement for the physical presence of firms in the host country.

The exogenous factors include:

- i. The host country's factor or risk profile, such as government policy, restrictions, regulations, and economic growth;
- ii. The psychic distance between the home and host countries – the differences in the cultural background and the local requirement of the host country; and
- iii. The foreign market size and potential.

Our quantitative study of the internationalisation strategy of consulting engineering firms, based on the data collected from our questionnaires – as outlined in section 5.4.1, figure 5.5, and section 5.9 – indicates that foreign direct investment is the most frequently used entry mode of firms, followed by

acquisition and joint venture. Our qualitative research on foreign direct investment – reported in section 5.4.5 – suggests that firms perceived FDI as a low risk and low capital investment strategy which provides firms with the real option to expand at a rate which is comfortable to their parent companies.

The summary of the findings of the qualitative study on the entry mode choice of consulting engineering firms is outlined in table 8.1 below.

Table 8.1: A summary of the factors affecting the entry mode choice of consulting engineering firms.

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
Tangible and intangible benefits: market-seeking, cost-efficiency and ownership advantages	<p>Economic advantages- firms are able to share their resources and cost, to achieve economies of scale and to lower their transaction costs through vertical integrations.</p> <p>Ownership advantages- complementary alliance and resources dependency- sharing of niche technical resources between the partnering firms.</p> <p>Strategic advantages- to gain access to the other firm's specific assets:</p> <ul style="list-style-type: none"> • To gain access to a new international market. • Learning and skills substitution- to gain additional resources, complementary skills, and technical expertise. • To provide a wider geographical presence to achieve a stronger market presence. 	<p>Economic advantages- M&A usually enables the acquiring firm to gain immediate advantages from the acquired firm.</p> <p>Economic advantages:</p> <ul style="list-style-type: none"> • To gain immediate access to new markets. • To create immediate financial gain- to create an immediate boost on the share price for firms listed in the stock market due to major acquisitions of firms abroad. <p>Ownership advantages:</p> <ul style="list-style-type: none"> • To acquire immediate new capabilities. • To enhance the brand and reputation of the acquiring firm. • To enhance value creation between the acquired and acquiring firms. 	<p>FDI usually starts with a moderate amount of investment and grows organically.</p> <p>FDI usually grows slower than the IJV and acquisition and does not normally provide an immediate impact on the performance or immediate increase in shareholders' value of firms.</p> <p>Efficiency-seeking FDI:</p> <ul style="list-style-type: none"> • The geography focus for the FDI will be in low-cost countries with abundance of skilled resources. • This is more common amongst the big players in the consulting engineering sector. <p>Strategic advantages: to obtain a specific skill-set that is not available in the home country's market in order to improve the firm-specific advantages or to strengthen its position in the market.</p>

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
The future growth potential and growth options	<p>IJV can be seen as a real option for firms to learn more about the new market with a relatively small amount of investments, without any major commitment.</p> <p>Firms have the options to decide after a period of time whether to continue to invest in the alliance, based on the performance of their investments.</p>	<p>A good fit between the acquired and acquiring firms can generate synergies, thus creating value for the firm.</p> <p>On the other hand, firms may face difficulties in finding a cultural fit target for acquisition, and can be faced with potential risks associated with integration post-merger.</p>	<p>The majority of the investments carried out by firms using FDI were considered on the basis of opportunities (opportunistic strategy) or to follow existing clients to go abroad.</p>
The market entry speed-the immediate or organic growth	<p>Firms viewed IJV as a transitory arrangement where there is a lack of knowledge or understanding of a specific market, absence of local network and also in a situation where it is necessary for firms to cooperate with local firms in order to start working in the host country.</p>	<p>Acquisitions enable the acquiring firms to obtain immediately a readily available market, framework and skills by acquiring the targeting firm and this can be carried out on a large scale basis.</p>	<p>FDIs usually grow organically at a pace with which the parent company feels comfortable, tailored to suit the requirement of the parent company.</p> <p>The foreign subsidiary is usually led by senior management relocating from the home country.</p>

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
The risk level and degree of controls	<p>Risk sharing- notably in terms of capital requirements, to spread the financial risk between the partnering firms.</p> <p>Risk mitigation- IJV is predominantly project-specific and is usually based on a short-term strategy. It provides firms the opportunities for a swift withdrawal from the investment when required.</p>	<p>Large consulting engineering firms perceived acquisition as having a lower risk in comparison to other forms of internationalisation strategy due to the readily available market, and skills from the acquired firm.</p> <p>Acquisitions provide firms with the full authority to exercise controls over the acquired firm, and this can eliminate the risk of conflicting interests between parties which may happen in joint venture investments.</p> <p>It enables the acquiring firms to internalise their firm-specific assets and advantages, therefore reducing the risk of appropriation by local firms.</p>	<p>FDI is an organic expansion strategy and is perceived by firms as a low risk and low capital investment strategy.</p> <p>Smaller consulting engineering firms prefer FDI due to its smaller critical mass and lower financing requirement.</p> <p>FDI provides the parent company with the full control of the foreign subsidiary, therefore reducing the risk of appropriation by local firms.</p>

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
Previous international experience and existing business network of firms	<p>IJV is usually adopted by firms when there is a lack of previous experience of the local market or a lack of certain types of technical resources.</p> <p>It provides firms with the intangible benefits of capturing the knowledge from their partnering firms and speeds up the learning process during the initial stages of internationalisation.</p>	<p>M&A enables firms to overcome the lack of previous experience of the local market and network by acquiring other firms which is already operating in the local market, and therefore, firms are able to obtain immediately the local market, framework and skills.</p>	<p>FDI usually grows organically and can be viewed as a learning process for firms to learn about the local market, to establish their local presence and to build their local network. The previous experience of firms operating in neighbouring countries with a similar cultural background could be beneficial for firms during the exploration stage of the FDI.</p>
The firm size of the parent company	<p>Potential arrangements for IJV are:</p> <ul style="list-style-type: none"> • Multi-companies service consortia- usually formed by two large multinational companies to create resources for mega size international development projects, and is usually on a project-by-project basis. • IJV with a local firm- to tap into the domestic market client networks and to gain an understanding of local design practices. 	<p>M&A has become a popular entry mode choice for large publicly-listed (plc) consulting engineering firms due to the speed of entry and hence the speed of capturing the readily available business framework and resources.</p> <p>M&A requires a significant amount of investment up front and is a more feasible option for large publicly-listed companies with access to a larger pool of funding and expertise, in comparison to smaller firms.</p>	<p>FDI can be carried out by both large or smaller firms due to it is a low risk and low capital investment strategy and is the preferred strategy for smaller firms.</p>

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
The host country factor and risk profile: the government policy, restrictions, regulations and economic growth	<p>Firms usually adopt the IJV when faced with:</p> <ul style="list-style-type: none"> • Turbulence in world markets and high economic uncertainty- creating a consortium with another larger firm as a risk mitigation strategy when internationalising. • The local government policy and barrier in a foreign market- IJVs with local firms provide quick entry to the market which is not able to be achieved by other means. 	<p>Firms are likely to carry out acquisition or merger when investing in developed countries with short psychic distance to the home country, and have a high level of political stability and transparency in the government institutional arrangement, such as in North America.</p>	<p>A wholly-owned or majority owned FDI may face challenges such the host country's government restriction in bidding for strategically and politically sensitive services sections and discriminated by procurements or standard policies which favour local companies.</p>
The psychic distance- the differences in cultural background and the local requirement of the industry	<p>IJV with a local firm allows the international firm the opportunities to seek particular competencies that they are lacked of or to secure the competencies through the partnering with other firms. This enables the international firm to overcome the issues associated with psychic distance and the lack of understanding of the local requirement.</p>	<p>M&A provides the acquiring firm with a readily available pool of local resources from the acquired firm, therefore overcoming the issues of psychic distance and lack of understanding of the local requirement.</p> <p>A good organisational cultural fit between the acquiring and acquired firms is vital for the success of the firm post-merger.</p>	<p>Localisation- disseminating the home country culture in the newly created foreign subsidiary is the key for a successful FDI investment. The resources for the new subsidiary are normally recruited locally in order to gain the client's confidence through localisation.</p>

	International Joint Venture (IJV)	Merger and Acquisition (M&A)	Foreign Direct Investment (FDI)
The foreign market potential and size	IJV provides quick access to a new market. The IJV could either be in the form a consortium with other big players in the industry for megascale projects, or it could be IJV with local firms to gain quick access to a local market on a smaller scale basis.	Firms are more likely to carry out M&A in developed countries which offer a stable and readily available market due to a large amount of investment involved.	FDI usually grows organically either on an opportunistic basis or to follow the existing client to invest abroad.

Our study found that the motives for internationalisation influenced their entry mode choice. Consulting engineering firms viewed FDI as an organic expansion strategy, perceived as a low risk and low capital investment strategy. We found that smaller consulting engineering firms tended to follow their clients to go overseas when internationalising, and to grow their international offices organically in the longer term. This is perceived by firms as a lower risk approach to internationalisation, ensuring that the work is already available when internationalising. This approach is consistent with the 1977 Uppsala model which postulates that typically firms develop their international operations incrementally, in small steps, rather than making a large foreign investment at single points in time, and with the revised 2009 Uppsala Model where Johanson and Vahlne argue that existing business relationships influence their entry mode choice, with firms able to identify and exploit opportunities from their existing relationships.

We found that larger firms were more likely to adopt acquisition as their internationalisation strategy when entering a new market or region. Acquisitions enable the acquiring firm to obtain immediately a readily available market, framework and skills, and this can be carried out on a large-scale basis. Gaining immediate access to new markets or opportunities was reported by consulting engineering firms as the main reason for their firms pursuing acquisitions. Acquisition of a competing firm with a good track record in both international and local markets may enhance the brand and reputation of the acquiring firm in the host region or country. Our findings in this regard are consistent with the Resource-based view. Acquisitions and mergers are usually carried out by larger firms and on a scale which is sufficient to create an immediate impact on their market entry. Large consulting engineering firms also perceived acquisition as having a lower risk in comparison to other forms of internationalisation strategy due to the readily-available market and skills from the acquired firm.

International joint ventures (IJVs) are viewed by firms as a middle ground choice compared to FDI and acquisition. Kogut (1991) describes Equity Joint Venture (EJVs) as real options for firms 'to expand and acquire'. Alliances may be viewed as an option for firms to learn more about the market with a relatively small amount of investment, and without any major commitment. IJVs provide firms fast track access to a certain market, opportunities for risk sharing, additional resources to improve their market positions, and an opportunity to understand local institutional arrangements by learning

from their partners. Our findings in this regard are largely consistent with the arguments in Kogut et al. (1988), Child et al. (2005) and Faulkner (1995), where the basic motivations for joint ventures are: (a) to lower transaction costs, (b) to gain a strategic position in the market and to enhance market power, (c) to gain additional resources and acquire organisational learning opportunities, and (d) to spread the financial risk. Firms can then decide after a period of time and based on the performance of the joint venture, whether to continue to invest in the host country or to move on to work on other international projects elsewhere. IJVs enable firms to make investments with contractual options, and may be an optimum solution to governance choice where sources and cost of supply, and location of demand are uncertain. IJVs also offer the options to limit financial, operation and reputation risks. This is consistent with Child et al.'s (2005) argument that strategic alliances offer firms the benefit of real options of paying a relatively small amount up front to gain the right to make a larger investment at a later stage at an agreed priced.

Our research also explored the influence of transaction costs on entry mode choice of firms. Consulting engineering firms reported that although transaction cost considerations would have an impact on the entry mode choice of firms, the issue of transaction costs on its own would be insufficient to determine their entry mode choice. Efficiency-seeking IJVs in developing countries with a lower production cost, are becoming increasingly popular amongst consulting engineering firms.

The data analyses of the influence of the parent company's firm size on the entry mode choice of firms revealed that there is no obvious indication of correlation between the firm size and the entry mode choice of firms. Explanations provided by the top management of consulting engineering firms indicate that the entry mode choice and internationalisation strategy of firms are influenced by a range of factors, rather than the firm size being a determining factor on its own. The top management of firms reported that many global markets are saturated, and so creating a niche and bespoke identity and strategy is vitally important. However, large public-listed consulting engineering firms also reported during our interviews that they would prefer acquisition as a strategy when internationalising due to having a 'bigger base' that provides them with relatively easy access for capital, and they are able to absorb the risk associated with acquisitions. On the other hand, non-public listed consulting

engineering firms reported a preferences for IJVs and FDI due to the financial risk involved in an acquisition, and their lack of experience in the international market.

Our research indicated that external factors – such as the psychic distance between the host and home countries, and the host country's market size – influenced the entry mode choice of firms. Consulting engineering firms reported that host country institutional factors – such as political institutions, economic conditions, and regulatory environment – would influence their decisions on internationalisation mode choice. IJVs may be the only option available, due to investment restrictions applied to foreign firms. This is in line with Child et al. (2005).

In our study of the effect of psychic distance on the entry mode choice, firms reported that the impact of cultural differences between the home and host countries are especially significant in the case of an acquisition. Firms are concerned about the difficulties of finding an organisational and cultural fit, and the risk of diluting the culture of either or both firms during the post-acquisition phase. King et al. (2004), Schoenberg (2006), Zollo and Meier (2008) and Hitt et al. (2012) all report acquiring firms creating little or no value post acquisitions, with most firms engaging in M&A activities not achieving their sought-after performance target. The effect of cultural distance in a joint venture arrangement and with FDI may be more manageable in comparison to an acquisition. With a joint venture being a separate entity, any negative impact from cultural friction may be contained within the joint venture investment.

Our research found entry mode choice influenced by the condition and size of the market. Firms reported that acquisitions are more likely to happen in developed or matured markets, such as in North America, in comparison to developing regions. International joint venture or foreign direct investment is the preferred strategy when firms are entering a new market in developing countries with a higher risk level and psychic distance. This is consistent with Buckley and Casson's (1996) findings on the influence of market size and volatility on the strategic choice of firms, where mergers are favoured if the market size is large and the volatility is low (where the market is stable); IJVs are favoured in a balanced situation where the market size is medium and the volatility is moderate; and licensing is favoured where the market size is low and the volatility is high.

In summary, our research findings reported in chapter 5 indicate that the entry mode choice of firms is influenced by a range of internal and external stimuli factors. The interplay between these factors and the firm's own capacity and growth strategy is important for the success of internationalisation.

Our research findings thus suggest that the answer to our question, 'what are the factors affecting firms' internationalisation strategies?', is as follows:

The internationalisation strategies of firms are influenced by a combination of external and internal stimuli factors, and by the firm's existing capacities (both financial and technical) and future growth strategy. The firm's capability in crafting a strategy that optimises the interplay between these factors is important for the success of its internationalisation.

8.2.2 Question 2: How does internationalisation affect the performance of, and risks facing firms?

Both quantitative (OLS regression) and qualitative analyses (questionnaires and interviews) were pursued to consider the interplay between the firm's performance on the one hand, and internationalisation on the other. We found internationalisation positively correlated to the firm's performance and size, and to global economic growth, and negatively correlated to the home country's economic growth.

Firms reported that, in general, the benefits of internationalisation outweigh the costs. Internationalisation provides consulting engineering firms with the opportunity to gain firm specific advantages, and to achieve a balanced and diversified portfolio. Internationalisation diversifies the operation of firms and reduces the concentration of firms on a specific market. Diversification of markets and geography – with a broader spread of clients, sectors and incomes – provided firms with a higher level of resilience and stability. These are consistent with the Real Options Theory which suggests that multi-nationality reduces the downside risk of firms by providing a portfolio of options that enables firms to avoid downside outcomes by shifting value chain activities across borders;

Rugman (1979), Miller and Pras (1980) and Caves (1996) argue that foreign operations stabilise returns due to the fact that economic conditions tend to be uncorrelated across different international markets; and the International Diversification Theory holds that a multinational corporation (MNC) has a lower systematic risk relative to similar domestic firms due to the MNC having more diversified cash flows.

Our firms reported internationalisation had helped stabilise the performance of their firms during the 2009 recession. As a result of their international activities, firms managed to create a wider and more diverse client base, which provided them with the resilience to mitigate the risk from changes in the domestic market. Internationalisation could increase risks due to a greater exposure to the international market. However, our firms reported such risks as 'manageable', and less than the risks from not internationalising.

The key risks for firms during internationalisation include political, reputational, financial, market, and foreign exchange. Political risks were reported to be the main risk factor affecting their investment location choice and their long-term investment strategy. Reputational, financial and market risk arise from a lack of understanding of the local market, a lack of local networks or sponsors, a lack of understanding of local institutions, legal structures and regulations, and a lack of understanding of local cultures and languages. Reputation risk is the key concern for firms venturing into an immature market, due to lack of understanding of design standards or requirement in the local context.

The majority of firms interviewed reported that a detailed assessment of the investment decision is required to be in place prior to investing in high-risk regions. One of the measures for firms to reduce the risk is to review the investment structure, the level of investment involved, and the short and long-term strategies of how the business will be carried out. A sensible level of investment is important when working in high risk regions. This is consistent with the Uppsala model's risk management approach, where firms can increase their commitments through incremental experiential learning.

Firms stressed the importance of having a good financial management strategy in place prior to investing in high risk regions. One of the key risks of investing in high-risk regions is not getting paid by clients – it is therefore important for firms to conduct due diligence on potential clients. When

working in high risk developing countries with a high risk of currency fluctuation, firms reported their preference to be paid in major currencies.

In summary, we find internationalisation positively correlated with firm performance. Firms reported the benefits of internationalisation outweighed the costs. Internationalisation provides firms with opportunities to capitalise on their firm specific advantages. International diversification allows firms to deal with different economic cycles in different world region.

These findings suggest the following answer to our question ‘How does internationalisation affect the performance and risk of firms?’:

Internationalisation provides firms with the opportunity to enhance their firm-specific advantages. Global firms can capitalise on their global branding and offering, and may enhance their resilience in the face of different economic cycle in different world regions.

8.2.3 Question 3: What factors affect the geographical choice of firms when internationalising, and what factors affecting the success of internationalisation?

i) What factors affect the geographical choice of firms when internationalising?

Our quantitative study of the regional turnover of the top UK based international consulting engineering firms in chapter 3 revealed there are few firms which have a good geographical spread across all world regions; most concentrate their activities in regions with a short psychic distance from the home country. Large consulting engineering firms tend to have a wider geographical spread, with a higher percentage of their revenues spreading across different regions in comparison to smaller firms. The majority of firms studied have higher overseas revenues from regions with a smaller psychic or geographical distance to the home country, despite the high GDP growth in developing regions such as the Middle East and Asia. The turnover saturation test of firms (as discussed in

chapter 3) shows that there is only a small percentage of the regional turnover of firms which comes from developing regions, such as the Middle East and Asia, despite the high GDP growths in these regions. This finding is consistent with the Association of Engineers (ACE) *State of Business Report 2011*, which reported a limited number of UK based consulting engineering firms with a good geographical spread across all regions, and with most firms concentrating their activities in regions with a short psychic distance to the home country. Our findings are also consistent with Rugman and Verbeke's (2008) research on the world's largest 500 firms (of which 300 are services firms), which reports little evidence that services MNEs are operating globally, and most adopting a regional rather than a global approach.

Perceived Market Opportunity and Risk

All of our firms reported the market potential of the host country is the most significant factor affecting the geographical choice of firms when internationalising. Quantitative and qualitative studies were carried out to review the relationship between the perceived market opportunity and regional GDP growth, regional turnover, and the size of firms.

The analysis of the data obtained from the questionnaires (reported and discussed in chapter 6) indicates that developing regions, such as the Middle East, have the highest perceived market opportunity rating, followed by China and the Indian sub-continent. Firms reported that emerging markets with high GDP growth provide bigger growth opportunities for their firms compared to mature markets. Developed regions with a similar cultural background to the home country, such as Western Europe, North America, and Australasia, have a relatively high perceived market opportunity rating, despite the moderate economic growth in these regions.

Our analysis of regional GDP growth and the regional turnover of firms reveals that firms have the highest proportion of their overseas incomes generated from the North American and Australasia regions. This is then followed by the Asian and Middle East regions. Our analysis also shows that despite the high perceived market opportunity rating of developing regions chosen by firms, such as

the Middle East and Asian regions, the overseas incomes rendered by firms from these regions are still far lower than from developed regions, such as the North American and Australasia regions.

Firms expressed their preferences to invest in North America and Australasia due to being developed markets with a lower political and economic risk, and a lower psychic distance, in comparison to Asia. Despite the high economic growth in Asian, firms expressed their concerns about the political risk in some of the developing countries in the region. The level of investment in developing regions is thus lower than in the developed regions. The size of the market is also one of the main factors affecting the geographical choice of firms. Large consulting engineering firms reported that geographical distance is not a consideration factor for the geographical choice of their firms if the market size is large enough. Smaller firms on the other hand perceived that entering a market further away will incur a higher level of investment, and they will take into account geographical distance in their choice when internationalising.

Studying the number of regional offices for the top 5 UK based international consulting engineering firms against the perceived market opportunity data obtained from questionnaires indicated no obvious correlation between the two parameters. Despite the high perceived market opportunity in developing regions (such as in the Middle East and China), firms do not have as many offices in these regions as compared to developed regions, such as North America and Western Europe. Firms entered developed regions, such as North America and Western Europe, much earlier than developing regions due to a lower psychic distance and a higher level of political and economic stability in developed regions.

Country Factors and Risk

The political and social stabilities of the host country were reported by firms to be one of the most important factors affecting geographical choice. The ease of access to local funding, taxation, and the restriction of capital outflows are amongst the factors affecting investment decisions. Political instability, the potential sudden change in government policies, and bureaucratic approval structures,

are major concerns for firms when operating in emerging markets. We found that, in general, emerging economies were perceived as being riskier. Firms reported that the perceived risk is very much affected by the degree of understanding of the market. A lack of understanding of the design standards in the local context, or a lack of understanding of the local market requirement is the biggest risk faced by firms when investing in a developing market.

The perceived risk data of firms obtained from questionnaires were analysed and compared against the *Ease of Doing Business Index 2015* obtained from the World Bank Data (2016). The analysis shows that there is a consistent trend between both sets of data. In general, developing regions, such as Russia and Africa, have a higher 'perceived risk' figure and a low 'Ease of Doing Business' index, whilst developed regions, such as North America and Australasia, have a low 'perceived risk' figure and high 'Ease of Doing Business' index.

A detailed study of the numbers of regional offices for the top 5 consulting engineering firms against the perceived market risk data (obtained from our questionnaires) indicates that, in general, firms have higher numbers of offices in regions with low perceived risk and the least numbers of offices in regions with high perceived risk. The unfamiliarity with the local markets in developing regions on issues such as politics, planning, legal processes and regulations may have deterred firms from investing in these regions. These findings are consistent with the Association of Consulting Engineers (ACE) *State of Business Report 2011*.

Previous International Experience

Consistent with Erramilli's (1991) research findings on the foreign market entry behaviour of firms, consulting engineering firms reported that their previous international experience and existing networks are very relevant when it comes to making the decision on their geographical choice when internationalising. A firm's preference for a similar market to the home country is influenced by the firm's previous international experience, and it is easier for the firm to grow in countries or regions where it has adjacent offices or investments.

Regional Characteristics and Cultural Distance

The 1977 Uppsala model posits that the geographical choice of firms is affected by the psychic distance of the home and host countries, and firms will start with building their foreign operations in culturally proximate countries and gradually expand further away from their home countries. Rugman and Verbeke (2008) found that when services firms enter markets with high cultural distance, the quality of the services delivered is at risk. To reduce the risk associated with the liability of foreignness, regional differences and the cultural distance, consulting engineering firms are using the regional or spiderweb approach when expanding into a new country or market. The regional or spiderweb approach enables firms to overcome their liability of foreignness by capitalising on their existing experience in culturally similar countries. The geographical proximity of the regional hub to the new market also reduces the internationalisation and management costs, thus creating firm-specific advantages for firms. This is consistent with Dunning's Eclectic Theory where the ownership advantages of firms rely on the size, experience and reputation of firms in both the home and host countries' markets. Interactions with local clients to understand the local requirement and business network will enable firms to develop their locational advantages.

ii) What factors affect the success of foreign subsidiaries?

The success of international subsidiaries is influenced by both the external environment and the characteristics of firms. Our quantitative and qualitative analyses of the data collected from the questionnaires indicate that the following factors have had a significant influence on the survival of foreign subsidiaries: the engineering and technological competency of the firm, the previous international experience of firms, and the host country's economic growth.

'Engineering and technology competency' was rated in the questionnaire returns as the most important factor affecting the survival of foreign subsidiaries. The top management of firms reported that possessing good technical skills and having great people (high-skilled people) is the key to success when internationalising. When investing in a new country, firms compete with well-

established local firms. As argued in Dunning's Eclectic Theory, for firms to compete with local firms, they must possess certain advantages specific to the nature of their ownership, and these must be sufficient to compensate for the cost of setting up and operating in host countries. Therefore, it is important that foreign subsidiaries are able to differentiate themselves from local firms by providing their clients with technical skills that local firms cannot.

The top management of large consulting engineering firms reported that their scale advantage allows them to invest abroad due to having a broader base of assets and resources, and a larger breadth of skills. Firms also reported that the home country firm size provides the perception of the capacity of the firm – the brand, support and involvement of a well-established home country's office will provide clients (especially the government agency clients of the host country) with confidence. Having a bigger home country base will also provide the foreign subsidiaries with greater flexibility in terms of international resources mobilisation.

Previous international experience provides a track record for firms when internationalising. It is easier for a firm to gain recognition from its new clients in the new country if it is already an international firm. Firms with existing international operations also have the capacity of drawing resources from different world regions to provide their new clients with the expertise required, thereby providing firm-specific advantages to firms. In terms of mitigation of risks associated with internationalisation, firms with previous international experiences will have more practical knowledge in the market research and the internationalisation process and operation. They will be more aware of the risk associated with the internationalisation process, and will be able to tailor their risk mitigation strategies appropriately, such as choosing an appropriate entry mode, and making a more informed decision regarding the market selection.

In exploring the effect of the host country's economic growth on the survival of foreign subsidiaries, it was found that good economic growth, especially regarding the construction and infrastructure sectors in the host country, has helped the survival of foreign subsidiaries due to there being more opportunities available.

Our analysis of the data obtained from our questionnaire returns indicates that the influence of cultural similarities of the host country on the success of foreign subsidiaries is insignificant. In the follow-up interviews, firms reported that although cultural similarities do not affect the survival of their foreign subsidiaries, firms do suffer from liability of foreignness due to lack of understanding of the local market and practices when venturing into a foreign region or country. The differences of practices in the local market could lead to a potential mismatch of the client's expectation and the misunderstanding of scope of the services delivered by foreign subsidiaries. This is consistent with Hymer's proposal of the 'liability of foreignness' which implied that the lack of knowledge of local cultures and institutions reduces the performance of foreign subsidiaries and increases the failure rate of foreign expansions. Foreign firms are faced with several disadvantages due to their unfamiliarity with the local market, practices, and regulations. Firms interviewed had adopted appropriate strategies when internationalising in order to mitigate the liability of foreignness and the issues of cultural dissimilarities of the host country. The organic growth strategy (expansion at a gradual pace) is the preferred mode of entry of firms when investing in an unfamiliar foreign market. This allows foreign subsidiaries the opportunities to carry out experiential learning, thereby reducing the effect of liability of foreignness and cultural dissimilarities.

In summary, we found the geographical choice of firms when internationalising influenced by a range of internal and external factors, such as market opportunities, previous international experience, cultural distance between the host and home countries, and country factors such as political stability and market competitions. A strategic locational choice and a well-planned internationalisation strategy will enable firms to capitalise on their existing firm specific advantages, thereby increasing the success rate of new foreign subsidiaries.

Our findings therefore suggest that in relation to 'factors affecting the geographical choice of firms when internationalising and the factors affecting the success of foreign subsidiaries':

Geographical choice is influenced by internal (motives for internationalisation, risk perception, previous experience, existing degree of internationalisation and international coverage) and

external stimuli factors (market opportunity and country factors – economic conditions, political stability and ease of doing business). Firms could increase the success of their new foreign subsidiaries by capitalising on their current firm-specific advantages, together with an appropriate locational choice and governing structure.

8.2.4 Question 4: How does internationalisation affect corporate governance and business strategy?

Internationalisation provides firms with opportunities for growth; however, it also creates new challenges for the corporate governance of firms. The organisational structure of services firms relies heavily on the unique characteristics of the services that they offered. The unique characteristics of consulting engineering services, as listed below, have influenced the organisation structure of firms:

- i. Customisation and localisation – services are usually customised to meet a specific client's requirement, and they also require compliance with local regulations;
- ii. The need for a local presence in the host country – frequent communications and interactions with clients is a requirement for delivering high-quality services;
- iii. Competitiveness – firms will require a cost-effective organisational structure in order to compete effectively with others; and
- iv. Quality of services – foreign firms are usually employed by clients to provide the niche skills due to their technical competencies and experience. Therefore, it is important for firms to choose an organisational structure that provides a good balance of control over the quality of the services delivered.

There are three types of organisational structures –multinational, global, and transnational (as proposed by Inkpen and Ramaswamy, 2005; and as discussed in chapter 7 above). In contrast to the organisational structures proposed by Inkpen and Ramaswamy, our research found that large consulting engineering firms, with a good spread of international offices across different world regions,

are using the regional approach (the 'spiderweb' arrangement), instead of a global (wholly-centralised) or multinational (wholly-localised) strategy.

Regional Strategy

The regional approach offers the following ownership, locational and institutional advantages (OLI) as per Dunning's Eclectic Theory:

- i. Optimum resources management – the regional hub provides firms with a shared pool of resources, making it a cost-effective way of managing the peaks and troughs of workload in different countries within the region. The regional hub approach provides firms with the flexibility of not having a local office in the new market during the start-up stage when internationalising into a new market or country.
- ii. Customisation and localisation – the majority of the construction projects that consulting engineering firms were involved in were bespoke and unique in nature. The regional hub approach enables their services to be tailored to the local requirement on a 'regional' scale. A good size local office supported by the regional hub will be able to facilitate frequent communication with the client at a closer distance in comparison to the global arrangement, thereby achieving the 'localisation' requirement. The regional hub is also geographically closer to the potential market or country in comparison to the global headquarter, and this could potentially increase the likelihood of firms identifying future opportunities due to their local networks and knowledge.
- iii. Economies of scale – a regional administrative hub provides shared services, and opportunities for asset sharing between foreign subsidiaries within the region, thus avoiding duplication of central services and cost within each subsidiary.

Corporate Governance and Competitiveness of Firms

As the degree of internationalisation increases, firms will be faced with competition on costs, resources and technical capabilities. Our qualitative study found that consulting engineering firms had adopted the following strategies:

i) Horizontal and Vertical investments

Our qualitative study revealed that large consulting engineering firms had adopted the vertically-integrated, horizontally-diversified strategy in order to compete effectively in an international market. Driven by the cost pressure and the advancement of communication technologies, firms have set up production offices in lower cost countries to facilitate the production of low-skilled engineering services activities to serve their international offices globally. The foreign production office is usually created as a separate entity to the main organisation and is set up mainly to support low-skilled production activities. The ability of firms to 'mix and match' their vertical or horizontal diversification strategy has provided them with the flexibility to achieve cost-effectiveness and to optimise their international resources management.

ii) International Resources Integration

As firms become more global, achieving an optimum resources integration on a global scale is vital for ensuring their firms. A high degree of flexibility, fluidity and adaptability is critical for firms in managing environmental volatility and maintaining their competitiveness. Our research revealed that firms had utilised various global resource management strategies (as discussed in chapter 7) to achieve an optimum global resources management and to provide flexibilities to cope with changes in regional and global demands, including the global resources migration strategy, regional resources migration strategy, international projects migration strategy, and global recruitment strategy.

iii) Technical Innovation and Dynamic Capabilities

The innovation and dynamic capability of resources could be enhanced by having a high level of fluidity of knowledge within the firm. Our research found that large consulting engineering firms with good global coverage had created a virtual global knowledge portal or network within their firms. The global knowledge network is then sub-divided into the regional knowledge networks to facilitate local requirements and practices in different regions. The majority of our firms had developed an integrated management system to manage and disseminate practices across all their offices globally. Foreign subsidiaries are required to operate based on the group corporate strategy and integrated management system, with local changes which take into account the local regulations and requirements. The integrated management system is aimed at standardising operating procedure throughout the practices, ensuring the quality of work delivered to clients.

In summary, internationalisation has provided firms with opportunities for growth. The creation of a new form of organisation structure, such as the regional hub and global resource optimisation strategy, provides firms with opportunities to augment their firm specific advantages globally.

Thus, regarding ‘the effect of internationalisation on the corporate governance and overall business strategy of firms’, we found that:

Internationalisation provides firms with opportunities to create new forms of corporate governance structures to optimise their performances and efficiencies.

8.3 Summary

Global economic volatility, including over 2007-2009, and the modest growth of the UK and EU economies since the 2009 global recession have increased the degree of internationalisation of UK based international consulting engineering firms. Firms are expected to continue to explore international opportunities and to increase their international activities for the future growth of their firms. The recent slowdown of the BRIC economies and the reduction in the oil price (which has affected the Middle East region) have had a negative impact on the infrastructures and construction sectors. This will, therefore, increase the degree of international competition, and cost pressures, for UK based international consulting engineering firms.

Thus, how might UK based international consulting engineering firms best respond? As international competition increases, and as firms become more internationalised, firms will need to pay more attention to managing the risk of internationalisation, and in developing a new form of organisational structure to optimise their resources management. It is important that firms assess and manage the risk appropriately when internationalising. The main factors driving the internationalisation decision of firms are the availability of market opportunities and the political and economic stability of the host country, as reported by the consulting engineering firms that participated in our research. The pressure of international competition and the rapid economic development in developing regions of the world could potentially lead to the following changes in the international activities of the consulting engineering sector:

- i. The use of regional hub arrangement as a global management strategy of firms is expected to continue to increase. The regional hub will provide foreign subsidiaries within the region with a common pool of resources, thereby increasing the flexibility and fluidity of resources in the region. This arrangement is expected to provide the benefit of economies of scale and enables the optimisation of resources management;
- ii. The advancement in communication and information technologies will increase the global migration of works and reduces the migration of human resources within an

organisation. The advancement in technologies enables firms to relocate and distribute effectively their international works to different offices within their organisations, thereby optimising their resource management on a global scale;

- iii. The decoupling of design work is expected to increase further due to the cost pressure from international competitions. Large consulting engineering firms have created large-scale global design production centres in lower cost countries to achieve economies of scale and to reduce their design production costs. Design production offices are currently utilised for repetitive, less complex design work and computer-aided drawing productions. As the international competition and cost pressure increases, the role of global design production centres could become even more significant, and firms may be able to relocate their more complex design works from the home country or other international offices to international production centres to achieve cost-effectiveness;
- iv. The relatively slow growth of the home country's economy in comparison to developing regions, such as in Asia, could potentially increase the size of foreign subsidiaries in developing regions to beyond the size of the home country's firm in a longer term. Foreign subsidiaries could demand more controls and authorities in deciding the strategy and future path of firms. In this situation, firms may require a different type of organisational structure and the central management hub may require to be relocated from the home country to a foreign region; and
- v. The recent slowdown of the construction and infrastructure sectors in China and the Middle East regions could encourage firms to invest in other less-developed, higher-risk regions such as in Africa and Central Asia. When operating in higher risk regions, firms may reduce the number of personnel in the region due to the security risk, with the design work relocated to a global design centre. This could encourage the growth of global design centres and the implementation of global resource integration within firms.

The degree of internationalisation of UK based international consulting engineering firms may well increase further in the future, especially if economic growth globally continues to exceed that of the UK. As and when new overseas markets do become attractive and viable, firms will need to develop their capabilities to manage the risks involved, and to adapt their organisational structures to deal with the concomitant increase in both the scope and complexity of their operations.

Appendix Research Questionnaire

Research Questionnaire

Researcher: Chia Huay Lau

The University of Oxford (Kellogg College)

Doctor of Philosophy in Business Management (Part-time)

Research title: The Global Trading Activities of Consulting Engineering Firms: Managing Risk and Geographical Choice.

Contact email: chia.lau@conted.ox.ac.uk

Please complete the following questions. By participating in this study and providing your contact details, you will receive a report of this study.

Your responses will be completely confidential and anonymised, and will be used only for research purposes.

I would like to thank you for your time in completing the questionnaire.

Company :

Name :

Position :

Email :

Office address :

Please refer to the last page of this questionnaire for definition of terminology used in this questionnaire.

1.0 Factors Affecting Internationalisation^[1]

1.1 Perceived market opportunities

Please rate the regions in terms of market opportunities, with 1 being the region with the lowest opportunity and 5 being the region with best opportunity.

For example:

Western Europe					
Lowest opportunity	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	Best opportunity
(Weighting)	(1)	(2)	(3)	(4)	(5)

Western Europe

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

Eastern Europe

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

Russia

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

North America

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

South and Central America and Caribbean

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

Middle East

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

Indian Sub-continent

Lowest opportunity (Weighting)						Best opportunity
	(1)	(2)	(3)	(4)	(5)	

China

Lowest opportunity (Weighting) Best opportunity

(1) (2) (3) (4) (5)

South East Asia

Lowest opportunity (Weighting) Best opportunity

(1) (2) (3) (4) (5)

Australasia

Lowest opportunity (Weighting) Best opportunity

(1) (2) (3) (4) (5)

Africa

Lowest opportunity (Weighting) Best opportunity

(1) (2) (3) (4) (5)

.2 Foreign Region's Risks

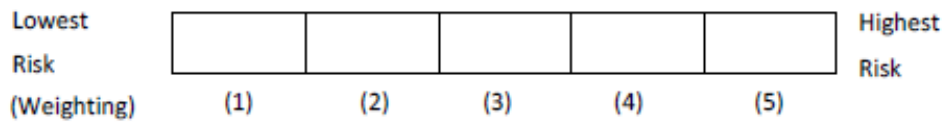
Please rate the regions in terms of perceived foreign region's risks^[2], with 1 being the region with the lowest risk and 5 being the region with highest risk.

Western Europe

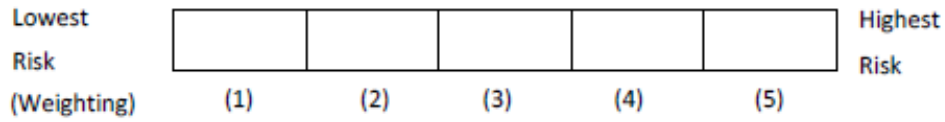
Lowest Risk (Weighting) Highest Risk

(1) (2) (3) (4) (5)

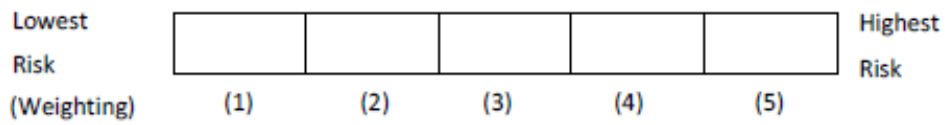
Eastern Europe



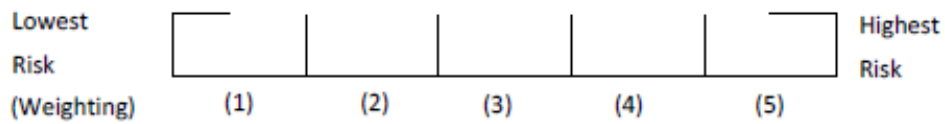
Russia



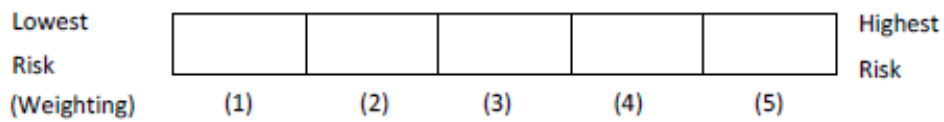
North America



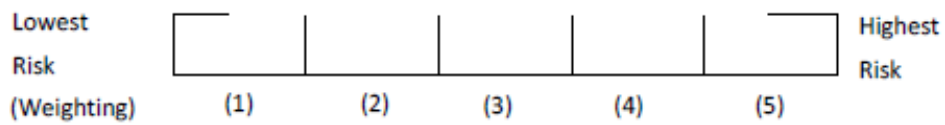
South and Central America and Caribbean



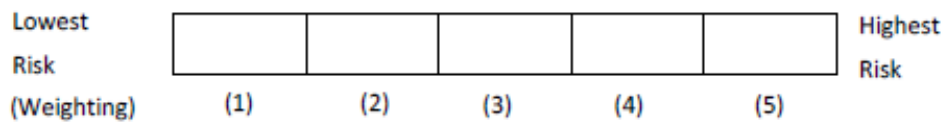
Middle East



Indian Sub-continent



China



South East Asia

Lowest Risk (Weighting)						Highest Risk
	(1)	(2)	(3)	(4)	(5)	

Australasia

Lowest Risk (Weighting)						Highest Risk
	(1)	(2)	(3)	(4)	(5)	

Africa

Lowest Risk (Weighting)						Highest Risk
	(1)	(2)	(3)	(4)	(5)	

2.0 Factors Affecting the Survival of International Subsidiaries

Please rate how significant the following factors have been in the success of overseas subsidiaries of your firm.

Home country's ^[3] firm size						
Insignificant (Weighting)						Very significant
	(1)	(2)	(3)	(4)	(5)	

Engineering/ technological competency of the firm						
Insignificant (Weighting)						Very significant
	(1)	(2)	(3)	(4)	(5)	

The firm's previous international experience

Insignificant						Very significant
(Weighting)	(1)	(2)	(3)	(4)	(5)	

The host country^[4] economic growth rate

Insignificant						Very significant
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Degree of foreign penetration of the host country's consulting engineering sector

Insignificant						Very significant
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Cultural similarity of the host country to home country

Insignificant						Very significant
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Subsidies and other support from host country government

Insignificant						Very significant
(Weighting)	(1)	(2)	(3)	(4)	(5)	

3.0 Importance of Having Overseas Presence

Please rate how important having an overseas presence (a subsidiary or joint venture) is for the following factors:

Turnover						
Not at all important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Market share						
Not at all important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Profitability						
Not at all important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Brand Image						
Not at all important	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Reputation						
Not at all important	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Overall performance						
Not at all important	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

Future growth						
Not at all important	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	<input style="width: 100%; height: 20px;" type="text"/>	Very important
(Weighting)	(1)	(2)	(3)	(4)	(5)	

4.0 Internationalisation Strategy

4.1 How many foreign acquisitions, international joint ventures and other foreign direct investments has your company made:

- Acquisition ^[5] :
- Joint venture ^[6] :
- Foreign direct investment ^[7] :

4.2 What other types of internationalisation mode(s) has your firm utilised, has not been mentioned in question 4.1 above.

4.3 Why has your company chosen the above pattern (question 4.1 and 4.2 above)?

4.4 What is the total turnover (£) of your foreign subsidiaries⁽⁸⁾ in these regions?

- Western Europe :
- Eastern Europe :
- Russia :
- North America :
- South and Central America & Caribbean :
- Middle East :
- Indian sub-continent :
- China :
- South East Asia :
- Australasia :
- Africa :

5.0 Reporting by Foreign Subsidiaries

5.1 How do your foreign subsidiaries report to the company?

5.1 How frequently do your foreign subsidiaries report?

6.0 The Effect of Economy on Your Firm's Internationalisation Strategy

6.1 How many foreign subsidiaries did your company create in:

Pre 1980s :

1980s :

1990s :

2000s :

6.2 Do you think the 2009 recession increased or decreased the degree of internationalisation of your firm?

Significantly decreased (Weighting)						Significantly increased
	(1)	(2)	(3)	(4)	(5)	
Neither						

6.3 Did the degree of internationalisation of your firm help in stabilising the firm's overall performance during recent recession?

Significantly hindered (Weighting)						Significantly helped
	(1)	(2)	(3)	(4)	(5)	
Neither						

6.4 How do you think the recession will affect the internationalisation strategy of your firm in short and long terms?

Short term :

Long term :

7.0 **Other Comments**

Please include any other comments you would like to add to this survey.

Terminology:

Terminology		Definitions
1.	Internationalisation	The process where firm established themselves in foreign market (outside the country where the firm's headquarter is located).
2.	Foreign region's risks	Foreign region risks includes for political, economic, financial, foreign exchange and international liquidity risk.
3.	Home country	The country where the firm's headquarter is located.
4.	Host country	The country where the firm's foreign office(s) is (are) located.
5.	Acquisition	Brownfield investment(s)/ business(es) in foreign market (outside the country where the firm's headquarter is located) by taking over existing local firm(s) .
6.	Joint venture	Investment(s) which involves two or more legally distinct organizations.
7.	Foreign direct investment	Greenfield investment(s)/ business(es) in foreign market (outside the country where the firm's headquarter is located) and the investment is wholly owned by the firm.
8.	Foreign subsidiary(ies)	Offices/ business(es) located outside the country where the firm's headquarter is located.

Bibliography

- Abdelzaher, D. (2012), The impact of professional services firms' challenges on internationalisation processes and performance, *The Service Industries Journal*, 32(10), 1721-1738.
- Agndal, H. and Chetty, S. (2007), The impact of relationships on changes in internationalisation strategies of SMEs, *European Journal of Marketing*, 41 (11/12), 1449- 1474.
- Allen, L., and Pantzalis, C. (1996), Valuation of the operating flexibility of multinational corporations, *Journal of International Business Studies*, 27(4), 633- 653.
- Anderson, E., and Weitz, B. (1992), The use of pledges to build and sustain commitment in distribution channels, *Journal of Marketing Research*, 29(1), 18- 34.
- Anderson, Erin and Hubert Gatignon. (1986), Modes of entry: A transactions cost analysis and propositions, *Journal of International Business Studies*, 17(3), 1- 26.
- Apfelthaler, G. and Vaiman, V. (2012), Challenges and opportunities of internationalization in professional service industries, *The Service Industries Journal*, 32 (10), 1589- 1592.
- Ardichvili, A., Cardozo, R. and Ray, S (2003), A theory of entrepreneurial opportunity identification and development, *Journal of Business Venturing*, 18(1), 105- 123.
- Aronson, B. (2007), Elite law firm mergers and reputational competition: Is bigger really better? An international comparison, *Vanderbilt Journal of Transnational Law*, 40(3), 763- 831.
- Arregle, J., Beamish, P. and Hebert, L. (2009), The regional dimension of MNEs' foreign subsidiary localization, *Journal of International Business Studies*, 40, 86–107.
- Asmussen, C. (2009), Local, regional, or global? Quantifying MNE geographic scope, *Journal of International Business Studies*, 40, 1192–1205.
- Audretsch, D. (1995), Innovation, growth and survival, *International Journal of Industrial Organization*, 13 (4), 441-457.
- Audretsch, D. and Mahmood, T. (1995), New firm survival: new results using a hazard function, *Review of Economics and Statistics*, 77 (1), 97–103.
- Audretsch, D. (2002), Knowledge, Globalization, and Regions: An Economist's Perspective, *Regions, Globalization, and the Knowledge- based Economy*, Oxford University Press.
- Axinn, C. and Matthyssens, P. (2002), Limits of internationalisation of theories in an unlimited world, *International Marketing Review*, 19 (5), 436- 449.
- Awuah, G.B. (2007), A professional services firm's competence development, *Industrial Marketing Management*, 36, 1068- 1081.
- Barkema, H., Bell, J. and Pennings, J. (1996), Foreign entry, cultural barriers and learning, *Strategic Management Journal*, 17(2), 151- 166.
- Barkema, H. G., Shenkar, O., Vermeulen, F., and Bell, J. H. J. (1997), Working abroad, working with others: How firms learn to operate international joint ventures, *Academy of Management Journal*, 40(2), 426- 442.
- Barkema, H. and Vermeulen, F. (1998), Foreign entry, cultural barriers and learning, *Strategic Management Journal*, 17 (2), 151- 166.

- Barkema, H. and Schijven, M. (2008), How do firms learn to make acquisitions? A review of past research and an agenda for the future, *Journal of Management*, 34 (3), 594- 634.
- Barkema, H., Shenkar, O., Vermeulen, F., and Bell, J. H. (1997), Working abroad, working with others: How firms learn to operate international joint ventures, *Academy of Management Journal*, 40(2), 426- 442.
- Barkema, H. and Vermeulen, F. (1998), International expansion through start-up or acquisition: a learning perspective, *Academy of Management Journal*, 41, 7- 26.
- Bagchi-Sen, S., and Kuechler, L. (2000), Strategic and functional orientation of small and medium sized enterprises in professional services: An analysis of public accountancy, *The Service Industries Journal*, 20(3), 117- 146.
- Barney, J. B. (1991), Firm Resources and Sustained Competitive Advantage, *Journal of Management*, 17, 99- 120.
- Barney, J. B., and Arikan, A. M. (2001), The resource-based view: Origins and implications. In M. A. Hitt, R. E. Freeman, and J. S. Harrison (Eds.), *Handbook of strategic management*, 124-188, Oxford: Blackwell.
- Barney, J.B., Wright, M., and Ketchen, D.J. (2001), The resource-based view of the firm: Ten years after 1991, *Journal of Management*, 27, 625- 641.
- Baum, J., and Singh, J. (1994), Organizational niches and the dynamics of organizational mortality. *American Journal of Sociology*, 100, 346- 380.
- Beaverstock, J.V. (2004), Managing across borders: Knowledge management and expatriation in professional service legal firms, *Journal of Economic Geography*, 4, 157- 179.
- Berger, A. N., Buch, C. M., DeLong, G., and DeYoung, R. (2004), Exporting Financial Institutions Management via Foreign Direct Investment Mergers and Acquisitions, *Journal of International Money and Finance*, 24, 831- 859.
- Berry, J. W. (1980), Social and cultural change. In H. C. Triandis and R. W. Brislin (Eds), *Handbook of cross-cultural psychology*, 5, 211- 279, Boston: Allyn and Bacon.
- Betties, R. and Hitt, M. (1995), The new competitive landscape, *Strategic Management Journal*, 16 (1), 7- 19.
- Bijlsma-Frankema, K. (2001), On Managing Cultural Integration and Cultural Change Processes in Mergers and Acquisitions, *Journal of European Industrial Training*, 25, 192- 207.
- Birkinshaw, J., Bresman, H., and Hakanson, L. (2000), Managing the Post- Acquisition Integration Process: How the Human Integration and Task Integration Processes Interact to Foster Value Creation, *Journal of Management Studies*, 37 (3), 395- 425.
- Björkman, I., Stahl, G. K., and Vaara, E. (2007), Cultural differences and capability transfer in cross-border acquisitions: The mediating roles of capability complementarity, absorptive capacity, and social integration, *Journal of International Business Studies*, 38, 658- 72.
- Blomström, M., Globerman, S. and Kokko, A. (2002), *Regional Integration and Foreign Direct Investment*, Regions, Globalization, and the Knowledge- based Economy, Oxford University Press.
- Blomstermo, A., Eriksson, K., Lindstrand, A., and Sharma, D.D. (2004), The perceived usefulness of network experiential knowledge in the internationalizing firm, *Journal of International Management*, 10(3), 355- 373.

- Boyacigiller, N., Kleinberg, M. J., Phillips, M., and Sackmann, S. (1996), Conceptualizing culture. In B. J. Punnett and O. Shenkar (Eds), *Handbook for international management research*, Cambridge, MS: Blackwell.
- Bouquet, C., He'bert, L., and Delios, A. (2004), Foreign expansion in service industries: Separability and human capital intensity, *Journal of Business Research*, 57, 35–46.
- Bouquet, C., Morrison, A. and Birkinshaw, J. (2009), International attention and multinational enterprise performance, *Journal of International Business Studies*, 40, 108- 131.
- Boyacigiller, N. (1990), The role of expatriates in the management of interdependence complexity and risk in multinational corporations, *Journal of International Business Studies*, 21 (3), 357- 381.
- Brock, D. (2012), Building global capabilities: A study of globalizing professional service firms, *The Service Industries Journal*, 32 (10), 1593- 1607.
- Brouthers, D. and Brouthers, L. (2000), Acquisition or greenfield start-up? Institutional, cultural and transaction cost influences, *Strategic Management Journals*, 21 (1), 89-97.
- Brouthers, D. and Brouthers, L. (2003), Why service and manufacturing entry mode choices differ: The influence of transaction cost factors, risk and trust, *Journal of Management Studies*, 40 (5), 1179-1204.
- Buckley, P. and Casson, M. (1976), *The Future of the multinational enterprise*, Macmillan, London.
- Buckley, P.J. and Casson, M.C. (1981), The optimal timing of a foreign direct investment, *Economic Journal*, 91 (361), 75- 87.
- Buckley, P. and Casson, M. (1996), An economic model of international joint venture strategy, *Journal of International Business Studies*, 27 (5), 849-876.
- Buckley, P. and Ghauri, P. (2004), Globalisation, economic geography and the strategy of multinational enterprises, *Journal of International Business Studies*, 35 (2), 81- 98.
- Buckley, P. and Casson, M. (2009), The internationalisation theory of the multinational enterprise: A review of the progress of a research agenda after 30 years, *Journal of International Business Studies*, 40, 1563- 1580.
- Burton, F. N., and Schlegelmilch, B. B. (1987), Profile analysis of non-exporters versus exporters grouped by export involvement, *Management International Review*, 27 (1), 38-49.
- Butler, J., Doktor, R., and Lins, F. (1996), Linking international entrepreneurship to uncertainty, opportunity discovery, and cognition, *Journal of International Entrepreneurship*, 8, 121- 134.
- Canals, J. (1999), *Managing Corporate Growth*, Oxford University Press.
- Cantwell, J. and Piscitello (1997), Accumulating technological competence- Its changing impact on corporate diversification and internationalisation, The University of Reading and Politecnico di Milano.
- Capron, L. and Anand, J. (2007). "Acquisition-Based Dynamic Capabilities," in C. E. Helfat, S. Finkelstein, W. Mitchell, Margaret Peteraf, H. Singh, D. Teece, & S. Winter (eds.), *Dynamic Capabilities: Understanding Strategic Change in Organizations*. Malden, MA: Blackwell Publishing, 80–99.
- Carlson, S. (1974), International transmission of information and the business firm, *Annals of the American Academy of Political and Social Science*, 412, 55- 63.

- Casillas, J., Moreno, A., Acedo, F., Gallego, M., and Ramos, E. (2009), An integrative model of the role of knowledge in the internationalization process, *Journal of World Business*, 44(3), 311- 322.
- Castellani, D., and Zanfei, A. (2004), Cherry-picking and self-selection: Empirical evidence on ex-ante advantages of multinational firms in Italy, *Applied Economics Quarterly*, 50(1), 5- 20.
- Caves, R. E., and Mehra, S. K. (1986), Entry of foreign multinationals into U.S. manufacturing industries. In M. E. Porter (Ed), *Competition in global industries*. Boston: Harvard Business School.
- Caves R.E. (1996), *Multinational enterprises and economic analysis*, Cambridge: Cambridge University Press.
- Cavusgil, S. T. (1984), Differences among firms based on their degree of internationalization, *Journal of Business Research*, 12 (2), 195-208.
- Chakrabarti, R., Gupta-Mukherjee, S., and Jayaraman, N. (2009), Mars-Venus marriages: culture and cross-border M&A, *Journal of International Business Studies*, 40, 216- 36.
- Chetty, S., and Campbell-Hunt, C. (2004), Paths to internationalisation among small-to medium-sized Firms, *European Journal of Marketing*, 37(5/6), 796- 820.
- Chia, S. Y. (2002), *Singapore: Destination for Multinationals, Regions, Globalization, and the Knowledge- based Economy*, Oxford University Press.
- Child, J., Faulkner, D. and Tallman, S. (2005), *Cooperative Strategy: Managing Alliances, Networks, and Joint Ventures*, Oxford University Press.
- Coase, R.H. (1937), The nature of firm, *Economica*, 4, November, 386-405.
- Cohen, W. M. and Levinthal, D.A. (1990), Absorptive capacity: A new perspective on learning and innovation. *Administrative Science Quarterly*, 35 (2), 128- 152.
- Cohen, S. D. (2007), *Multinational Corporations and Foreign Direct Investment: Avoiding Simplicity, Embracing Complexity*, Oxford University Press, Inc.
- Contractor, F. J., and Lorange, P. (2002), The growth of alliances in the knowledge-based economy, *International Business Review*, 11(4), 485- 502.
- Contractor, F.J., & Ra, W. (2002), How knowledge attributes influence alliance governance choices: A theory development note, *Journal of International Management*, 8, 11- 27.
- Contractor, F. Kundu, S., and Hsu, C. (2003), A three-stage theory of international expansion: The link between multinational and performance in service sector, *Journal of International Business*, 34 (1), 5- 18.
- Lambert, D. and Cooper, M. (2000), Issues in supply chain management, *Industrial Marketing Management*, 29 (1), 65- 83.
- Cartwright, S. (2012), Individual response to merger and acquisition, in Faulkner, D., Teerikangas, S. and Joseph, R., *The Handbook of mergers and acquisitions*, Oxford.
- Cort, K.T., Griffith, D.A., and White, D.S. (2007), An attribution theory approach for understanding the internationalization of professional service firms, *International Marketing Review*, 24(1), 9- 25.
- Coviello, N. and and Martin, K. (1999), Internationalisation of services SMEs: An integrated perspective from the engineering consulting sector, *Journal of International Marketing*, 7 (4), 42-66.

- Daniels, John D., E.W. Ogram and L.H. Radebaugh (1976), *International business: Environments and operations*, Reading, MA: Addison-Wesley.
- Dastidar, P. (2009), International corporate diversification and performance: Does firm self-selection matter?, *Journal of International Business Studies*, 40, 71- 85.
- Datta, D. K., Pinches, G. P., and Narayanan, V. K. (1992), Factors influencing wealth creation from mergers and acquisitions: a meta-analysis, *Strategic Management Journal*, 13, 67- 84.
- Davidson, William H. (1980), The location of foreign investment activity, *Journal of International Business Studies*, 11 (2), 9- 23.
- Davidson, William H. (1982), *Global strategic management*. New York: John Wiley & Sons.
- Davidson, W. and McFetridge, D. (1985), Key characteristics in the choice of international technology transfer mode, *Journal of International Business Studies*, 16 (2), 5- 21.
- Delios, A., and Henisz, W. J. (2000), Japanese firms' investment strategies in emerging economies, *Academy of Management Journal*, 43(3), 305- 323.
- Doing Business 2012- Doing Business in a more transparent world. World Bank, 2012.
- Doing Business 2015- Going Beyond Efficiency. World Bank, 2015
- Dunning, J. (1977), The location of economic activity and the multinational enterprise: Search for an eclectic approach. In B. Ohlin, P. Hesselborn, and P. Wiskman (Eds.), *The international allocation of economic activity*: 395- 418. London: Macmillan.
- Dunning, J. (1979), Explaining Changing Patterns of International Production: In Defence of the Eclectic Theory, *Oxford Bulletin of Economics and Statistics*, 41(4), 269- 295.
- Dunning, J. (1980), Toward an eclectic theory of international production: some empirical tests, *Journal of International Business Studies*, 11(1), 9-31.
- Dunning, J. (1988), The Eclectic Paradigm of International Production: A Restatement and Some Possible Extensions, *Journal of International Business Studies*, 19(1), 1-31.
- Dunning, J. (1989), Multinational Enterprises and the Growth of Services: Some Conceptual and Theoretical Issues, *The Service Industries Journal*, 9(1), 5-39.
- Dunning, J. (1993), *The Theory of Transnational Corporations*, *United Nation Library on Transnational Corporations*, Volume 1.
- Dunning, J. (1993), Multinational Enterprises and the Global Economy, *Wokingham UK: Addison Wesley*, 133- 132.
- Dunning, J. (1995), Reappraising the eclectic paradigm in an age of alliance capitalism, *Journal of International Business Studies*, 26 (3), 461- 491.
- Dunning, J. (1998), Location and the multinational enterprise: A neglected factor?, *Journal of International Business Studies*, 29 (1), 45- 66.
- Dunning, J. (2000), The eclectic paradigm as an envelope for economic and business theories of MNE activities, *International Business Review*, 9 (2000), 163- 190.

- Dunning, J. (2002), *The Impact of the Completion of the European Internal Market on FDI, Regions, Globalization, and the Knowledge- based Economy*, Oxford University Press.
- Dunning, J. (2002), *Globalization, and the Knowledge- based Economy*, Oxford University Press.
- Dunning, J. (2003), Some Antecedents of Internationalisation Theory, *Journal of International Business Studies*, 34 (2), 108-115.
- Dunning, J. (2006), Towards a new paradigm of development: Implications for the determinants of international business, *Transnational Corporations*, 15 (1), 173- 228.
- Dunning, J. (2008), Location and the multinational enterprise: A neglected factor? *Journal of International Business Studies*, 40, 5- 19.
- Dunning, J. and Lundan, S. (2008), Institutions and the OLI paradigm of multinational enterprise, *Asia Pacific Journal of Management*, 25 (4), 573- 593.
- Dunning, J. (2009), Location and the multinational enterprise: John Dunning's thoughts on receiving the Journal of International Business Studies 2008 Decade Award, *Journal of International Business Studies*, 40, 20- 34.
- Dyer, J. H., & Singh, H. (1998), The relational view: Cooperative strategy and sources of inter-organisational competitive advantage, *Academy of Management Review*, 23(4), 550- 679.
- Ease of Doing Business Economy Ranking, World Bank 2011.
Website: <http://www.doingbusiness.org/rankings>
- Eden, L. and Miller. S. (2004), Distance matters: Liability of Foreignness, institutional distance and ownership strategy, *Bush School working paper no. 404*, Texas A&M University.
- Edvardsson, B., Edvinsson, L. and Nystrom, H. (1993), Internationalisation in Service Companies, *The Service Industries Journal*, 13 (1), 80-97.
- Eisenhardt, P. (1989), Building theories from case study research, *Academy of Management Review*, 14 (4), 532-550.
- Ellis, P. (2000), Social ties and foreign market entry, *Journal of International Business Studies*, 31, 443-470.
- Ellis, P. (2007), Distance, dependence and diversity of markets: Effects on market orientation, *Journal of International Business Studies*, 38, 374- 386.
- Enright, M. J. (2005), Regional management centers in the Asia-Pacific, *Management International Review*, 45(1), 59- 82.
- Erramilli, M.K. (1990). Entry mode choice in service industries, *International Marketing Review*, 7(5), 50- 62.
- Erramilli, M. and Rao, C. (1990), Choice of foreign market entry modes by services firms: Role of market knowledge, *Management International Review*, 30, 135- 150.
- Erramilli, M. (1991), The experience factor in foreign market entry behaviour of service firms, *Journal of International Business Studies*, 22(3), 479- 501.
- Erramilli, M. and Rao, C. (1993), Service firm's international entry-mode choice: A modifies transaction- cost analysis approach, *Journal of Marketing*, 57, 19- 38.

- Erikson, K., Johanson, J., Majkgard, A. and Deo Sharma, D. (1997), Experiential Knowledge and Cost in the Internationalisation Process, *Journal of International Business Studies*, 28(2), 337- 360.
- Eriksson, K., Majkgård, A., & Sharma, D.D. (2000), Path dependence and knowledge development in the internationalization process, *Management International Review*, 40, 41- 59.
- Eriksson, K., and Chetty, S. (2003), The effect of experience and absorptive capacity of foreign market knowledge, *International Business Review*, 12(6), 673- 695.
- Fairclough, N. C. and Fairclough, S. (2012), Mergers Between Professional Service Firms, *The Handbook of Mergers and Acquisitions*, Oxford University Press.
- Fang, Y., Wade, M., Delios, A., and Beamish, P. (2007), International diversification, subsidiary performance, and the mobility of knowledge resources, *Strategic Management Journal*, 28(10), 1053-1121.
- Faulkner, D. (1995), *International strategic alliances: Co-operating to compete*, Maidenhead, McGraw-Hill.
- Faulconbridge, J.R. (2006), Stretching tacit knowledge beyond a local fix? Global spaces of learning in advertising professional service firms, *Journal of Economic Geography*, 6, 517- 540.
- Faulkner, D., Teerikangas, S. and Joseph, R. J. (2012), *The Handbook of Mergers and Acquisitions*, Oxford University Press.
- Feinberg, S. and Gupta, A. (2009), MNC subsidiaries and country risk: Internationalization as a safeguard against weak external institutions, *Academy of Management Journal*, 52, 381- 399.
- Figueira-de-Lemos, F., Johanson, J. and Vahlne, J. (2011), Risk management in the internationalization process of the firm: A note on the Uppsala model, *Journal of World Business*, 46, 143- 153.
- Forsgren, M. (2002), The concept of learning in the Uppsala internationalisation process model: a critical review, *International Business Review*, 11, 257- 277.
- Gelbuda, M., Starkus, A., Zidonis, Z. and Tamasevicius, V. (2003), Learning in the internationalization process. A case for organizational identity and interpretative capacity, Proceedings of the 29th EIBA Conference, Copenhagen Business School, Denmark.
- Geringer, M. (1991), Strategic determinants of partner selection criteria in international joint venture, *Journal of International Business Studies*, 22 (1), 41- 62.
- Glaser, B. and Strauss, A. (1967), *The discovery of grounded theory: Strategies for qualitative research*, Chicago: Aldine.
- Gomes, L. and Ramaswamy, K. (1999), An empirical examination of the form of the relationship between multinationality and performance, *Journal of International Business Studies*, 30 (1), 173-187.
- Granovetter, M. (2005), The impact of social structure on economic outcomes, *Journal of Economic Perspectives*, 19(1), 33- 50.
- Greenwood, R. and Hinings, C. (1993), Understanding strategic change: The contribution of archetypes, *Academy of Management Journal*, 36 (5), 1052-1081.
- Greenwood, R., and Empson, L. (2003), The professional partnership: Relic or exemplary form of governance? *Organization Studies*, 24: 909- 933.

Greenwood, R., Li, S.X., Prakash, R., and Deephouse, D.L. (2005), Reputation, diversification, and organizational explanations of performance in professional service firms, *Organisation Science*, 16(6), 661–673.

Groenroos, C. (2000), *Service management and marketing* (2nd ed.), Chichester: Wiley.

Grosse, R. 2000. Knowledge creation and transfer in global service firms. In Y. Aharoni and L. Nachum (Eds.), *Globalization of services: Some implications for theory and practice*: 217- 232. London: Routledge.

Gulati, R., Lavie, D. and Singh, H. (2009), The nature of partnering experience and the gains from alliances, *Strategic Management Journal*, 30, 1213- 1233.

Gupta, A. and Govindarajan, V. (2000), Knowledge flows within multinational corporations, *Strategic Management Journal*, 21, 473- 496.

Hadjikhani, A. (1997), A note on the criticism against the internationalization process model, *Management International Review*, 37, 43- 66.

Hackman, J. R. (1992), Time and transitions, in P. Frost and R. Stablein (Eds.), *Doing exemplary research*. Newbury Park: Sage Publications.

Hamel, G. (1991). Competition for competence in inter-partner learning within international strategic alliances, *Strategic Management Journal*, 12 (4), 83- 103.

Hannan, M. T., and Carroll, G. R. (1992), *Dynamics of organizational populations: Density, legitimacy, and competition*, New York: Oxford University Press.

Hannan, M. T., and Carroll, G. R. (2000), *The demography of corporations and industries*, Princeton, NJ: Princeton University Press.

Haspeslagh, P. C. and Jemison, D. B. (1991), *Managing Acquisitions: Creating Value through Corporate Renewal*, New York: The Free Press.

Hayward, M. L. A. (2002), When do Firms Learn from their Acquisition Experience? Evidence from 1990–1995, *Strategic Management Journal*, 23, 21- 39.

Hedlund, G., & Kverneland, A. (1985), Are strategies for foreign market entry changing? The case of Swedish investments in Japan, *International Studies of Management and Organization*, 15(2), 41- 59.

Henisz, W. J., & Delios, A. (2001), Uncertainty, imitation, and plant location: Japanese multinational corporations, 1990–1996, *Administrative Science Quarterly*, 46(3), 443- 475.

Henisz, W. J., & Macher, J. T. (2004), Firm- and country-level trade-offs and contingencies in the evaluation of foreign investment: The semiconductor industry, 1994-2002, *Organization Science*, 15(5), 537- 554.

Hirst, P. and Thompson, G. (2003), The Future of Globalisation, *The Handbook of Globalisation*, 147- 175, Edward Elgar Publishing Limited.

Hitt, M., Hoskinson, R. and Kim, H. (1997), International diversification: Effects on innovation and firm performance, *Academy of Management Journal*, 40, 767- 798.

Hitt, M., Harrison, J. S. and Ireland, R. D. (2001), *Mergers and acquisitions: A guide to creating value for stakeholders*, New York: Oxford University Press.

- Hitt, M. A., Ahlstrom, D., Dacin, M. T., Levitas, E., and Svobodina, L. (2004), The institutional effects on strategic alliance partner selection in transition economies: China versus Russia, *Organization Science*, 15, 173- 185.
- Hitt, M., Uhlenbruck, K. and Shimizu, K. (2006), The importance of resources in the internationalization of professional service firms: The good, the bad, and the ugly, *Academy of Management Journal*, 40 (6), 1137- 1157.
- Hitt, M. et al. (2012), Creating Value Through Mergers and Acquisitions, *The Handbook of Mergers and Acquisitions*, Oxford University Press.
- Hocking, J., Brown, M. and Harzing, A. (2007), Balancing global and local strategic contexts: Expatriate knowledge transfer, applications, and learning within a transnational organization, *Human Resource Management*, 46 (4), 513–533.
- Hofstede, G. (1980), *Culture's consequences: International differences in work-related values*, Sage Publications: Beverly Hills.
- Holburn, G. L. F., and Zelner, B. A. (2010), Political capabilities, policy risk and international investment strategy: Evidence from the global electric power generation industry, *Strategic Management Journal*, 31(12), 1290- 1315.
- Holm, D.B. and Erikson, K. and Johanson, J. (1996), Business Network and Cooperation in International Business Relationships, *Journal of International Business Studies*, 27 (5), 1033-1053.
- Hsieh, M., Shen, C. and Lee, J. (2010), Factors influencing the foreign entry mode of Asian and Latin-American banks, *The Services Industries Journal*, 30, 2351- 2365.
- Hurmelinna-Laukkanen, P. and Ritala, P. (2012), Appropriability as the Driver of Internationalization of Service- Oriented Firms, *The Service Industries Journal*, 32 (7), 1039- 1056.
- Hymer, S.H. (1976), *The international operations of national firms: a study of direct foreign investment*, MIT Press: Cambridge, MA.
- letto-Gillies, G. (2019), The role of transnational corporations in the globalisation process, in Michie (ed.) *The Handbook of Globalisation*, Edward Elgar Publishing Limited.
- ING Banking (2008), "The Consulting Engineering Sector in Europe report".
- Inkpen, A. and Ramaswamy, K. (2005), *Global Strategy: Creating and Sustaining Advantage across Borders*, Oxford University Press.
- Inkpen, A. C., and Tsang, E. W. K. (2007), Learning and strategic alliances. *The Academy of Management Annals*, 1(1), 479- 511.
- Javalgi, R.G., Martin, C.L., and Todd, P.R. (2004), The export of e-services in the age of technology transformation: Challenges and implications for international service providers, *Journal of Services Marketing*, 18(7), 560- 573.
- Jemison, D. B. and Sitkin, S. B. (1986), Corporate Acquisitions: A Process Perspective, *Academy of Management Review*, 11(1), 145- 163.
- Johanson, J. and Wiedersheim-Paul, F. (1975), The internationalisation of firms: Four Swedish cases, *Journal of Management Studies* 12(3), 305- 322.

- Johanson, J. and Vahlne, J. (1977), The internationalization process of the firm- a model of knowledge development and increasing foreign market commitments, *Journal of International Business Studies*, 8 (1), 23- 32.
- Johanson, J., and Vahlne, J.-E. (1990), The mechanism of internationalisation, *International Marketing Review*, 7(4), 11- 24.
- Johanson, J. and Vahlne, J. (2006), Commitment and opportunity development in the internalisation process: A note on the Uppsala Internationalisation Process Model, *Management International Review*, 46 (2), 165- 178.
- Johanson, J. and Vahlne, J. (2009), The Uppsala internationalisation process model revisited: From liability of foreignness to liability of outsidership, *Journal of International Business Studies*, 40, 1411–1431.
- Kanter, R. (1989), The new managerial work, *Harvard Business Review*, 67 (6), 85- 92.
- Keil, T., Laamanen, T. and Mäkisalo, A. (2012), Acquisitions, Acquisition Programs, and Acquisition Capabilities, *The Handbook of Mergers and Acquisitions*, Oxford University Press.
- Kester, C. (1984), Today's options tomorrow's growth, *Harvard Business Review*, March, 153-160.
- Kim, W. C., and Hwang, P. (1992), Global strategy and multinationals' entry mode choice, *Journal of International Business Studies*, 23(1), 29- 53.
- King, D., Dalton, D., Daily C., and Covin, J. (2004), "Meta-Analyses of post- acquisition performance: Indications of unidentified moderators", *Strategic Management Journal*, 25, 187- 200.
- King, G., Keohane, R. and Verba, S. (1994), *Designing social enquiry- Scientific inference in qualitative research*, Princeton University Press.
- Kirkman, B. L., Lowe, K. B., and Gibson, C. B. (2006), A quarter century of Culture's Consequences: A review of empirical research incorporating Hofstede's cultural values framework, *Journal of International Business Studies*, 37(3), 285- 320.
- Kirzner, I. M. (1973), *Competition and entrepreneurship*, Chicago: University of Chicago Press.
- Knickerbocker, F.T. (1973), *Oligopolistic reaction and multinational enterprise*. Boston: Division of Research, Harvard Business School.
- Kogut, B. (1983), *The multinational corporation in the 1980s*, MIT Press: Cambridge, MA.
- Kogut, B. (1985), Designing global strategies: Corporate and competitive value added chain, *Sloan Management Review*, 25, 15- 28.
- Kogut, B. and Singh, H. (1988), The Effect of National Culture on the Choice of Entry Mode, *Journal of International Business Studies*, 19 (3), 411- 432.
- Kogut, B. (1989), Research notes and communications a note on global strategies, *Strategic Management Journal*, 10 (4), 383- 389.
- Kogut, B. (1991), Joint Ventures and the Option to Expand and acquire, *Management Science*, 37 (1), 19- 33.

- Kogut, B. and Kulatilaka, N. (1994), Operating flexibility, Global manufacturing, and the option value of a multinational network, *Management Science*, 40 (1), 123- 139.
- Kostova, T., and Zaheer, S. (1999), Organizational legitimacy under conditions of complexity: The case of the multinational enterprise, *Academy of Management Review*, 24, 64- 81.
- Krishnan, H. A., Miller, A., and Judge, W. Q. (1997), Diversification and top management team complementarity: is performance improved by merging similar or dissimilar teams?, *Strategic Management Journal*, 18(5), 361- 74.
- Kristensen, P. and Zeitlin, J. (2004), Local Players in Global Games: The Strategic Constitution of a Multinational Corporation, *The Handbook of Mergers and Acquisitions*, Oxford University Press.
- Krull, E., Smith, P. and Ge, G. (2012), The Internationalization of Engineering Consulting from a Strategy Tripod Perspective, *The Service Industries Journal*, 32 (7), 1097- 1119.
- Kulatilaka, N. and Perotti, E. (1998), Strategic growth options, *Management Science*, 44 (8), 1021- 1031.
- Kusewitt, J. B. (1985), An Exploratory Study of Strategic Acquisition Factors Relating to Performance, *Strategic Management Journal*, 6(2), 151- 69.
- Lall, S. (1980), *The multinational corporation*, The Macmillan Press Ltd, London and Basingstoke.
- Lane, H. W., Greenberg, D., and Berdrow, I. (2004), "Barriers and Bonds to Knowledge Transfer in Global Alliances and Mergers," in H. W. Lane, M. Maznevski, and M. Mendenhall (eds.), *Blackwell Handbook of Global Management: A Guide to Managing Complexity*. Oxford: Blackwell, 342- 61.
- Lee, S-H. and Makhija, M. (2009), The effect of domestic uncertainty on the real options value of international investments, *Journal of International Business Studies*, 40, 405 - 420.
- Levinthal, D. A. and March, J. G. (1993), The Myopia of Learning, *Strategic Management Journal*, 14, 95- 112.
- Li, J. and Guisinger, S. (1992), The Globalization of Service Multinationals in the "Triad" Regions: Japan, Western Europe and North America, *Journal of International Business Studies*, 23 (4), 675- 696.
- Li, J. (1995), Foreign entry and survival: Effects of strategic choices on performance in international Markets, *Strategic Management Journal*, 16, 333- 351.
- Lindsay, V., Chadee, D., Mattsson, J., Johnston, R., and Millett, B. (2003), Relationships, the role of individuals and knowledge flows in the internationalization of service firms, *International Journal of Service Industry Management*, 14(1), 7- 35.
- Lowendahl, B.R., Revang, O., and Fosstenlokken, S.M. (2001), Knowledge and value creation in professional service firms: A framework for analysis, *Human Relations*, 54(7), 911- 931.
- Løwendahl, B.R. (2005), *Strategic management of professional service firms*. Copenhagen: Copenhagen Business School Press.
- Lu, J. W., & Beamish, P. W. (2001), The internationalization and performance of SMEs, *Strategic Management Journal*, 22, 565- 586.
- Lu, J. and Beamish, P. (2004), International Diversification and Firm Performance: The S-Curve Hypothesis, *Academy of Management Journal*, 47 (4), 598- 609.

- Lubatkin, M., Calori, R., Very, P., and Veiga, J. F. (1998), Managing mergers across borders: A two-nation exploration of a nationally bound administrative heritage, *Organization Science*, 9(6), 670- 684.
- Madhok, A. (1996), Know-how, experience and competition related considerations in foreign market entry: An exploratory investigation, *International Business Review*, 5, 339- 366.
- Madhok, A. (1997), Cost, value and foreign market entry mode: the transaction and the firm, *Strategic Management Journal*, 18 (1), 39-61.
- Madhok, A. and Tallman, S. (1998), Resources, Transactions and Rents: Managing value through interfirm collaborative relationships, *Organisation Science*, 9 (3), 326- 339.
- Madsen, T. and Servais, P. (1997), The internationalization of Born Globals- An evolutionary process, *International Business Review*, 6(6), 1-14.
- Magnusson, P., Westjohn, S.A., and Boggs, D.J. (2009), Order-or-entry effects for service firms in developing markets: An examination of multinational advertising agencies. *Journal of International Marketing*, 17(2), 23- 41.
- Maister, D. H. (1993), *Managing the professional service firm*. New York: Free Press.
- Majkga°rd, A. and Sharma, D. (1997), Client-following and market-seeking strategies in the internationalization of service firms, *Journal of Business-to-Business Marketing*, 4 (3), 1- 41.
- Majkga°rd, A., & Sharma, D.D. (1998), Client-following and market-seeking strategies in the internationalization of service firms, *Journal of Business-to-Business Marketing*, 4(3), 1– 41.
- Malhotra, N. (2003), The nature of knowledge and the entry mode decision, *Organization Studies*, 24, 935- 959.
- Martin, X., Swaminathan, A., and Mitchell, W. (1998), Organizational evolution in the inter-organizational environment: Incentives and constraints on international expansion strategy. *Administrative Science Quarterly*, 43, 566–601.
- Martin, X., and Salomon, R. (2003), Tacitness, learning and international expansion: A study of foreign direct investment in a knowledge-intensive industry, *Organization Science*, 14(3), 297- 311.
- Mata, J. and Freitas, E. (2012), Foreignness and exit over the life cycle of firms, *Journal of International Business Studies*, 43, 615-630.
- McSweeney, B. and Happonen, E. (2012), *Creating Value Through Mergers and Acquisitions*, The Handbook of Mergers and Acquisitions, Oxford University Press.
- McCann, P., and Mudambi, R. (2004), The location and behaviour of the multinational enterprise: Some analytical issues, *Growth and Change*, 35(4), 491- 524.
- Meyer, K. E. (2001), Institutions, transaction costs and entry mode choice in Eastern Europe, *Journal of International Business Studies*, 32(2), 357- 367.
- Meyer, K. E., and Peng, M. W. (2005), Probing theoretically into Central and Eastern Europe: Transactions, resources and institutions, *Journal of International Business Studies*, 36(6), 600- 621.
- Michie J. (2019), *The Handbook of Globalisation*, 3rd edition, Edward Elgar Publishing Limited.
- Miller, J., and Pras, B. (1980), The effects of multinational and export diversification on the profit stability of us corporations, *South Econ Journal*, 46(3), 792- 805.

- Miller, K. and Reuer, J. (1998), Firm strategy and economic exposure to foreign exchange rate movements, *Journal of International Business Studies*, 29 (3), 493- 513.
- Miller, S., and Eden, L. (2006), Local Density and Foreign Subsidiary Performance, *Academy of Management Journal*, 49 (2), 341- 355.
- Minbaeva, D., Pedersen, T., Bjorkman, I., Fey, C.F., and Park, H.J. (2003), MNC knowledge transfer, subsidiary absorptive capacity, and HRM, *Journal of International Business Studies*, 34, 586- 599.
- Morgan, M., and Hunt, D. (1994), The commitment- Trust Theory of relationship marketing, *Journal of Marketing*, 58(3), 20- 38.
- Morosini, P. (1998), *Managing cultural differences: Effective strategy and execution across cultures in global corporate alliances*, Oxford: Pergamon.
- Moore, K., and Birkinshaw, J. (1998), Managing knowledge in global service firms: Centers of excellence, *The Academy of Management Executive*, 12(4), 81- 92.
- Mudambi, R. (1998), The role of duration in multinational investment, *Journal of International Business Studies*, 29 (2), 239-261.
- Mudambi, R. and Zahra, S.A. (2007), The survival of international new ventures, *Journal of International Business Studies*, 38, 333- 352.
- Mudambi, R. (2008), Location, control and innovation in knowledge- intensive industries, *Journal of Economic Geography*, 8(5), 699- 725.
- Myers, S. (1977), Determinants of Corporate Borrowing, *Journal of Financial Economics*, 5 (2), 147- 175.
- Nahapiet, J., and Ghoshal, S. (1998), Social capital, intellectual capital and the organizational advantage, *Academy of Management Review*, 23(2), 242- 267.
- North, D.C. (1990), *Institutions, Institutional Change and Economic Performance*, Cambridge University Press, Cambridge.
- Olie, R. (1990), Culture and Integration Problems in International Mergers and Acquisitions, *European Management Journal*, 8(2), 206- 215.
- Olie, R. (1994), Shades of Culture and Institutions in International Mergers, *Organization Studies*, 15(3), 381- 405.
- Olibe, K., Michello, F. and Thorne, J. (2008), Systematic Risk and International Diversification: An empirical perspective, *International Review of Financial Analysis*, 17, 681-698.
- Oviatt, B., & McDougall, P. (1994). Toward a theory of international new ventures. *Journal of International Business Studies*, 25, 45- 61.
- Oxley, J. (1997), Appropriate Hazards and governance in strategic alliance: A transaction cost approach, *Journal of Law, Economics, and Organisation*, 13, 387- 409.
- Oxley, J.E. (1999), Institutional environment and the mechanisms of governance: The impact of intellectual property protection on the structure of inter-firm alliances. *Journal of Economic Behavior and Organization*, 38, 283- 309.

- Park, B., Oh, K. and Choi, S. (2012), Acquisition of local market information in international joint ventures: service sectors, *The Service Industries Journal*, 32 (7), 1077- 1096.
- Parkhe, A. (1991), Interfirm diversity, organizational learning, and longevity in global strategic alliances, *Journal of International Business Studies*, 22(4), 579- 601.
- Patterson, P.G., and Cicic, M. (1995), A typology of service firms in international markets: An empirical investigation, *Journal of International Marketing*, 3, 57- 83.
- Peng, M.W. (2001), The resource-based view and international business, *Journal of Management*, 27, 803- 829.
- Penrose, E. (1959, revised edition 2009), *The Theory of the Growth of the Firm*, Oxford University Press, University of Oxford.
- Perraton, J. (2003), The Scope and Implications of Globalisation, *The Handbook of Globalisation*, Edward Elgar Publishing Limited, 147-175.
- Petersen, B., Pedersen, T., and Lyles, M. A. (2008), Closing knowledge gaps in foreign markets, *Journal of International Business Studies*, 39(7), 1097-1113.
- Philippe, J., and Le'ó, P.-Y. (2011), Internationalisation of service activities in the Haute-Garonne, *The Service Industries Journal*, 21, 63- 80.
- Pla-Barber, J. and Ghauri, P. (2012), Introduction- Internationalization of service industry firms: understanding distinctive characteristics, *The Service Industries Journal*, 32 (7), 1007- 1010.
- Porter, M. (1980), *Competitive strategy*. New York: Free Press.
- Porter, M. (1991), Towards a dynamic theory of strategy, *Strategic Management Journal*, 12 (S2), 95- 117.
- Porter, M. E. (1994), The role of location in competition, *Journal of Economics and Business*, 1(1), 35- 39.
- Porter, M. E. (1996), Competitive advantage, agglomeration economies, and regional policy, *International Regional Science Review*, 19(1&2), 85- 94.
- Porter, M. E. (1998), *On competition*. Cambridge, MA: Harvard Business Press.
- Porter, M. E. (2000), Location, competition, and economic development: Local clusters in a global economy, *Economic Development Quarterly*, 14(1), 1- 34.
- Perlmutter, H. (1969), The Tortuous Evolution of the Multinational Corporation, *Columbia Journal of World Business*, Jan- Feb., 9- 18.
- Qian, G. and Li, J. (1998), Multinationality, Global Market Diversification, and Risk Performance for the largest U.S. Firms, *Journal of International Management*, 4 (2), 149-170.
- Reeb, M., Kwok, C. and Baek, Y. (1998), Systematic Risk of the Multinational Corporation, *Journal of International Business Studies*, 29 (2), 263- 279.
- Reihlen, M., & Apel, B.A. (2007), Internationalization of professional service firms as learning= A constructivist approach, *International Journal of Service Industry Management*, 18(2), 140- 151.

- Reuer, J. and Leiblein, M. (2000), Downside risk implications of multinationality and international joint ventures, *Academy of Management Journal*, 43 (2), 203- 214.
- Ricart, J. E., Enright, M. J., Ghemawat, P., Hart, S. L., and Khanna, T. (2004), New frontiers in international strategy, *Journal of International Business Studies*, 35(3), 175- 200.
- Rodríguez, A. and Nieto, M. (2012), The internationalisation of knowledge-intensive business services: The effect of collaboration and the mediating role of innovation, *The Service Industries Journal*, 32 (7), 1057- 1075.
- Rosenbaum, S. and Madsen, T. (2012), Modes of foreign entry for professional service firms in multi-partner projects, *The Service Industries Journal*, 32 (10), 1653- 1666.
- Rugman A.M. (1976), Risk reduction by international diversification, *Journal of International Business Studies*, 7(2), 75- 80.
- Rugman A.M. (1979), *International Diversification and Multinational Enterprise*, Lexington, MA: Health.
- Rugman, A. (2000), *The End of Globalisation*, Random House: London/ Amacom-McGraw-Hill: New York.
- Rugman, A. M., and Verbeke, A. (2003), Location competitiveness and the multinational enterprise. In A. M. Rugman and T. L. Brewer (Eds), *The Oxford handbook of international business*: 150-180. Oxford: Oxford University Press.
- Rugman, A. and Verbeke, A. (2004), A perspective on the regional and global strategies of multinational services firms, *Journal of International Business Studies*, 35(1), 3- 18.
- Rugman, A. and Verbeke, A. (2005), Towards a theory of regional multinationals: A transaction cost economics approach, *Management International Review*, 45(1), 5- 17.
- Rugman, A. and Verbeke, A. (2007), Liabilities of regional foreignness and the use of firm level versus country level data: A reponse to Dunning et.al., *Journal of International Business Studies*, 38(1), 200- 205.
- Rugman, A. and Verbeke, A. (2008), A New Perspective on the Regional and Global Strategies of Multinational Services Firms, *Management International Review*, 48, 397- 411.
- Ruigrok, W. and Wagner, H. (2003), Internationalisation and performance: An organisational learning perspective, *Management International Review*, 43, 63- 83.
- Root, F. (1987), *Entry strategies for international markets*, Lexington, MA: Lexington Books.
- Salomon, R. and Wu, Z. (2012), Institutional distance and local isomorphism strategy, *Journal of International Business Studies*, 43, 343- 367.
- Sanchez, R. (1993), Strategic flexibility, firm organization, and managerial work in dynamic markets, *Advances in Strategic Management*, 9, 251- 291.
- Sanchez, R. (1995), Strategic flexibility in product competition, *Strategic Management Journal*, 16 (Summer special issue), 135- 159.
- Sarala, R. (2010), The Impact of Cultural Differences and Acculturation Factors on Post-acquisition Conflict, *Scandinavian Journal of Management*, 26(1), 38- 56.

Services Sectoral Classification list MTN.GNS/W/120, 1991, World Trade Organisation.

Schoenberg, R. (2006), Measuring the Performance of Corporate Acquisitions: An Empirical Comparison of Alternative Metrics, *British Journal of Management*, 17, 361- 70.

Scott-Kennel, J. and Batenburg, Z. (2012), The role of knowledge and learning in the internationalisation of professional service firms, *The Service Industries Journal*, 32(10), 1667- 1690.

Shane, S. (1998), Prior Knowledge and the Discovery of Entrepreneurial Opportunities, *Organisation Science*, 11 (4), 448- 469.

Sharma, D.D., and Johanson, J. (1987), Technical consultancy in internationalisation, *International Marketing Review*, 4(4), 20- 29.

Sharma, D.D. (1989), Overseas market entry strategy: The technical consultancy firms, *Journal of Global Marketing*, 2(2), 89- 110.

Shaver, J. M., Mitchell, W., and Yeung, B. W. (1997), The effect of own-firm and other-firm experience on foreign direct investment survival in the United States, 1987- 92, *Strategic Management Journal*, 18(10), 811- 824.

Sheehan, P. and Grewal, B. (2002), Firms, Regions, and Strategy in a Diverging World: The Australian Case, Regions, Globalization, and the Knowledge- based Economy, Oxford University Press.

Shenkar, O. (2012), Cultural distance revisited: Towards a more rigorous conceptualization and measurement of cultural differences, *Journal of International Business Studies*, 43, 1-11.

Shrader, R., Oviatt, B. and McDougall, P. (2000), How new ventures exploit trade-offs among international risk factors: Lessons for the accelerated internationalization of the 21st century, *Academy of Management Journal*, 43(6), 1227- 1247.

Shukla, A., & Dow, J.D. (2010), Post-entry advancement of international service firms in Australia: A longitudinal approach, *Scandinavian Journal of Management*, 26(3), 268- 278.

Sirmon, D. G., Hitt, M.A., and Ireland, R.D. (2007), Managing firm resources in dynamic environments to create value: Looking inside the black box, *Academy of Management Review*, 32, 273- 93.

Slangen, A. (2006), National cultural distance and initial foreign acquisition performance: The moderating effect of integration, *Journal of World Business*, 41, 161- 70.

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

Sluyterman, K. (1998), Internationalisation of Dutch accounting firms, *Business History*, 40, 1- 21.

Smit, H. T. J. (2001), Acquisition Strategies as Option Games, *Journal of Applied Corporate Finance*, 14, 79- 89.

Sölvell, Ö. and Birkinshaw, J. (2002) Multinational Enterprises and the Knowledge Economy: Leveraging Global Practices, Regions, Globalization, and the Knowledge- based Economy, Oxford University Press.

Stata Data Analysis and Statistical Software.

State of Business Report 2008, Association for Consultancy and Engineering UK (ACE).

State of Business Report 2011, Association for Consultancy and Engineering UK (ACE).

Stobaugh, Robert B., Jr. (1969), How to analyse foreign investment climates, *Harvard Business Review*, September- October, 100- 08.

Stopford, John M. and Louis T. Wells, Jr. (1972), *Managing the multinational enterprise*, New York: Basic Books.

Storper, M. (2001), Globalization and knowledge flows: An industrial geographer's perspective. In J. H. Dunning (Ed.), *Regions, globalization and the knowledge based economy*: 42–62. Oxford: Oxford University Press.

Stray, S., Bridgewater, S. and Murray, G. (2001), The Internationalisation Process of Small, Technology-Based Firms: Market Selection, Mode Choice and Degree of Internationalisation, *Journal of Global Marketing*, 15(1), 7- 29.

Subramanian, R. and Lawrence, R.Z. (1999), *A Prism on Globalisation: Corporate Responses to the Dollar*, Brookings Institution Press: Washington, DC.

Sullivan, D . and Bauerschmidt, A. (1990), Incremental internationalization : A test of Johanson and Vahlne's thesis, *Management International Review*, 30(1), 19-30.

Sullivan, D. (1994), Measuring the degree of internationalisation of a firm, *Journal of International Business Studies*, 25 (2), 325- 342.

Susan, C. (2012), Individual response to mergers and acquisitions, *The Handbook of Mergers and Acquisitions*, Oxford University Press.

Tallman, S. and Li, J. (1996), Effects of international diversity and product diversity on the performance of multinational firms, *Academy of Management Journal*, 39, 179- 196.

Tan, A., Brewer, P. and Liesch, P. (2007), Before the first export decision: Internationalisation of readiness in the pre-export phase, *International Business Review*, 16 (2007), 294-309.

Tang, C., and Tikoo, S. (1999), Operational flexibility and market valuation of earnings, *Strategic Management Journal*, 20(8), 749- 761.

Teerikangas, S. and Véry, P. (2012), Culture in Mergers and Acquisitions, *The Handbook of Mergers and Acquisitions*, Oxford University Press.

Teece, D.J. (2003), Expert talent and the design of (professional services) firms, *Industrial and Corporate Change*, 12(4), 895- 916.

Teece, D.J. (2009), *Dynamic capabilities and strategic management*. New York: Oxford University Press.

Tong, T., Alessandri, T., Reuer, J. and Chintakananda, A. (2008), How much does country matter? An analysis of firms' growth options, *Journal of International Business Studies*, 39, 387- 405.

Toyne, Brian & Peter G.P. Walters. (1989), *Global marketing management: A strategic perspective*. Boston: Allyn and Bacon.

Tsai, W., and Ghoshal, S. (1998), Social capital and value creation: The role of intrafirm networks. *Academy of Management Journal*, 41, 464- 476.

- Tsang, E., and Yip, P. (2007), Economic distance and the survival of foreign direct investments, *Academy of Management Journal*, 50 (5), 1156–1168.
- Tschoegl, A. (1987), International retail banking as a strategy: An assessment, *Journal of International Business Studies*, 18(2): 67- 88.
- Tuppura, A. et al. (2008), Linking knowledge, entry timing and internationalisation strategy, *International Business Review*, 17 (4), 473- 487.
- Uhlenbruck, K., and DeCastro, J. O. (2000), Foreign acquisitions in Central and Eastern Europe: Outcomes of privatisation in transitional economies, *Academy of Management Journal*, 43, 381- 402.
- UNCTAD Handbook of Statistics 2010, United Nations Conference on Trade and Development.
- UNCTAD Handbook of Statistics 2015, United Nations Conference on Trade and Development.
- UNCTAD Handbook of Statistics 2017, United Nations Conference on Trade and Development.
- UNCTAD World Investment Report 2015, United Nations Conference on Trade and Development.
- Vaara, E. (2003). "Post-acquisition Integration as Sensemaking: Glimpses of Ambiguity, Confusion, Hypocrisy, and Politicization." *Journal of Management Studies*, 40/4: 859–94.
- Vahlne, J. and Finn, W-P (1973), Economic Distance. Model and Empirical Investigation, *Export and Foreign Establishments*, 81-159.
- Varaiya, N. P. (1988), The winner's curse hypothesis and corporate takeovers, *Managerial and Decision Economics*, 9, 209- 220.
- Vermeulen, F., and Barkema, H. (2001), Learning through acquisitions, *Academy of Management Journal*, 44, 457- 476.
- Vermeulen, F., and Barkema, H. G. (2002), Pace, rhythm and scope: Process dependence in building a profitable multinational, *Strategic Management Journal*, 23, 619- 635.
- Von Nordenflycht, A. (2010), What is a professional service firm? Toward a theory and taxonomy of knowledge-intensive firms, *Academy of Management Review*, 35(1), 155- 174.
- Warf, B. (1996), International engineering services 1982- 92, *Environment and Planning*, 28, 667- 686.
- Weber, Y. (1996), Corporate cultural fit and performance in mergers and acquisitions, *Human Relations*, 49(9), 1181- 202.
- Weisfelder, C. (2001), Internationalisation and the multinational enterprise: development of a research tradition, *Advances in International Marketing*, 11, 13-46.
- Williamson, O. (1975), Markets and hierarchies, analysis and antitrust implications: A study in the economics of internal organisation, New York, The Free Press.
- Williamson, O. (1985), The economic institutions of capitalism, New York, The Free Press.
- Williamson, O. (1991), Comparative economic organisation: The analysis of discrete structural alternatives, *Administrative Science Quarterly*, 36, 269- 296.

- Winstead, K. and Patterson, G. (1998), Internationalisation of Services: the service exporting decision, *The Journal of Services Marketing*, 12 (4), 294-311.
- Woodcock, C., Beamish, P., and Makino, S. (1994), Ownership-based entry mode strategies and international performance, *Journal of International Business Studies*, 25(2), 253- 273.
- World Bank World Development Report 1997 and Global Economic: Prospects and the Developing Countries, World Bank.
- World Bank Development Indicator 2009, World Bank website <http://data.worldbank.org/indicator/>, March 2011.
- Worldwide Governance Indicators 2011, World Bank 2011.
Website: <http://info.worldbank.org/governance/wgi/index.asp>
- Wymbs, C. (2000), How e-commerce is transforming and internationalizing service industries, *Journal of Services Marketing*, 14(6), 463- 478.
- Xu, D. and Shenkar, O. (2002), Institutional distance and the multinational enterprise, *Academy of Management Review*, 27(4), 608- 618.
- Yip, G. S., Biscarri, J. G. and Monti, J. A. (2000), The role of the internationalization process in the performance of newly internationalizing firms, *Journal of International Marketing*, 8(3), 10–35.
- Zimmerman, M. and Zeitz, G. (2002), Beyond survival: achieving new venture growth by building legitimacy, *Academy of Management Review*, 27 (3), 414–431.
- Zaheer, S. (1995), Overcoming the liability of foreignness, *Academy of Management Journal*, 38, 341-363.
- Zaheer, S. and Mosakowski, E. (1997), The dynamics of the liability of foreignness: A global study of survival in financial services, *Strategic Management Journal*, 18 (6), 439-463.
- Zaheer, S. and Manrakhan, S. (2001), Concentration and dispersion in global industries: Remote electronic access and the location of economic activities, *Journal of International Business Studies*, 32(4), 667- 687.
- Zaheer, S., Schomaker, M. and Nachum, L. (2012), Distance without direction: Restoring credibility to a much-loved construct, *Journal of International Business Studies*, 43, 18- 27.v
- Zahra, S., Ireland, D.R. and Hitt, M. (2000), International expansion by new venture firms: international diversity, mode of market entry, technological learning and performance, *Academy of Management Journal*, 43 (5), 925–950.
- Zeng, Y., Shenkar, O., Lee, S. and Song, S. (2013), Cultural differences, MNE learning abilities, and the effect of experience on subsidiary mortality in a dissimilar culture: Evidence from Korean MNEs, *Journal of International Business Studies*, 44, 42- 65.
- Zollo, M. and Singh, H. (2004), Deliberate Learning in Corporate Acquisitions: Post-acquisition Strategies and Integration Capability in US Bank Mergers, *Strategic Management Journal*, 25 (13) 1233- 56.
- Zollo, M. and Meier, D. (2008), What is M&A Performance?, *Academy of Management Perspectives*, 22 (3), 55- 77.