International entrepreneurial capabilities: The role of networks in the small multinational enterprise

ANDERSON, Alexandra

Available from the Sheffield Hallam University Research Archive (SHURA) at:

http://shura.shu.ac.uk/24195/

A Sheffield Hallam University thesis

This thesis is protected by copyright which belongs to the author.

The content must not be changed in any way or sold commercially in any format or medium without the formal permission of the author.

When referring to this work, full bibliographic details including the author, title, awarding institution and date of the thesis must be given.

Please visit http://shura.shu.ac.uk/24195/ and http://shura.shu.ac.uk/information.html for further details about copyright and re-use permissions.
International Entrepreneurial Capabilities:

The Role of Networks in the Small Multinational Enterprise

Alexandra Heather Anderson

A thesis submitted in partial fulfilment of the requirements of Sheffield Hallam University for the degree of Doctor of Business Administration

July 2018
Abstract

Interest in entrepreneurial internationalisation, i.e. the pursuit of business opportunities across national borders through the orientation of individuals and firms towards innovativeness, risk-taking, proactiveness, autonomy and competitive aggressiveness, has increased over the past two decades. Interest in these types of behaviours has suggested that the internationalisation of firms is no longer a slow, incremental, undertaking. Thus, the field of International Entrepreneurship has broadened insights into these activities by examining firms that engage in international activities from inception, or International New Ventures (INV).

This thesis aims to broaden the field of international entrepreneurship by considering these activities outside of the INV. While there is much work on the internationalisation activities of multinational enterprises (MNEs), little consideration has been given to the entrepreneurial activities of those running the firms as to how their internationalisation may occur. Drawing on parallels from the corporate entrepreneurship literature, which essentially divorces the act of entrepreneurship from the act of starting a new venture, this thesis addresses this gap. It explores how the small MNE (sMNE), with between two and five international subsidiaries, utilises international entrepreneurial capabilities and networks to drive renewal in the organisation, in order to identify opportunities, develop international markets, acquire overseas subsidiaries, and create new products and services.

To achieve this aim, a single case study approach-of a UK based engineering and services sMNE was undertaken and critical realist methodology to seek causal explanations of entrepreneurial internationalisation was applied. The findings demonstrated the entrepreneurial drive of key figureheads in the sMNE helped sustain the international entrepreneurial capabilities of the sMNE and its subsidiaries. International autonomy enabled the sMNE subsidiaries to pursue new international markets, to develop new product and service innovation, and diversify into new markets. In addition, international autonomy nurtured human capital within the sMNE subsidiaries, while human and network capital, i.e. the knowledge and ability to develop beneficial ties, enabled individuals to be alert to international opportunities and act on them accordingly.
Dedication

for

my father Alex, my inspiration
Acknowledgements

I have been incredibly honoured to have had such immense support from my family, friends and colleagues on what has been an incredible journey, one that has inspired me but also challenged above and beyond any venture I have undertaken before.

I am indebted to my Director of Studies, Dr Andrew Johnston who has consistently supported and guided me through this process and for whom I have the utmost respect. I have thoroughly enjoyed our debates on all things entrepreneurial and look forward to continuing to do so. I would like thank him for his patience, his humour and taking on the role to guide me on this journey.

I would also like to thank my second supervisor Dr Diana Sharpe, her wisdom, patience and guidance has been invaluable. Her calmness has seen me through some challenging times whilst undertaking this doctorate. Together, Dr Andrew Johnston and Dr Diana Sharpe have been an incredible supervisory team, one I have indeed been privileged to have had.

I am also grateful to the Group CEO and the senior management teams of the case company for the time they gave up to be part of my research study.

It is without question, my family who have been truly amazing in supporting me on this long journey. I would like to thank my wonderful husband Rob, who has taken on the role of both parents in the latter stages of this journey and I am truly thankful for his belief in me. My beautiful, kind and loving daughters, Lydia, Maddy and Gabby, who have had to see their mum not as often as I would have liked whilst completing my doctorate, but have been there to support me all the way. The encouraging words they have given me have spurred me on; to hear the words 'we're so proud of you mum' has made this journey so worthwhile. I would also like to thank my mum Hilda, her humour and love, as always, has guided me along this journey and continues to do so in life.

Finally, I would like to thank my late father, Alex, who inspired me as a child to make the most of education we had available to us. Without his love and support as a child and young woman, I would not have been in the position to have fulfilled this opportunity and I am again extremely thankful to him for always looking out for me and encouraging me to make the most of any opportunity, in particular the opportunity of education.
Contents

Abstract .............................................................................................................................................. i
Dedication ........................................................................................................................................ ii
Acknowledgements .......................................................................................................................... iii
Contents ........................................................................................................................................... iv
List of Figures .................................................................................................................................... vii
List of Tables ...................................................................................................................................... ix
List of Abbreviations ........................................................................................................................ x

Chapter One: International Entrepreneurial Capabilities, Networks and Small Multinational Enterprise ................................................................................................................................. 1
  1.1 Background to the Research ...................................................................................................... 1
  1.2 Rationale ..................................................................................................................................... 7
  1.3 Aims of this Research ............................................................................................................... 11
  1.4 Research Approach ............................................................................................................... 11
  1.5 Structure of the Thesis ........................................................................................................... 12

Chapter Two: International Entrepreneurial Capabilities and International Corporate Entrepreneurial Outcomes .................................................................................................................. 14
  2.1 Introduction ............................................................................................................................... 14
  2.2 Traditional Theories of Internationalisation and the Emergence of International Entrepreneurship ......................................................................................................................... 16
  2.3 International Corporate Entrepreneurial Outcomes: Innovation, International Strategic Renewal and International Corporate Venturing ......................................................................... 22
  2.4 International Entrepreneurial Capabilities: International Entrepreneurial Orientation and International Entrepreneurial Culture .................................................................................................. 30
  2.5 Chapter Summary .................................................................................................................... 53

Chapter Three: The Role of Networks in Entrepreneurial Internationalisation .................................. 55
  3.1 Introduction ............................................................................................................................... 55
  3.2 Networks and the resource based view ................................................................................... 56
  3.3 Network Embeddedness and Entrepreneurial Internationalisation ........................................ 69
<table>
<thead>
<tr>
<th>Section</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>3.4 Summary</td>
<td>83</td>
</tr>
<tr>
<td>Chapter Four: Methodology</td>
<td>88</td>
</tr>
<tr>
<td>4.1 Introduction</td>
<td>88</td>
</tr>
<tr>
<td>4.2 Case study research in international business and international</td>
<td>91</td>
</tr>
<tr>
<td>corporate entrepreneurship</td>
<td></td>
</tr>
<tr>
<td>4.3 A Case Study Research Strategy</td>
<td>97</td>
</tr>
<tr>
<td>4.4 Philosophical Underpinnings</td>
<td>99</td>
</tr>
<tr>
<td>4.5 Drawing on theoretical lenses to inform the case study research</td>
<td>103</td>
</tr>
<tr>
<td>4.6 Case Design and Case Selection</td>
<td>104</td>
</tr>
<tr>
<td>4.7 The Case Boundaries</td>
<td>108</td>
</tr>
<tr>
<td>4.8 Case Data Selection and Accessing Participants</td>
<td>109</td>
</tr>
<tr>
<td>4.9 Interview Design and Management</td>
<td>116</td>
</tr>
<tr>
<td>4.10 Reflexivity</td>
<td>122</td>
</tr>
<tr>
<td>4.11 Data Analysis</td>
<td>124</td>
</tr>
<tr>
<td>4.12 Quality of Research</td>
<td>128</td>
</tr>
<tr>
<td>4.13 Ethical Considerations</td>
<td>129</td>
</tr>
<tr>
<td>4.14 Chapter Summary</td>
<td>130</td>
</tr>
<tr>
<td>Chapter Five: Case Analysis</td>
<td>132</td>
</tr>
<tr>
<td>5.1 Introduction</td>
<td>132</td>
</tr>
<tr>
<td>5.2 Overview of the Titanium Group and its International Trade and</td>
<td>133</td>
</tr>
<tr>
<td>Investment Activity</td>
<td></td>
</tr>
<tr>
<td>5.3 Key Sector Influences: Economic Decline of the Oil and Gas Sector</td>
<td>135</td>
</tr>
<tr>
<td>5.4 International Strategic Renewal in the sMNE</td>
<td>138</td>
</tr>
<tr>
<td>5.5 International Corporate Venturing</td>
<td>149</td>
</tr>
<tr>
<td>5.6 Innovation: New Products, Services, Diversification and International Markets</td>
<td>155</td>
</tr>
<tr>
<td>5.7 Chapter Summary</td>
<td>194</td>
</tr>
<tr>
<td>6. Chapter Six: Discussion</td>
<td>199</td>
</tr>
<tr>
<td>6.1 Introduction</td>
<td>199</td>
</tr>
</tbody>
</table>
6.2 Power of human capital ................................................................. 199
6.3 Subsidiary power, network capital and the pursuit of international opportunity 202
6.4 Influence of acquisition and organisation structure .............................. 205
6.5 Influence of customer and competitor ties on resource acquisition .......... 209
Chapter Seven: Conclusion ..................................................................... 217
7.1 Introduction ..................................................................................... 217
7.2 Research Question One: How and in what ways can entrepreneurial internationalisation promote international corporate entrepreneurial outcomes in the small MNE? ................................................................. 217
7.3 Research Question Two: How and why are networks created in the small MNE, who creates them and what role might they play in achieving international corporate entrepreneurial outcomes? ............................................................................. 219
7.4 Research Question Three: How and in what ways can network embeddedness be viewed as a strategic resource to the small MNE to achieve international corporate entrepreneurial outcomes? .......................................................... 220
7.5 Theoretical Contribution .................................................................. 221
7.6 Empirical Contribution ..................................................................... 226
7.7 Practical and Policy Implications ....................................................... 227
7.8 Limitations ....................................................................................... 232
7.9 Future Research ................................................................................ 234
References ............................................................................................. 236
Word Count: .......................................................................................... 261
Appendix 1: Client Research Brief .......................................................... 262
Appendix 2: First Interview Guide ........................................................... 265
Appendix 3: Interview Guide and Theoretical Underpinnings ..................... 273
**List of Figures**

<table>
<thead>
<tr>
<th>Figure</th>
<th>Description</th>
<th>Page</th>
</tr>
</thead>
<tbody>
<tr>
<td>2.1</td>
<td>Map of literature review on entrepreneurial internationalisation of the small MNE</td>
<td>15</td>
</tr>
<tr>
<td>2.2</td>
<td>International corporate entrepreneurial outcomes and entrepreneurial internationalisation</td>
<td>29</td>
</tr>
<tr>
<td>2.3</td>
<td>Adaption of international market orientation</td>
<td>33</td>
</tr>
<tr>
<td>2.4</td>
<td>Augmentation of international entrepreneurial orientation and international entrepreneurial culture</td>
<td>34</td>
</tr>
<tr>
<td>2.5</td>
<td>International entrepreneurial capabilities influence on role of networks and international entrepreneurial outcomes</td>
<td>35</td>
</tr>
<tr>
<td>3.1</td>
<td>The role of networks: RBV and network embeddedness</td>
<td>56</td>
</tr>
<tr>
<td>3.2</td>
<td>MNE and subsidiary network resource</td>
<td>59</td>
</tr>
<tr>
<td>3.3</td>
<td>Network capital</td>
<td>66</td>
</tr>
<tr>
<td>3.4</td>
<td>Network embeddedness in internationalisation</td>
<td>72</td>
</tr>
<tr>
<td>3.5</td>
<td>Conceptual framework to research international entrepreneurial capabilities influence on the role of networks and international corporate entrepreneurial outcomes</td>
<td>87</td>
</tr>
<tr>
<td>4.1</td>
<td>Structure of causal explanation</td>
<td>90</td>
</tr>
<tr>
<td>4.2</td>
<td>Critical realist case research strategy</td>
<td>98</td>
</tr>
<tr>
<td>4.3</td>
<td>Example of sensitised theory used in causal explanation</td>
<td>104</td>
</tr>
<tr>
<td>4.4</td>
<td>Titanium Plc Structure</td>
<td>107</td>
</tr>
<tr>
<td>4.5</td>
<td>Coding stages of event</td>
<td>127</td>
</tr>
<tr>
<td>4.6</td>
<td>Process of case analysis</td>
<td>131</td>
</tr>
<tr>
<td>5.1</td>
<td>Timeline of international strategic renewal</td>
<td>140</td>
</tr>
<tr>
<td>5.2</td>
<td>Causal influences on international strategic renewal in the Titanium Group</td>
<td>148</td>
</tr>
<tr>
<td>5.3</td>
<td>Network embeddedness in the acquisition of Redroad LLC</td>
<td>152</td>
</tr>
<tr>
<td>5.4</td>
<td>Causal influences on international corporate venturing in the Titanium Group</td>
<td>154</td>
</tr>
<tr>
<td>5.5</td>
<td>Network embeddedness in Division Four - Copper Ltd</td>
<td>176</td>
</tr>
<tr>
<td>5.6</td>
<td>Network embeddedness in Silver Ltd - creation of Silver Ltd (Germany) Division Three</td>
<td>178</td>
</tr>
<tr>
<td>5.7</td>
<td>Network embeddedness in Silver Ltd - creation of Silver Ltd (USA) Division Three</td>
<td>179</td>
</tr>
</tbody>
</table>
Figure 5.8: Causal influences on innovation in the Titanium Group.......................... 193
Figure 5.9: Proposed causal mechanism of the Titanium Group international corporate entrepreneurial outcomes .......................................................... 198
List of Tables

Table 1.1: Types of Internationalising Firms ................................................................. 4
Table 2.1: Firm Level International Entrepreneurship Definitions ............................... 20
Table 2.2: Examples of International Corporate Entrepreneurial Outcomes ............... 24
Table 4.1: Phases of case study process and reflective questions ............................... 94
Table 4.2: Summary of turnover and employees for the Titanium Group and Companies ......................................................................................................................... 106
Table 4.3: Participants and Human Capital ................................................................. 113
Table 4.4: Example interview guide question ............................................................ 117
Table 4.5: International Corporate Entrepreneurial Events ....................................... 125
Table 5.1: International Trade and Investment Activity of the Titanium Group .......... 134
Table 5.2: Selected Key Performance Indicators in Oil and Gas Sector .................... 135
Table 5.3: Examples of Innovation ............................................................................ 156
Table 5.4: Summary of presence of international entrepreneurial capabilities in the Titanium Group Companies ....................................................................................................... 197
List of Abbreviations

MNE - Multinational Enterprise
INV - International New Venture
RBV - Resource Based View
sMNE - Small Multinational Enterprise
OLI - Ownership, Location, Internalisation
FDI - Foreign Direct Investment
mMNE - Micro Multinational Enterprise
UNCTAD - United Nations Conference on Trade and Development
FSA - Firm Specific Advantages
CSA - Country Specific Advantages
Chapter One: International Entrepreneurial Capabilities, Networks and Small Multinational Enterprise

1.1 Background to the Research

International trade, entrepreneurship and innovation are widely recognised as key drivers for economic growth and firm competitiveness (Schumpeter 1934; Acs, et al. 2012; Williams and Vorley 2017). In fact, the reference by Schumpeter (1939) to new export markets and new sources of raw material supply in his definition of entrepreneurial activity was one of the earliest connections to be made between internationalisation, i.e. where a firm engages in international trade and investment, and entrepreneurship. Thus, in a dynamic, complex, and often uncertain global trading environment, how firms interact with their surroundings (Young 2001) and how they successfully navigate new economic landscapes requires them to engage in a combination of internationalisation, entrepreneurship and innovation (Kurakto et al., 2015).

How to successfully develop international markets has long been considered a key question for international business scholars to address (Peng 2004). In answering this question, international business research followed many paths and remained largely focussed on sequential approaches to internationalisation of Uppsala (Johanson & Vahlne 1977; 1990) and activities of the MNE (Sinkovics et al. 2007; Forsgren 2016). As global communications developed and international markets became more accessible, scholars witnessed the rise of the early internationalising firm - the 'born global' (Rennie 1993); the international new venture (INV) (Oviatt and Mcdougall 1994); or the global start-up (Knight and Cavusgil 2004). These typically defined those firms which early after inception traded internationally and therefore did not follow traditional internationalisation processes synonymous with extant international business literature.

Theories of international entrepreneurship emerged in the late 1980's and clearly positioned internationalisation as an entrepreneurial act, exploring entrepreneurial behaviours, processes and outcomes associated with the identification and enactment of new international opportunity (McDougall 1989; Jones 1999). The entrepreneurial behaviours of these early internationalising firms, questioned the notions of psychic distance and liability of foreignness (Hymer 1976; Johanson and Vahlne 1977; Zaheer 1995) as relevant concepts for the INV who did not perceive distance or culture as a
reason not to pursue international opportunity. Such firms typically utilised networks to fill resource or knowledge gaps, the importance of networks for the INV emerged as a key dimension of international entrepreneurship research (Coviello and Munro 1995; Coviello and Munro 1997). Although, entrepreneurship and internationalisation were linked mainly in the context of INVs, the literature subsequently included established firms and the entrepreneurial activities of the Multinational Enterprise (MNE). However, the focus of international entrepreneurship remained largely on the international entrepreneurial activities of the large MNE (Dimitratos, et al. 2003; Dimitratos, et al. 2010; Dimitratos, et al. 2012).

The crucial point here is that while international entrepreneurship is therefore not exclusive to the INV, the entrepreneurial behaviours, processes and outcomes of an INV and MNE will differ (Al–Aali and Teece 2014). The INV represents one form of entrepreneurial internationalisation. Crucially, evidence from the existing corporate entrepreneurship literature suggests that entrepreneurial activity does not only take place inside new ventures or by founders (Zahra and Garvis 2000; Dess, et al., 2003; Keupp and Gassmann 2009). By nature of their stage in internationalisation, the MNE is typically engaged in more diverse forms of international trade and investment than the INV (Bartlett and Ghoshal 1987; Ghoshal and Barlett 1988; Rugman, et al. 2011; Al–Aali and Teece 2014). Therefore, there is a need to explore entrepreneurial internationalisation in the context of organisations that do not fall into either of these extremes i.e. the INV at one end of the continuum and the large MNE at the other. Consequently this thesis concentrates on the small MNE (sMNE) to examine international corporate entrepreneurial activity. Defining and Delimiting the Small Multinational Enterprise

MNEs are diverse due to differences in patterns of internationalisation, levels of organisational structure complexity, the role of leadership teams involved in the entrepreneurial internationalisation of the sMNE, the relationships between the corporate headquarters and their subsidiaries as well as how resources are coordinated across sMNE subsidiaries (Dimitratos, et al. 2003). Recently attention has begun to shift on smaller MNEs particularly the micro-MNE defined as an MNE with less than 250 employees (Dimtratos, et al. 2003).

Few scholars have considered different types of MNE. The mMNE (Dimitratos, et al. 2003) is significant to this thesis as it differentiates between the different size and nature
of activity of the MNE. A notable difference between the INV/Born Global and internationalising SMEs is that the latter can internationalise or become global later in their organisational life. With this in mind, the mMNE (Dimitratos, et al. 2003) and the global smaller firm (Dimitratos, et al. 2010) are different in that they actively pursue international trade activity in all major international markets and are expected to source the majority of their inputs from international markets, but have not necessarily done this early after inception.

This approach depicts the scope of international activity as a defining factor. However, it is difficult to address how major international markets are defined and this can of course differ on a number of factors including sector and nature of product or service. A further differentiation of the mMNE, other than size, is the constellation and investment of the mMNE associated with international venturing activity, such as licensing, joint ventures and strategic alliances suggested by Dimitratos, et al (2003). According to Dimitratos, et al (2003) the mMNE is engaged in significant control and management of value added activities and does not necessarily always involve the ownership of subsidiaries. This definition appears to be more aligned to the global smaller MNE. The sMNE in this thesis is however defined by its ownership activity; this is important in demonstrating the entrepreneurial internationalisation activities of the sMNE from a subsidiary perspective and therefore builds on early international business scholars work on MNEs subsidiary roles.

Definitions rely on a combination of different criteria such as the pace of internationalisation after inception, the mode of internationalisation (mainly exporting), firm age, firm size, resource combinations, ownership and control of subsidiaries as well as changes in structure during internationalisation. Table 1.1 summarises these and includes the mMNE, the global smaller firm, the global SME, the transitioning MNE and the MNE. As the table shows beyond the INV, types of internationalising firm that own affiliates in international markets but have not necessarily internationalised early after inception include the mMNE and the MNE. There is therefore a gap between the mMNE that has fewer than 250 employees and may only control a single subsidiary to a large MNE that employs thousands of employees across multiple subsidiaries.
<table>
<thead>
<tr>
<th></th>
<th>Definition and Nature of International Entrepreneurship</th>
<th>Ownership of Foreign Subsidiaries</th>
<th>Internationalisation from inception</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>INV/Born Global</strong></td>
<td>INV: Less than eight years old and more than 5% exports (Mc Dougall 1989). INV: International activity at dedicated sites within one year of inception (not just exporting) (Kuemmerle 2002) INV: Six years old or younger (Zahra, et al. 2000) Born Global: Exported within two years of inception (Rennie 1993). Utilise resources from partner firms e.g. close relationships, partners, JV firms.</td>
<td>No</td>
<td>Yes</td>
</tr>
<tr>
<td><strong>Micro-multinational</strong></td>
<td>Less than 250 employees (SME) Controls and manages more than one value added activities through constellation and investment in more than one country (Dimitratos, et al. 2003)</td>
<td>Yes</td>
<td>No</td>
</tr>
<tr>
<td><strong>Global smaller firm/global SME</strong></td>
<td>Less than 250 employees (SME) Energetic, industry-specific lead market presence. Active international market selection and presence. Can become global other than its first organisational life stages. Sources majority of inputs from abroad, trades a large majority of its outputs across borders, has</td>
<td>No</td>
<td>No</td>
</tr>
</tbody>
</table>
multiple establishments in all major international regions. Markets its products in all major international regions (Dimitratos, et al. 2010)

<table>
<thead>
<tr>
<th>The Transitioning MNE/Global Corporate Venture</th>
<th>Rapid multinationalisation</th>
<th>Yes</th>
<th>Yes</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>primarily through the creation of overseas subsidiaries (Vanninen et. al 2017; Monaghan 2018)</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Separate units from the main organisation, internationalise from inception (Callaway 2008)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The employee size used in defining the mMNE i.e. less than 250 employees clearly differentiates this size of MNE from the large MNE however the gap in studies of entrepreneurial internationalisation of the MNE still remains with the mMNE at one end and the large MNE at the other of the spectrum. Whilst this is a useful distinction it is simply not a dichotomy between the mMNE and the large MNE, a finer classification is required. Similarly, not all smaller MNEs have transitioned from an INV to MNE through the rapid ownership of overseas subsidiaries. The sMNE includes those smaller MNEs whose growth path has not necessarily been achieved through a global presence early after inception. They may not have experienced rapid growth from an INV to an MNE but have grown internationally over a longer transitioning period. A transitioning period which may include movement from a SME to a sMNE. Therefore by exploring the sMNE as a distinct type of MNE our understanding of entrepreneurial internationalisation of the MNE can be expanded; how decisions to enable international opportunity are made, how subsidiary roles may differ and how the power and role of intra-organisational networks may vary in different types of MNE. As the SME is delimited to the micro, small and medium enterprise, similar delimitations could be applied to the MNE.
As this thesis focusses on the MNE, UNCTAD data was consulted to try to create some clarity in definition. Interestingly, empirical analysis of a large sample of MNEs showed 70% of MNEs have one affiliate and almost 90% have less than five affiliates. Again, pointing to potential gaps in international entrepreneurial literature which mainly focus on the large MNE. The largest MNEs, with more than 100 foreign affiliates represented less than 1% of the total number of MNEs and had the highest distributed value added at just over 58% (UNCTAD 2016). In terms of classification of MNE however, the size of organisation used by UNCTAD is split into 1, 2 to 5, 6 to 20, 21-100, 101 to 500 and 500 plus foreign affiliates owned by the MNE. The number of employees held by the MNE is not included in the UNCTAD definitions of a MNE. The UNCTAD classifications provide a basis on which to differentiate the different types of MNE based on their scope of control and ownership of overseas activity rather than just the number of employees. This allows for a clear distinction to be made between the SME, the global SME and the sMNE. Using UNCTAD classifications MNE types can be classified along the MNE spectrum for example the micro MNE (1 subsidiary), the sMNE (2 to 5 subsidiaries), the medium MNE (6 to 20 subsidiaries), the large MNE (20 to 100) and the super MNE (101 plus subsidiaries).

Based on this data, this thesis will refer to the sMNE as having between two and five foreign affiliates rather than by the number of employees, this provides a clear distinction between studies focussed on entrepreneurial internationalisation of the SME and the MNE. This also allows for the global differences in SME classifications and represents more clearly the extent of global operations of the organisation.

Developing International Entrepreneurial Capabilities and the Role of Networks

To understand the international corporate entrepreneurial activity of the sMNE, this thesis explores international entrepreneurial capabilities (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012; Covin and Miller 2014) and networks, as enablers of sMNE international corporate entrepreneurial outcomes. These outcomes include international strategic renewal (repositioning the organisation in a highly competitive global market place), international corporate venturing (the creation of new international ventures) and innovation (new products, services and process and new international market entry) (Zahra and Garvis 2000; Dess, et al. 2003).

Networks are posited as enablers of international opportunity. They provide access to resources through durable network relationships (Gulati, et al. 2011), resources to be
used to achieve international corporate entrepreneurial outcomes. Networks are created by people and it is people who nurture network relationships. In this thesis, network capital (Gulati 2007; Gertler and Levitte 2005; Huggins 2010; Huggins, et al. 2012) is used to explore the collective human capital (Becker 1964) and social capital (Bourdieu 1985; Gulati, et al. 2011) the firm holds to understand how and why organisations pursue certain networks to achieve international corporate entrepreneurial outcomes. Networks as a strategic asset to achieve international corporate entrepreneurial outcome supports the resource-based view (RBV) of the firm, whereby network capital is unique and inimitable (Barney 1991; Barney, et al. 2001), creating a competitive advantage in international markets.

However, it is not just the networks a firm holds which are important in exploring international corporate entrepreneurial outcomes (Zahra and Garvis 2000; Dess, et al., 2003; Keupp and Gassmann 2009); it is the unique combination of relationships as well as the diverse spread of connections across international markets held by the organisation. This web of networks, the ties within them and the relationships between actors is defined as network embeddedness (Gulati, et al. 2011). For the sMNE, network embeddedness spans international boundaries with headquarters and subsidiaries holding their own range of networks and ties (Al–Aali and Teece 2014). Network embeddedness allows the sMNE to access resource through global networks and in turn, network embeddedness becomes a strategic resource.

Consequently this thesis seeks to examine the influence of international entrepreneurial capabilities and the role of networks, on international corporate entrepreneurial outcomes exhibited within the sMNE. In doing so it addresses identified gaps now discussed in the rationale behind this thesis.

1.2 Rationale

The emergence of international entrepreneurship addressed a significant gap in the international business field by acknowledging how entrepreneurial internationalisation activities of the INV and SMEs differed to extant sequential theories of internationalisation. Work in this field has enhanced the understanding entrepreneurial behaviours and activities in seeking new international opportunity (Young, et al. 2003; Dimitratos and Jones 2005; Jones, et al. 2011; Hoskisson, et al. 2011; Peiris, et al. 2012). This thesis aims to add to this body of work by addressing a number of
theoretical, empirical and practice-based gaps around the entrepreneurial internationalisation of the sMNE.

Oviatt and McDougall's (2005) definition of international entrepreneurship, demonstrated the field was aligned to all size and type of firm. However, empirically, extant literature remains focussed on the INV (Keupp and Gassmann 2009). Paradoxically, extant international business literature is dominated by the internationalisation studies of the MNE. A key rationale for this study was to consider a different type of internationalising firm, and to explore how international entrepreneurship manifests in the sMNE.

International entrepreneurship spans the international business and strategy disciplines, however the international dimension is not widely explored in extant corporate entrepreneurship literature; conversely corporate entrepreneurship is not addressed substantially in international entrepreneurship literature (Zahra and Garvis 2000; Dess, et al., 2003; Keupp and Gassmann 2009). Scholars have called for more investigation into the international corporate entrepreneurial activities spurring innovation, in particular international corporate venturing such as joint venturing, acquisition and licensing, as well as strategic renewal activity (Hoskisson, et al. 2011). By focussing specifically on the international entrepreneurial capabilities and international entrepreneurial outcomes of a particular type of MNE this research addresses this gap in international corporate entrepreneurship studies. In focussing on the sMNE it also demonstrates how such activity may display different characteristics pertinent to this size of MNE with fewer subsidiaries located across international markets.

The role of networks in different types of MNE is also underexplored. It is agreed within extant international entrepreneurship and international business literature that networks enable international opportunity (Young, et al. 2003; Jones and Coviello 2011). Despite this acknowledgement, network literature is often concerned with dyadic level relationships (Duysters et al. 1999; Slotte - Kock and Coviello 2010). Authors argued networks were more complex in their value to an organisation than relationships between two actors. Networks provided access to partner resources through careful nurturing of a range of network relationships (Gulati, et al. 2011) and as such future research should explore how organisations manage their portfolio of relationships (Dimitratos, et al. 2014). The sMNE is defined in this thesis as a firm owning two to five subsidiaries in international markets, and little is understood on the nature of
networks in this type of firm. The ways in which the sMNE identifies their networks and how these networks evolve from both a subsidiary and corporate headquarters perspective may differ to those of the larger MNE. The actors involved in the creation and development of these networks in a smaller and often less complex MNE organisational structure may vary. The way in which resources are accrued through a network partnership development in the sMNE with fewer subsidiaries may display different characteristics to that of the larger MNE. Little is understood on how the ownership of fewer subsidiaries in the sMNE combined with the international entrepreneurial capabilities of the sMNE may influence how they strategically position the organisation in global networks to achieve new international trade and investment opportunities. This thesis aims to contribute to our understanding of how the sMNE creates and utilises networks to achieve international corporate entrepreneurial outcomes, investigating how networks are chosen, who instigates their creation and which combination of relationships are important to the sMNE.

Drawing on the theory of network capital, i.e. the calculative creation of networks (Huggins 2010; Huggins, et al. 2012), this thesis considers how the sMNE strategically utilises and positions itself in networks to influence international strategic renewal, international corporate venturing and innovation. Therefore this addresses gaps in international entrepreneurship and network literature on the performance implications of networks (Gulati, et al. 2011). Whilst networks are considered a strategic resource, few studies have been undertaken specifically from an international corporate entrepreneurship perspective and tend to focus on the INV (Jones, et al. 2011). How does the sMNE strategically use networks to achieve international corporate entrepreneurial outcomes?

This thesis identifies human capital as an important factor for organisations in their identification and use of networks to achieve international corporate entrepreneurial outcomes. Ultimately, actors within firms influence network choice. It is clear in international entrepreneurship studies, that the skills and expertise of actors within an organisation, tended to focus on the INV or start-up (Jones and Cavusgil 2014). In concentrating on the sMNE, this study seeks to explicitly link human capital in to network and international corporate entrepreneurship discussions. How might the international and sector experience of senior management teams in the sMNE, their knowledge and skills alert them to international opportunity (Mc Dougall, et al. 1994; Dimitratos and Plakoyiannaki 2003; Wang, et al. 2015)?
A further gap identified in this thesis was the methodological approaches used in international entrepreneurship research. Both international entrepreneurship and international business studies have been asked to consider innovative qualitative cases as a way to thoroughly examine the behaviours and outcomes associated with internationalisation and entrepreneurial activity (Piekkari, et al. 2009; Easton 2010; Piekkari, et al. 2010; Morais 2011). This study advances the use of case studies by focussing on a critical realist approach in exploring the influences of different entrepreneurial dimensions and networks on the international entrepreneurial outcomes of the sMNE. Critical realist approaches in international entrepreneurship and international business are few (Morais 2011; Sharpe 2005; 2018). The rich tapestry of interdependent criteria evident in international entrepreneurial capabilities and networks of the sMNE allows for a deep investigation of causal influences on international entrepreneurial outcomes. International business scholars engaged in critical realist studies of the MNE, suggest experiences of change can further the international business and critical realist field (Sharpe 2018). This study in part addresses this call, by exploring international entrepreneurial activities of the sMNE, the networks used and the actors involved to create new international corporate entrepreneurial outcomes.

A further rationale behind this focus on the sMNE, is the emphasis of government policy on the promotion of international trade, investment, innovation and entrepreneurship. More specifically, the UK government has sought to support high growth organisations in capitalising on trade and investment opportunities. However, high growth organisations such as the smaller MNE will be engaged in different market entry types where control and investment is required (Dimitratos, et al. 2014). Therefore if the government is to support these types of organisations in their sustainability, it is important to recognise how they maintain their international corporate entrepreneurial activity. This is not just important in terms of supporting existing sMNE, but also in supporting those high growth SMEs which can transform into the smaller MNE contributing to economic growth. Related to this latter point, this thesis, by including human capital in international corporate entrepreneurship, can inform both INVs and sMNEs on investing in employees with international entrepreneurial skillsets to be shared within an organisation.
1.3 Aims of this Research

The aim of this research is to explore the international entrepreneurial capabilities and the role of networks for the sMNE to achieve international corporate entrepreneurial outcomes.

The research questions are as follows:

1. How and in what ways can entrepreneurial internationalisation promote international corporate entrepreneurial outcomes in the small MNE?

2. How and why networks are created in the small MNE, who creates them and what role might they play in achieving international corporate entrepreneurial outcomes?

3. How and in what ways might network embeddedness be viewed as a strategic resource to the small MNE, to achieve international corporate entrepreneurial outcomes?

1.4 Research Approach

The research utilises a critical realist to examine the structures and processes that may explain how the sMNE achieves international corporate entrepreneurial outcomes in specific contexts and conditions (Welch, et al. 2010). In this way it provides a contextualised explanation of how the international entrepreneurial capabilities and the role networks play in achieving these outcomes.

A case study research strategy was used and involved a sMNE whose headquarters are based in the UK. Following a pilot study on a sample of 15 mid-sized firms, purposeful and theoretical sampling (Eisenhardt 1989; Eisenhardt and Graebner 2007) was undertaken and identified the Titanium Group as an interesting and unique case (Yin 2009; 2013). The pilot study highlighted that Titanium was in fact an sMNE undertaking substantial international activity. The company was also faced with significant challenging conditions operating in the oil and gas market but also in the newer sector of renewables. The history of the organisation provided an interesting backdrop, differing from those studies tending to follow the INV or the larger conglomerate MNE. It was a management buy-out based in the UK, slightly larger than an SME by definition, with over 290 employees across the Group and with a number of
international subsidiary locations, one of which involved international corporate venturing.

In depth, semi-structured interviews were undertaken with 19 people in the Group, including with employees from headquarters and the six operating companies. All participants were involved in key decision-making for the case companies in their operations and in international trade and investment activity i.e. selling into and buying from international markets. The participants therefore included senior management teams holding positions as Managing Directors, Business Development Directors, Finance Directors, Sales Directors and Managers, as well as the Group CEO, the Chairman and two Non-Executive Directors.

1.5 Structure of the Thesis

The following chapters comprise the remainder of this thesis:

**Chapter Two** critically reviews developments in the international entrepreneurship literature on the entrepreneurial internationalisation of the MNE, in particular the sMNE. It explores the literature on the nature of international entrepreneurial outcomes. This is followed by an examination of literature pertaining to firm level international entrepreneurial capabilities. Capabilities are viewed as overarching dimensions shaping the entrepreneurial internationalisation of the sMNE.

**Chapter Three** highlights the importance of the role of networks as an enabler of international corporate entrepreneurial outcomes. It critically reviews network literature from the perspective of networks as a source of capital, comprised of human and social capital. The role of networks is then reviewed through investigation of network embeddedness literature. Within this domain, it considers both the structural and relational aspects of network embeddedness, to explore how network embeddedness may influence international corporate entrepreneurial outcomes and thus be viewed as a strategic resource. At the end of this chapter, the conceptual framework underpinning this thesis is presented.

**Chapter Four** details the critical realist research strategy employed in this research. In using this approach, the chapter demonstrates how this thesis provides a contextualised explanation of the interactions between actors, their networks and the sMNE. It sets out the international entrepreneurial capabilities they possess, the role networks play and how they may influence international corporate entrepreneurial outcomes in this
context. The case study design demonstrates the reflective questions asked at each stage in addressing the research objectives and each stage of the process are presented.

**Chapter Five** provides the empirical findings of the case study analysis. The background to the case study sMNE is presented, providing a summary of its international trade and investment activity and key conditional influences are outlined. It is structured around the international entrepreneurial outcomes, of international strategic renewal and international corporate venturing. In seeking the explanation of how these outcomes may have occurred, international entrepreneurial capabilities and networks are analysed. A summary of key findings is presented at the end of this chapter to highlight the causal explanation identified to achieve the research objectives.

**Chapter Six** engages in a discussion of the key findings emanating from the previous chapters against the theoretical concepts identified in the conceptual framework presented at the end of Chapter Three. Specific dimensions emerge from this analysis in explaining international corporate entrepreneurial outcomes along with influences of human capital. It also advances discussion on the role networks play from both a network capital and network embeddedness perspective.

**Chapter Seven** addresses each of the research objectives in turn, based on the key findings associated with the entrepreneurial internationalisation of the sMNE, the international entrepreneurial capabilities they possess and utilise to achieve international corporate outcomes. In meeting these objectives, it demonstrates the role of networks as a strategic resource of the sMNE and an enabler of international corporate entrepreneurial outcomes. Theoretical, practical and empirical contributions are explored, demonstrating how this thesis addresses a number of gaps in international entrepreneurship research. Limitations associated with the research approach are outlined. The chapter concludes with areas for scholars to consider in future international corporate research.
Chapter Two: International Entrepreneurial Capabilities and International Corporate Entrepreneurial Outcomes

2.1 Introduction

In order to address the key aims of this thesis, this chapter sets out a conceptual framework for examining the international entrepreneurial capabilities of an organisation to understand how and in what ways such capabilities influence the identification and utilisation of networks for the small multinational enterprise (sMNE). Figure 2.1 below represents a map of key conceptual areas explored in the literature review. This chapter highlights the emergence of international entrepreneurship as a distinct literature (Jones, et al. 2011) at the nexus of international business and entrepreneurship that offers a new perspective on internationalisation. The first section of this chapter considers the emergence of international entrepreneurship in response to the more traditional conceptualisations of internationalisation. This is followed by a consideration of the definitional issues associated with exploring the sMNE. This is particularly important given the dominance in international corporate entrepreneurship of the large MNE.

The aims of this thesis are to establish the international entrepreneurial influences on the international entrepreneurial outcomes of the sMNE. International corporate venturing, innovation and international strategic renewal form the international entrepreneurial outcomes reviewed in this thesis. These outcomes encapsulate the different aspects of international trade and investment related activity the sMNE is potentially engaged in.

This thesis then, posits international entrepreneurial capabilities as a useful way to explore the influences on international entrepreneurial outcomes. International entrepreneurial orientation (Covin and Lumpkin 2011; Covin and Miller 2014) and international entrepreneurial culture (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012) are augmented to encapsulate the overall international entrepreneurial capabilities and drive of the sMNE.

The role of networks as shown in Figure 2.1 is reviewed in Chapter Three. However, in this chapter, the international networking orientation of the firm is discussed as a dimension of international entrepreneurial capabilities.
Figure 2.1: Map of literature review on entrepreneurial internationalisation of the small MNE
2.2 Traditional Theories of Internationalisation and the Emergence of International Entrepreneurship

Theoretical insights into the process of internationalisation in international business are plentiful. Well cited concepts include the Uppsala model (Johanson and Vahlne 1977; Johanson and Vahlne 2009), internalisation and MNEs (Buckley and Casson 1976), the eclectic paradigm (OLI) (Dunning 1988), the network perspective (Johanson and Mattsson 1987) and the Resource Based View (RBV) (Barney 1991).

Studies of the activities of the entrepreneurial internationalisation of the MNE lie at the nexus of international business, international entrepreneurship and corporate entrepreneurship literatures. In exploring the gaps in these fields, this section demonstrates a need to focus more international entrepreneurship literature on understanding different types of entrepreneurial activity of the MNE.

One of the earliest models in international business literature is the Uppsala model (Johanson and Vahlne 1977). It explored the process of internationalisation on the basis that firms lacked market knowledge. This lack of market knowledge was perceived as a barrier to firms wishing to expand overseas and had a negative impact upon which markets they invested in (Johanson and Vahlne 1990). This model posits that firms would select markets cautiously and internationalisation would be a sequential process; markets deemed ‘closer’ in terms of culture (psychic distance) and geographical distance as well as a firm’s existing knowledge of those markets, were entered first and markets continued to be selected upon this basis. Johanson and Vahlne (2009) revisited their work focusing on a number of criticisms in relation to the applicability of their model in more dynamic international business environments, from an entrepreneurial perspective and relevance to new venture internationalisation. In this revisited work the authors focus on business network research, arguing that the complexity of markets in which firms operate means firms are linked to each other in a variety of ways and being part of these networks impacts on the firms success in internationalisation. Importantly, the authors develop their original model to connect internationalisation and corporate entrepreneurship, as they state that ‘internationalisation resembles entrepreneurship and may be described as corporate entrepreneurship’ (Johanson and Vahlne 2009:1423). Furthermore, Johanson and Vahlne (2009), also suggest that networks provide access to international opportunity and demonstrated the importance international business now gave to entrepreneurship and internationalisation.
The network perspective on internationalisation, states the position a firm holds in a network allows the organisation to access markets and resources. It internationalises by forming relationships across international markets (Johanson and Mattsson 1988). Johanson and Mattsson (1988) formulated four types of firm based on the stage of development of the international market they operate in and the business network relationships they held internationally. Their typologies included the Early Starter; the Lonely International; the Late Starter and the International Among Others. Although not positioning their work in the entrepreneurial domain, international opportunity through networks forms a key focus of their study. The network based internationalisation approach does therefore consider aspects of the behaviour underpinning internationalisation (Jones and Coviello 2005) and is more aligned to an international entrepreneurial understanding of internationalisation. This thesis will expand on the entrepreneurial internationalisation perspective of networks and is considered in more detail in Chapter Three.

Internationalisation from the resource based view maintains an organisation holds a unique set of strategic resources which are accrued, coordinated, utilised and reconfigured to achieve competitive advantage (Barney, 1991); in the case of internationalisation resources to enable a strategic position in a global marketplace. Exploring the strategic importance of the resources a firm possesses Barney (1991) states resources should be viewed from the perspective of their value, rarity, inimitability and non-substitutability. In international business, the RBV supports a plethora of internationalisation research. Peng (2001) draws specifically on the application of RBV in international business research highlighting the synergies between international business and strategy disciplines; synergies which evolved as international business studies began to consider more firm level approaches to internationalisation including Foreign Direct Investment (FDI) and MNE activity (Ghoshal and Bartlett 1990). Although the RBV, was not first posited as an entrepreneurial approach to internationalisation (Barney 1991) and Alvarez and Busenitz (2001) argued entrepreneurial opportunities occur as individuals identify the value of resources missed by others and therefore RBV is a useful framework in the entrepreneurship domain. A gap identified here, relevant to this thesis, is few international entrepreneurship scholars have drawn on the RBV approach and empirically the focus is often the INV (Young, et al. 2003; Jones, et al. 2011). This thesis addresses this gap by exploring networks from an RBV perspective, as shown in Figure 2.1 and is expanded upon in Chapter Three.
Internationalisation therefore involves the INV at one end of the continuum, driven in its pursuit of new international market opportunities, to the large MNE, typified by a more systematic approach to internationalisation. Internationalisation of the MNE is typically explored using established frameworks notably Dunning’s eclectic paradigm (Dunning 1988) and the internalisation theory (Buckley and Casson 1976). Firstly, the eclectic paradigm states the choice to produce internationally, is posited against the ability to achieve three key advantages of ownership, location and internalisation. Although ownership advantages were revisited by Dunning after his first conceptualisation (Eden 2010), the original states an organisation’s income-generating assets are deemed as ownership advantages, generated within the organisation or through cooperative relationships with partners (Dunning 2001). This draws on the RBV, where the uniqueness, imitability and rarity of resources held by the firm influenced their internationalisation strategy (Barney 1991). This is closely linked to the internalisation variable, which suggests an MNE will internalise these resource advantages through its subsidiary network. Country specific advantages refer to host country specific advantages and although might be located based on geographic location, the MNE can transfer these between the different subsidiary units.

The large MNE is therefore concerned with how it acquires and coordinates value chain activities across its myriad of global subsidiaries (Dunning and Lundan 2008). The role of the subsidiary is therefore determined by the corporate headquarters strategic allocation of resource. The internalisation theory is a firm level theory focussed on the MNEs’ choice to own specific knowledge-based assets of the firm (Rugman 2010). An MNEs’ choice of mode of entry into a market may include FDI, where ownership of knowledge-based assets is maintained. Or it may seek to internationalise using licensing, joint ventures or alliances where knowledge-based assets can be shared. Innovation is examined in OLI and internationalisation from a subsidiary role perspective, but there is a lack of consideration for the overall international entrepreneurial capabilities perspective when driving how resources are allocated across a MNE. Internalisation may not be an option for a less resource rich entrepreneurial sMNE where the subsidiary network is less established and subsidiary roles are not based on the splitting of value chain activities.

The above internalisation conceptualisations therefore largely focus on a more systematic approach to internationalisation, whereby choices to enter into international trade and investment activity are mainly based on the existing levels of international
market knowledge and expertise. These traditional conceptualisations of internationalisation therefore lack entrepreneurial aspects. International entrepreneurship emerged as a field to address more opportunity driven internationalisation approaches and gave rise to consideration of the international new venture (INV) (McDougall 1989) and Born Global (Rennie 1993). This provided a different view of how firms internationalised, following opportunities in distant markets expanding rapidly often from their inception, in contrast to the typical country similarity or proximity perspective. Scholars particularly questioned the relevance of traditional sequential models, in particular the Uppsala model of internationalisation, as they largely ignored the entrepreneurial firm who internationalised more quickly following opportunity, irrespective of resources held (McDougall 1989; Rennie 1993; Oviatt and McDougall 1994; Pedersen and Petersen 1998; Zahra, et al. 2004; Oviatt and McDougall 2005; Forsgren and Hagstrom 2007).

Early international entrepreneurial definitions included reference to the INV and scholars critiqued initial definitions of Mc Dougall (1989) stating international entrepreneurship was not unique to the INV (Shane and Venkataraman 2000) (Dimitratos and Plakoyiannaki 2003) and the predominance of INV studies presented a 'narrow-minded' view on international entrepreneurship (Dimitratos, et al., 2016 p. 1220). International entrepreneurship therefore departed from the notion of being an entrepreneur i.e. an individual owning and creating a new venture to trade internationally to being entrepreneurial i.e. engaged in international entrepreneurial behaviours (Atherton 2004). This is an important acknowledgement for this thesis, as it recognised organisation level international entrepreneurship irrespective of size or stage in internationalisation (McDougall and Oviatt 2000). This led to revisited definitions focussing on an organisation’s ability to locate and enact upon opportunities in international markets as outlined in Table 2.1 below.
Despite this shift, reviews showed the predominance of international entrepreneurial studies on the INV, Born Global and small firm (Jones, et al. 2011); 99% of empirical articles included in the Keupp and Gassmann (2009) review of international entrepreneurship were found to focus on the young or small firm. Therefore much international entrepreneurship research, although insightful in addressing the entrepreneurial dimensions of internationalisation, lacks a comprehensive perspective of company level international entrepreneurial activity. Keupp and Gassmann (2009) go
so far as to say the emphasis of empirical work on small firms has left the international entrepreneurship field with knowledge gaps.

In contrast, of the few international corporate entrepreneurial studies identified in the Jones and Coviello (2011) review, they tended to focus on the larger MNE. Subsidiary and headquarter roles in the large MNE are well researched from an international business and innovation perspective (Bartlett and Ghoshal 1987; Birkinshaw 1997; Birkinshaw and Fry 1998; Birkinshaw, et al. 1998; Birkinshaw 1998; Birkinshaw 2000; Andersson 2003; Rugman, et al. 2011). The RBV is a dominant underpinning concept in international corporate entrepreneurial studies and a small number of studies have a network perspective (Andersson, et al. 2002; Andersson, et al. 2005; Andersson, et al. 2015). The role of subsidiaries is well debated in international business literature, whereby subsidiaries should be viewed as contributors to and leaders of innovation (Bartlett and Ghoshal 1987). This is useful from an organisation structure and allocation of resources perspective, as well as an indication of the propensity of the MNE to innovate for international markets as part of an international entrepreneurial culture. However, the typologies provide little consideration from an entrepreneurial internationalisation perspective and extant literature focusses mainly on the large MNE, therefore ignoring the micro - multinational enterprise (mMNE), sMNE or mid-sized MNE who will be potentially combining different types of international trade and investment activity i.e. licencing agreements, supplier partnerships to access innovative capability and not just from their subsidiaries. Similarly, MNEs are considered as corporate networks but extant literature tends to focus on the MNEs network of subsidiaries (Ghoshal and Bartlett 1990) rather than the range of partners they are involved with globally as a source of international entrepreneurial capability. This will be explored in more detail in the international network orientation section later in this chapter. Despite the expansion of MNE typologies to focus on innovation, production, sales and administrative functions of subsidiaries (Rugman, et al. 2011), other than the subsidiary capabilities for innovation, there is still little consideration of the overarching entrepreneurial drive of an MNE to identify or enact upon international opportunity. This review therefore identified another gap in the MNE research, as the overall international entrepreneurial capabilities of MNEs were not being explored and often focussed on the large MNE.
The next section presents an overview of the international entrepreneurial outcomes of the MNE before moving on to the conceptualisation of international entrepreneurial capabilities used in this thesis.

2.3 International Corporate Entrepreneurial Outcomes: Innovation, International Strategic Renewal and International Corporate Venturing

This thesis seeks to understand how international corporate entrepreneurial outcomes are influenced by international entrepreneurial capabilities, and the role of networks in this process as identified in Figure 2.1. International corporate entrepreneurship seeks to understand company level international entrepreneurial behaviours, activities and outcomes, and sits at the intersection of international business, international entrepreneurship and corporate entrepreneurship. It concerns those organisations who actively seek to competitively position themselves in global markets, where competitive advantage lies in the ability to differentiate based on innovative capabilities (Garud, et al. 2014). It therefore encapsulates the international entrepreneurial opportunity driven strategic approach of the organisation (Dess, et al. 2003; Zahra and Garvis 2000; Naldi, et al. 2014). International corporate entrepreneurship is vision driven and includes the identification of new opportunities, resource acquisition, implementation, exploitation and commercialisation of ideas (McFadzean, et al. 2005; Hornsby, et al. 2013). This thesis is concerned with international entrepreneurial outcomes and often international entrepreneurship studies refer specifically to the success or failure of entrepreneurial behaviours and processes measured by international scope and financial performance (Zahra and Garvis 2000). Herein lies a key gap in extant international corporate entrepreneurship literature which this thesis addresses. There is a missing link between an organisation displaying international entrepreneurial capabilities and the final financial performance indicators; this missing link is a greater understanding of the influences on innovation, international strategic renewal and international corporate venturing.

The aims of this thesis are to explore how and in what ways international corporate entrepreneurial outcomes are influenced by firm level international entrepreneurial capabilities. This approach provides a more fruitful and in-depth understanding of the entrepreneurial internationalisation of the organisation. It also subscribes to the creation of more general and specific models of entrepreneurial internationalisation (Jones and
Coviello 2005). Understanding the configuration of these different outcomes is important to exploring how organisations achieve a sustained international corporate entrepreneurial approach yielding continual added value (Hoskisson, et al. 2011). As Figure 2.1 shows, at level one, lies innovation, international strategic renewal and international corporate venturing. Innovation, strategic renewal and corporate venturing are well recognised in traditional corporate entrepreneurship literature but are not often considered from an internationalisation perspective. Those that do consider international corporate entrepreneurship influence on internationalisation performance are considered limited in focus (Dess, et al. 2003). International corporate entrepreneurship definitions are varied, ranging from a narrow focus on innovation as new products and services entering new international markets (Naldi, et al., 2015) thus ignoring the notion of entrepreneurial activities of strategic renewal and international corporate venturing to a broad definition focussed on entrepreneurial orientation dimensions of innovation, risk taking and proactiveness (Zahra and Garvis 2000). As this thesis is specifically concerned with international corporate entrepreneurial outcomes, it draws on Sharma and Chrisman (1999) and Covin and Miles (1999) seminal works on seeking clearer conceptualisations of corporate entrepreneurship. -As Covin and Miles (1999) conceptualisation is aligned to that of Sharma and Chrisman (1999), the latter will be used in this thesis.

'The process whereby an individual or a group of individuals, in association with an existing organisation, create a new organisation or instigate renewal or innovation within that organisation.' (Sharma and Chrisman 1999 pg 17).

Each international corporate entrepreneurial outcome involves international trade and investment activity. In the case of innovation this can involve new export markets, new products and new services for export markets or new processes such as the implementation of new lean systems in the management of global supply chains. In international strategic renewal, an organisation may restructure the functions of its subsidiaries to allow them to compete more effectively in host country locations. Similar to broader international entrepreneurship studies, definitional issues arise for example, international venturing in Zahra and Garvis (2000) refers simply to new international market entry. In this thesis, international corporate venturing adopts Sharma and Chrisman (1999) definition. As shown in Table 2.2 below, this includes new licencing agreements with an overseas organisation leading to new international customers, acquisitions to gain a foothold in international markets or to increase
international manufacturing capability or strategic alliances and joint ventures across
global supply chains.

<table>
<thead>
<tr>
<th>Table 2.2: Examples of International Corporate Entrepreneurial Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Innovation/Sustained Regeneration</strong> (Sharma &amp; Chrisman 1999; Covin &amp; Miles 1999)</td>
</tr>
<tr>
<td>New markets, new products, new processes. Organisational Regeneration (Covin &amp; Miles 1999) Innovation of organisation processes, structures, capabilities. Domain Redefinition Creation of a new product market area (not recognised or actively sought to exploit by competitors)</td>
</tr>
<tr>
<td>- Entering of new international markets</td>
</tr>
<tr>
<td>- New products/services in new or existing international markets.</td>
</tr>
<tr>
<td>- New processes impacting upon international trade and investment activity e.g. implementation of lean production systems, new global information systems.</td>
</tr>
</tbody>
</table>

| International Strategic Renewal (Covin & Miles 1999) (Sharma & Chrisman 1999) |
| Redefining the way an organisation competes in its environment. |
| - Repositioning the organisation - diversification following sector decline allowing for new international market entry. |
| - Restructuring of organisation functions to address new international market activity. |

| International Venturing (Sharma & Chrisman 1999) |
| Creation of new ventures within or external to the organisation. |
| - Creation of autonomous business unit/wholly owned subsidiaries operating in international markets. |
| - New international licencing agreements |
| - Acquisitions to enter new international markets. |
| - Joint ventures to enter new international markets. |
| - Spin-off ventures in international markets. |

Each outcome is now explained in more detail before moving on to gaining an understanding of how international entrepreneurial capabilities influence these outcomes.

**Innovation; new international markets, new products, new processes**

Innovation allows organisations to exploit new international market opportunities. As noted in the introduction to this thesis, Schumpeter (1934) considered the entering of new export markets and sources of supply as innovation. For international corporate entrepreneurship to exist there should be evidence of some aspect of innovation (Covin
and Miles 1999; Sharma and Chrisman 1999). The conceptualisation of innovation has moved beyond traditional perspectives on innovation as mainly product and service related to include organisational processes, global supply chain approaches, leadership initiatives, organisational structures and financial models (Govindarajan and Trimble 2005). In an international corporate entrepreneurial sense, innovation therefore can lead to the regeneration of, or creation of, new processes to support international expansion and allow the organisation to maintain a competitive advantage in global markets. However, discussions on innovation in international entrepreneurship literature tend to remain with product/service innovations.

Innovation spurs more international corporate entrepreneurial outcomes (Sharma and Chrisman 1999). Innovation is also connected to international strategic renewal; as an organisation innovates it may require different business units to facilitate its international production and distribution. International venturing may also lead to innovation; a strategic alliance may result in investment in R&D resulting in new product development for new geographical markets. As already discussed, the sMNE is underrepresented in international corporate entrepreneurship literature, which limits understanding of how the sMNE creates innovation.

**International corporate venturing**

International corporate venturing refers to the creation of a new business organisational unit which may reside within the existing structure of the organisation or result in entities being created located outside of the existing organisational domain (Sharma and Chrisman 1999). Motivations for international venturing include driving the overall entrepreneurial capability of the firm, to access new resource, to achieve greater value from current competences, to expand the scope of operations, rapid access to new markets, as well as achieve quick financial return (Miles and Covin 2002; Zahra and Hayton 2008; Koryak, et al. 2015; Bierwerth, et al., 2015). Institutional environments are also considered to play a key role in the choice of international corporate venturing activity (Biniari, et al. 2015). This is of particular relevance to the MNE as discussed in the traditional models of internationalisation, whereby location advantages influence MNE internationalisation. International corporate venturing in these circumstances is therefore necessary to fulfil an international entrepreneurial opportunity. Some international corporate venturing options allow a speedier way to enter a market than through an organisational strategic renewal activity (Benavides Espinosa and Suanes
2011; Bierwerth, et al. 2015). For the international entrepreneurial organisation, international corporate venturing allows access to resources to enable international opportunity (Teng 2007; Zahra and Hayton 2008; Benavides Espinosa and Suanes 2011). The motivations for the micro MNE and sMNE may differ to a large MNE, yet little distinction is made in studies of international corporate venturing from an entrepreneurial internationalisation perspective. Even if the motivations are similar i.e. to achieve a strategic foothold in a high growth market such as China, the choice of international corporate venturing may differ. The sMNE, having identified China as a new source of supply and as a springboard to South East Asian markets may engage in a joint venture agreement with a local manufacturer, this differs considerably to a large MNE focussing on internalisation advantages, with the financial capital to invest in a wholly owned subsidiary.

New international business may only be accessible through international corporate venturing activity due to host market environmental constraints, impacting on the ability of an organisation to exploit the international opportunity (Zahra and Garvis 2000). This may include a requirement for proximity to the end user, where indigenous suppliers are preferred. This results in the organisation establishing a physical local presence or target market governments dictate local company participation for market entry of the foreign firm.

Organisational strategy on maintaining a unit within or divesting activity will be influenced by the associated risks of keeping the unit internal or divesting externally (Moschieri and Mair 2016). The level of instability created by maintaining the 'new business' within the existing structure may be outweighed by the risk of divesting the business into a competitive environment into which it has potentially limited control or experience. The motives for an external new business, such as a joint venture, may include: accessing a geographic market which institutionally had been difficult to enter or identifying a chance to exploit a market located internationally. The venturing activity of establishing a joint venture then enabled that opportunity. A spin-off, due to a number of strategic decisions around location, may be physically positioned in an international market, as a spin-off the direction of the culture of the organisation may befit that of the INV or Born Global - where the organisation follows the opportunity irrespective of location.
Mergers and acquisitions as an international corporate venturing type are used by international entrepreneurial organisations as a way to access markets and diversify more quickly (Burns 2013; Koryak, et al. 2015). The motivations to engage in cross-border mergers and acquisitions include a strategic choice to access resources which are otherwise difficult to attain (Teng 2007; Lockett, et al. 2011), to enter previously inaccessible new geographic markets or opportunistic in exploiting a vulnerable competitor thus accessing their order book (Burns 2013). All of these motivations form part of an international entrepreneurial strategy to create wealth (Farinós, et al. 2011). Yet there are also limitations to mergers and acquisitions from a performance perspective, but studies tend to focus on the larger publically-owned organisations (Lockett et al. 2011). Compared with a larger MNE, which has a more diversified portfolio of activity, the sMNE may not experience some of the negative performance issues associated with larger MNE mergers and acquisitions (Lockett, et al. 2011). Few studies have considered how the sMNE engages in what might be considered one of the international corporate venturing activities requiring the highest level of investment commitment. This thesis addresses the gap in exploring how the sMNE achieves acquisition as an international corporate entrepreneurial outcome.

For the sMNE, alliances and joint ventures may pose particular issues, where often conflicting managerial styles or weaker negotiating positions of the sMNE, can inhibit the success of the international venture, thus resulting in unexploited international opportunity (Koryak, et al. 2015). Existing capabilities and an international entrepreneurial orientation were found to contribute to the success of alliances on international performance with SMEs in marketing and research alliances (Brouthers, et al. 2015).

Not all international venturing activity may involve direct international market entry; venturing in a home country may provide access to international market opportunities through acquisition of an international client base or utilising the resources or capabilities of a domestic joint venture to access international markets. However, domestic alliances were found to have been beneficial to domestic firms, but not those with international operations (Wiklund and Shepherd 2009). Few studies explore this aspect, but as this thesis is concerned with the sMNE, this is an interesting point to consider as often sMNEs have grown from international corporate venturing activity within their domestic market.
**International strategic renewal**

International strategic renewal refers to the entrepreneurial drivers a company pursues to reconfigure their strategy or structure, ultimately changing the way it competes in global markets; the organisation renews strategies to align itself with the external environment (Covin and Miles 1999; Sharma and Chrisman 1999; Dess, et al. 2003; Agarwal and Helfat 2009).

“transformation of organizations through renewal of the key ideas on which they are built” and involves

“significant changes to an organization’s business or corporate level strategy or structure.” (Sharma and Chrisman 1999, p. 19)

Motivations for international strategic renewal include responding to market and sourcing opportunities presented in a global trading environment (Birkinshaw, 2000). Subsidiary renewal activities were found to be in response to internal crisis surrounding a decline in profitability or market share (Verbeke, et al. 2007). Again, research tends to be from a large MNE perspective.

The sMNE, as it advances into more geographical markets, engages in new types of international trade activity such as alliances or international partnerships which can often require the formation of new organisational structures. Conversely, international entrepreneurial decisions to restructure and reconfigure activities across international markets can drive innovation and new international market entry (Zahra and Garvis 2000). Discussion on organisation structure from the perspective of international entrepreneurship tends to focus on the INV or the large MNE. The entrepreneur driving the INV is more likely to demonstrate characteristics which influence organisation design to allow for innovativeness, risk-taking and proactiveness (Jones and Coviello 2005). The large MNE discussion on structure is dominated by headquarter and subsidiary relationships, the ability to create structures which encourage and facilitate subsidiary innovation (Birkinshaw 1997; Birkinshaw, 2000; Andersson 2003; Andersson, et al. 2015). Overall there is a paucity in research on how entrepreneurial internationalisation influences international strategic renewal (Keupp and Gassmann 2009).
The relationship between each of the outcomes in Figure 2.2 can vary. One study found innovation and strategic renewal had a stronger impact on firm performance than strategic renewal (Bierwerth, et al. 2015). Strategic renewal in another study on Turkish firms was found to have a negative impact on financial performance and authors suggest managers should act cautiously when engaging in major strategic renewal initiatives (Ağca, et al. 2012). Conversely, another study suggested subsidiary managers innovative practice can be influenced by the headquarter ability to engage in renewal activities (Birkinshaw 2000). The studies were however limited in the specific detail on what strategic renewal activities were undertaken.

Having explored international corporate entrepreneurial outcomes, the following section now considers how and in what ways international entrepreneurial capabilities of the organisation influence innovation, international strategic renewal and international corporate venturing.
2.4 International Entrepreneurial Capabilities: International Entrepreneurial Orientation and International Entrepreneurial Culture

The preceding sections established few scholars consider the entrepreneurial internationalisation of the sMNE (Dimitratos, et al. 2003; Dimitratos, et al. 2014; Brouthers, et al. 2015) representing a significant gap in international business and international entrepreneurship research. In addressing this gap, a key aim of this thesis is to explore how and in what ways international entrepreneurial capabilities influence the international entrepreneurial drive of the sMNE, to pursue international entrepreneurial outcomes presented in the previous section. In particular, how these capabilities can influence the role of networks in the organisation. The purpose of this section is to therefore consider each international entrepreneurial capability dimension, their potential influence on each other; the ways in which they influence the international entrepreneurial outcomes of the sMNE and the role of networks. It is important to remember, networks are being explored here at two levels:

1) As part of firm level international entrepreneurial capabilities and

2) As a strategic resource from a network capital and network embeddedness perspective.

This chapter is mainly concerned with the first level, the international entrepreneurial capabilities to achieve international entrepreneurial outcomes. The second level is explored in Chapter Three.

An MNE must demonstrate an overarching international corporate entrepreneurial posture to ensure it can sustain competitive advantage in global markets (Birkinshaw and Hood 1998). In this thesis, this overarching posture is being explored from an international entrepreneurial capability perspective, in order to dig deep into understanding the different drivers and enablers influencing the entrepreneurial internationalisation of the sMNE. It draws on both international entrepreneurial culture and international entrepreneurial orientation.

*International entrepreneurial orientation* is largely considered part of a wider international corporate entrepreneurial strategy and includes the dimensions of risk taking, proactiveness and innovativeness (Covin and Slevin 1989; Miller 1983),
autonomy and competitive aggressiveness (Lumpkin and Dess 1996). It is broadly defined by Covin and Miller (2014) as

‘the beliefs, preferences, and behaviours that lead to and include acts of new international market entry’ (p. 27)

International entrepreneurial orientation provides a conceptual lens moving beyond the motivations of entering new international markets, to specifically assessing the international entrepreneurial processes, leading to new international market entry (Covin and Miller 2014). An MNE demonstrating an international entrepreneurial orientation means it continually exposes the organisation to innovation, is alert to global market opportunities and provides an environment in which organisation learning takes place. Therefore, an international entrepreneurial orientation assists an MNE in the identification of opportunities and in creating new ventures (Lumpkin, et al. 2009). Such international entrepreneurial behaviours must be sustained and recurring to be determined as international entrepreneurial orientation and defined as an international entrepreneurial attribute of the organisation (Ireland, et al. 2009). This point leads to why international entrepreneurial orientation is augmented with international entrepreneurial culture in this thesis. The dimensions of international entrepreneurial orientation alone do not provide a conceptualisation to address how these dimensions are manifested in the sMNE. This is of particular importance to the aims of this thesis in understanding how capabilities lead to innovation, international strategic renewal and international corporate venturing.

A number of international entrepreneurship and international business studies were found in this review, exploring the influence of international entrepreneurial orientation dimensions on such themes as international performance (Ghoshal and Barlett 1988; Brouthers, et al. 2015; Thanos, et al. 2016), degree and scope of internationalisation (Ripolles-Melia, et al. 2007), international opportunity (Dimitratos, et al. 2016). However, few of these studies were found to consider the influence of these dimensions on specific outcomes of international corporate entrepreneurial activity, often focussing on mainly innovation.

*International entrepreneurial culture* was identified as way to draw on the acknowledged dimensions of international entrepreneurial orientation and create a conceptualisation of firm level international entrepreneurial capabilities. The international entrepreneurial culture perspective recognises international
entrepreneurship as an organisation-wide phenomena - a dynamic evolving process, embedded in organisation culture, specific to the identification and enactment of international opportunity, which ultimately achieves value creation for the organisation (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012). The international entrepreneurial culture of an organisation, the dominant patterns of beliefs and values, directly affects the degree of internationalisation (Jantunen, et al. 2005) and drives the organisation in its pursuit of new geographic market entry or international sources of supply. An entrepreneurial culture is cited as a requirement to encourage subsidiary initiative (Birkinshaw, et al. 1998), which is of particular relevance to this thesis focusing on the sMNE, but often MNE studies do not dig deep into what constitutes an entrepreneurial culture. To address calls for constructs to test international entrepreneurship at a firm level, Dimitratos and Plakoyiannaki (2003) presented six dimensions of international entrepreneurial culture to aid the operationalisation of international entrepreneurship with the focus on opportunity identification and enactment. The six dimensions include international market orientation, international learning orientation, innovation propensity international risk attitude, international networking orientation and international motivation. Pertinent to achieving the aims of this thesis, the international entrepreneurial culture framework (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012) is the only one found in this review to specifically acknowledge international networking and utilisation of networks as a key dimension in an international entrepreneurial context.

A number of amendments were made when augmenting international entrepreneurial orientation and international entrepreneurial culture for this thesis. International proactiveness was introduced as dimension mostly aligned to the active pursuit of international opportunity. International market orientation was divided into three individual dimensions as outlined in Figure 2.3 below. Inter-functionality has been renamed to the international coordination of resources and includes organisation structure and autonomy. It was felt in international corporate entrepreneurship, in particular for studies exploring the MNE, where the allocation and coordination of resources is conducted across a number of international business units in a number of international markets, this dimension should have more prominence than a sub-dimension of international market orientation. This aims to address a gap in extant international entrepreneurship literature, where the commitment to international opportunity completely irrespective of resources held, needs further exploration in the
non INV. It is also of significance to the aims of this thesis as it aligned to recognised use of networks in addressing resource gaps. A further adaptation is the consideration of an international supplier orientation, international corporate entrepreneurial activity is not solely linked to new international market entry and international innovative activity may be jointly pursued with suppliers. It may involve international corporate venturing activity such as alliances with international suppliers as well as international renewal activities working with suppliers to adhere to new global lean operating systems.

<table>
<thead>
<tr>
<th>International market orientation</th>
<th>International resource coordination</th>
</tr>
</thead>
<tbody>
<tr>
<td>- Inter-functionality</td>
<td>- includes resource allocation, bundling and recombination, autonomy, and organisation structure</td>
</tr>
<tr>
<td>- International customer orientation</td>
<td>International customer orientation</td>
</tr>
<tr>
<td>- International competitor orientation</td>
<td>International supplier orientation</td>
</tr>
<tr>
<td></td>
<td>International competitor orientation</td>
</tr>
</tbody>
</table>

**Figure 2.3: Adaption of international market orientation**

The augmenting and adapting of these two approaches, presented in Figure 2.5, specifically addresses calls to consider strategic decision making, managerial perceptions, firm behaviours, and resource allocations in international entrepreneurial orientation studies (Brouthers and Hennart 2007; Wales 2016). It allows the exploration of how international entrepreneurial capabilities can shape the overarching beliefs and values driving international corporate strategy resulting in strategic actions which influence an organisations level of internationalisation (Jantunen, et al. 2005). It provides a robust framework to specifically explore how entrepreneurial internationalisation occurs and is influenced by firm level international entrepreneurial capabilities.
Therefore, as shown in Figure 2.4, international entrepreneurial capabilities are conceptualised into eight dimensions, augmenting the conceptual frameworks of international entrepreneurial orientation (Covin and Slevin 1989; Miller 1983; Covin and Lumpkin 2011; Covin and Miller 2014) and international entrepreneurial culture (Dimitratos and Plakoyiannaki, 2003; Dimitratos, et al., 2012) as stated above. Studies have previously considered entrepreneurial organisation culture and entrepreneurial orientation together (Dess 2003; Burns 2013) but not in relation to entrepreneurial internationalisation outcomes. This presents another gap identified in strategy literature, where the international context is often missing in corporate entrepreneurial studies.
(Keupp and Gassmann 2009). This thesis addresses this gap in specifically focussing on entrepreneurial internationalisation and the effect of firm level capabilities on international trade and investment activity.

**Figure 2.5 International entrepreneurial capabilities influence on role of networks and international entrepreneurial outcomes**

Each dimension is now explored in more detail, to establish the relationship between them as well as the potential influence on the role of networks in international corporate entrepreneurial activity. The organisation views international networking as a firm level behaviour, however an organisation-wide stance on the importance of pursuing networks does not achieve international entrepreneurial outcomes alone and is thus just one of a number of dimensions associated with international entrepreneurial capabilities as shown above in Figure 2.5.

**International proactiveness**

International proactiveness is the dimension most closely aligned to the fundamental notion of international entrepreneurship as the identification and exploitation of opportunities in international markets (McDougall 1989; Jones 1999). It encapsulates the international entrepreneurial notion, that organisations are alert to international
opportunity (Tang, et al. 2012) and irrespective of currently held resource, s will proactively pursue an international opportunity (Stevenson and Jarillo 1990; Perks and Hughes 2008). An organisation demonstrating international proactiveness seeks to shape the future direction of the environment in which the organisation operates or will operate in, to anticipate future trends and turn these into opportunities (Lumpkin and Dess 2001). This means proactiveness depicts a longer term approach to international trade and investment activity, often exploring opportunities which may not be directly associated with the current line of business. It could be expected that an internationally proactive organisation is in a better position to enact upon international trade and investment opportunities than one which is reactive. In terms of international entrepreneurial capability combinatorial influence on internationalisation, both high and low levels of innovation and proactiveness were found to influence the scope of international activity (Dai, et al. 2014). Moderate levels of innovativeness and proactiveness were seen to lead to lower international scope, suggesting organisations which adopt greater levels of these dimensions engage in more international trade and investment activity across more international markets (Dai, et al. 2014).

In terms of influencing international entrepreneurial outcomes, as proactiveness results in the identification of more international opportunities, this can lead to the utilisation of innovation and strategic renewal to capitalise on these opportunities (Kreiser, et al. 2010). Proactiveness was also found to lead to the identification of new technologies and new niche international markets (Brouthers, et al. 2015).

In relation to the influence on other international entrepreneurial capabilities, those firms who are proactive in the pursuit of new international markets other than to access a larger customer base, tend to be those companies who have an international learning orientation. They are proactive in responding to opportunities in an international marketplace (Lumpkin and Dess 2001) and utilise the knowledge gained across the organisation.

Consideration of this dimension, suggests without an international proactive capability a sMNE is unlikely to engage in entrepreneurial internationalisation. Other dimensions of international entrepreneurial capability may affect how proactiveness results in innovation, strategic renewal and international venturing activity. Few studies tend to go beyond exploration of proactiveness influence on innovation or as a more general influence of internationalisation per se. As an influencer on the role of networks, as with
other dimensions, for a sMNE to capitalise on international networks, it would need to be proactive in its pursuit of them.

**International learning orientation**

International learning orientation explores knowledge acquisition and the ability of the firm to use intelligence to advance its international market position and development (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012). International learning orientation recognises added value to the organisation of engaging in organisation learning associated with international opportunity exploitation and enactment (Lu and Beamish 2001). How the organisation builds on its collective knowledge and expertise to influence future international entrepreneurial activity.


In a study of proactiveness, innovativeness and risk-taking and learning, proactiveness had the greatest relative contribution to acquisitive learning and innovativeness had the greatest relative contribution to experiential learning. Risk taking demonstrated a relative contribution to both types of learning (Kreiser 2011).

Organisation socialisation and communication is important for creation, adoption and diffusion of innovation (Ghoshal and Barlett 1988). The ability to create entrepreneurial teams facilitates the accumulation of new knowledge (Lee and Williams 2007). This links to how the organisation harnesses the absorptive capacity of individuals within the organisation to act as gatekeepers of new external knowledge for international trade and investment activity and its ability to codify and disseminate between the various sub units within an organisation (Cohen and Levinthal 1990; Zahra and Hayton 2008). The ability to codify the international entrepreneurial opportunity and act upon it by engaging with others across the organisation, can influence organisations in their decision to pursue international entrepreneurial outcomes.
Few studies consider international learning from the subsidiary perspective and in particular how subsidiaries identify international opportunities. Subsidiaries' ability to identify and act upon an opportunity within their host environment is suggested to be influenced by both managerial learning and entrepreneurial learning. Managerial learning is considered to include the 'acquisition and dissemination of macro-environmental and institutional context of the host country' and entrepreneurial learning is defined as the

"...alertness to and search for opportunities, a process that allows the MNE subsidiary to seek radical solutions and reframe existing ways of doing business." (Dimitratos, et al. 2014, p. 112)

This raises an interesting question in this thesis as it suggests the subsidiary will interact with its host environment to identify and enact on opportunity and networks may be one way in which the subsidiary enables this. Another interesting question this posits is the focus on opportunity arising from the subsidiary's host environment, suggesting subsidiaries potentially only seek opportunity from the geographical market in which they are situated. This aspect will be explored in this thesis by considering the role of the sMNE subsidiaries potentially beyond their host environment.

Linkages with the international resource coordination and international networking dimensions were identified where heterarchy and autonomy influenced the subsidiaries position within entrepreneurial communities (Lee and Williams 2007). The internal and external linking activities of subsidiary managers enabled the resource management and international opportunity identification (Andersson, et al. 2002). In the exploration of the role of entrepreneurial teams (Lee and Williams 2007), there is little discussion on the purpose and outcome of such entrepreneurial teams, new products and processes are touched upon but there is minimal detail on what the specific outcomes of such teams might entail.

A further connection between international learning orientation and international resource coordination is the organisation’s access to intangible resources including the human capital of its collective employees. Increasingly it is the access to, creation and utilisation of intangible assets which provide the ability to achieve competitive advantage (Wills-Johnson 2008). Intangible resources include both assets and capability assets such as intellectual property, licences, knowledge, social capital and capabilities such as the ability to transform these assets into the desired outcomes (Kafouros and
Aliyev 2016). The drive to learn from market experiences and act on the international opportunity of experienced individuals is difficult to imitate as well as replace. A firm's dynamic capabilities are defined by its ability to reconfigure its knowledge assets in order to seize on international opportunities (Lumpkin and Lichtenstein 2005). To address the aims in this thesis, it is important to understand how the sMNE allows its 'knowledge resource' to be transferred across the organisation. This will include transferring international market knowledge between subsidiaries, partners and headquarter locations. Inability to transfer knowledge assets and capabilities will limit firm-specific advantages; knowledge flows cannot be one way if they are to build the companies' capabilities through internationalisation (Peng 2001).

In summary, the international learning dimension demonstrates the benefits of sharing international trade experience and knowledge in the pursuit of international opportunity. This is of particular relevance to this thesis in exploring how networks may play a role in international entrepreneurial learning. However, few studies consider the international entrepreneurial outcomes associated with international learning orientation, and those which do mainly focus on innovation rather than its influence on international strategic renewal or international corporate venturing.

**International resource coordination - organisation structure, resource combination and autonomy**

The allocation of resources ultimately influences the international opportunities identified and acted upon by the organisation (Dimitratos, et al. 2016). International resource coordination of international entrepreneurial capabilities is of significant interest to this thesis. It clearly differentiates the sMNE with a small number of affiliates and using a range of constellation and investment approaches, from the large multinational, with over 100 foreign affiliates, and focusing on internalisation. MNE international resource coordination achieving international corporate entrepreneurial outcomes, typically involves the coordination of complex and competing dynamic capabilities across international borders and requires an understanding of the roles different MNE business units play (Bouquet, et al. 2009).

Discussions in the MNE literature on international resource coordination tend to focus on the roles of subsidiaries and the relationships between the headquarters and subsidiary units. The unique firm-specific advantages (FSA) of the MNE are distributed through its internal market of subsidiaries, thus maintaining FSA within its
organisational structure (Rugman, et al. 2011). The large MNE has the power to accumulate resource and redistribute resources. This enhances its ownership advantages and allows for increased international market entry (Dunning 2001). The international corporate entrepreneurial perspective on resource bundling would suggest a less formulaic process as aligned with traditional international business perspectives of the MNE. From an international strategic renewal perspective, the MNE will engage in entrepreneurial resource orchestration (Verbeke and Kano 2016). The sMNE, with fewer subsidiary locations, will tend to be more entrepreneurial in its resourcing approach - sourcing through different means beyond its wholly owned subsidiaries. Rather than create global resource pools, organisations allow the allocation of resources to be based on international opportunity, arising from the respective international markets. This requires an entrepreneurial approach to both the allocation of resources such as human capital, the skills, expertise and knowledge of employees, as well as organisation structure. For the sMNE this would involve strategic decisions on how best to utilise resources across international markets through its different constellation and investment activities i.e. alliances, wholly owned subsidiaries, contract manufacture and sources of supply.

The sMNE is engaged in a range of international trade and investment activity and with fewer wholly owned subsidiaries has fewer options in resource allocation and combination choices. Resource distribution systems are debated in studies mainly concerning large MNEs. They found, using differentiated systems at a regional level allowed host market locations to create more entrepreneurial combination of resources (Piekkari, et al. 2010; Verbeke and Kano 2016). The role of the subsidiary and subsequent resource allocation, is also influenced by country specific advantages (CSA), the MNE seeks to capitalise on its, subsidiary location advantages internalising those advantages as appropriate. This links to the international organisation structure of the MNE and its ability to refocus subsidiary roles, when faced with international environmental changes. To counter environmental challenges, MNEs have sought to decentralise structures, providing subsidiaries with the opportunity to respond at a local level while maintaining interconnectedness across international boundaries (Cantwell, et al. 2009). The sMNE will have more flexibility in how it renews the organisation, in terms of resources and structure, than a large and often more rigid MNE.

With specific reference to innovation, international strategic renewal and international corporate venturing, a number of studies showed the influence of international resource
coordination. In terms of innovation, MNEs have increasingly engaged in the fine slicing of value chain activities, locating activities such as R&D in resource-rich locations (Contractor, et al. 2010). This can present a trajectory of influence as the subsidiary builds its innovative capabilities (Dellestrand and Kappen 2012). In addition those subsidiaries with greater knowledge and absorptive capacity received greater resources from the headquarter location (Dellestrand and Kappen 2012). In addition, as the corporate MNE is often distanced both geographically and by time, they are reliant on its subsidiary as the local expert, therefore assigning resources to the subsidiary networks with local expertise (Ahuja and Katila 2004). As the environment influences the innovative capabilities of the subsidiary location, when the environment changes as noted above, the large MNE is in a position to redistribute activity and recombine resources. Discussions have tended not to explore the ability of the sMNE in reassigning roles through its subsidiary network and whether this takes place given the scale of international operations of the sMNE versus the large MNE. Discussions on international corporate venturing associated with international resource coordination tend to focus on how resources are recombined to influence international performance. Acquisitions are viewed as an opportunity to recombine resources for further growth opportunities (Lockett, et al. 2011). Successful international acquisitions were dependent on the MNEs ability to internationally coordinate and bundle resources (Wiklund & Shepherd 2009). International alliances are viewed as a less risky option to secure resources (Ortiz-De-Urbina-Criado, et al. 2011) and SMEs were found to view strategic alliances as a less resource intensive international venturing opportunity (Brouthers, et al. 2015). Acquired subsidiaries were also found to accrue more resources from their headquarter locations than non-acquired subsidiaries on the basis they were acquired for a particular capability and of strategic interest to the headquarter location (Dellestrand and Kappen 2012). This presents a gap in how the international resource coordination may influence and drive an MNE in its pursuit of international corporate venturing opportunities. International strategic renewal associated with international resource coordination is closely linked to the restructuring of roles within the MNE, to better position the organisation in global markets and respond to competitive challenges. This links back to the previous comments on subsidiary roles, the strategic influence they have in the overall MNE structure. Subsidiary renewal activities are considered a senior subsidiary management team initiative whereby subsidiaries should be actively encouraged to seek initiatives for strategic change and communicate environmental changes back to the headquarters (Verbeke, et al. 2007).
This links to international motivation, whereby headquarters encourage and employ subsidiary talent to identify new opportunities or potential threats to the organisation. There are however issues cited linking to international autonomy, whereby international strategic renewal activities of the subsidiary could affect the wider MNE strategic position and therefore need more involvement from the corporate headquarter (Verbeke, et al. 2007). Again, a sMNE perspective is not pursued and a more flexible sMNE organisation structure may result in easier communication streams, to assess possible conflicts of subsidiary and wider MNE activity.

*International autonomy* is a less explored international entrepreneurial capability. - In the context of international corporate entrepreneurship, it provides individuals or groups within an organisation the freedom and independence to pursue opportunities, make decisions around the enactment of an opportunity, to allow them to see a vision through to completion (Lumpkin and Dess 1996; Dimitratos, et al. 2014). To this end autonomy encourages exploration of opportunities beyond the existing capability of the organisation, thus stimulating entrepreneurial outcomes (Lumpkin, et al. 2009) resulting in new international corporate venturing, international strategic renewal activity and innovation. Autonomy, combined with access to specialised resources, leads to higher subsidiary initiative (Birkinshaw and Hood 1998) and therefore the opportunity to innovate. Autonomy is required operationally, at middle management and top management in the fulfilment of new venturing activity (Burgelman 1983) and is closely linked to international coordination of resources and organisation structure to facilitate effective decision-making associated with international corporate entrepreneurial activity (Lee and Williams 2007). However, in more established organisations, autonomy is not necessarily a given, nor does it mean employees within an organisation are boundary-free in their international exploration and exploitative activities; autonomy will require negotiation and the complete enactment of an opportunity may require confirmation of commitment to additional resource requiring Board approval. In a MNE, autonomy in decision making at a subsidiary level is not about acting alone and with - freedom also comes the responsibility of communicating across the organisation. An evolutionary relationship development between the MNE and its subsidiaries (Ireland, et al. 2009; Hakala 2016), this creates a challenge for the MNE in encouraging international entrepreneurial behaviours in the subsidiary, by allowing autonomy in decision-making (Dimitratos, et al. 2014). Authorisation on risky new international market entry may require greater authorisation processes in a large
MNE thus impacting on the level of autonomy a subsidiary is given by the headquarters (Hakala 2016).

This is particularly relevant in international trade and investment activity, where entering one geographic market may impact upon existing agreements in another. For example, where exclusivity agreements exist with intermediaries for certain sectors or geographic regions. In addition, organisational learning on market entry strategies for one international market may prove useful when entering another international market or presenting new products to existing international markets. Those in the organisation attempting to bring a new device to a US market may benefit from the experience of another divisional unit which has brought new products to the US and established a local market presence. This can be crucial to success. Again existing empirical and conceptual research on the autonomy dimension lacks an international perspective. This review showed, few studies have considered the role of autonomy in a sMNE perspective, therefore this thesis addresses this gap in exploring autonomy in relation from the perspective of an organisation which does not have the same vast and organisational complex structures of the large MNE across many international markets. It is also difficult to establish from existing literature, the international entrepreneurial outcomes associated with autonomy. Although considerable insight has been identified on subsidiary level entrepreneurial competences and their influence on each other (Dimitratos, et al., 2014), few studies were found which considered the outcomes of firms demonstrating such capabilities. The interplay of international resource coordination, organisation structure and autonomy as international entrepreneurial capabilities will also influence the extent to which the MNEs subsidiaries engage and utilise networks to actively pursue innovation, international strategic renewal and international corporate venturing.

Although it is widely acknowledged that environmental influences affect the MNE (Young 2001) in its international coordination of activity and its strategic responses to it, in terms of recombining resources, few consider how the MNE uses its international entrepreneurial capabilities to respond to such challenges, including international corporate venturing and international strategic renewal.

An important point associated with international resource coordination, is a firm may require different resources to initiate all of the different international entrepreneurial capabilities, resulting in organisations potentially having to trade-off between the
different dimensions i.e. more resources assigned to proactively targeting new international customers or combatting international competitor activity (Dai, et al. 2014).

From an international entrepreneurial capability perspective, there is a gap in international entrepreneurship and international business on what types of resources (Miller 2011) as well as the recombination of resources influence on international entrepreneurial outcomes. This thesis addresses this gap through the consideration of international entrepreneurial capabilities and networks as a source of resource.

In summary decentralised MNEs governance structures, autonomy provided to subsidiaries, local responsiveness of subsidiaries but connected internationally through the MNE subsidiary network leads to greater levels of institutional innovation (Cantwell, et al. 2005; Cantwell, et al. 2009). This thesis aims to advance this understanding through the consideration of such combinatory capabilities in the sMNE.

**International customer orientation**

An international customer orientation places the interests of the international customer above all others (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012). Naturally, a focus on the international customer opens up more international opportunity (Perks and Hughes 2008). The customer here also needs to include the intermediary, as often distributors in different international locations are being managed by organisations and provide a source of customer insight. In particular the mMNE and sMNE may still work with a range of distributors in combination with their local subsidiary networks. The initial statement is therefore somewhat limited in understanding the need for an international customer orientation, but posits the importance of placing significant resources on servicing international customer needs.

In connection with meeting the aims of this thesis, a concentration on the needs of international customers opens up the sMNE to innovation opportunity, as well as international venturing opportunities. Subsidiaries play a key role in the identification of new customers and alliance partners (Birkinshaw and Fry 1998). Customers can be a source of acquisition and also a potential acquiring organisation. International customers may also yield joint venture opportunities to access new international markets (Benavides Espinosa and Suanes 2011). A focus on key clients contributes to the development of research systems to access new international market opportunities in global SMEs (Dimitratos, et al. 2010; Dimitratos et al., 2016). Linkages with
international customers are also a means to internationalise further, they provide access to knowledge and enhance international trade experience (Perks and Hughes 2008).

In putting the interests of the international customer against all others, for the sMNE who may still have significant home-based customers, this is a difficult statement to apply. The sMNE operating in global markets where significant pressures are driving down prices for the customer, requires the headquarters and subsidiaries to undertake some difficult decisions on off-setting different international client pressures. From an international entrepreneurial perspective this may lead to strategic renewal, where innovation in systems and processes is required to achieve efficiencies elsewhere in the supply chain. As most studies focus on the large MNE, little discussion is presented on how sMNEs respond to such challenges from an international customer perspective.

Overall, the sMNE may not have the same internalisation advantages of the large MNE and different international customer needs may require the seeking of new international opportunities in new sectors or geographic markets.

**International supplier orientation**

The MNE will have relationships with a number of international suppliers and these contacts form part of the international networking orientation of the organisation. However, international supplier and outsourcing partner relationships in particular can yield innovation opportunities (Roy and Sivakumar 2004; Roy and Sivakumar 2012; Dimitratos, et al. 2016) and thus should be viewed as part of the entrepreneurial internationalisation process. MNEs may actively seek opportunities to collaborate on new system and process designs as part of a strategic renewal process, whereby suppliers are perceived as valued partners to the MNE moving away from a notion of arm's length supplier relationships. In the case of the large MNE, operating complex networks of supply across international markets, the opportunity arises to internalise potential efficiencies gained as a consequence of internal supplier innovation. Large MNEs can however seek alternative supply sources - outside of their existing networked organisation, if the product offered internally is not considered competitive and often units within large MNEs R&D units have to effectively market their services internally (Birkinshaw 1998). This type of internal competition can also spur innovation for internationalisation. The sMNE will not have the same complex supplier network, internally or externally, yet the opportunity to cooperate on innovation possibilities in the design of parts, materials and other supplies or in information systems, has the
potential to provide them with a competitive advantage in global markets. An international supplier orientation, also alerts subsidiaries to potential international venturing opportunities with suppliers (Birkinshaw 1998). The addition of international supplier orientation to the international entrepreneurial capabilities perspectives of the organisation addresses a gap in international entrepreneurship literature. As the aim of this thesis is on the role of networks, this contributes to our understanding of suppliers as part of the network capital of an organisation and is further explored in Chapter Three.

**International competitor orientation**

An MNE with an international competitor orientation demonstrates competitive aggressiveness which relates to a firm’s drive and action to outperform their industry rivals (Lumpkin and Dess 2001). From an international trade and investment activity perspective this refers to the extent to which the firm forcibly positions itself within its sector to capitalise on international market opportunities. Organisations pursue aggressive international corporate entrepreneurship strategies to compete and survive in hostile markets (Zahra and Garvis 2000). The international entrepreneurial proactiveness and international competitor orientation of the firm means they will aggressively pursue a market position; this aggressiveness can be defined by the degree and intricacy of their competitive actions (Hassan, et al. 2010). Competitive aggressiveness relating to international trade and investment activity, may involve pursuing global competitors closely into new sectors, targeting vulnerable competitors for acquisition, allying with other competitors to gain a strategic foothold in sensitive markets, or by high levels of investment in R&D. Competitive aggressiveness may involve capitalising on network relationships across international markets by firstly gathering market intelligence and then leveraging power within networks to outmanoeuvre competitors (Hassan et al. 2010). Again, this will be pursued in more detail in Chapter Three as part of understanding the role of networks. Competitive aggressiveness may not always support international trade and investment activity with reference to cultural differences. Where organisations work across cultures, collectivist societies may deter from aggressive competitive strategies (Covin and Miller 2014). This may also stifle innovation, where collectivist societies err more towards innovation as shared experience in the organisation (Shane 1993; Shane, et al. 1995). An international competitive orientation also leads to potential venturing opportunities especially for the sMNE (Dimitratos, et al. 2016). Different types of smaller
organisation were found to engage in varying levels of competitive aggressiveness and this may be attributed to the strength of their international commitment (Dimitratos, et al. 2010). International competitor orientation at a subsidiary level and MNE level can differ depending on the size and nature of the industry in which it operates. As large MNEs typically internalise their resource bases, subsidiaries are often competing against sister subsidiaries, therefore the international competitor orientation for this size of MNE is internal rather than external (Birkinshaw, et al. 2005).

**International innovativeness**

A key international corporate entrepreneurial outcome as discussed above is innovation. In order to create new products, services or processes for international markets, an organisation must demonstrate a sustained approach to innovativeness (Dimitratos and Plakoyiannaki 2003; Dimitratos et al., 2012; Covin and Miller 2014). This requires an organisation to instil innovativeness for internationalisation as a firm level capability, where innovation is pursued to international trade and investment (Doole, et al. 2006). Innovativeness therefore becomes the norm within an organisation. In a sMNE, investment is therefore needed in research and development. The sMNE faces challenges in maintaining a sustained approach to innovation as the sMNE grows, where innovative practices are encouraged. Sustained innovativeness from an international market entry perspective requires organisations to continually establish new products or services into existing international markets, and existing products or services into new international markets. Where organisations have an international entrepreneurial orientation, a new innovation, whether product or service, will be targeted at international markets. The innovation may be specific to a particular geographic market, where an opportunity has arisen to exploit a local customer requirement or the innovation may then serve other international markets.

The creation of new products, processes, and organisational systems increases the knowledge base of an organisation thus differentiating them from competitors in international markets (Zahra and Garvis 2000). Innovation allows organisations to break from traditional established patterns (Mintzberg 1983) consistent with an international entrepreneurial outlook. Innovation can drive overseas market development; new product, service or process developments can open up access to new geographical markets (Covin and Miller 2014). Linked to venturing activities, firms which have strong innovative capabilities, have often built a knowledge base through the creation of
intangible assets including patents, licenses and know-how; such activity has thus increased their attractiveness to investors and ultimately opened up international market opportunities. Organisations with international entrepreneurial orientation were found to exploit their innovations across international markets (Pla-Barber and Alegre 2007). Innovation was found to have an important influence on international performance in family firms (Hernandez-Perlines, et al. 2016) and resulted in increased international scope in SMEs (Cassiman and Golovko 2011; Pla-Barber and Alegre 2007).

Entrepreneurial behaviours of the MNE subsidiary are considered by relatively few studies; organisation socialisation and communication influence on innovation, (Ghoshal and Barlett 1988) subsidiary initiative and specialist resources (Birkinshaw and Hood 1998) and building firm specific advantages (Birkinshaw, et al. 1998). The level of innovativeness at a subsidiary level was influenced by the specialist resources they held and autonomy given to the subsidiary, access to opportunity via their respective environments and the organisation’s communication of subsidiary initiative through the MNE. Although, subsidiary innovativeness is also restricted by a number of factors including the reluctance of subsidiaries to go beyond the existing product portfolio of the MNE (Birkinshaw 1998) and the allocation of resources to specific subsidiary locations as already outlined in the international coordination of resources. The SMNE involved in a wider range of international trade and investment activity than solely through its subsidiary locations, may face challenges in coordinating sustained innovativeness when a number of different partner organisations are involved such as alliance partners, distributors, as well as customers and suppliers. The innovativeness of an organisation in support of international entrepreneurial outcomes, will be influenced by the resource commitment of the headquarter location on research and development, as well as by access to global talent as part of an innovation orientated culture (Koryak, et al. 2015).

**International risk orientation**

To achieve any of the international corporate entrepreneurial outcomes of innovation, strategic renewal and international venturing, an organisation must have an international risk orientation. International risk attitude refers to the extent to which the organisation is prepared to undertake considerable resource commitments in international market development (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012). Simply put, SMNE engagement in international trade and investment activity is resource intensive,
requiring greater financial commitment and greater risks associated with liability of foreignness (Tseng, et al. 2007). An organisation’s effective utilisation of resources involves complex decision-making when engaged with multiple sectors across a range of international markets, as discussed in the international resource coordination section of this chapter. The propensity to take international risks is also influenced by the human capital held by the organisation, the collective previous international trade experience and expertise (Dimitratos, et al. 2016).

High growth international markets, where risk is greater and economic return more uncertain than other more developed markets, will require greater commitment of resources. However, those that do commit can realise financial performance benefits (Zahra and Garvis 2000). The role of risk varies in achieving different types of international corporate entrepreneurial outcomes (Liesch, et al. 2014); pursuing an export market for a more established firm which is already engaged in diverse international trade and investment activity is not as risky as committing to the building of a greenfield site. Most international entrepreneurship studies focus on risk-taking and the INV (Liesch, et al. 2014). The organisational perception of risk-taking in international markets varies dependent on many factors, including the nature of the industry, resource required versus currently held resources and prior international experience. Risks associated with launching new products in existing markets, will be different to the risks associated with taking existing products into new international markets. These risks may include identifying new suppliers, new agents and distributors or greater investment through venturing, such as alliance, JVs or acquisition. International risk-taking is not undertaken in isolation nor in a cart blanche way. International entrepreneurial risk-taking tends to be more calculative in nature (Lumpkin and Dess 1996), and this was found to be the case in both innovation choices and more general new international market entry (Zahra, et al. 2000). Moderate levels of risk-taking were found to influence an organisation’s scope of international markets (Pla-Barber and Alegre 2007). Some level of prudence will be employed in international risk-taking of the MNE, where various stakeholder influences impact on decisions to commit substantial levels of resources to potential new international new market and venture activity. Any decisions to substantially renew the organisation activity for international trade and investment activity will also require buy-in from a number of internal stakeholders. Headquarter authorisation processes were required on riskier international new market entry by subsidiaries (Hakala 2016). In terms of influence on
international venturing activities, little discussion was evident on how an international risk orientation resulted in international venturing, but alliances and joint ventures were deemed less risky options (Brouthers, et al. 2015) and an opportunity to share the risks of new international market entry (Koryak, et al., 2015). There is again little discussion in extant international entrepreneurship literature on whether an international risk orientation is prevalent in the sMNE.

**International motivation**

International motivation considers the roles organisational culture and human behaviour play as drivers of international entrepreneurial activity (Dimitratos, et al. 2012). It describes the direction and overarching drive of individuals within the organisation to be engaged in the identification and enactment of international opportunity. This dimension draws on the human capital i.e. skills, experience and expertise (Becker 1964) of actors within the firm, specifically the senior management teams and their ability to instil, nurture and reward an international entrepreneurial outlook within their organisation. The human capital of leadership and management teams influences the drive for international growth and success (Zahra and Dess 2001; Koryak, et al. 2015). Human capital such as prior international trade experience, can influence the extent to which an organisation takes risk and thus the speed with which new international market entry occurs (Dimitratos, et al. 2016). Organisations led by founder-CEOs were also found to be more proactive than organisations led by CEOs who did not found the company (Kreiser, et al. 2010). This is an interesting avenue to explore, as the senior management teams operating in the sMNE can be bound by additional firm level factors such as investor expectations, a difference to the INV. International trade experience and skills associated with international trade and investment activity play a significant role in the sMNE, as senior management teams embody the overarching ethos of the organisation to achieve corporate goals across international markets. As the sMNE grows, it faces considerable challenges in sustaining an international motivated entrepreneurial culture across different locations hosted in national cultures (Shane, 1993; Shane, et al. 1995; Tiessen 1997). This is closely linked with the international coordination of resources and the roles different subsidiaries may play, based on their access to certain human capital. From an RBV perspective, little research has been undertaken on how the MNE achieves overall firm level advantages through its dispersion of activity across international markets (Peng 2001). The influence of human capital as part of a firm level international
entrepreneurial capability is missing in extant international corporate entrepreneurship literature. Again the focus is often on the human capital of entrepreneurs in INVs. This thesis addresses this gap by focussing on human capital and its influence on the overarching international entrepreneurial capabilities of the firm but also on the role of networks as can be seen in Figure 2.1. This will be explored in more detail in the next chapter on the role of networks.

**International networking orientation**

As already mentioned this review shows that international networking orientation is rarely considered as part of a firm level international entrepreneurial behaviour. This thesis firmly places the organisation’s ability to instil a culture of international networking as a sign of its commitment to an entrepreneurial approach to internationalisation. A key aim of this thesis is to understand the role networks play in achieving international corporate entrepreneurial outcomes. In the conceptualisation of international entrepreneurial capabilities, an international networking orientation depicts an organisation which assigns value to international networks as a way to identify and enact on international opportunity. The international corporate entrepreneurial organisation therefore views networks as a strategic asset to support entrepreneurial internationalisation, and networks are engaged in at many levels across the organisation (Loane and Bell 2006). The large MNE and its subsidiaries is a network of interdependent operating units, and although connected by ownership, ties can be viewed as inter rather than intra-organisational networks - (Ghoshal and Bartlett 1990). Often the emphasis in international entrepreneurial studies of the MNE is the ability to utilise its internationalised subsidiary network (Dellestrand and Kappen 2012; Zahra 2015). Although the subsidiary is recognised to be embedded in its local networks (Ghoshal and Bartlett 1990), few studies consider the international networking orientation of the headquarters and the subsidiary (Birkinshaw 1998; Anderssson, et al. 2002). From an external network perspective, this may be in part due to the preoccupation with the large MNE and its internalisation strategy. Those who have considered external networks of the MNE subsidiaries, regard the subsidiary networks as a knowledge source, enhancing the subsidiary market position, as well as that of the MNE, as it transfers this knowledge to other subsidiaries in the MNE (Andersson, et al. 2002). However, the subsidiary international networking orientation in this context, is often considered and limited to the national location it serves, with the international aspect relating to its dissemination back into the MNE, of new knowledge created
locally. This demonstrates a gap in understanding from the sMNE perspective, where its international networking orientation, through a variety of international trade and investment activity, is not purely from a headquarter or subsidiary location perspective. The international networking orientation of the sMNE can involve distributors and agents, strategic alliances, joint ventures as well as wholly owned subsidiaries. The sMNE with fewer subsidiaries would therefore display a greater level of international networking orientation, influencing potential product and process innovation opportunities in the international network and creating opportunities for international venturing with customers, suppliers or distributors. A further gap identified here, is an exploration of the international networking orientation of the subsidiary, rather than a domestic networking orientation perspective. Although part of the MNE network, the subsidiary is part of an international network. This will be explored in more detail in Chapter Three.

Few studies were specifically linked to the international networking orientation of the organisation to achieve innovation, strategic renewal and international venturing activity. MNEs were found to engage in alliances with smaller born global companies to exploit their innovations (Vapola, et al. 2008). Senior management teams orientation to use networks in boundary spanning activity of the MNE was identified as influencing strategic renewal activity (Glaser, et al. 2015).

It is important to note that scholars recognise that different international entrepreneurial capability dimensions may accrue different levels of emphasis from the organisation (Covin and Miller 2014). Organisations should not aim to achieve an overall entrepreneurial posture but seek to focus on specific dimensions of entrepreneurship which align to their overall strategy or develop a competitive strategy which suits their particular international entrepreneurial profile and effect on international performance (Kreiser, et al. 2010; Linton and Kask 2017). As different international entrepreneurial capabilities will have a greater emphasis in different contexts (Dimitratos and Plakoyiannaki 2003) aiming to achieve high levels in each may not have the most favourable impact on performance of the firm (Lumpkin and Dess 1996).
2.5 Chapter Summary

A key aim of this thesis is to explore the international entrepreneurial capabilities of the sMNE and its influence on international trade and investment activity. This chapter shows the significant advances international entrepreneurship research has made in exploring international opportunity-driven internationalisation, but has identified a paucity of research surrounding the sMNE. An augmented international entrepreneurial capabilities conceptualisation is presented in Figure 2.5, drawing on international entrepreneurial orientation and international entrepreneurial culture. Using this approach, this thesis has a solid conceptual base upon which to explore the entrepreneurial internationalisation of the sMNE, addressing criticism directed at some scholars of international entrepreneurship, for its lack of common conceptual underpinnings (Dess, et al. 2003).

The different dimensions of international entrepreneurial capabilities explored in extant international entrepreneurship and international business literature highlighted the complexity of international resource coordination for the large MNE. Again gaps emerged in whether the focus on internalisation would be evident in the sMNE and if this might influence how the sMNE acts upon international opportunity.

Evidence of interconnectedness between some of the dimensions emerged in the review. However few studies considered the combined influence of these dimensions. International networking orientation was found to influence the international customer, supplier, and competitor orientation of the organisation. International resource coordination, international autonomy and international learning orientation appeared in discussions relating to the MNE relationships with its subsidiaries. As the standpoint of most literature was that of the large MNE, how these international entrepreneurial capabilities may manifest themselves in smaller MNEs is underexplored.

The review also demonstrated the lack of understanding on the influences between international entrepreneurial capabilities and international entrepreneurial outcomes other than broader internationalisation outcomes of the scope of international markets entered or narrow financial performance outcomes. This section shows however, that an international networking orientation is mainly explored from the way larger MNEs utilise their internal organisation networks, with few studies considering the wider networking activity of both subsidiaries and the corporate headquarter.
In summary there is a paucity of research in how different international entrepreneurial capabilities unfold in the sMNE. Extant international entrepreneurship literature associated with the large MNE focusses on the internalisation of resources and the roles of subsidiaries and the slicing of value chain activities across its subsidiaries. In the sMNE with fewer subsidiaries, little is understood of the influence of these capabilities compared with others. Chapter Three now explores the role of networks in more detail from a network capital and network embeddedness perspective for entrepreneurial internationalisation.
Chapter Three: The Role of Networks in Entrepreneurial Internationalisation

3.1 Introduction

The previous chapter highlighted international entrepreneurial activities associated with the international entrepreneurial capabilities of the sMNE and entrepreneurial internationalisation. This chapter is concerned with exploring the role of networks in entrepreneurial internationalisation. Although, networks represent a common theme in international entrepreneurship literature as a means to internationalisation (Jones, et al. 2011), it is dominated by the INV and networks for early internationalisation. The few which cover the more established organisation tend to focus on the large MNE (Dimitratos, et al. 2003; Dimitratos, et al. 2010).

In addressing the key aims of this study to establish the role of networks, this chapter is concerned with exploring how networks are positioned in entrepreneurial internationalisation for the sMNE to identify and act upon international opportunity, and how networks influence innovation, international corporate venturing and international strategic renewal. As noted in the introduction to this thesis, international opportunity recognition is an underexplored area of international entrepreneurship and this thesis specifically addresses requests for the exploration of changes in combinatory international entrepreneurship areas such as opportunity recognition and a firm's networks or internationalisation patterns (Jones and Coviello 2011).

To provide an in-depth analysis of the role of networks for the sMNE, two key areas of network and international entrepreneurship theory are drawn upon. As depicted in Figure 3.1 below, these include network resource and network embeddedness. The next section in this chapter focusses on networks from a resource based view (RBV) and is explored using the concept of network capital in shaping organisation resources for entrepreneurial internationalisation. Following this, the role of network embeddedness and the MNE is explored, drawing on both relational and structural embeddedness to provide a detailed understanding of how both position and relations in networks influence entrepreneurial internationalisation. Throughout this chapter the role of networks is considered from its potential influence on international corporate entrepreneurial outcomes of innovation, international corporate venturing and international strategic renewal. In the chapter summary, the key gaps identified in this review of the role of networks are presented and links to the international entrepreneurial capabilities discussed in Chapter Two are considered. This leads to the
The final section of this chapter which presents the conceptualisation of the international entrepreneurial capabilities underpinning the research methodology outlined in Chapter Four.

Figure 3.1: The role of networks: RBV and network embeddedness

3.2 Networks and the resource based view

**Defining MNE Networks**

A key aim of this thesis is to understand how and why networks are created by the sMNE in entrepreneurial internationalisation. In addressing this aim, this section explores the idea of networks as a strategic resource for the organisation as a means of understanding why an MNE invests in the creation and development of networks to achieve international trade and investment activity, the connections an organisation has for international trade and investment activity, influences on the strategic choices they have to compete internationally and the resources they are able to access (Coviello and Munro 1995).
There are a number of network definitions in international business, international entrepreneurship and strategy disciplines. Reviews and conceptual studies have sought to categorise network studies and faced challenges in doing so, given the varying definitions of and, in some cases, lack of definition in empirical studies (Hohenthal, et al. 2014). Early works in the field of international business recognised organisations were part of networks comprising of relationships with a range of customers, distributors, suppliers, suppliers’ suppliers, the customers' customers, competitors and government (Johanson and Mattsson 1987; 1988). Networks are also viewed as patterned, connected relationships between two or more individuals and groups (Dubini and Aldrich 1991) and include relationships between organisations (Hohenthal, et al. 2014). As this thesis explores in depth, the nature and role of networks at an organisational level the more strategic definition of networks from Gulati et al. (2000) is more suited to this research; the nature of the relationships they include in their definition as noted below, are associated with international corporate entrepreneurial activity.

"…inter-organisational ties that are enduring, are of strategic significance for the firms entering them, and include strategic alliances, joint ventures, long-term buyer-supplier partnerships, and a host of similar ties." (Gulati, et al. 2000, p. 203)

It is important to recognise the strategic networks of the MNE include the networks held by the different MNE subsidiaries, as well as the MNE headquarters. The subsidiary is potentially operating in an environment which is different to that of its headquarter location in terms of competition, customers and the resources required to support the international entrepreneurial activities of the MNE (Hakala 2016). This creates a diverse and dynamic web of networks of the MNE. Through their subsidiaries the MNE will have access to the networks identified and created by their subsidiary outlets as shown in Figure 3.2. The extent to which the corporate headquarters is involved in the subsidiary network development, will be dependent on a number of factors including whether the MNE subsidiary contributes to the firm specific advantages of the MNE i.e. are the subsidiary resources key to the MNEs ability to achieve an overall competitive advantage? From a network perspective, it is argued headquarters should seek to be involved in its subsidiary network relationships, to have oversight of the tacit knowledge and competences developed at a subsidiary level which could potentially benefit other subsidiaries (Andersson, et al. 2002). For a large MNE with more than 100
subsidiary locations this may present particular challenges around coordination and governance, however for the sMNE the corporate headquarter involvement in subsidiary external networks has the potential to broaden the resource base of the firm. Of note is the lack of consideration for the MNE corporate headquarter networks, which will be addressed in this thesis as both the sMNE headquarter connections will be explored, as well as those of their subsidiaries.

A plethora of MNE research considers the MNE as a networked organisation with many subsidiaries vying for headquarter resources, these studies tend to be the focus of 'resource' related debates and the MNE (Birkinshaw, et al. 2005). Typically, the large MNE will seek to internalise specialist resources where appropriate to achieve firm specific advantages (Verbeke and Kano 2016). Although this thesis recognises the importance of intra-organisational networks for the large MNE as part of its international entrepreneurial capability in coordinating resources, the aims of this thesis are mainly concerned with the sMNE and its subsidiaries external networks. A connection however arises in the international resource coordination discussed in section 2.5 as the resource bundling and reconfiguration activities of the MNE can influence the extent to which the subsidiary seeks external partner relationships (Meyer, et al. 2010). Subsidiaries displaying existing new product capabilities for example were attributed more headquarter resource, in turn influencing the drive to locate more external partners (Gilmore, et al. 2018).

- Furthermore, the role of networks in entrepreneurial internationalisation can be explored in the following ways; networks to access resources currently not held by the organisation resulting in a unique combination of resources for the organisation (network capital); and
- an organisation’s network of relationships (network capital and network embeddedness) as a unique resource to the organisation (Andersson, et al. 2002; Loane and Bell 2006)

As Figure 3.2 shows, the red lines between the subsidiary and the customer (cu), supplier (s), distributor (d), competitor (co) and university (u) provide access to resources not currently held by the MNE. This results in a new combination of resources for the subsidiary and the MNE. The complete network of relationships held by the different subsidiaries and their corporate headquarters represents a unique
resource for the total MNE. The subsidiary also has its own unique network resource in its combination of relationships with different partners.

Figure 3.2: MNE and subsidiary network resource

Key: Co = Competitor, Cu= Customer, G=Government, D=Distributor, Uni=University, T=Trade Association

Network Resource

The role networks play in entrepreneurial internationalisation of the sMNE can be explored using the resource based view (RBV), whereby an organisation holds a unique set of strategic resources, accrued, coordinated, utilised and reconfigured to achieve competitive advantage (Barney 1991). In exploring the strategic importance of the resources a firm possesses, Barney (1991) states that resources should be viewed from the perspective of their value, rarity, inimitability and non-substitutability. Specialised resources is a broader term used in MNE research to describe subsidiary resources and are defined as those resources which are

"...superior to those available elsewhere in the corporation. If the subsidiary’s specialized resources are combined with other resources elsewhere in the MNC,
we suggest that they then become part of the MNC’s firm-specific advantage.”

(Birkinshaw, et al. 1998, p. 224)

In international business, the RBV supports a plethora of internationalisation research and draws on the synergies between international business and strategy disciplines; synergies which evolved as international business studies began to consider more firm level approaches to internationalisation such as FDI and MNE activity (Peng 2001). Seminal work in strategy and international business literature considered the purpose of networks as an acquisition of resources (Barney 1991; Johanson and Mattssson 1987; Nahapiet and Ghoshal 1998; Hoang 2003); resources which firms may not have access to within the boundaries of their own organisation. As such, network scholars state the ultimate purpose of building inter-organisational networks and nurturing partner ties is to access, integrate, and leverage partner resources (Gulati, et al. 2000). The patterned network of relationships a firm has influences the strategic choice the organisation has and access to resources (Coviello and Munro 1995; Chetty and Blankenburg Holm 2000). Whilst the RBV has been used to provide a basis for understanding sequential approaches to international entrepreneurship scholars argue organisations do not always follow such a systematic approach to internationalisation. However in this thesis, the RBV is being used as one aspect of the conceptualisation of the role of networks, as demonstrated in Figure 3.1 and in relation to the international entrepreneurial capabilities of the sMNE as shown in Figure 3.5 at the end of this chapter, thus addressing calls for scholars to consider the development and combination of resources in developing firm level capabilities (Gerbl, et al. 2015 ). However, the RBV is useful if positioned as a way to understand how an international entrepreneurial organisation uses its networks to access resources not currently held and augments these to provide a unique combination of firm level resources.

Entrepreneurial internationalisation suggests an organisation will pursue an opportunity irrespective of resources held (Stevenson and Jarillo 1990) as it will locate a route to access resource gaps (Loane and Bell 2006). Typically MNEs sought to internalise their resource base, however MNEs are involved in global networks involving external partners to access expertise (Contractor, et al. 2010). The MNE therefore increasingly recognises not all internal resources can provide the knowledge and capability required to maintain a position global markets and creates a range of external networks using contract, alliances and clusters placing themselves within a 'global network of expertise' (Contractor, et al. 2010). An MNE’s international opportunity seeking behaviour,
researching opportunities overseas in the pursuit new product or international market entry, may result in the network created in becoming a source of innovative activity translating into a new resource base for the organisation (Ahuja and Katila 2004).

Thus networks provide access to resources to be reconfigured and adapted by the organisation through the different business network relationships in which it is embedded (Slotte - Kock and Coviello 2010). As networks are not a static resource, the resources the sMNE accrues or the potential to accrue will be dynamic (Anderson, et al., 1994) and will require investment in the coordination of their networked relationships (Johanson and Mattsson 1987). For the sMNE, the network of business relationships it holds will influence the ability it has to pursue international opportunity and the ability to access and augment partner resources (Gulati, et al. 2000). Networks are unique to the organisation due to the different relationships an organisation holds in each of its networks and how these networks co-develop (Slotte - Kock and Coviello 2010). For the purpose of this thesis although resources are often used in a broad sense to mean technology, new opportunity information and market knowledge (Papanastassiou and Pearce 2009), it is important to recognise networks also provide access to international opportunity. Relationships with international partners can initiate a conversation to explore a new international market, product and service innovation thus networks as means to access resources is not the sole purpose in exploring entrepreneurial internationalisation outcomes and explored in more detail in the network embeddedness section. The review from an RBV perspective also identified a lack of consideration of the international entrepreneurial opportunity emanating from the network and the international entrepreneurial drive an organisation uses to capitalise on this opportunity. This study addresses this gap through consideration of the role of networks from both a resource and an international entrepreneurial outcome perspective. How the sMNE then expands its network resources to acquire further resource will be driven by the international entrepreneurial capability of the organisation. This thesis seeks to explore how the sMNE views networks as a strategic resource as well as a conduit to access resources, thus potentially increasing the range of innovation, international corporate venturing and strategic renewal they are engaged in. Exploring networks from both an RBV and international opportunity perspective, addresses the call mentioned above for more combinatory research in international entrepreneurship (Jones, et al. 2011).

Discussions in the extant literature on MNEs rarely address which subsidiary external relationships are used to identify them and the types of resources the subsidiary
identifies through its partners. This review found little discussion of the types of resources accessed via the MNEs network and what actually constitutes a unique combination of resources for entrepreneurial internationalisation. To try to address this gap, the next section considers how network capital might shed more light on the influence of networks on entrepreneurial internationalisation from a resource perspective.

**Network capital and entrepreneurial internationalisation**

Network capital helps address the aim of this thesis in exploring how and why networks are created in the sMNE. Network capital proposes a way to conceptualise the link between the individual and firm and includes resources strategically held by the organisation. Network capital is viewed as the firm level version of social capital, a collection of social capital of the firm's directors, managers and employees (Gertler and Levitte 2005; Huggins 2010; Huggins, et al. 2012). Network capital referred to the more 'calculative relations through which firms gain access to knowledge to enhance expected economic returns' (Huggins, 2010 p. 336). Although conceptual and empirical studies refer to social capital not just from individual perspectives but at a firm level, critics state the relational aspect of social capital does not fully represent the calculative intention of actors when transacting in dyadic relationships. Economic gain for the organisation may originate in ties which are not empathetic, trust-based or obligatory in nature but are focused on profit maximisation logic. Hence, network capital is considered here more appropriate to explore the networks established to achieve 'calculative' international entrepreneurial outcomes for the organisation. Using this conceptualisation of the network resources held by the organisation, extends the network research beyond whether ties are merely weak or strong as called for in the Jones and Coviello (2011) review. At a firm level, Coviello and Cox (2007) distinguish between the capital of the organisation, the physical, human, financial and organisational capital and the range of resources accessible through the organisations network. The review unearthed a range of conceptualisations of network resource. To combat the plethora of terms used from a 'capital' perspective in entrepreneurship literature, for those studies concerned with a firm level approach, network capital provides a clear basis upon which to explore network resource in entrepreneurial internationalisation. Therefore, this thesis uses the network capital approach to include the human capital within the organisation which influences the choice of network and
how it is utilised as well as social capital denoting the range of resources held within the network and the network itself.

*Human capital* refers to the knowledge and skills acquired through investment in education, work experience and other experiences (Becker 1964), and is viewed from both the perspective of human capital investment and human capital outcome. Investment involves education and work experience and outcomes are viewed as the knowledge and skills associated with the human capital investment. Human capital can be specific to a task or non-task related (Becker 1993; Unger, et al. 2011), suggesting expertise and skill might be transferable or not to other organisations. Human capital investment may include technical and or business related educational background, as well as level of study or number of years and range of international sectors worked in involving international trade and investment activity. Human capital outcomes may include the skills and expertise accrued from establishing an overseas manufacturing plant, the implementation of a global licencing agreement or managing an international distribution agreement. The process by which the opportunity is discovered may result from an individual's alertness to information in their global networks (Tang, et al. 2012) this influenced by their international trade experience, skills, knowledge and expertise (Mary George, et al. 2016).

The human capital of the management team is considered to be crucial to the growth of international entrepreneurial firms (Crick and Spence 2005; Fernhaber and McDougall-Covin 2009; Unger, et al. 2011). However such studies again tend to focus on the entrepreneur or international new venture rather than the MNE. In addition, beyond directors with long Board membership, external directorships with other firms and prior cross border acquisition experience were found to have a positive influence on shareholder value in a study of cross border acquisitions (Basuil and Datta 2017). For the sMNE, the human capital of external directors may have different role to play of that of the larger MNE, in advising and guiding the international corporate entrepreneurial outcomes of the organisation. Therefore, the international proactiveness or international motivation of the sMNE as discussed in section 2.5 can be influenced by the previous international trade experience of senior management teams, Board members and employees.

The collective human capital held within the organisation is part of their network resource, unique to the organisation but subject to change. Therefore it needs careful
monitoring and coordinating by the sMNE headquarter and subsidiary senior management teams. Scholars refer to the importance of creating a collaborative international human capital in influencing firm performance, and suggest a greater understanding is needed of how human capital is dispersed within an organisation to achieve a competitive advantage (Kim, et al. 2015). From an identification of appropriate networks, this culmination of international trade and investment expertise and skill can influence the choice of networks the sMNE decides to engage in to access resource and fulfil an international opportunity. As increasingly more international trade is conducted, organisation actors’ views of the network scope for international trade and investment activity changes (Anderson, et al. 1994), therefore network development is influenced not only by actors’ prior international trade experience, but also their continuing knowledge accumulation of international markets as the organisation grows. In terms of the influence of human capital on international corporate entrepreneurial outcomes, few studies were identified. In choosing offshoring options, prior international outsourcing experience was found to influence the choice offshoring locations. Local or nearshore locations were more likely when such experience was limited (Gerbl, et al. 2015). However, human capital was found to influence the success of cross border acquisitions and Board member composition in particular the role of external Board members (Basuil and Datta 2017). Prior experience combined with access to networks was considered a motivation for opportunity recognition by Tang (2010). International motivation, as discussed in Chapter Two, includes human capital aspects of an organisation, the drive and capabilities of individuals in an organisation to pursue international entrepreneurial activity. Therefore human capital provides a lens through which to explore how and why employees identify and create networks to pursue and enact upon international corporate entrepreneurial opportunity.

As stated above, network capital extends the notion of social capital to focus on the predominant purpose of the business relationship is the pursuit of economic gain for the organisation. Although numerous definitions of social capital exist, common terminology used across definitions includes resources and the network of relationships an individual or organisation holds. Lin et al. (2001) include purposive actions, while Bourdieu (1985) refers to the durability of the relationships in his definition of social capital as,
"...the aggregate of the actual or potential resources which are linked to possession of a durable network of more or less institutionalised relationships of mutual acquaintance or recognition." (Bourdieu 1985 p. 248; 1980).

As this thesis recognises the network itself as a resource, the following definition is used as part of the firm's network capital,

"... the sum of the actual and potential resources embedded within, available through, and derived from the network of relationships possessed by an individual or social unit [...] social capital comprises both the network and the assets that may be mobilised through the network." (Nahapiet and Ghoshal 1998 p. 243).

Therefore, the relationships held within the network, as well as the network itself are considered as social capital. Studies show senior management teams social capital can influence the international direction of the organisation. Managerial ties enhance performance and directly affect a firm's activities as senior managers exert considerable energy in maintaining and developing relationships to access resources and opportunities which directly impact on the innovative capabilities of the firm (Burt 1992; Uzzi 1996). In a study focusing on how CEO relationships shape an organisation, evidence suggests that their bridging of social capital in the external environment has positive effect on the entrepreneurial orientation of the firm (Cao, et al. 2015). However, few studies again have considered social capital from the perspective of the MNE and in particular the sMNE.

As shown in Figure 3.3 below, network capital is conceptualised as both the human and social capital of the firm. The interaction of human and social capital was found to be strongly linked in exploring the innovative capabilities of the organisation. Individual knowledge and capabilities if not shared through relationships do not benefit the organisation (Xu, et al. 2013) and presents an underutilised resource for entrepreneurial internationalisation. Therefore, the review of literature on human and social capital emphasised the importance of recognising the role of individuals’ international trade skills and experience, driving the choice of networks entered into and the investment made in developing those relationships. Using network capital to augment individual level competences driving firm level capabilities helps address a key aim of this thesis, to understand how and why networks are created for entrepreneurial internationalisation. However, to fully act upon the network capital of the organisation,
the review unearthed a link between the international learning orientations of the organisation, now discussed in the next section.

Figure 3.3: Network capital

*International learning orientation, boundary spanning and network capital*

Linked to the effective use of network capital for entrepreneurial internationalisation is the ability of individuals to act upon intelligence from their networks and disseminate across the organisation, the international learning orientation of the organisation. To manage networks as strategic resource, a firm can seek to engage in ongoing communication, collaboration, and negotiation within the firm (Simsek and Heavey 2011). This combines the *boundary spanning activity* and the *absorptive capacity* evident in organisation. This is important in addressing how networks are utilised and sustained for international trade and investment activity, how a sMNE enacts with its networked environment and uses the resource and intelligence gained to international corporate entrepreneurial outcomes.

Specialist resources held by the subsidiary are identified through boundary scanning activities of subsidiary employees (Birkinshaw, et al. 1998; Laursen and Salter 2006) sometimes referred to as 'scouting units' in subsidiaries they create a vital link in
identifying opportunities from external networks (Laursen and Salter 2006). This involves balancing internal capabilities with the firm's external networks (Birkinshaw, et al. 1998; Zahra and George 2002; Gilmore, et al. 2018) and is influenced by the international networking orientation of the organisation. The value accrued through the subsidiary external networks will not be fulfilled if boundary spanning activity is not sustained, impacting on the innovative capabilities of the MNE (Zahra and George 2002). Individuals must codify and disseminate new external knowledge to various sub-units within an organisation (Cohen and Levinthal 1990). Actors locate and interpret information on international markets. In undertaking further research, additional opportunities can arise or new ways of thinking on the original opportunity resulting in a cyclical and iterative process (Ardichvili, et al. 2003). The relationship between the actor, the environment and the firm to absorb and act upon 'new' knowledge therefore lies in the absorptive capacity of the actor and the firm.

For the MNE, absorptive capacity as an element of human capital can affect the extent to which innovation is diffused across different international borders from subsidiary to subsidiary, from subsidiary to HQ and HQ to subsidiaries (Birkinshaw 1997; Birkinshaw 2000; Andersson et al., 2002). Subsidiaries therefore can create a pathway across the organisation to disseminate information in supporting international corporate entrepreneurial outcomes. In relation to the influence of absorptive capacity on international entrepreneurial outcomes, Zahra and Hayton (2008) found the impact of absorptive capacity was positive in related industry international venturing, alliance and acquisition activity rather than non-related. As already mentioned above, the innovativeness of an organisation is also influenced by the interaction of human and social capital. Innovation is influenced by the ability of individuals to share knowledge and information via their networks (Xu, et al. 2013). Furthermore, the way in which individual actors engage with opportunities over time is a dynamic relationship and is therefore heterogeneous and difficult to imitate, referred to as network diversity (Sarason, et al. 2006). This contributes to the notion of network capital as a key strategic resource to the organisation.

Discussions on external networks often viewed these from an internal perspective, focussing on how the MNE shared information and suggesting the investment and importance given to the role of networks in the large MNE is often dictated by the relevance given to them internally or the ability of subsidiaries to vie for a position in the MNE’s overall structure. This presents a gap in the understanding of the value of
external networks if mainly driven from the larger MNEs ability to achieve an overall FSA. In relation to this thesis, the sMNE with fewer subsidiaries may not experience the same level of internal competition in vying for attention.

In an INV context, Mc Dougall et al. (1994) suggest that competencies such as the ability to use networks in identifying new foreign market opportunities are unique to the entrepreneur, not all actors within more established firms are inherent opportunity seekers. However, less is understood in extant international entrepreneurship literature as to how this is manifested in the sMNE.

As the review of network capital and international learning orientation shows, the propensity of a firm to act upon market intelligence from foreign markets impacts on its ability to identify opportunities. The sMNE is therefore reliant on the human capital of the individuals driving relationships for entrepreneurial internationalisation set within the context of the organisation and their range of extended networks. To maintain international growth, the sMNE must therefore ensure it encourages a culture of gathering and -acting upon foreign market intelligence, to create an international learning orientation (Dimitratos and Plakoyiannaki 2003), as discussed in section 2.5. It is also important to recognise here from a network perspective, this includes the sharing of information externally with network partners as well as internally. The MNE should therefore aim to invest in developing its network ability and sharing of ideas, rather than internalising its intellectual skills and knowledge (Subramaniam and Youndt 2005).

In summary, network capital can be considered as a strategic asset used to compete in international markets by the sMNE. The composition of networks, the relationships they hold in that network and the extent to which the network provides them with knowledge, resources, power and influence is further explored through network embeddedness in section 3.5.

A number of gaps have been identified in this review of network capital, social capital and human capital in an international trade and investment activity context, namely the lack of consideration of organisations other than the INV and scant attention is given to the influence of network capital on entrepreneurial internationalisation. In particular, human capital in the large organisation is largely ignored in extant international entrepreneurship literature. Studies also tend to shy away from combining individual level capabilities and firm level capabilities. Given the dominant role of human capital in defining a firm's international entrepreneurial capability it was imperative the human
capital held in the organisation was considered in meeting the thesis aims. Given the strategic importance of networks noted in the discussion of networks and RBV, there is also a significant gap of the networking competencies held by the organisation through its collective human capital i.e. how the individuals within the organisation through their international trade experience and skill, identify and enable the creation of networks.

Having considered the role of networks to access strategic resources and the complexity of the range of resources the sMNE may have access to in order to illuminate the potential challenges they face in the international coordination of these resources (Goerzen 2007), the following section now considers how network embeddedness may influence entrepreneurial internationalisation and also represent a strategic resource to the MNE.

3.3 Network Embeddedness and Entrepreneurial Internationalisation

Network based internationalisation theory dictates that the network in which a company is embedded, influences the internationalisation process of an organisation. Thus, the position the organisation holds in their network is defined by the degree of internationalisation of both the firm and the network (Johanson and Mattsson 1988). From an entrepreneurial internationalisation perspective, network embeddedness advances the network based internationalisation theory by exploring the range and types of ties the organisation holds and the relationships between these ties. In exploring dyadic relationships and interactions, network embeddedness therefore considers the individual level influence of the role of networks.

The role of networks cannot be viewed merely as the number of international connections an organisation has; the structure of the networks, the nature of the relationships held within that network and the positioning of the organisation within that network will enable or hinder the ability of the organisation to capitalise on international opportunities. As networks are based on exchange relationships with the aim of economic gain, the quality of these networks are often measured by their direct influence on economic activity (Uzzi 1996). Increasingly, researchers have expanded the role of networks beyond pure economic transactions, moving towards an embeddedness perspective, considering the development of deeper relationships to cultivate longer term more cooperative ties.
This exploration of network embeddedness thus enables a greater understanding of how and in what ways networks can be used by the sMNE to enact upon international opportunity and achieve such outcomes as new international market entry, engagement in international alliances or restructure to be more competitively positioned in international markets. Consequently, as shown in Figure 3.1, network embeddedness provides a useful way of understanding the role of networks in entrepreneurial internationalisation.

Network embeddedness is considered an important aspect of network theory in understanding the role and purpose of networks in adding value to an organisation, promoting competitive advantage and improved performance (Mcevily and Marcus 2005). Network embeddedness research tends to fall into two categories; those pertaining to the structural properties of networks (Burt 1992, Coleman 1988) and those exploring the relational properties. Structural embeddedness considers the position the organisation has within a larger network (Granovetter 1992). Relational embeddedness explores the dyadic relationship between parties, the trusted networks through which knowledge is exchanged. Although embeddedness is characterised as relational and structural, often conceptual and empirical studies consider both aspects as mutually exclusive and scholars call for empirical studies to distinguish between the relational and structural dimensions (Gulati, et al. 2011; Jones, et al., 2011). In addition, it is argued that network research mainly falls into the structural camp and exploration of more relational dimensions of networks may provide more depth to international entrepreneurship and network conceptual development (Andersson, et al 2005). Another gap identified in the review of network embeddedness and the MNE, was the lack of consideration for the corporate headquarter networks. This thesis aims to address these gaps by undertaking in-depth research into both the range and types of ties the sMNE and the corporate headquarter holds and the relationships between these ties for internationalisation.

In terms of influencing international corporate entrepreneurial outcomes, the range of ties and relationships between ties were found to enable innovation and international venturing, few studies eluded to the role of networks influencing international strategic renewal. Challenges were explored in post-formation international joint ventures in terms of the relationships between the joint venture partners. It was found the structure positively influenced the relationship in the management of conflict (Owens, et al. 2018). One study considered the influence of international joint venture partners on
strategic renewal (Benavides Espinosa and Suanes 2011) stating through the increased number of competitors, customers and suppliers as a consequence of the joint venture, resulted in organisation structure change, as well as the coordination of resources. Interestingly, this study, unlike others as the authors note, found that international joint ventures did not influence innovation and, that spin-offs and outsourcing influenced this outcome more. In this same study, international customers were found to provide international joint venture opportunities (Benavides Espinosa and Suanes 2011).
Figure 3.4: Network embeddedness in internationalisation


**Relational Embeddedness**
- Influence on perception of risk (Liesch, et al. 2011)
- Value through capabilities of network partners (McEvily & Marcus 2005; Slotte-Kock & Coviello 2010)

**Structural Embeddedness**
- Types and range of ties for international trade and investment activity (Barringer 2000; Contractor, et al. 2000; Xu, et al. 2010)
- Connectedness between ties (Burt, 1992; Gulatti, et al. 2011)
- MNE and subsidiary networks (Andersson, et al. 2002)
- Density of ties for CBA (Dubani & Aldrich 1991)
- Shared ties in an MNE (Dyer, et al. 2000)
Relational embeddedness and the sMNE

International business has long recognised business relationships clearly influence the internationalisation of an organisation (Johanson and Mattsson 1987; Johanson and Vahlne 2003; Andersson, et al. 2005; Hohenthal, et al. 2014; Forsgren 2016). Therefore an international entrepreneurship perspective using relational embeddedness allows for deeper insights into understanding how relational ties can influence the enactment of international opportunity.

The sMNE typically engages in a range of international trade and investment, and is potentially involved with a range of stakeholders, including customers, suppliers, agents, distributors, subsidiary managers, local governments, trade associations, universities and a range of other relationships. The interdependencies created with these range of international partners can influence the international entrepreneurial outcomes, relational embeddedness allows the exploration of the nature and influences of such interdependencies. The characteristics of the relationships the organisation holds in its network was suggested to influence the organisation’s ability to overcome the liabilities of foreignness and outsider-ship when entering new international markets, thus influencing the ability to become an insider and the ability to further develop international trade and investment activity (Forsgren 2016). Therefore as organisations accumulate knowledge and experience working with their contacts in international markets, the network relationships they have can therefore influence their perceptions of opportunity and risk in their international operations (Liesch, et al. 2014).

Relational embeddedness describes individual relationships developed through a series of interactions (Granovetter 1973). Relationships in networks are often described as 'weak' or 'strong' emanating from Granovetter's seminal works on individual relationships in networks (Granovetter 1973). Weak ties are considered those relationships which have little emotional investment and are often casual in nature, superficial and not emotionally close. Strong ties are close, based on trust and long-term commitment (Agndal, et al. 2008). In strong ties considerable investment is made with a greater level of trust, respect and commitment between the parties involved. The difficulty with the profiling of ties as either strong or weak is that relationships are far more complex based on whether they are weak or strong from Granovetter's perspective. As the nature of ties evolves, weak ties may become strong. For example a subsidiary engaged in more selling and purchasing with external ties may involve more
interaction on the adaptation of resources and more personal contacts are developed and therefore a higher degree of relational embeddedness occurs (Andersson, et al. 2005). Capabilities of network partners are accessed via the relationships developed with an organisation (Mcevily and Marcus 2005). This shared access to capabilities will involve investment in nurturing such relationships, again resulting in a higher degree of relational embeddedness. In a study of British multinational retailers engaged in shared management of international joint ventures, commitment through this shared management and access to each other’s capabilities was found to positively influence levels of trust and commitment (Owens, et al., 2018).

Although, a relationship with a contact may be profiled as sporadic and shaped by a few interactions, a weak tie can command as much trust and commitment as a strong tie in relation to the specific transaction being undertaken by the organisation. Likewise, in an international customer relationship, outside of the customer and client relationship, no other commitment may exist. Is this therefore a weak tie for the company, despite the high levels of trust associated with both parties in this transactional relationship? Ties can be dynamic, with weak ties developing into strong ties and vice versa, at what point does a weak tie become a strong tie?

Irrespective of whether a weak or a strong tie, the contract is not solely about the financial commitment made by both parties. Network relationships are formed to identify resources and international opportunity, thus from a relational embeddedness perspective each party is contracting based on some level of relationship being formed. Dyadic trust is needed to acquire new knowledge and capabilities from ties, to create a competitive advantage through the acquisition of knowledge and resources (Hornsby, et al. 2013). Mutual trust was observed in the open contract type relationships of INVs, enhancing the relationship between parties and often providing greater opportunities for market development, information exchange and sources of new opportunities rather than more formal contractual constraints (Presutti, et al. 2007). More informal contractual relationships based on trust are less likely in a sMNE operating across a number of international markets. However, in the development and nurturing of relationships, the sMNE may encounter more open approaches to trade in some of the subsidiary locations. If to advance a new client relationship trust is implicit in the contract negotiation, international autonomy maybe required for the subsidiary to manage the potential local relationship with suppliers, customers or other international partners.
The nature of the relationship is important in ascertaining the role of networks and their resultant international trade and investment activity. Network studies often refer to the fundamental concept of exchange relationships as a key dimension of inter-organisational networks; relationships focusing not just on financial exchanges for goods and services but also skills and knowledge exchange (Ghoshal and Bartlett 1990). At a dyadic level, an organisation has granted legitimacy to that relationship by engaging in interaction, engaging in transactions to gain new knowledge or resources. Whether the tie is weak or strong in this instance, its impact on the identification and enactment of opportunity is of questionable importance to the final outcome of the international entrepreneurial opportunity process. Ultimately in a more established firm, the strategic importance of network capital, the calculative nature of the relationship for the organisation is directly linked to the overarching strategic objectives of the organisation, whether a tie is weak or strong, the ultimate aim of network ties in entrepreneurial internationalisation is to have access to and enact upon international opportunities.

Ties are important from both a structural and relationship perspective, however there is some debate on advancing the weak and strong concepts originally presented by Granovetter considering the multiplex characteristics of relationships i.e. not just whether a tie is weak or strong but includes the content of these relationships in terms of the value and resource these relationships bring (Slotte-Kock and Coviello 2010). This thesis, although cognisant of the terminology, seeks to go beyond this original conceptualisation of strong and weak ties drawing on more contemporary perspectives of embeddedness, addressing calls from international entrepreneurship scholars (Jones, et al. 2011).

**Frequency in Exchange Relationships**

From the perspective of MNEs, they were found to engage in a number of alliances and are more experienced in developing relationships with alliance partners to acquire knowledge (Xu, et al. 2013). The frequency of the series of interactions, the developing of a pattern of trust results in alliance partners was found to influence partner choice in the future. Continued relations meant organisations would seek the same partners for future collaborations (Gulati 1999; Goerzen 2007). A potential downside to these continued relationships is this reduces the potential scope of new international opportunity and can affect the organisations international proactiveness to seek new
partners (Gulati 1999; Goerzen 2007). Again few studies consider the sMNE and the relationships may differ to the large MNE if fewer alliances are entered into.

The purpose of the relationship can also influence the level of relational embeddedness and can differ dependent on that purpose. In the relational ties of MNEs associated with high technological innovation, active engagement with a range of technology contacts in a number of global locations were sought to ensure access to leading world specialists (Papanastassiou and Pearce 2009). In customer and supplier relational embeddedness, the nature of the relationship between the organisations can be significantly different and be influenced by the power each party has in that relationship. Where the organisation is a sole supplier to their key client, it was found to have a negative impact on the acquisition of capabilities as they were bound by the influences of this key client (Mcevily and Marcus 2005). A further difference was identified between the relational embeddedness of lead suppliers and lead customers. Relationships with lead suppliers based on joint problem solving were more effective resulting in potential renewal opportunities in the organisation (Mcevily and Marcus 2005). This is an interesting perspective in relation to the sMNE and how it draws on supplier relationships to innovate, as well as the implications for renewing organisation structure and positioning in international markets.

**Structural Embeddedness and the sMNE**

It was previously stated that the range of potential ties of the sMNE may include export intermediaries such as distributors and agents, customers, suppliers, competitors, outsourcing partners, joint venture partners, strategic alliances, trade associations and universities and that MNEs are increasingly open to accessing resource from their global networks (Barringer, 2000; Contractor, et al. 2010). Exploring the network positions organisations hold, provides a greater understanding of firm behaviour and performance in increasingly competitive markets (Gulati, et al. 2000).

The sMNE may therefore possess a set of inter-organisational ties across international markets, through which international opportunities can be identified and enacted upon. Structural embeddedness refers to the overall number and pattern of these ties, the connectedness amongst these ties and how they are accessed (Burt, 1992; Gulati, et al. 2011). The configuration of the network, the ties between actors within the network, and the level of connectivity between the ties, provides a picture of the potential resources a firm has access to, to engage in entrepreneurial internationalisation. This
network position therefore allows the sMNE to access resources from partners in their network (Chetty et al. 2000).

The position the organisation holds within its network also influences the reputation of the organisation, as well as its access to new information (Burt 1992). Therefore, international strategic entrepreneurship in the small SMEs can be benchmarked against how much an organisation is transforming itself against the industry in which it operates (Hornsby, et al. 2013). The position an organisation holds within its industry can support or inhibit its ability to transform. Therefore from a structural perspective, the expertise a sMNE is able to demonstrate can influence its reputation, thus potentially placing them in a strong position in sector networks with the opportunity to influence industry government policy and position themselves against competitors. In addition, if the network structure due to the types or location of ties restricts access to new information on potential international opportunities, then the organisation in its strategic oversight may need to reconfigure its structure. Few studies appear to consider the nature of ties from the perspective of the type of tie i.e. distributor, supplier, competitor to the geographic location and the sector importance of such ties.

Network 'actors' refers to the individuals, teams and organisations within the networks, the ties and connected relationships are sometimes referred to as 'nodes' (Borgatti and Foster 2003). Specific ties between two parties are often referred to as dyads and considered the building blocks of networks (Snow and Fjeldstad 2015). The type of ties, strong or weak are often discussed in the network structure studies - the advantages of having a diverse set of ties, often weak which may not be utilised immediately but drawn on as future opportunities emerge.

A network consisting of many weaker tie relationships where contacts are not known to each other, has a low density. Those networks with stronger ties are deemed denser (Dubini and Aldrich 1991). Networks are typically more complex than merely involving dyadic interactions; increased attention has been given to ties between organisations which involve with multiple individuals and functions within an organisation. Consequently, it is argued that the where a large number of these types of ties exist, the more opportunity there can be in reducing search costs as tacit and explicit knowledge is increased between the organisations (Dyer, et al. 2000).

As previously noted, the MNE's relationships are likely to be based around a number of ties between the different subsidiaries of the same MNE customer, particularly
including subsidiary level networks that create a complex structure of relationships across the organisation. In some cases, these subsidiaries may share international customers and suppliers, and for the larger MNE presents challenges in the coordination of these ties. The many links in these networks can be strengthened by increased interaction and further still, by an entrepreneurial leader pulling the network together and giving it stability, as discussed in the international motivation section in Chapter Two. The extent to which networks are shared will depend on the strategic advantage network exchange provides the subsidiary and/or the MNE. For example, a subsidiary located in a host market of China used in contract manufacture may find limited value in networks offered by a sister subsidiary located in Poland assigned to international market development of Eastern Europe. Different subsidiary locations may serve different sectors. Again, the synergizing of networks may not provide a meaningful structural embeddedness for international opportunity development.

This complexity, therefore, should mean that using relationships and networks across subsidiaries to explore the role of networks in entrepreneurial internationalisation should involve closer examination of the ties at a subsidiary level. However, few studies were found to focus on the ties of the subsidiary and as discussed in the network resource section above, were mainly concerned with the relationship of the subsidiary and the corporate headquarters. This perspective also links to the international resource coordination of the MNE as discussed in section 2.5.

The structure of a network can be considered an emergent outcome of an organisation’s cooperative decision making in international competitive markets (Kogut 2000). However, for the international networking oriented organisation, that views networks as a strategic resource, it could be argued, the structure of an organisation’s networks is more guided by the organisation, rather than purely emergent. International expansion occurs through the network of international partners by capitalising on international opportunity. From a sMNE perspective this is also an interesting point to pursue; are their networks more emergent or the result of a focussed effort to enter a new international geographic market or introduce a new product internationally?

The strength of network ties i.e. existing ties, the size of the network and the overall density of the network were considered a moderating influence on the speed of internationalisation (Oviatt and McDougall 2005). Interestingly, all three factors suggested here appear to be mainly focussed on the structural aspects of network
embeddedness, yet Oviatt and McDougall (2005) refer to them as part of network relationships. This confirms the concerns of other scholars who suggest structural and relational dimensions of network embeddedness are often combined. However, this review showed, given the combinatory nature of structure and relational dimensions in networks, it is at times difficult to create a clear divide between the two.

Organisations may sit within a common network but are not connected, hence creating a structural hole. Scholars argue bridging these structural holes provides opportunities in accessing knowledge and different perspectives (Burt 2017). Therefore within this type of more open network structure, the density of the network i.e. the connectedness between parties, is less. Where the density is less, organisations are less likely to find themselves in restrictive networks, which may be deemed redundant but difficult to exit. The extent to which the firm is then embedded in a dense network can have a negative effect on the original advantages of being part of a network.

A number of studies consider the structure of an organisation’s network from an alliance perspective. Alliances were found to create a strategic position in international markets to create a competitive advantage (Goerzen 2007). Again for the sMNE, this may present a tight structure, allowing it to capitalise on its position within a stronger alliance network. A potential issue arises if its overall network structure is dominated by such tight network ties. As mentioned in the relational embeddedness section above, a reliance on existing alliance partners can restrict the entrance of new network partners (Goerzen 2007), therefore the structure of the organisation’s network may include a number of long-term partners which are tightly bound to each other. If the sMNE, is tightly bound to a small number of long-term alliance relationships it can potentially restrict the opportunities for further entrepreneurial internationalisation, whereby new knowledge and resources are limited to relationships with existing long term contacts. In contrast, the experience of larger organisations which were deemed to have considerable international experience trading with a range of trusted and long-term alliance partners, do not suffer the same costs associated with introducing new alliance partners to their network (Xu, et al. 2013). Therefore sMNEs may accrue some level of security working with longer term partners; however issues may arise when the structure of its network is reliant on a few alliance partners. Outsourcing and offshoring partners present a further type of tie in an MNE network, allowing for greater access to the expertise of contract manufacturers, service providers, distribution and other functional operations (Contractor, et al. 2010).
A number of studies consider innovation and discussions demonstrate how the structure of international networks can influence innovation. Network structure and influence on innovation included the importance of having a large network with a number of diverse ties to enhance the innovativeness within an organisation (Rodan and Galunic 2004). Technical embeddedness, the connection between two organisations in terms of technology needed in the relationship for product process and production, can influence the ability to create new products for new international markets (Andersson, et al. 2002). Subsidiary network embeddedness was also found to have a positive impact on innovation transfer in the MNE (Dellestrand and Kappen 2012), a subsidiaries ability to create R&D expertise can result in a transfer of this innovation back within the MNE. Subsidiaries which were part of entrepreneurial hubs also enabled the acquisition of knowledge to create new products, services and processes for international markets (Zahra 2015). Innovation was also found to be enabled through strategic alliances with smaller international firms including Born Global firms (Vapola, et al. 2008).

As discussed above, subsidiaries, as well as corporate headquarters, will have their own networks. The MNE’s global network structure is potentially influenced by the resources it allocates to specific subsidiaries or the ability of the subsidiary in vying for resources to pursue its own networks. The challenge for the MNE lies in effectively coordinating these networks to ensure international opportunities flow through the organisation and are acted upon (Andersson, et al. 2002).

**Negative Network Embeddedness**

In exploring how embedded firms are within their networks, the positioning within that network could be viewed as both advantageous as well as potentially hindering opportunities due to deep strong ties limiting the firm's ability to adapt into new international markets, new ways of doing business outside of these ties (Uzzi 1997). Cutting across structural and relational aspects of network development is the potential negative impact of network membership; unproductive relationships can be difficult to exit, or even difficult for actors to acknowledge they exist thus resulting in preclusion from potential more lucrative relationships with other organisations (Gulati, et al. 2000). Not all relationships within networks provide the same power positioning (Huggins, et al. 2012) therefore are open to uncertainty and risk, an area which Coviello and Jones (2006) suggest requires further investigation in network and international entrepreneurship research. As noted above, often, large MNEs maintain existing...
alliance relationships rather than seek new partners. Similarly the long term benefits of
customer and supplier relationships need to be carefully observed as to avoid 'the effects
of relationship inertia, resource misallocation, and negative co-dependency' (Day, et al.,
2013 p. 160). For the sMNE with subsidiaries positioned in a number of international
markets servicing a range of customers, working with a range of distributors, suppliers
and alliance partners the role networks can play in achieving international corporate
entrepreneurial outcomes can be influenced by possible negative positioning within
those networks. For example, an sMNEs subsidiary may be tied into a powerful key
customer limiting their ability to search for new international opportunities in one
particular sector. This was evident in the acquisition of capabilities by firms which
were highly dependent on lead customers in exclusive agreements; the international
innovativeness of the organisation was lower in this type of exchange (Mcevily and
Marcus 2005). Therefore the space an organisation holds within an international
network as well as the specific network they are part of need to be explored to
understand the strategic importance of network positioning and behaviour of
organisations (Gulati, et al. 2000), from both the perspective of potential opportunities,
as well as the inhibiting influences on international opportunity identification and
enactment.
Reach, Richness and Receptivity for the sMNE

As noted at the beginning of this chapter it is often difficult to separate out the influence of structural and relational embeddedness. It is useful to consider the overall structure of the network to understand the organisation’s potential access to resource and opportunity, yet the potential for the firm to act upon the resources and opportunity in its international network, is influenced by the relationships the firm holds with its different ties. The reach, richness and receptivity of networks, describes the network resources impact on organisational performance (Gulati, et al. 2000).

Each aspect is considered to underpin equally the value an organisational obtains from its network and draws on both structural and relational aspects of international network embeddedness. Reach relates to the connectivity within the organisation’s network to a range of diverse and distant partners, thus is concerned with structural aspects of the network. It would not be unreasonable to expect the reach of the sMNE engaged in international trade and investment activity to span a number of countries and possibly sectors, based on subsidiaries held overseas, international distribution contacts, alliance partners, suppliers, etc. Richness relates to the value of resources held across the organisations network and enhances the organisations internal resources. The combination of resources may occur at a bilateral or multilateral level, the latter involving a range of partners’ resources through a variety of ties within the network.

As already discussed in the networks and RBV section above, both subsidiaries and the MNE corporate headquarter location will have a number of ties through which resources are identified and acted upon. Richness draws on the ability of the organisation to add value through the combination of resources an organisation’s networks provides. The role of networks in the sMNE will be an interesting area to explore, to establish to what extent it uses its network to acquire resources not currently held, to meet specific international opportunities identified, drawing on network reach and richness. This leads to the concept of receptivity i.e. the ability of the firm to capitalise on the potential value it holds across its network resources.

The strength and quality of organisational ties will impact on its receptivity to network resources, linking to relational aspects of network embeddedness capital; the trust, faith and commitment of inter-organisational ties at a dyadic level will allow or not allow the exchange of resource, thus impacting on the value created for the firm. In the context of entrepreneurial internationalisation, receptivity can therefore impact on the enactment of
an international opportunity. Not only in the exchange of information but also in the ability to joint problem-solve with inter-organisational ties. Receptivity also links to the reputational perspective of relational and structural embeddedness; if an organisation becomes an expert in its field, shared with other partners like trade associations with peer membership, it can hold a reputational position in that network. Structurally it is strategically positioned to potentially influence policy decision-making, as well as build its reputation with customers and suppliers. For the sMNE, is it able to hold such reputational positions in its networks and how does it influence its entrepreneurial internationalisation?

Different sectors and different international locations may yield different combinations of partners influencing the network capital the organisation has access to, as well as the overall pattern of its international network (Gulati, et al. 2000), and calls are made to explore the influence of different sectors on network research (Kogut 2000). Addressing the aims of this research, this thesis will explore the different influences of type, sector and geographic location on the sMNE.

3.4 Summary

This chapter shows how networks can influence the international entrepreneurial endeavours of the MNE. It has however unearthed an overall paucity of sMNE network international entrepreneurial research. A dominant theme pursued in exploring the role of networks in entrepreneurial internationalisation, is the internalisation of resources of the large MNE, mainly focussing on intra-organisational networks. Little insight exists in the extant literature on the networks of subsidiaries, how they use their network capital and network embeddedness to pursue and act on international opportunity (Andersson, et al. 2002).

Network capital provides a useful conceptual lens with which to combine the human and social capital aspects of networks as a strategic resource to aide international entrepreneurial outcomes. This review demonstrated a lack of consideration of networks as a resource from this perspective i.e. the individual level international trade and sector expertise influencing the range of networks and relationships the firm has access to in entrepreneurial internationalisation. The aim of using the RBV in an international corporate entrepreneurial context is to identify how organisations can create a unique combination of resources to achieve innovation, international strategic renewal and international corporate venturing. The research identified in this review, gave little
insight into what constitutes a unique combination of resources for the MNE and how accessing its network resources this resulted in international entrepreneurial activity. This thesis aims to specifically address this gap by focussing on the international entrepreneurial outcomes of international network engagement.

A further paucity of research was identified in the lack of consideration for potential sector and geographical implications on the network embeddedness of the MNE and its subsidiaries. This is surprising given the seminal work in international business studies on the role of subsidiaries from a locational advantage perspective. Sector and geographical perspectives influencing the role of networks for the sMNE will be considered in this thesis.

Although some studies recognise networks are dynamic, international network evolvement is rarely explored. How network capital and network relationships develop overtime, thus influencing the resources available to the sMNE and also the overall network position they hold is often missing in network literature.

In this chapter, network embeddedness is identified as way to understand how an MNE through its position in a network and the relationships it holds, can create a competitive advantage in international markets. Beyond innovation, little is discussed in extant network literature on how the MNE utilises its networks from a network embeddedness position. Again when considered, the large MNE is the focus. The types of ties in the MNE subsidiary network are alluded to, but the types of ties in external networks were often limited to innovation partners (Andersson, et al. 2002) and occasional discussion on competitor (Xu, et al. 2013), customer and supplier ties (Mcevily and Marcus 2005). It is important in addressing the aims of this thesis that the types of ties are considered in more detail, in order to understand their potential influence on the network embeddedness of the sMNE and thus the influence on achieving international corporate entrepreneurial outcomes.

Another underexplored area was that of the negative influences of network embeddedness. A sMNE may find itself in a redundant relationship that no longer yields international opportunity. In what circumstances that may occur and how the sMNE addresses this negative network position, will be explored in this thesis.

A surprising further key gap in exploring the role of networks from both the network capital and network embeddedness perspective was a lack focus on acting upon
international opportunity to achieve international corporate entrepreneurial outcomes. Surprising, as early scholars specifically make the link between networks as enablers of entrepreneurial opportunity (Birley 1985). This thesis aims to address this specific gap, by exploring the influences of international entrepreneurial capabilities on the role of networks and outcomes in entrepreneurial internationalisation, as presented in the conceptualisation in Figure 3.5.

Figure 3.5 draws on the literature discussed in Chapters Two and Three, conceptualising international entrepreneurial capabilities and their influence on the role of networks and international corporate entrepreneurial outcomes.

Each level in Figure 3.5 is considered to have some influence on the other, however each level is seeking to understand how the component and collective parts finally influence the international entrepreneurial outcomes of the sMNE.

Level three in the conceptualisation is concerned with the firm level international entrepreneurial capabilities, an augmentation and adaption of international entrepreneurial culture (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012) and international entrepreneurial orientation (Miller 1983; Covin and Miles 1999; Lumpkin and Dess 1996; Covin and Lumpkin 2011; Covin and Miller 2014). To address research aims two and three in more detail, level two of Figure 3.5, the role of networks as a strategic resource, is considered drawing on network capital and network embeddedness (Ghoshal and Bartlett, 1990; Gulati, et al., 2000; Andersson, et al., 2002; Huggins, et al., 2012; Gulati, et al., 2011). At this level the sMNE is considered to augment resources from its external networks to act upon international opportunity. Network embeddedness allows the exploration of the combinatorial aspects of position and relationships the sMNE possesses. It has the potential to achieve international entrepreneurial outcomes. Here research aim three is specifically addressed, to dig deep into the interconnectedness of structure and relational ties of the sMNE, to explore its influence on achieving international entrepreneurial outcomes. Level one denotes the international entrepreneurial outcomes of innovation, international strategic renewal and international corporate venturing (Sharma and Chrisman 1999; Covin and Miles 1999). Here consideration is also given to the mutual influence of each outcome, for example how international corporate venturing may result in increased innovation opportunities, potentially enabled by level one capabilities and level two strategic resource.
Chapter Four now presents the research methodology used in this thesis, and shows how the conceptualisation in Figure 3.5 supports the overall approach in exploring the international entrepreneurial capabilities and role of networks of the sMNE.
Figure 3.5: Conceptual framework to research international entrepreneurial capabilities influence on the role of networks and international corporate entrepreneurial outcomes
Chapter Four: Methodology

4.1 Introduction

The research questions for this thesis are as follows:

1. How and in what ways can entrepreneurial internationalisation promote international corporate entrepreneurial outcomes in the small MNE?

2. How and why networks are created in the small MNE, who creates them and what role might they play in achieving international corporate entrepreneurial outcomes?

3. How and in what ways might network embeddedness be viewed as a strategic resource to the small MNE, to achieve international corporate entrepreneurial outcomes?

In addressing the above research questions, the previous two chapters identified a number of gaps in knowledge relating to the entrepreneurial internationalisation of the sMNE. Little is understood in extant international entrepreneurship literature on the international entrepreneurial capabilities of the sMNE. Due to the predominance of studies on the large MNE, often coordinating the activities of many international subsidiaries, the focus of such studies was on the internalisation of resources or the internal dissemination of information within the intra-organisational network. Few studies considered the subsidiaries and corporate headquarters’ engagement with external organisations.

Exploring the role of networks from a resource perspective, network capital and network embeddedness again tended to focus on the large MNE. Interesting questions arose on how the sMNE may utilise its own networks and network position in identifying and acting upon international opportunity. Although networks were recognised in the literature as a strategic resource, few studies sought to establish how networks themselves could be viewed as a strategic resource. This thesis addresses this gap by considering the range of ties held in the sMNEs network along with the relationships they have between these ties. Therefore, the thesis addresses the question of how and in what ways network capital and network embeddedness may influence international entrepreneurial outcomes. An important gap to consider here is the
negative influence of network embeddedness for the sMNE. Generally this is an underexplored area, and poses questions on what opportunities may have been missed or what unintended consequences there may be from being negatively embedded in a network.

International corporate entrepreneurial outcomes of innovation, international corporate venturing and international strategic renewal were found to focus mainly on the large MNE and few studies explore how such outcomes are achieved by the MNE. Each of the research aims of this thesis is concerned with international corporate entrepreneurial outcomes; seeking explanations as to how and in what ways the sMNE utilises its capabilities and in particular its network capital and network embeddedness to achieve these outcomes.

Consequently international entrepreneurship and strategy scholars have called for more studies to examine the different types of international entrepreneurial opportunity activities of the more established firm, addressing how firms behave and why (Dess 2003; Dimitratos and Jones 2005). This case study approach addresses this call.

In this thesis a critical realist methodology is employed on a case study of a sMNE. This approach was adopted because it allowed the exploration beyond and below the surface appearance of organisational strategies and practices (Sharpe 2018) to explain how individuals, structures and firm level behaviours impact on international corporate entrepreneurial outcomes. As a way of introducing the critical realist approach adopted in this thesis, Figure 4.1 represents the structure of causal explanation used in this case study research, demonstrating the main theoretical insights used in seeking to explain how international entrepreneurial capabilities and networks influence international corporate venturing, innovation and international strategic renewal. This is reflected upon again in section 4.5 when addressing the theoretical insights supporting the case study research strategy.

The chapter now briefly demonstrates how case study research has been used as an approach in underexplored areas of international business and international entrepreneurship research. This is followed by a detailed account of the case study research strategy employed in this thesis and follows the phases of the case study process and reflective questions presented in Table 4.3, an adapted approach of Piekarri et al. (2010) and Ryan et al. (2012).
Figure 4.1: Structure of causal explanation
4.2 Case study research in international business and international corporate entrepreneurship

In designing the case study research for this thesis, literature discussing the use of cases in international business and international entrepreneurship was reviewed.

Case studies have successfully been used in a range of qualitative international business studies (Piekkari, et al. 2009); empirical observations of case firms were used in seminal internationalisation process research (Johanson and Vahlne 1977; Johanson and Vahlne 2003; Johanson and Vahlne 2009). Within the field of international entrepreneurship case study research has shown to be a useful approach in exploring MNE activity and networks (Ghoshal and Barlett 1988; Coviello and Munro 1997; Coviello 2006; Birkinshaw, et al. 2005; Harris and Wheeler 2005; Sigfusson and Harris 2012; Moensted 2010; Zahra, et al. 2000; Dimitratos, et al. 2014).

It is interesting to note that whilst there has been increased discussion in the international business literature about the potential of critical realist underpinnings to case study research (Easton 2010; Morais 2011; Ryan, et al. 2012) there is still a paucity of research that has drawn on this in empirical research.

The critical realist approach underpinning case study design and discussion of findings is considered as innovative practice by Piekkari, et al. 2010 in their review of industrial marketing case study research. However, relatively few studies were located in international business, human resource and industrial marketing. International business examples include an ethnography of an MNE (Sharpe 2005) and MNE and network theory (Morais 2011). The use of critical realism case studies as a methodological approach to theses applied to inter-organisational relationships and networks and collective agency are explored from a human resources study (Vincent 2008). A number of studies were located in the industrial marketing domain and the critical realist approach was found to lend itself to network and business relationship research (Easton 2010; Ryan, et al. 2012), as it seeks to explain the influence of social structure and human agency.
"A critical realist case approach is particularly well suited to relatively clearly bounded, but complex, phenomena such as organisations, inter-organisational relationships or nets of connected organisations." (Easton, 2010 p. 123)

This review of existing critical realistic studies, although few in number, supports the approach taken in this thesis to address the research aims of understanding the role of networks in entrepreneurial internationalisation of the sMNE. It allows for a greater understanding of the human agency, structure and processes at play through examination of international entrepreneurial capabilities, network capital and network embeddedness to achieve international corporate entrepreneurial outcomes.

The case study approach outlined in the following sections allows the investigation of the international entrepreneurial behaviours and activities of the sMNE, to provide a deep and rich explanation of the identified international corporate entrepreneurial outcomes. For example, as can be seen in Table 4.1, this deep and rich explanation is explored through investigation of how the sMNE is proactive in its search for new international opportunity. Exploring how networks are continually sought in global markets to access this opportunity, how the sMNE views its network capital, position and relationships within its network to access and enact upon on international opportunity.

Philosophical underpinnings are considered absent or weak in a number of international business related cases. This study clearly sets out the critical realist approach reflected in each stage of the design of the research. Case studies are also questioned on their ability to theorise, the approach taken here does not aim to theorise based solely on this research but suggests as more critical realist approaches are used in the field, entrepreneurial behaviours and activities and network embeddedness in similar settings can be examined to move towards theoretical advancement in the international corporate entrepreneurial field. Finally, the robustness of case studies to date, were queried in their use of mainly interviews as the data source. Again this study addresses these points by using multiple data sources as outlined below. These points are also represented in Table 4.1 in the phases and reflective questions associated in designing this case study.

Case study research in the field of international business has been criticised for their lack of theoretical underpinning (Piekkari, et al. 2009; Welch, et al. 2010). The critical
realist approach taken in this thesis addresses this call through as the author is sensitised to international corporate entrepreneurship literature as outlined in Figure 4.1.
<table>
<thead>
<tr>
<th>Phases of case study process</th>
<th>Key decisions/reflective questions</th>
<th>Approach</th>
</tr>
</thead>
</table>
| Designing critical realist research  
Ontological realism  
Epistemic realism  
Abductive realism (Ryan, et al., 2012) | How is the view taken on networks and entrepreneurial outcomes as real affect observations of them?  
Does knowledge of an organisation’s international entrepreneurial capabilities and networks relate to the empirical observation?  
How can our research be designed for higher levels of theoretical sensitivity? | Networks and international entrepreneurial capabilities are viewed as legitimate objects of observation. They can influence events to occur.  
There is no simple correspondence between knowledge and reality as knowledge is theory laden (Ryan, et al., 2012).  
Theoretical lenses of international entrepreneurial culture, international entrepreneurial orientation, international corporate entrepreneurship, network literature sensitised the author in the collection of data and analysis but was not restricted to only these themes. |
| Relating theory to empirical data  
Best practice*  
- Clarity of research purpose: exploratory, explanatory, descriptive  
- Theory development prior to data collection | Research purpose | Explanatory case  
Fig 3.5 emanating from Chapter Two and Chapter Three represents the theoretical conceptual framework in meeting the research aims. |
| Case selection: choosing and justifying empirical cases  
Best practice*  
- Decision on use of single or multiple cases prior to data collection  
- Choice of single vs. multiple case design driven by research purpose  
- Sampling strategy - purposeful sampling | Number of case studies  
Sampling strategy | Single case based on locating in depth understanding of influences of international entrepreneurial capabilities and networks.  
Purposeful sampling used to identify the case, sMNE, demonstrating |
<table>
<thead>
<tr>
<th><strong>Use of literal or theoretical replication</strong></th>
<th>international entrepreneurial capabilities, was engaged in a range of international trade and investment activity.</th>
</tr>
</thead>
<tbody>
<tr>
<td>• Specification of unit of analysis: holistic or embedded</td>
<td></td>
</tr>
<tr>
<td>• Longitudinal or cross-sectional designs</td>
<td></td>
</tr>
<tr>
<td>Selecting and investigating appropriate data sources Best practice*</td>
<td>Multiple sources of evidence (what kinds of data?) Interviews, documentary evidence - investor presentations, company reports, commissioned research reports, news items. Company databases - FAME LinkedIn International entrepreneurial outcomes for international trade and investment activity, the events, allow explanation of influences up to the events. Human capital influencing, capabilities and networks. Structures and relationships in networks.</td>
</tr>
<tr>
<td>• Use of multiple data sources to ensure triangulation and convergence on a single explanation</td>
<td></td>
</tr>
<tr>
<td></td>
<td>What role do events play? Beyond events what should the researcher be drawn to?</td>
</tr>
<tr>
<td>Analysing findings and data reduction Best practice*</td>
<td>Method/process of data analysis Possible causal mechanisms? Nvivo was used to code and analyse data. All interviews and documentary evidence were held in Nvivo. Case data analysis - following Miles and Hubermann (2014) Consideration of conditions, situations influencing on what didn't or could have happened in terms of international entrepreneurial</td>
</tr>
<tr>
<td>• Application of analytic techniques e.g. pattern matching to ensure systematic approach</td>
<td></td>
</tr>
<tr>
<td>• Use of initial theoretical propositions to steer appropriate analytical strategy</td>
<td></td>
</tr>
<tr>
<td>Ensuring quality of data</td>
<td>Method of verification</td>
</tr>
<tr>
<td>-------------------------</td>
<td>------------------------</td>
</tr>
<tr>
<td>Best practice*</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Construct validity, external validity, internal validity, reliability</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Writing up and presenting case data</th>
<th>Presentation and discussion of findings</th>
<th>Followed SHU doctoral thesis requirements and SHU ethical guidelines.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Best practice*</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Choice of report structure should be aligned to research purpose and case audience</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Case report may not need to include rich narrative</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Source:** Adapted from Piekarri et al (2010), Ryan et al. (2012)
4.3 A Case Study Research Strategy

Scholars acknowledge it is difficult to provide one single definition of a case study research strategy, given the wide forms it takes across business and management research (Piekkari, et al. 2009; Easton 2010; Fletcher and Plakoyiannaki 2011). Alternative standpoints include positivist (Eisenhardt 1989; Eisenhardt and Graebner 2007) and critical realist (Morais 2011; Sharpe 2018). Based on the different standpoints for the use of the case study, this thesis adopts the broad definition presented by Piekarri et al. 2009 in their exploration of cases studies in international business.

‘a research strategy that examines, through the use of a variety of data sources, a phenomenon in its naturalistic context, with the purpose of “confronting” theory with the empirical world’ (Piekkari et al. 2009, p. 569).

However, the case study is largely viewed as a research strategy rather than just a method of investigation (Hyde 2000) and provides the opportunity to fully consider the context of the phenomenon under study (Robson 2002). It therefore allows for a holistic, deep and meaningful investigation of organisation activities (Yin 2009), in this thesis the international entrepreneurial capabilities and networks for international trade and investment activity. Piekarri et al (2009) also suggest case study research may take a particular approach according to the discipline area and explore case studies in the field of international business. In seeking the explanation of international entrepreneurial activity to achieve international entrepreneurial outcomes, this thesis similarly supports the use of a case study research strategy in achieving its research objectives. The case study research approach adopted, also allows for the unpicking of the interrelationships of the sMNE within the networks they use to engage in international trade and investment activity, in seeking out new international markets and sources of supply. This unpicking seeks to explain how the capabilities and processes fit together to achieve international corporate venturing, innovation and international strategic renewal for the sMNE. In case research, observations of these capabilities and processes are undertaken through the constant movement through the different phases of the research (Verschuren, 2003; Easton, 2010).

The strategy employed for this study is set out below and Figure 4.2 outlines the overall research approach taken.
Figure 4.2 Critical realist case research strategy

A 'best practice in practice' in case design is presented by Piekarri et. al (2010) and suggests a number of phases to case study design. Ryan et al. present a 'critical research spiral' (Ryan, et al., 2012 p. 303) focusing on design, investigation, analysis and explanation and the structure of causal explanation along with a series of reflective questions for the critical realist researcher to consider. For the purpose of this thesis, these approaches have been augmented and presented in Table 4.1. In this table, a response to the decisions made and the reflection questions raised are summarised in the approach column and expanded upon in each of the remaining sections of this chapter. Each phase is now explored in more detail starting with the philosophical underpinnings of this case study approach.
4.4 Philosophical Underpinnings

A critical realist approach is taken in this research study, whereby explanation is the primary concern, specifically why and how organisations utilise networks in the international entrepreneurial opportunity process to achieve international entrepreneurial outcomes.

Critical realism supports an objectivist ontology whereby phenomena exist independently of whether research is undertaken or not (Sayer, 1992 1999; Gill and Johnson, 2010) social forms pre-exist and as such are objects for investigation, they are required for any 'intentional act' and it is the causal powers of these social forms which establish reality (Bhaskar, 1998 p. 27). Therefore the social world is produced and reconstructed by the actions of participants (Elder Vass 2010, Archer et al. 2013). As shown in Figure 4.1, the actions of participants, actors in the organisation, occur in the international entrepreneurial capabilities of the organisation, in the creation of networks and the relationships built demonstrate through the sMNEs network capital and network embeddedness.

In critical realism, reality constitutes the empirical (what is perceived to the case), the actual (events which occur in space and time) and the real (mechanisms and structures which generate the actual along with the empirical) (Bhaskar 1975). The empirical is a subset of the actual which in turn is a subset of the real, as such social phenomena cannot be separated from the environment. However, the pre-existence of social forms i.e. entities and structures does not pre-determine events, 'powers may exist unexercised, and hence that what has happened or been known to have happened does not exhaust what could happen or have happened' (Sayer, 2000 p. 12). This acknowledgement allows us to understand how organisations may engage in international corporate entrepreneurial activity who may currently not be; it allows us to 'understand how we could be or become many things which currently we are not' (Sayer, 2000 p. 12). This supports the contribution of research using a critical realist approach in informing practice; in this case in supporting the sMNE to achieve increased levels of international trade and investment activity.

Therefore 'reality is a stratified 'open system' of emergent entities' (Edwards, et al. 2014); these entities can be individuals, organisations, inventions and they are the basis upon which critical realists develop explanation of events. As shown in the bottom box of Figure 4.1, entities in this case study include the sMNE, the structure within it,
divisions, subsidiaries, and it includes the networks the sMNE is part of influencing international trade and investment activity. Entities include the actors in the organisation influencing the international entrepreneurial capabilities present in the sMNE and the networks created. Entities which have causal powers and liabilities, and interact in an 'open system' therefore must be explored alongside their environment. Entities are stratified, have different levels within their structure, however the entity 'makes a difference' in its own right. The critical realist ontological perspective aligns to the observations of networks, actors and organisation structure as stratifications of the sMNE i.e. the entity. The sMNE is therefore not just a sum of individual's knowledge and skills, the resources it holds and the networks it is part of; these stratified levels interact in an 'open system' to create different properties greater than the sum of the parts i.e. are emergent. The sMNE may therefore have individuals with specific international trade experience and skills developed from trading in different international locations who interact with other individuals displaying international entrepreneurial behaviours. The combined outcome of their interactions is greater than those individuals acting alone. The critical realist approach therefore allows the exploration of the combined value of networks and the resources an organisation holds, by viewing the entity at different levels. Network capital, human and social capital are concerned with network structure and relationships within that structure, and as critical realism views reality as stratified and entities as collective relationships, the critical realist approach directly aligns to a network based thesis.

A causal mechanism is viewed as 'the ways of acting of things' (Bhaskar 1978: p. 14) or 'deep generative processes and structures' (Edwards, et al. 2014, p. 203); the way in which the sMNE utilises its international entrepreneurial capabilities, how it utilises its network resource combined with the structure of its network and the relationships it holds in its network (network embeddedness) in certain contexts will expand our understanding of how the sMNE achieves international corporate entrepreneurial outcomes.

Context is important in critical realism, and is defined as 'the contingent conditions that, in combination with a causal mechanism, produce an outcome'. As such critical realism provides a 'contextualised explanation' (Welch, et al. 2010, p. 741). In this research the author wanted to understand how the sectors in which the companies operated influenced the enactment of international opportunity; did the environment influence
how they interacted with international corporate entrepreneurial outcomes of international venturing, international strategic renewal and innovation?

Epistemologically a critical perspective enabled a deeper exploration (Sayer, 2000) of the international entrepreneurial activities of the case firm in their use of networks to achieve international corporate entrepreneurial outcomes. The critical realist approach is ultimately concerned with the question "what caused these events to happen?" (Easton 2010). This allows the unpicking of events to understand the 'pattern of events' (Sayer 1984); starting with the international corporate entrepreneurial outcome associated with international trade and investment activity to establish the entities involved i.e. the organisation, their networks, their human and social capital and the causal powers and liabilities they possess i.e. network embeddedness as well as the conditions/context in which the entities operated i.e. the international sector, the country impacting on the event. Acquisitions, distributor agreements, licensing, outsourcing are different types of international trade and investment activity and are constituted by the behaviour of organisations and their networks engaged in international corporate entrepreneurship.

In this thesis the 'entity' is the sMNE and following the stratified critical realist perspective is viewed as not only layered by its organisation structure i.e. sMNE with functional divisions and/or geographic divisions, but also by the layers of networks it possesses. The 'entity' i.e. the sMNE is therefore complex, comprising of different networks operating across different geographic environments and presents a range of relations to be explored (Elder Vass 2010). The relational outlook of a critical realism perspective therefore allows a more detailed exploration of how organisations and their networks operate in a connected environment. In viewing the organisation as a stratified entity, critical realism allows the exploration of the combinatory factors of the different international entrepreneurial capabilities of the sMNE. The aim however is to determine the 'pattern of events'. How do the combinatory aspects of international entrepreneurial capabilities, the firm’s networks capital and network embeddedness give rise to innovation, international corporate venturing and international strategic renewal?

Critical realism also acknowledges human agency as a mediator to the causal powers of entities (Bhaskar 1998); human capital presented in this thesis as part of network capital and of the international motivation of the sMNE and allows for a more detailed explanation of human agency. This approach expands our understanding of how the sMNE is able to act upon international opportunities by observing the causal powers
and liabilities at play, for example the way in which the sMNEs international networking orientation creates access to certain networks, thus building relationships with contacts across international markets; what power does the subsidiary possess in the development of an international opportunity through its own networks? Does it have the ability to act autonomously? What liabilities are at play if a network hinders an organisation from acting upon an international opportunity due to the dominant role of existing customers, whereby exiting the relationship in favour a new potentially more profitable opportunity will have a negative impact on their long term client relationship?

Can structural holes explain the causal liabilities impacting on an organisation’s ability to identify and act upon international opportunities? Thus, the causal powers and liabilities associated with critical realism are aligned to the exploration of network embeddedness; how does structural and relational embeddedness enable or hinder the international entrepreneurial opportunity process? The number of ties an organisation has across international markets, the nature of those ties, the dyadic relationships between actors in those networks is viewed from the perspective of 'relations' and the resultant influence such network membership brings. The way, in which causal powers are combined across any given entity, impacts on the effects of the causal mechanisms at play.

As critical realism acknowledges the distinctness of the behaviours of agents and structures, as well as the importance of the relations between them in the development of events, it allows for deeper insight into why and how particular actors choose specific networks to achieve international corporate entrepreneurial outcomes. It also enables a deeper understanding from a collective perspective i.e. emergence, that the activities of individuals, the networks in which they operate as part of a sMNE are greater than the sum of the parts.

The critical realist approach in this case study therefore involved 'looking upwards' to establish the range of contexts i.e. the range of geographic markets the case organisation explored for international opportunities, as well as the complex challenges faced by a depressed oil and gas sector and new renewable energy sector which impacted on the patterns of behaviour of the organisation. It also involved 'looking downwards' on how the case organisation comprised a complex set of interacting sub-units i.e. the case organisation companies, divisions and networks (Easton 2010; Vincent and Wapshott 2014).
Overall critical realism supports the exploration of the sMNE, comprising different levels of networks, operating in a global, diverse and complex environment to achieve international corporate entrepreneurial outcomes. This approach allows a deep and rich explanation of 'a pattern of events' of the sMNE in entrepreneurial internationalisation.

4.5 Drawing on theoretical lenses to inform the case study research

Synonymous with a critical realist approach, the literature review undertaken in the previous chapters was conducted to identify the more realist theorising of international corporate entrepreneurship and networks, to identify mechanisms expected in this field and the contexts in which it is best to be studied and finally to identify the gaps concerning the interplay of mechanisms and contexts (O'Mahoney and Vincent 2014). The key theoretical concepts drawn from the conceptual framework are presented in Figure 4.1 and draw on the literature presented in Figure 3.5 of human, social and network capital, international entrepreneurial capabilities of international entrepreneurial culture and orientation, network embeddedness and international corporate entrepreneurial outcomes.

At the level of entity, theoretical insights into the organisation structure, the actors and the networks the organisation is part of are considered. At the causal powers and liabilities level, international entrepreneurial capability, network capital and network embeddedness concepts are considered to explore the potential causal mechanisms at play in the entrepreneurial internationalisation of the sMNE. Conditions are explored across the international entrepreneurship literature, in relation to the global environment in which the sMNE is operating along with their sectoral focus. Sensitising of literature at events level, involves the international corporate entrepreneurial outcomes of international venturing, innovation and international strategic renewal.

Figure 4.3 below demonstrates the unpicking of potential causal powers and liabilities, sensitised by literature pertaining to the dimensions of international entrepreneurial capabilities, network capital and network embeddedness. At the entity level, the actors involved are situated in the headquarter location (the group CEO) and in subsidiary (the subsidiary MD), both with their own level of human capital, they are connected through their belonging to the organisation; they are part of the overall structure and composition of the organisation. Their ability to act upon international opportunity in using networks to access new markets is considered at the causal powers and liabilities level, here causal mechanisms are being explored. In this example, the sMNE Group
CEO, influences the international resource coordination of the Group, leading the extent to which the sMNE subsidiary can engage in international networking and ultimately how it then positions itself in their host market. The human capital of the subsidiary MD can also influence the international networking orientation of the subsidiary, prior international trade experience influencing the identification of potential new networks or influencing the position the organisation is able to hold in its network through the subsidiary MDs relationships with local suppliers.

**Figure 4.3: Example of sensitised theory used in causal explanation**

The following section now discusses the case selection process.

**4.6 Case Design and Case Selection**

A single case is used in this thesis as part of an intensive research strategy; focussed and in-depth (Karlsson and Ackroyd 2014), thus allowing for greater explanatory research (Morais 2011). This allowed for the presentation of a 'rich story' (Piekkari, et al. 2009) and 'thick description' (Fletcher and Plakoyiannaki 2011) of the international entrepreneurial capabilities and role of networks in the sMNE. In this thesis, such rich description of how specific ties were created, by whom and their influence on the position the sMNE was able to accrue in its global markets.
**Sampling and the Single Case**

Similar to other studies focusing on smaller more established organisations engaged in global operations, definitional issues arose in the initial stages of this research (Welch, et al. 2010; Dimitratos, et al. 2010).

Following the best practice associated with case study research (Ryan, et al. 2012), purposeful sampling was undertaken in a pilot study on a sample of 15 mid-sized firms established firms to explore the key themes associated with more established firms displaying the characteristics of an internationally oriented firm. For the pilot, the target sample were all located in the Sheffield City Region and had between 50 to 499 employees and less than £500 million turnover, taking into account EU, Grant Thornton and BIS research definitions as follows:

- The Grant Thornton survey (2011) (2015) of the medium-sized business (MSB); 50 to 499 employees, and;
- £25 million to £500 million turnover in the BIS (Business, Innovation and Skills) and Middlesex University (2011) research into mid-size business growth.

The sample companies were identified using the FAME database, LinkedIn and contacts via UKTI; 60 companies were contacted directly requesting a 45 minute interview either by phone or face to face. Fifteen contacts agreed to take part in the research and scoping interviews were undertaken to explore the concept of international corporate entrepreneurship within the mid-sized firm and the nature of its international trade and investment activity.

Sensitised from the literature and based on observations made during this initial investigation, the Titanium Group was identified as an unusual case compared to the other pilot companies, unusual in terms of the nature of their entrepreneurial internationalisation. The Titanium Group was also a smaller MNE, with long established roots in traditional manufacturing and engineering-based activity, yet they had expanded via a range of international corporate entrepreneurial activity. This activity included diversification into the defence sector, development of new engineering services and new product development as well international acquisition. The Group through their divisional structural also included the strategic operations of three similar divisions servicing the oil and gas sector and one emerging division in the renewables sector. Both Titanium Plc and Silver Ltd were part of the pilot study; during
the interviews the author identified via the Group CEO and the Silver Ltd MD their engagement in a range of networks which supported both domestic and international market expansion.

Having undertaken the scoping interviews, it was apparent that a single case study would be the best approach to answer the research questions proposed by this thesis. A key aim of this thesis was to explore how international entrepreneurial capabilities are manifested in the sMNE. The sMNE is presented as a specific type of MNE with potentially less complex organisational structures in place. A type of MNE where the international entrepreneurial capabilities of the subsidiaries may be influenced by the human capital of the senior leadership teams in ways not currently explored in extant international business and international entrepreneurship literature. As such, the choice of a single unusual and critical case (Yin, 2009 and 2013) allowed for a deeper investigation into the role of different actors in each of the divisional companies in the pursuit of international entrepreneurial opportunities. It also allowed for the investigation from a number of principal actors within the same context and it provided an opportunity to explore the sMNE in a bounded context. Finally, this approach allowed the analysis to consider the role conditional factors such as the sector influences in the oil and gas had on network embeddedness as well as allowing for different international entrepreneurial events to be explored in detail in the context of the sMNE.

The group has 13 UK based wholly owned subsidiaries and five internationally based wholly owned subsidiaries, represented by six companies structured across four divisions (see Figure 4.4). It also has a 40% stake in a US oil and gas equipment company. It is not the typical type of MNE often researched in international business and international corporate entrepreneurship studies in that it is at the smaller scale of MNEs with 290 employees in total and in 2015 achieved £55.6 million revenue of which £26 million was attributed to geographic markets outside of the UK.

| Table 4.2: Summary of turnover and employees for the Titanium Group and Companies |
|-----------------------------------------------|----------------|----------------|
|                                              | Turnover 2016  | Employees 2016 |
| Titanium Group                               | 36,000,000    | 290           |
| Aluminium Ltd                                | 5,140,000     | 40            |
| Iron Ltd                                     | 4,200,000     | 30            |
The organisational structure and size presented an interesting subject for further study; an MNE at the smaller end of the scale having grown through acquisitions and had sales offices and distribution networks located in international markets. Titanium Plc therefore provided an interesting and different case (Yin 2009), not the average firm (Andriani and McKelvey 2007) for its size having engaged in diversification, growth through acquisition and international locations. It was also interesting in that it was not a new company, it did not fall into the typical firms often associated with international entrepreneurship studies. This drew the author to the potential exploration of entrepreneurial internationalisation of the sMNE.

Figure 4.4: Titanium Plc Structure
4.7 The Case Boundaries

The case provides a boundary for the observation of particular processes (Karlsson and Ackroyd 2014). Confusion is cited in case study research of the distinction between the unit of observation and the unit of analysis (Fletcher and Plakoyiannaki 2011; Ryan, et al. 2012). Ryan et al (2012) present the unit of observation as

"the ontological basis for what kinds of data a critical realist researcher needs to concern themselves with in order to be philosophically consistent." (Ryan, et al. 2012 p. 305)

The unit of analysis is presented as the detailed nature of this data and can include 'actions, perception and decisions'. The unit of analysis is context specific and dependent on the research objectives of any particular study (Fletcher and Plakoyiannaki 2011).

In this thesis, the unit of observation is the sMNE senior management teams involved in international trade and investment activity. The unit of analysis is the international entrepreneurial capabilities and the nature of networks from the perspective of the sMNE. This followed a similar approach to units of analysis used in international business studies. Learning modes were the unit of analysis in a study of subsidiaries across six international countries (Dimitratos, et al. 2014). The network from the perspective of the INV was the unit of analysis in a study on exploring network dynamics and the units of observation were the managers, owners and founders associated with the INVs networks (Coviello, 2006; Fletcher and Plakoyiannaki 2011).

Difficulties international business scholars have faced in previous studies lie in the identification of these boundaries. Piekarri, et al. (2009) refers to the challenges faced by Birkinshaw et al (2005) in their study where interrelated concepts of subsidiary initiative, resources and innovativeness of the subsidiaries are explored. The evolutionary and reflective process associated with the identification of the unit of analysis in case research (Piekkari, et al. 2009) was also reflected in this thesis. The movement from human capital, through international entrepreneurial orientation and culture, to networks and outcomes occurred throughout the case research. Following the pilot the author was however more focussed on the networks and capabilities influencing these networks as well as the outcomes these processes influenced. Therefore the looking up and looking down in this case research resulted in the
international entrepreneurial capabilities and the nature of networks as the unit of analysis.

4.8 Case Data Selection and Accessing Participants

Interviews were the main source of data and 21 interviews were conducted in total, two of these during the pilot study. Other data sources used included company reports, Group commissioned third party independent research, investor presentations, industry news, LinkedIn, Group company and Divisional company websites and FAME databases were used in the case development. The next sections considers documentary evidence, how the participants were selected, accessed and how the interviews were managed.

Documentary evidence

The documentary evidence used in the course of this study included investor presentations, press releases, and company reports, which were accessed via the company website.

The documentary evidence held on the company website provided a useful source to establish the organisation structure, key products and services, target customer segments as well as the overarching strategic intentions of the Titanium Group. For example, analysis of the company reports denoted the strategic vision of the organisation to seek synergies in target markets across their divisions, diversification and growth through acquisition. This formed part of the preparatory work before interviews took place as potential lines of inquiry and to provide the author with insight into the context of the international trade and investment activity of the different divisional companies. Key conditional influences identified in investor presentations and in the company reports provided insight into the role of the oil and gas sector in the entrepreneurial internationalisation of the organisation.

The documentary evidence also allowed for the validation of events identified in the participant interviews for example the diversification into the nuclear sector, expansion into the naval sector and developments in the renewables sector. The company also provided third party market intelligence reports they had previously commissioned. The Group Business Development Director outlined their strategic plan during their interview, however due to the sensitivity of information held within the report a hard copy was not provided for analysis.
**Accessing interview participants**

In the initial pilot, accessing participants involved emailing the author’s own contacts of companies engaged in international trade and intermediaries, including UKTI and the Chambers of Commerce. The intermediaries provided lists of their main contacts at the company, who were mainly senior executives or those engaged in international trade. As the initial sample did not yield sufficient participants FAME and LinkedIn were used to identify companies in the target region. Connections were requested via LinkedIn and emails were sent to participants requesting their support in this research. Once their involvement was agreed, the participants were asked to take part in either a telephone or face to face interview.

As discussed earlier in this section the Titanium Group was selected through observations made in the initial pilot study. The author contacted the Group CEO via email with a proposal for Titanium Plc and the Division companies to be the focus of the case study research. A follow up email was sent and the Group CEO agreed for his Group to be part of the research and suggested a further meeting was undertaken with himself and the Group Business Development Director to discuss the research objectives and select the appropriate interviewees across the Group. This follows the suggestions made in interviewing elites where researchers are advised to locate an ‘influential sponsor’ who can assist in endorsing engagement of others in the organisation (Welch, et al. 2002 p. 614). In addition, accessing participants in a sMNE is potentially easier than trying to gain access to a large MNE and their subsidiaries.

At this meeting potential contacts were discussed in relation to covering each company within the group and their appropriateness with regard to the key theme of networks and international trade and investment activity. Each contact held a senior position in the company, held functional responsibility of strategic influence to the sMNE, relative industry experience, involved in a range of networks and engaged in international trade related activity and was therefore considered a corporate elite in this thesis (Welch, et al. 2002). The author at this point had not considered external Board members to be included in the participants, however the Group CEO suggested interviews with a selection of non-Executive Directors and the Chairman. This proved to be an interesting dynamic in considering the role non-executives play as part of the international entrepreneurial capabilities of the sMNE (Basuil and Datta 2017).
The Group CEO also recommended each participant was sent the objectives of the research prior to the meeting; the initial research proposal was refined and sent to each participant in an email to arrange a suitable date (see Appendix 1 for the proposal). The Group CEO assigned responsibility to the Group Business Development Director to confirm the contacts with the author and provided 19 contacts across the Group including representatives in overseas locations. The Group Business Development Director became the main point of contact at the company at this point and contacts were only provided once the author and the doctoral supervisors signed non-disclosure agreements (NDA). The Group Business Development Director also informed all participants that they would be contacted by the author prior to being contacted to arrange the interview. The author then contacted each participant to arrange an interview at a location and time suitable to them. At least two senior contacts were interviewed from each Division. Participants were based in the UK, Germany, USA, New Zealand and Canada; those located internationally and two contacts in the UK were interviewed by telephone and the rest were face to face interviews.

The ability to locate the 'influential sponsor' eased the process of accessing the participants and the engagement of the Group elites in the research. It is important to point out at this point the author was mindful of the potential influence of being asked by their Group headquarters to take part in this study may have had on how the interview should be managed and is reflected upon in later sections on reflexivity. However, the experience of the author having conducted a number of elite interviews in previous research studies, enabled early identification of participants ease with providing accounts of personal professional histories and themes associated with the international entrepreneurial activities of the company they worked in and relations with the Titanium Group. Another point to raise here from a participant access perspective and which links to the analysis of international entrepreneurial capabilities discussed in Chapter five, was that little evidence of 'power' struggles was identified between the subsidiary contacts and the corporate headquarters as suggested in extant MNE subsidiary studies (Birkinshaw and Fry 1998; Bouquet and Birkinshaw 2008). This again allowed for greater access for the author and ability to dig deep into conversations with the corporate elites interviewed.

A number of interviews took place at the Group headquarters; this was timed to use the opportunity to interview Board members (a non-Executive Director and Chairman) attending a Board meeting on a particular day as well as the location of the Group
contacts including the Group Business Development Director and Group Finance Director. The MD of Aluminium Ltd was also attending a meeting at the Group Headquarters and an opportunity arose to interview him at the Group head office rather than in their UK location. The President of the US arm, from Silver Ltd was visiting the Division HQ and the opportunity arose to conduct a face to face interview at Silver Ltd in Sheffield. Having interviewed the Sales Director heading the German subsidiary of Silver Ltd by phone the opportunity arose to follow up the interview in a face to face meeting at Silver Ltd UK subsidiary. The author was given access to meeting rooms at the Group HQ and at Silver Ltd’s premises.

In total, face to face and telephone interviews were conducted with 19 contacts (see Table 3.1) across the Titanium Group and its subsidiaries including the Chairman and two non-Executive Directors. The Group CEO and Silver Ltd (UK) Division MD were interviewed twice, once during the initial scoping project as a telephone interview and again five months later in a face to face interview.

All participants were involved in key decision making for the case companies as discussed above and outlined by their position in Table 4.3 below. To support the exploration of the relations and causal powers at play in the development of the identified international trade events and in line with exploring entrepreneurial behaviours, each participant's history was explored. This is summarised in the table below and drawn in more detail in Chapter Five in the analysis of this thesis.
### Table 4.3: Participants and Human Capital

<table>
<thead>
<tr>
<th>Participant</th>
<th>Human capital investment and outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Titanium Group</strong></td>
<td></td>
</tr>
<tr>
<td><strong>Group Chairman (Titanium Plc)</strong></td>
<td>Joined 2013. Degree qualified Chartered Engineer. Naval architect. 35 years oil and gas industry experience (majority at SMT and Board level). Prior international experience in FDI in Brazil, US, Europe. Global international trade experience in all oil and gas sectors (apart from Russia). Experience as Chairman and Non-Executive Director positions at other private equity-backed and privately owned companies in oil and gas.</td>
</tr>
<tr>
<td><strong>Non-Executive Director (Titanium Plc)</strong></td>
<td>Metallurgy degree, MBA in the US, over 20 years’ engineering and hi-tech industrial experience. Worked in UK and USA including Silicon Valley. 23 years' experience in venture capital industry Non-executive directorships in other engineering and finance sectors.</td>
</tr>
<tr>
<td><strong>Non-Executive Director (Titanium Plc)</strong></td>
<td>Appointed as Non-Executive 2013. Chartered Accountant with 25 years' experience in oil and gas and engineering industries, FDI in India and China. Group Finance Director at two global manufacturing firms. Experience in oil and gas sector. Experience in mergers and acquisitions - led a public to private acquisition following US private ownership, two global acquisitions. Non-executive roles in charitable trusts. University Board Governor.</td>
</tr>
<tr>
<td><strong>Finance Director (Titanium Plc)</strong></td>
<td>Appointed in 2015, first female on the Board, Director at Global consultancy firm in UK in 2008, BA (Hons) Business Studies, graduated as Chartered Accountant from a global consultancy firm. Audit and transaction experience in manufacturing and engineering sectors with major global clients.</td>
</tr>
<tr>
<td>Business Development Director (Titanium Plc)</td>
<td>Appointed in 2014. Four years' experience as Business Development Director of the international division of an aerospace and defence company. Previous military experience. Established offices in India and Brazil.</td>
</tr>
<tr>
<td>---</td>
<td>---</td>
</tr>
</tbody>
</table>

| Division One: Aluminium Ltd, Iron Ltd, Steel Ltd |
| --- | --- |
| **Aluminium Ltd Managing Director** | Appointed in 2012, City & Guilds apprenticeship in atomic weapons company (13 years). Five years with MNC at a greenfield site in UK. Headhunted for a greenfield site in UK with another MNC. Major car company lean supply chain experience. Ministry of Defence experience. |

| **Aluminium Ltd Business Development Manager** | Appointed in 2011, HND in mechanical engineering, apprenticeship with tooling company, technical buyer moved on to business development, quality assurance experience. |

| **Iron Ltd - Managing Director - Division MD** | Son of previous owner of acquired business. Joined family business in 1998. Oil and gas experience. |

| **Steel Ltd - Managing Director** | Joined acquired company in 1999 in operations, became MD in 2016, oil and gas experience. |

| Division Two: Mercury Ltd |
| --- | --- |
| **Managing Director** | Mechanical engineering apprenticeship and degree. Masters Accelerated Development Programme at London Business School. 4 years’ oil and gas sector experience. 31 years production and engineering experience Senior Management and Director positions in electrical and oil and gas industry. Global lean supply chain and operations expertise. Extensive experience of working in China. Business turnaround expertise. |

| **Commercial Director** | Appointed in 2010 just before acquisition by Titanium Group. Prior experience working as a sales and business development manager for the competition. 20 years in the oil and gas industry, global trading experience including Europe, Middle East and US. |

| Division Three: Silver Ltd | }
<table>
<thead>
<tr>
<th>Position</th>
<th>Details</th>
</tr>
</thead>
<tbody>
<tr>
<td>Managing Director</td>
<td>Directors Programme Cranfield, qualified in production engineering, 16 years’ automotive, aerospace and oil and gas sector experience.</td>
</tr>
<tr>
<td>(Division MD - Based UK)</td>
<td></td>
</tr>
<tr>
<td>President of US operations (Based USA)</td>
<td>US citizen. Worked for US steel for 20 years. Management the operation of a large investment in the US. Appointed by Titanium Group in 2001 following retirement from US company.</td>
</tr>
<tr>
<td>Sales Manager (Based Germany)</td>
<td>Appointed in 2010 as sales manager. German engineering degree. Worked for competitor before joining Silver Ltd.</td>
</tr>
<tr>
<td>Division Four: Copper Ltd</td>
<td></td>
</tr>
<tr>
<td>Managing Director UK &amp; Europe (Based UK)</td>
<td>Appointed 2008 to establish renewables arm of Titanium Group (pre MBO). Managed the licencing contract and then became MD of Copper Ltd post acquisition. Key account management and sales roles in aerospace sector and Formula One for 14 years (specialising in superalloys).</td>
</tr>
<tr>
<td>Managing Director North America (Based North America)</td>
<td>Appointed MD in 2014. Bachelors in mechanical engineering. 17 years in the R&amp;D industry, specialising in renewable energy technology development. Field and operations manager for a Copper Ltd competitor. In 2009, approached by a former colleague who was opening up the NA office for Copper Ltd (pre acquisition).</td>
</tr>
<tr>
<td>Managing Director New Zealand (Based New Zealand)</td>
<td>Joined the founding company in 1995. Experience in R&amp;D and technology development. Part of a management buy-out in 2012.</td>
</tr>
</tbody>
</table>
4.9 Interview Design and Management

**Interview Design**

As outlined in section 4.5 and represented in Figure 4.1 at the beginning of this chapter, the author was sensitised to concepts associated with international entrepreneurial culture, international entrepreneurial orientation, international corporate entrepreneurial outcomes, network capital and network embeddedness. In developing the interview guide, to allow for deeper investigation of the explanation of events, these theoretical viewpoints therefore allowed the author to pursue and develop certain lines of inquiry (Symon and Cassell 2012) for example digging deep into the type and nature of ties involved in new international market entry.

Extended interviews were undertaken in the pilot study to check the appropriateness of the key themes of international entrepreneurial culture, international entrepreneurial orientation, international corporate entrepreneurial outcomes and networks. As a result of the pilot study the interview guide for the main interviews was revisited to cover three areas of 'about you and your role', 'international entrepreneurial processes and international market development' and 'networks/relationships'. This approach followed the conceptual framework presented at the end of Chapter Four, moving from human capital influences, to exploring firm level international entrepreneurial capabilities and more specifically the role of networks and relationships. This also allowed for the identification of specific events, checked against the accounts of participants and where possible documentary evidence such as company reports and press releases. Following the pilot, it was also felt, the detail on the networks and relationships needed greater attention in the interview questioning and more emphasis was given on these aspects in the interviews used for the main thesis (See Appendix 2 for the pilot interview guide). Therefore, the network literature was revisited and expanded upon resulting in greater consideration of network embeddedness, human, social and network capital in the interview questions (see Appendix 3 for the main interview guide).

For example, section C focussed on networks and relationships and in C1 in the table below the aim was to specifically identify the type of external contacts the company held.
Table 4.4: Example interview guide question

<table>
<thead>
<tr>
<th>Question</th>
<th>Source</th>
</tr>
</thead>
<tbody>
<tr>
<td>C.1 Which external (outside of the group of companies) relationships/networks do you feel are key for your role/Division/Group from an international perspective? (explore examples, consider how may have changed based on experience, explore purpose, explore all international trade and investment activity)</td>
<td>Scope of engagement and international trade experience influence on use of networks for international trade and investment activity (Anderson, et al., 1994) (Andersson, et al., 2002)</td>
</tr>
<tr>
<td></td>
<td>International networking orientation (Dimitratos &amp; Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, &amp; Nakos, 2012 )</td>
</tr>
<tr>
<td></td>
<td>International network embeddedness (Granovetter, 1973; Coleman 1988; Burt, 1992; Mcevily &amp; Marcus, 2005; Gulati, et al., 2011; Jones, et al., 2011; Hornsby et al. 2013)</td>
</tr>
</tbody>
</table>

However, as shall now be explained in the management of the interviews, the questions in the interview guide became more of a checklist against which to ensure the themes being pursued as the conversation progressed. It was also referred to at the end of the interview to ensure key themes had been addressed. Using the semi-structure interview and open conversation provided a more flexible approach to establish how events occurred through the interaction of actors, organisations, the international entrepreneurial capabilities present in the organisation and the networks they identified and were part of to access new opportunities across international markets.

**Interview management**

As outlined at the beginning of this section, 21 interviews were conducted in total and were with 'corporate elites' across the Titanium Group and their subsidiaries. Permission was sought with each participant to record the interviews and all participants agreed.

The interviews were semi-structured using a conversation style involving

"[the] interviewer and respondent engaging in a fluid interactive process to generate a set of responses which formulate perspectives, observations, experiences and evaluations." (Smith and Elger 2014, p. 119)
The interview style adopted in the face to face interviews was maintained in the telephone interviews, building a rapport with the participant through the conversational style to the questioning. Rapport was also built whilst arranging the interviews through email or telephone and in the conversation before the interview was recorded. Also, as the time allocated to the interview approached the end, the author would remind the participant that they did not want to take up any more of their time, in a number of interviews the participant wanted the conversation to continue. This approach resulted in participants suggesting if further information was needed to get in touch.

"Any problems, just give me a shout. If you’re looking for any info, Alex, you know my number." Managing Director, Steel Ltd

Interviews based around a 'fluid conversation' allowed an understanding of the challenges and opportunities arising from operating in specific contexts and conditions; sectoral, host and home government, market and geographical external influences. This approach allowed the interviewer to explore and dig deeper into the relational aspects at play the actor, headquarter and subsidiary level as well as investigate potential causal powers and liabilities emanating from these interactions and entrepreneurial capabilities and network activities of the sMNE.

The author was prepared to follow up particular events if not identified by participants who might be expected to have been engaged in that particular activity. For example the pursuit of Chinese opportunities in Division Four. However, the participants tended to identify similar events in the discussions around international market activity and how international opportunities were identified. Different perspectives may have been presented but the event was acknowledged by the relevant contacts. For example in exploring activity in China the following participants referenced market entry into China.

"So, again, my role is as much just about being somebody that people can talk to. It’s very important with the Chinese market. So Mr Xi, who runs Xian Industries, which Copper Ltd have got contracts with through our North America office... "Titanium Group CEO

"Well in the case of Ian he had actually reported to Manuel, our Business Development Director, and they had a personal relationship as well, and when we were looking to get into the market in China we contacted him directly and
let him know what the opportunity was and began the discussion there." Copper Ltd NA MD

"We met on a sales trip up to China together with Barry. We saw some people and they were involved in some of those meetings." Copper Ltd UK & Europe MD

"So China, for example, Paul’s been in China a lot. We could see an enormous amount of interest in renewables there." Titanium Group Chair

Consequently conducting 21 interviews allowed for cross checking across participants in terms of events mentioned and accounts of those events and supports the in depth nature of an intensive single case study (Piekkari, et al. 2009; Morais, 2011; Fletcher and Plakoyiannaki 2011).

The interviews were based around three broad areas, which the author explored in more detail based on the respondents’ answers. The areas included 'about you and your role', 'international entrepreneurial processes and international market development' and 'networks/relationships'. Interviewees were asked to start by explaining the international trade of the company followed by their role within it. This also provided a historical account of how they joined the company as well as the development of their role within it, providing insight into the nature of human capital held by the organisation (Crick and Spence 2005; Fernhaber and McDougall-Covin 2009; Unger et al. 2011; Mary George, et al. 2016). It was explained to the interviewee that the format of the interviewee would be conversational, with specific areas to focus on as presented in the brief they had already been sent via email and if the author felt an area needed to be revisited they would do so at an appropriate point in the interview.

"I sent through the interview guide to you but it is more of a kind of a conversation and I’ll double-check and go back and see if I’ve covered everything that I need to as we go along. So first of all if you could just explain to me a little bit about yourself, your background, so how you came to be involved with Copper Ltd to begin with?" Opening question with Copper Ltd UK & Europe MD.

Conversations mainly started with asking the participants to explain their current role as well as previous roles to gauge insight into their human capital and also enable the participant to settle into a comfortable conversation about themselves.
"And if you think about your experience or the networks, the connections that you had coming to the company Aluminium Ltd, did you bring any with you?"

"So did you bring contacts from the MoD with you or...?"

"Your networks, your experience, how are you bringing that into the Titanium Group?"

This often presented lines of inquiry to pursue from an international entrepreneurial capabilities or network perspective. For example, in the case of networks, each answer was followed up to ensure a deep understanding of how the networks were identified and created and for what purpose. Points were affirmed back with the interviewee, which spurred further conversation, when no further explanation occurred pertaining to that particular point the author moved on to the next line of inquiry.

"And if we looked at each of those areas, can you give me some examples of how you’ve got into that market or how you got the opportunities, the business?"

"So when did you hire him?"

"So that was post the acquisition with Titanium Group."

"And you mentioned he’s brought in some new customers and he’s got his networks that he brought particularly for the Chinese market."

"And is it a similar setup in terms of what you said before where you could be working with the end user or the engineering firm for China?"

"And without the Chinese person that you hired, the business development manager, you wouldn’t have been able to access that kind of network, that kind of project?"

Within each section questions relating to opportunities identified for international market development were explored, asking the participants to expand on their role as well as others in the identification and utilisation of these opportunities (Mc Dougall 1989; Jones, et al. 2011). Respondents were asked to consider the networks and relationships the company had used to expand overseas markets. The interaction between the participant and the author, enabled a mutual construction of meaning around the networks used to develop international trade and investment activity. Both from an epistemological and theoretical perspective, relations were important to this
thesis; the use of interviews enabled deeper exploration of such relations at a stratified entity level by exploring participant perceptions of how individuals and the organisation engages in international corporate entrepreneurial activity, by exploring the different networks the organisation is part of, has access to and the relationships held within them i.e. the network embeddedness of the sMNE (Granovetter 1973; Coleman 1988; Burt 1992; Mcevily and Marcus 2005; Gulati, et al. 2011; Jones, et al. 2011; Hornsby et al. 2013).

In order to explore the international resource coordination, international autonomy and international learning orientation (Dimitratos and Plakoyiannaki 2003; Dimitratos, et al. 2012 ), the participants were also asked about communication within the divisional company itself, across divisions and with the central Group headquarters. This provided a route of enquiry regarding the relational aspects of the different levels within the Titanium Group structure. As this particular question was firmly posited on how the Titanium Group worked at different levels and more of a question related to 'internal' relationships, it was expected participants may have some reservations on providing potentially negative comments. However, based on the participant's commentary through the interviews and openness in commenting on areas they felt the organisation needed to develop further, such as international learning orientation versus the autonomy provided to the subsidiaries to pursue international opportunity, participants freely outlined their experiences. In the example below the comment was in response to lines of inquiry on autonomy the New Zealand subsidiary experienced and the second comment in response to exploring how the Titanium Group and its companies shared information.

"Yeah, I think it's changed how we've done it compared to how we used to but there's still an openness. And definitely I think Paul Stewart's very supportive of innovation." Copper Ltd New Zealand, MD

"I mean we do actually have a sales meeting coming up, probably the first time we're actually getting together, in San Diego in a couple of weeks' time for a day, where some of this might be thrashed out. But, yeah, I think there should be more common systems and ways of doing things. I think there's lip service to it but really we don't see it." Copper Ltd New Zealand, MD
Therefore the openness adopted in the management of the interviews allowed the author to investigate identified events, such as the establishing of a new subsidiary in Germany, by moving through the conversations of different participants to establish their accounts of any particular events.

4.10 Reflexivity

This section discusses the role of reflexivity in this research and is defined as

“the concept used in the social sciences to explore and deal with the relationship between the researcher and the object of research.” (Brannick and Coghlan 2006)

Reflexivity adopted in this thesis, follows a critical realist perspective and therefore relates to 'epistemic reflexivity' (Johnson and Duberley 2003). To this end, the author was aware of their ‘own habitus' (Johnson and Duberley, 2003 p. 1289); previous practitioner experience and lecturing in the field.

Firstly, theory laden empirical observation is recognised as influencing research findings; the author of this research was mindful of the direction prior knowledge could take the research (Ryan, et al. 2012). The research design was informed by identification of expected gaps having located the most appropriate theoretical positions in the field of international corporate entrepreneurship and networks as outlined at the beginning of this section as presented at the end of Chapter Three. However, using the existing theoretical observations did not mean the collection of information lying outside of the existing theory was restricted, or required the analysis to only focus on the themes originally explored. For example, although international corporate venturing and international strategic renewal were outcomes identified as part of the conceptual framework, areas emerged from the perspective of the acquired companies, an aspect which had not been considered in the literature review.

The author was also aware of her own previous experience in international trade support and the knowledge accrued whilst in this role through engagement with a number of small to medium sized enterprises (SME). The relationships built in these previous roles are considered as 'theoretical lenses which shape what we can and cannot see' (Ryan, et al., 2012 p. 304). Prior experience in establishing her own business was also part of this 'theoretical lens' as the author was mindful of her own challenges faced when starting and running a new business.
The author acknowledged the human agency active in the identification and enactment of opportunities in the participant's accounts, for example of in the utilisation of networks; the senior management team's explanation of the creation and development of those networks, the knowledge created from those networks as a consequence of the actions of the actors involved. However, akin to the critical realist approach, the researcher is aware of the fallibility and theory laden nature of knowledge created (Sayer 1992), but through the use of accounts from different actors in the case study, by observing industry news and company documentation they were able to undertake an empirical check. The researcher was able to observe and interpret how the resultant opportunities unfolded from the network activity within the case firms.

In terms of the profile of the participants, all were male apart from one Board member, the Group Finance Director, who was also the youngest member. Apart from one German participant, English was their first language. Neither gender nor language posed any issues for the author in conducting the interviews. From a gender perspective this partly influenced the participant’s own accounts of her experiences whilst at the company.

"So I joined Titanium Group expecting to feel quite isolated for a while because I'm one of one in terms of the finance director, although I’ve got a team of finance people that work for me or with me. Only female on the Board. Youngest by quite some distance on the Board. And I'd never been a finance director before. So I was expecting to feel kind of quite isolated and lonely and not really know what I was doing and not know anybody and to be coming from an 18,000 to a 350employee group, you know, I thought God. But actually I’ve been really surprised." Titanium Group Finance Director

In addition, the author did not identify any issues in terms of gender influencing the relationship between the author and the male participants. This is discussed here as Welch et al. (2002) state corporate elites in an international business field are typically male along with other characteristics discussed earlier in this chapter. The author was mindful of the seniority and experience of those being involved, as well as the time they had allocated to undertake the interview. However, the interview approach taken to build rapport with the participants as outlined above enabled an effective process of data collection during the interviews.
Although scholars have suggested interviewing 'corporate elites' can present issues of power between the interviewee and the researcher (Welch, et al. 2002), the author of this research did not experience such relationships in the interviewing process. She recognised their position within the organisation, however this was considered more from an ethical perspective discussed later in this chapter.

Finally, one observation made by the author in scrutinising data collection procedures, thus influencing future research approaches (Alvesson 2000) is to ensure the conversations which begin to significantly move to conversations beyond the aims of the thesis, is draw the participant back into the boundaries of the case research. Overall the author is engaged in a negotiation and dialogue with the participant, exploring the pre-identified themes of the author, this required expertise in framing and communicating the questioning in the interview (Smith and Elgar 2014). The author was therefore engaged in bringing out the experiences, reasoning and choices of the participants in relation to their international entrepreneurial activity and seeks to 'coach' the participants through the process (Smith and Elgar 2014). However, on one occasion with the President of the US operations, storytelling moved beyond entrepreneurial internationalisation of the sMNE and more towards a personal, more general personal account of experiences in their career. This was partly due to the author’s desire not to offend the senior and very experienced participant by diverting conversation away from personal non-related reflections.

4.11 Data Analysis

Data analysis follows Sayers (1984) structure of causal explanation, expanded upon by Easton (2010) and is outlined in Figure 4.6 at the end of this section which provides the steps taken in the analysis process. The conceptual framework (see Figure 3.5) at the end of Chapter Three is represented at the bottom of the diagram.

As discussed in section 4.8 documentary evidence was used in the preliminary work prior to interviews being undertaken as well as verify specific international entrepreneurial events identified in the analysis of participant interviews. Investor presentations, company reports and commissioned third party reports were uploaded into Nvivo along with the transcribed interviews. Using Nvivo, first level codes were then assigned to 'data chunks' to identify the key events associated with international trade and investment activity, networks and international entrepreneurial outcomes (see Appendix 4 for code list). The process of identifying the event included a first stage
review of the participant interviews, cross checking the event in the commissioned research reports, industry and investor news. As some events involved actors across companies and divisions, this process also provided a check for event activity. Events included the acquisition of Copper Ltd, the opening up of the subsidiary in Germany and other activity as presented in Table 4.4 below. As a levelled entity the sMNE was viewed at a structural level (a group of companies with a corporate headquarters), a network level (the different networks the organisation is part of) and the actors (senior management teams and employees) and codes were attached to these levels according to their involvement with international trade and investment and events.

<table>
<thead>
<tr>
<th>Table 4.5: International Corporate Entrepreneurial Events</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisitions of Titanium Plc</td>
</tr>
<tr>
<td>Nuclear market expansion Division One</td>
</tr>
<tr>
<td>Development of OEM subsidiary relationships in Division One</td>
</tr>
<tr>
<td>Development of supplier relationships in Division One</td>
</tr>
<tr>
<td>Development of North American market in Division Two</td>
</tr>
<tr>
<td>Engineering solutions offer Division Three</td>
</tr>
<tr>
<td>Diversification into defence Division Three</td>
</tr>
<tr>
<td>Establishing German office in Division Three</td>
</tr>
<tr>
<td>Establishing US office in Division Three</td>
</tr>
<tr>
<td>Acquisition of licensing company in Division Four</td>
</tr>
<tr>
<td>Development of three technology offer in Division Four</td>
</tr>
<tr>
<td>Development of Chinese market in Division Four</td>
</tr>
<tr>
<td>Development of Brazilian market in Division Four</td>
</tr>
</tbody>
</table>

Pattern codes were then used in the search for causal powers and liabilities associated with the events identified. Nvivo pattern codes were used to identify interrelated themes associated with causes/explanations, relationships and theoretical constructs (Miles, et al. 2014). Memos were used to document reflections and thought processes of the author in developing the pattern analysis. Different data displays were used including matrix and network display to aid the investigation of relationships between the themes identified.
Following the abductive logic, in drawing on the authors theoretical preunderstanding as well as the investigation of potential 'surprise' aspects emerging from the data (Ryan, et al. 2012) this coding used detailed sub codes emanating from the literature, as shown in the example in Figure 4.5. Here network embeddedness was further broken down to patterns associated with which actors were involved in the identification of the opportunity to establish the German office, competitor tie relationships of the different actors involved i.e. the Group CEO, Silver Ltd MD UK, Silver Ltd Germany. The relationships between the actors and competitor ties explained the creation of the German subsidiary. Relating back to the previous point made on 'surprise' themes, the international competitor literature lacked consideration of the competitive nature in which human capital is acquired through competitor network ties. Thus, the author then investigated other patterns where similar activity involved using ties to acquire human capital.
Figure 4.5: Coding stages of event

Having completed the pattern coding, this moved to the retroduction phase of the analysis, whereby the author, guided by the theoretical lenses identified in Figure 3. 5, sought to understand the causal mechanisms at play in the events identified (Morais 2011). In this phase the author is seeking to also investigate the 'what if', to explore potentially hidden causal mechanisms (O’Mahoney and Vincent 2014). For example, in investigating the why Silver Ltd undertook the diversification into the naval sector, this unearthed possible explanations as to why Division One companies were less engaged in international entrepreneurial outcomes through their position in a network dominated
by large conglomerates. In this example, the author in her analysis poses the question, what might happen if their position in this network changed? Therefore, the author tried to consider how alternative decisions or in this example alternative position in the network, may influence international corporate entrepreneurial activity.

4.12 Quality of Research

As can be seen from the previous sections in this chapter, a robust research process has been followed in the case study design and implementation. The reflective questioning posited in Table 4.1, allowed the author to question each phase of the case study research, from the philosophical underpinnings to the case data analysis. The author in moving back and forth between the theoretical concepts identified in the conceptual framework and themes arising from the empirical data and analysis allowed for continual reflection on the quality of each phase of the research process (Ryan, et al. 2012).

Scholars in international business suggest best practice is dependent on the 'researcher's own paradigmatic stance, the aims of the research and the cultural practices of the research setting at that point in time' (Welch and Piekkari 2017). However, best practice supporting this thesis was drawn from the discipline and critical realist stances taken in case study research of international business (Piekkari, et al. 2009; Piekkari, et al. 2010; Welch, et al., 2010; Welch and Piekkari, 2017), international entrepreneurship (Dimitratos, et al. 2014 ) and industrial marketing (Easton, 2010; Ryan, et al. 2012). This allowed the author to reflect on her approach to quality research against the research aims set, but guided also by contemporaries in the field and related disciplinary areas.

In reflecting on the validity of accounts presented by the participants, the author acknowledged the human agency active in the identification and enactment of opportunities in the case firm, through the utilisation of networks; the senior management team's explanation of the creation and development of those networks, the knowledge created from those networks as a consequence of the actions of the actors involved. However, akin to the critical realist approach, the researcher is aware of the fallibility and theory laden nature of knowledge created (Sayer, 1992), but through the use of accounts from different actors in the case study, by observing industry news and company documentation they were able to undertake an empirical check. Through this process the researcher was able to observe and interpret how the resultant opportunities
unfolded from the network activity within the case firms. Empirical checks were also made – the author referring a summary of the initial findings to the Group CEO to ensure valid and rigorous comprehension.

At a data analysis level, using Nvivo as detailed above, also allowed for consistent application of codes representing key themes identified in the interview transcriptions. Data comparison tables allowed for meaning to be explored between participants and consistent with a critical realist approach acknowledged when participants presented different perceptions of the same events.

4.13 Ethical Considerations

The approach outlined below adheres to the Sheffield Hallam University research ethics policy and procedures, whereby integrity, informed consent and anonymity form key requisites of this policy. Prior to contacting any of the participants, the author and supervisors were required to sign a non-disclosure agreement. In terms of data management, following the signing of non-disclosure agreements data was only accessible to the supervisory team and the author of this research. Documentary evidence was used with permission from the company. This included commissioned research reports, or publicly available sources such as AIM investor presentations and company accounts. Data was held securely through password protected online folders and in the Nvivo database and recordings were deleted from recording devices.

The relationship with the company was managed through regular initial contact with the Business Development Director, following introductory meetings with the Group CEO. Informed consent was provided from all participants following the introduction to the participants via the Group CEO and Group Business Development Director.

All participants were asked permission before interviews were recorded and informed all references to the material in the research would be anonymised. In the interviewing process as participants freely provided detailed accounts of their perceptions of events and experiences working as part of the Titanium Group, the author was mindful of the sensitivities of the information some of the participants exchanged in their interviews. Therefore during the interview phase, the author did not recall any information to other participants involved in the study. The Group CEO was only sent a copy of the summary findings prior to the writing of the full thesis, which did not include reference to any individuals and provided top level key findings of the research.
On completion of the thesis, a thorough check of all material was conducted to ensure names of the companies forming the case, participants, competitor, supplier and all other stakeholders were removed from the thesis and replaced with pseudonyms. Each pseudonym used, reflects the nationality of the participants.

4.14 Chapter Summary

This chapter presented the case study research strategy employed in this thesis. Table 4.1 provides a summary of the phases and reflective questioning the author undertook throughout the research process. The review of existing case study research identified a gap in critical realist approaches and the author therefore drew on existing case study and critical realist research in the fields of international business, international entrepreneurship and industrial marketing.

Sensitised to existing literature, emanating from the literature reviews in Chapter Two and Chapter Three and depicted in the conceptual framework in Figure 3.5, the author was able to dig deep into participants’ accounts of their experiences in the pursuit of international entrepreneurial opportunities and their engagement in networks in entrepreneurial internationalisation. However, the author recognised the participants accounts were constructed in their own social context and cross-checking against other participants’ accounts and other documentary evidence was undertaken. Through reflexive practice, the author was cognisant of her own theoretical lens, knowledge gained through literature as well as previous experience, however this allowed the author to explore in depth, participant accounts of events. Theoretical constructs also supported the detailed analysis as shown in Figure 4.6, however the author allowed for the investigation of emergent themes. In seeking causal explanation the author engaged in the reflection of 'what caused these events to happen?' and investigated the relationships between the different layers of observation. In doing so, the author considered alternative explanations and considered the outcome of international corporate entrepreneurial events, if different causal influences had been at play.

The following chapter now provides the detailed analysis undertaken, using the approach presented in this chapter.
**Figure 4.6: Process of case analysis**

<table>
<thead>
<tr>
<th>What caused the events to happen?</th>
</tr>
</thead>
<tbody>
<tr>
<td>Identification of possible causal mechanisms</td>
</tr>
<tr>
<td>e.g. intentions of actors in creating networks or pursuing certain customer ties.</td>
</tr>
<tr>
<td>What could happen, what hasn’t happened?</td>
</tr>
<tr>
<td>e.g. if a certain network was not pursued.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Constant cross checking across themes</td>
</tr>
</tbody>
</table>

| International opportunity identification and enactment e.g. |
| Actors initiating opportunity, actors enacting opportunity |
| Experience influencing international opportunity process |
| Environmental influences |
| Network embeddedness e.g. Relationships between actors and networks |
| Nature of ties |
| Power of ties |
| Sector influences |
| International entrepreneurial capabilities |
| e.g. Relationships between subsidiaries and headquarter |
| Sharing of information across the organisation |
| International autonomy |
| Subsidiary networking |

<table>
<thead>
<tr>
<th>First level coding: Constant cross checking across themes</th>
</tr>
</thead>
</table>

<table>
<thead>
<tr>
<th>Event identification</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nature of internationalisation</td>
</tr>
<tr>
<td>International corporate venturing</td>
</tr>
<tr>
<td>Innovation</td>
</tr>
<tr>
<td>International strategic renewal</td>
</tr>
<tr>
<td>Entity</td>
</tr>
<tr>
<td>The organisation: Titanium Group</td>
</tr>
<tr>
<td>Structure: Corporate HQ, Divisions, Subsidiaries, Offices</td>
</tr>
<tr>
<td>Actors: Group CEO, Division and company MDs, Business Development Managers, Subsidiary Managers, Employees</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Development of conceptual framework: Identification of themes from theories; gaps and contexts:</th>
</tr>
</thead>
</table>

| International entrepreneurial capabilities |
| International entrepreneurial culture |
| International entrepreneurial orientation |
| Networks and RBV |
| Network embeddedness |
| Network capital |
| International entrepreneurial outcomes |
| Innovation |
| International corporate venturing |
| International strategic renewal |
Chapter Five: Case Analysis

5.1 Introduction

In addressing the research aims, this chapter is structured around the international corporate entrepreneurial outcomes of international strategic renewal, international corporate venturing and innovation. They include acquisitions, organisation restructure, outsourcing, establishing licencing agreements, entering of new geographical markets and sectors, new product, process and service development (see Table 4.4). The analysis presented in this chapter follows the process of analysis presented in Figure 4.6 to investigate international entrepreneurial capabilities and the role of networks in the sMNE and seeks explanation of their influence on the international corporate entrepreneurial outcomes stated above. Each outcome is considered from the perspective of the entities involved i.e. the Titanium Group, the divisional companies, the actors within the networks they are part of. It involves the analysis of the influence of the key international entrepreneurial capabilities of the Titanium Group and its subsidiaries on the outcomes of international strategic renewal, international corporate venturing and innovation. It considers the causal influences of network embeddedness and network capital to achieve these outcomes, the role they play. External conditions are also considered which include the uncertainties associated with oil and gas and the growth opportunities of the renewables sector. Following this section of the analysis, proposed causal mechanisms are brought together in the chapter summary and presented in Figure 5.8.

This chapter begins with a short background to the Titanium Group and an overview of its entrepreneurial internationalisation. It then moves on to the uncertainties inherent in the oil and gas market. This represents a key conditional factor having had significant impact on the international corporate entrepreneurial outcomes of three of the four divisions in the Titanium Group, as well as influencing the choice of Titanium Group to acquire Division Four companies.
5.2 Overview of the Titanium Group and its International Trade and Investment Activity

Background and organisation structure

As mentioned in section 4.6, the Titanium Group was formed following a management buy-out by the current Group CEO in 2005. Titanium Plc, an AIM listed engineering firm, is comprised of six companies structured within four divisions; total employees stood at 290. In 2016 (the latest year end when fieldwork was undertaken) the Group achieved £55.6 million revenues, of which £26 million was attributed to international trade. The ten-year period following the management buy-out saw five acquisitions in the UK and New Zealand. As of 2016, the company has 13 UK home-based subsidiaries and six overseas subsidiaries along with a 40% equity stake in a related US company.

Titanium Group is comprised of four operating divisions; with three classed as manufacturing and one as contracting. Division One has a long history with the Group; the original company was established over 100 years ago and was part of a management buy-out in 2005 led by the current Group CEO. Division Two is comprised of a UK based company acquired in 2010, and Division Three includes three separate UK based companies acquired between 2010 and 2014. Finally, Division Four is comprised of an acquisition originating from an original licensing agreement with a company in New Zealand and took place in 2014. All acquired companies were over 25 years old at the time of acquisition.

The current Titanium Board membership includes two Non-Executive Directors, the Chair as well as three, full-time, senior managers from the Group; the Group CEO, the Finance Director and the Business Development Director. Each Division had a Divisional MD and each company within the Division had an MD; the Divisional MD was one of the company MDs where there were more than one company or subsidiary.

Across the group, all subsidiaries were involved in a range of international trade and investment activity as outlined in Table 5.1. The companies servicing the oil and gas sector tended to engage in international trade and investment activity with large conglomerates whereby contracts were won via establishing a position on the corporate headquarters approved vendor lists (AVL). Remaining international trade and investment activity involved export via distributors to the management of wholly owned subsidiaries in North America, New Zealand, the US and Germany. The roles of the
overseas subsidiaries were mainly sales and business development apart from in Division Four, where the New Zealand was primarily R&D with some sales function.

<table>
<thead>
<tr>
<th>Company</th>
<th>Locations</th>
<th>Type of Internationalisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Aluminium Ltd</td>
<td>UK</td>
<td>Approved Vendor List status with UK OEM HQ and global subsidiaries including USA, Canada, Saudi Arabia, Singapore, Australia, Norway and Germany. Supplier agreements</td>
</tr>
<tr>
<td>Iron Ltd (Division One)</td>
<td>UK</td>
<td>Approved Vendor List status with UK OEM HQ and global subsidiaries including Gulf States, Nigeria, Congo, USA, Brazil Mexico.</td>
</tr>
<tr>
<td>Steel Ltd (Division One)</td>
<td>UK</td>
<td>Approved Vendor List status with UK OEM HQ and global subsidiaries including Azerbaijan, Singapore, Australasia, Brazil, USA, Denmark, Russia and China</td>
</tr>
<tr>
<td>Mercury Ltd (Division Two)</td>
<td>UK, USA</td>
<td>Distributors in USA America, Norway, Middle East, Australia South East Asia. Wholly Owned Subsidiary in the US, focussed on the Gulf States, and US states of Texas and Louisiana. Outsourcing via contract manufacture in China.</td>
</tr>
<tr>
<td>Silver Ltd (Division Three)</td>
<td>UK, USA, Germany</td>
<td>Direct sales. Engineering services deployed teams to specific locations where the naval base is located - included locations in Mexico, Kazakhstan, West Coast of Africa, Indonesia and Singapore. Distributor and agency agreements including Germany, USA, India, South Korea. Naval contracts for global market via MNE conglomerate based in Sweden. Naval contract with Swedish Navy. Suppliers in Germany and Italy.</td>
</tr>
<tr>
<td>Copper Ltd (Division Four)</td>
<td>UK, Canada, New Zealand</td>
<td>Direct sales to France, Italy, Denmark, Brazil, China, Canada, US, Japan, Madagascar, South Africa, Pakistan, South Korea, Indonesia and Malaysia. Outsourced manufacture in China, Brazil, US, Canada, Europe and the UK.</td>
</tr>
</tbody>
</table>
5.3 Key Sector Influences: Economic Decline of the Oil and Gas Sector

A topic that arose multiple times in the interviews was the influence of the fluctuating fortunes in the oil and gas sector on opportunity and as the following sections show, which led to innovation and diversification. At the time the fieldwork was undertaken, falling oil prices, which had declined by 47% in 2015 and 17% in 2016 (see Table 5.2 below), had put a strain on the sector, which translated to declining revenues and lower demand for the products and services provided by Titanium. Furthermore, the fortunes of the oil industry were mirrored by another of Titanium’s markets, the gas sector. Here a similar pattern was observed due to a 26% year on year drop in 2014, 15% in 2015 and 19% in 2016 (see Table 5.2).

The effect of these changes was that, across the entire supply chain, oil and gas revenues fell by over 30% from a peak of £41.3 billion in 2014 to £28 billion in 2016 and an estimated two thirds of companies providing goods and services to oil and gas production reduced their headcount during this period, representing a 24% drop in oil and gas supply chain jobs (Oil and Gas UK 2017).

<table>
<thead>
<tr>
<th>Table 5.2: Selected Key Performance Indicators in Oil and Gas Sector</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Brent Oil Price ($/barrel)</strong></td>
</tr>
<tr>
<td>2013</td>
</tr>
<tr>
<td>108.7</td>
</tr>
<tr>
<td>(-3%)</td>
</tr>
<tr>
<td><strong>National Balancing Point</strong></td>
</tr>
<tr>
<td><strong>Day-Ahead Gas Price</strong> (pence/therm)</td>
</tr>
<tr>
<td>68.0</td>
</tr>
<tr>
<td>(14%)</td>
</tr>
<tr>
<td><strong>Supply Chain Revenues</strong> (£billion - all data shown in 2016 prices)</td>
</tr>
<tr>
<td>40.5</td>
</tr>
<tr>
<td>(11%)</td>
</tr>
<tr>
<td><strong>Number of Jobs in Supply Chain Employment</strong> *</td>
</tr>
<tr>
<td>198,000</td>
</tr>
</tbody>
</table>

Source: Oil and Gas UK - Business Outlook 2017, *Oil and Gas UK - Economic Report 2017
The influences of the uncertainties in the sector on the international corporate entrepreneurial outcomes of the Titanium Group companies were reflected in the senior management team's accounts of the sector.

"Oil and gas had a dip in 1999, 2000, a pretty heavy dip. So when I started it was very quiet. The quietest, even through the 2008 recession it wasn’t as bad then as it was in 2000. 2000 was really quiet but not as bad as it is now. Now is really tough. " Managing Director Iron Ltd

According to the Division One MD, the pressure on the oil and gas sector meant the structure of the industry changed with many suppliers going out of business. As a consequence, the sector had witnessed considerable consolidation with companies unable to survive in a considerably depressed sector; the consequences down the supply chain impacting firms who had been 80% to 100% dependent on their oil and gas customers. These factors influenced the Titanium Group's strategy of acquisition to diversify into the renewables sector and to in-source some of their engineering services activity. These developments also influenced the opportunity to innovate, as competition became increasingly focussed on price, which became the predominant factor in customer choice.

" ... at the moment, it’s all about price, it’s not really about technology. All that matters at the moment is cheapest price, cheapest price. And in that market you struggle to maintain your sort of technological advance, I think anyway. Let’s move to China, let’s get it made in China, let’s do everything in China. ... this oil price crash is a perfect storm and there’s so many companies going down at the moment, it’s hurting to the extent that I’m not convinced it will ever recover in the UK." Managing Director Iron Ltd

Market conditions of the oil and gas sector were also cited by Silver Ltd MD, who had witnessed a change in international competitor behaviour as a result of the decline in oil prices and oil and gas supply chain revenues as shown in Table 5.2. His comments also demonstrated their nature of Silver Ltd's international competitive aggressiveness in that they did not mirror the general aggressive behaviours of their competitors, as they felt strategically this would influence their position in the market in the future i.e. undercutting themselves so much that the business is no longer viable.
"It’s become very aggressive. Extremely aggressive. To the point where the market has been, I think, changed forever. Margins have got lower and lower and lower and lower, even when the oil price was still $100, because everyone’s chasing a small amount of work and they all see it as must wins and there’s been people taking work on that breaks even or even at a loss just to keep the wheels spinning. Just to stay in business... The next time it comes along you’ve got to do the same again and you just simply can’t afford to do that. But there’s others that have." Divisional Managing Director Silver Ltd

Consequently, the decline pushed some of the divisional companies to be more internationally proactive, particularly evident in Division One companies, which were all UK based acquisitions. This will be discussed later in the section exploring innovation. However, due to a historic buoyant oil and gas market the Division One companies held a strong position in their network, not having to look outside their current customer base or new markets.

"This business, we do difficult stuff and we do it well so we’re used to people coming to us, we’re not really used to having to sell ourselves. In the last year, even through 2000, it’s the first time that really we’re starting to have to press ourselves rather than have people come to us." Managing Director Iron Ltd

Therefore the analysis at a conditional level as shown on Fig 4.6, illustrates that the oil and gas sector influences the levels of network embeddedness of the Titanium Group. Influences of the oil and gas sector on international entrepreneurial outcomes will be addressed in further sections, however, it was important to recognise here before a full investigation of the causal mechanisms at play, the influence of the oil and gas sector on the Titanium Group.

The next sections investigate the potential causal influences on each of the international entrepreneurial outcomes.
5.4 International Strategic Renewal in the sMNE

As discussed in section 2.4, international strategic renewal involves the refreshment or replacement of an organisation’s strategy and structure with the potential to significantly affect its long term sustainability in international markets (Sharma and Chrisman 1999; Agarwal and Helfat 2009). For the Titanium Group international strategic renewal was evidenced in the listing of the company on the AIM and a number of associated developments following this, namely a series of acquisitions, equity investment and an organisation restructure. The AIM listing in 2008 and subsequent acquisitions and equity investments are presented in the timeline in Figure 5.3. This represented a significant organisational change and positioning of the Titanium Group in international markets over an eleven-year period; from the management buy-out of a manufacturing firm in 2005 to becoming an sMNE with UK and overseas subsidiaries operating across four divisions in 2015. It included the creation of a start-up venture Copper Ltd which enabled the group to diversify into the renewables sector under a licencing agreement with Redroad LLC, which was later acquired by the Titanium Group. In addition, four acquisitions and one equity investment were made. This activity aligns with the strategic objectives of the organisation outlined in the introduction to this chapter. The objectives for the acquisitions were twofold: to achieve internal rationalisation and to open up new market and product development opportunities. The UK acquisitions in Division One enabled 'in-sourcing', Division Two and Division Four acquisitions enabled access to new international markets and new product development. The acquisition of Division Two companies included the US subsidiary of Mercury Ltd. The importance of the acquisitions to the group was presented in the Chair’s statement in the annual report, highlighting if all acquired businesses were excluded the Group would show a fall in revenue of almost 25%.

The organisation restructure was announced as a way to streamline operations, fulfil cost savings and align the Divisions with key markets. Each division was assigned an MD, one of the current MDs within the division, who reported to the Group CEO and developed divisional strategic plans along with the Group Business Development Director. A further development was the introduction of a Finance Director per division who reported directly into the Group Finance Director.

Having outlined the nature of international strategic renewal, the remaining part of this section addresses the research objectives more closely in investigating the influences of
developments in the oil and gas sector, international entrepreneurial capabilities and networks on the international strategical renewal of the Titanium Group.

A key conditional influence on international strategic renewal was the uncertainties evident in the firm’s key sector of oil and gas, driving the Titanium Group to reconsider its market position and influencing decisions to grow through acquisition and create a divisional structure. The international entrepreneurial capabilities enabling the international entrepreneurial outcome of international strategic renewal were manifested in the international proactiveness, international risk-taking and international learning of the Titanium Group. From a network capital perspective, the human capital of actors at a Board level was found to influence international strategic renewal.

In investigating the international strategic renewal of the Group, it was clear that the previously mentioned uncertainties in the oil and gas sector influenced the decisions to acquire and in the organisational restructure. Company reports and investor presentations also signalled the challenging times faced by the organisation, with an expected recovery in the sector in mid to long term, the restructuring of the Group was presented as a way to address the downturn in the oil and gas market. In the 2015 company report, the Group reported a return on revenue of 6% compared with 15% the previous year. However, it was felt the opportunities to be part of a clearly focussed Divisional group with the opportunity to insource and develop new products as well as diversify would position the Group more competitively in global markets and be well placed for the continued challenges the oil and gas market presented. This supports the suggestion that international strategic renewal often takes place when organisations face a decline in profitability and market share (Verbeke, et al. 2007).
2005 Management buyout

2008 Floated on the AIM

2008 Copper Ltd (start-up) later becomes part of restructured Copper Ltd in 2015 following acquisition of Redroad LLC in 2014

2010 Acquisition of Mercury Ltd Acquisition of Aluminium Ltd

2013 Equity stake in US oil and gas equipment company

2014 Acquisition of Redroad LLC (New Zealand) Acquisition of Iron Ltd Acquisition of Steel Ltd

2015 Divisional structure introduced
Division 1: Iron Ltd, Steel Ltd and Aluminium Ltd
Division 2: Mercury Ltd
Division 3: Silver Ltd
Division 4: Copper Ltd

(Source: Adapted Titanium Group investor presentations 2013-2016)

Figure 5.1 Timeline of international strategic renewal
The overarching international proactiveness of the Titanium Group was influenced by the Group CEO’s global outlook for the organisation leading to the UK and international acquisitions as well as the equity investment stake in the US. The Group CEO firmly chartered the intention to globally position the Group, in his aspirations for the divisional companies. For example, in Division Two, his aim was to create a company with a strong global distributor network. This overarching drive of the Group CEO to achieve success in international markets was mirrored by the international proactiveness of the senior management teams. This is discussed in more detail in observations of product innovation and the entering of new international markets later in this section.

Human capital across the division including Board members was used to alleviate potential risks in international corporate entrepreneurial activity. Decisions to enter new markets, acquisitions and other international corporate entrepreneurial related activity were questioned by Board members based on their previous experience in acquisitions, international trade and funding of international new ventures (see Table 4.3). The Chair and Non-Executive Board members viewed their role as 'advisory' and were there to challenge the senior management teams on when the present new international opportunities. The Chair referred to his contributions as 'Father Time type advice', observing the external environment and then leveraging this experience for the benefit of the Group. As noted in Table 4.3 the Chair had over 35 years' experience in the oil and gas sector, held a number of executive level positions and global trading experience.

"I think they [the Titanium Group companies] were quite parochial and quite isolated about how they looked at the market. Whereas when I've come along I can see the whole oil and gas market and I'm able to ask far more probing questions about why we do things..." Titanium Group Chair

The human capital of the Chair and Non-Executive Directors also influenced the organisational restructure, drawing on their experience of the difficulties associated with the Group CEO being the focal point of all activity. The chair and non-executive directors were cognisant of the dependence by the Titanium Group on one key actor i.e. the Group CEO in driving international corporate entrepreneurial activity. They recognised this was unsustainable following the AIM listing and as the Group continued to grow. The Group CEO would not be in a position to continue to drive the global representation of the business and be 'hands on' operationally. The Board's move to
appoint a Group Business Development Director in 2015 sought to alleviate this potential threat by creating structures and processes to maintain a balance between autonomy and entrepreneurial drive in the Divisional companies as well as function as a Group rather than purely autonomous units. A further observation made regarding the size of the sMNE having grown through this period of international strategic renewal, was the ability to maintain an entrepreneurial approach to the organisation.

"It is interesting that. It's hard to keep the entrepreneurial thing because the natural thing as you get bigger you become more corporate; you get sucked into committees and audit committees and things like that, and risk committees, and you’ve got to do that." Non-executive Director 1

Working with the Group CEO, the Non-executive Directors' international trade and financing expertise also supported the implementation of the Titanium Group acquisitions. Non-Executive Director 1 undertook two of the UK acquisitions in Division One. The level of involvement of the Non-Executive Directors was also an interesting observation from an sMNE perspective, and whether this would be experienced in large MNEs.

The Division One acquisitions and restructure, achieved supply chain efficiencies and resulted in increased communication across the divisions; Division Two manufactured 'one-off' parts at a significant cost, this business was directed to Steel Ltd which provided a more cost effective component for Mercury Ltd. Machining was moved from both Silver Ltd and Mercury Ltd and relocated in Scotland with Steel Ltd. This resulted in the creation of a working group between Division One and Division Two to combine the design and engineering expertise, aimed at achieving cost efficiencies in the machining stage. Looking back to the other senior management team's perspectives on the expertise of the Group CEO in international strategic renewal activities, there was an acknowledgement by the MD of Steel Ltd of the Group CEO's knowledge and expertise in his rationale for the Division One acquisitions.

"So I think part of that, Paul, his foresight was right, we'll buy Steel Ltd, they’ve got a good order book, they’ve got a good customer base currently, they’ve also got room where we can take the machines out of Mercury Ltd, we’ll take the machines out of Silver Ltd, we’ll take them up to Scotland and Steel Ltd will do all the Titanium Group machining so we’re not giving that three million quid out
Managing Director Steel Ltd

In exploring the causal explanation of international strategic renewal, an interesting observation was also made on the relationship held between the Titanium Group and the chair and non-executive directors. The way in which the chair and non-executive directors imparted advice, signifies the level of support the Board provides to the Titanium Group international strategic renewal activities. Advice was direct, made from Board members with significant experience in the sector, finance and in global operations. Non-Executive Director 1, as mentioned above, explained how they managed to 'get this from Paul [the Group CEO]', inferring their direction on supporting him to relinquish more of the operational aspects of his role. They played a 'hands on' role in their support of the Titanium Group, not from a day to day perspective, but on major renewal activities such as acquisitions, and in achieving product and new international market innovation (explored later in this section). This is an interesting observation from an sMNE perspective and links to the international learning orientation and structure of the Titanium Group. Therefore, this analysis suggests that the size of the sMNE allows for this type and level of communication between its Board members.

International learning orientation, as an international entrepreneurial capability evidenced at the Board level, influenced the implementation of the acquisitions and in the restructure of the organisation. Another perspective on international learning orientation was how this develops following international strategic renewal. In this case, differences were observed at a cross divisional and intra-divisional level. Despite the desire at a Board level to promote cross-divisional communication to pursue new international opportunities, evidence varied in terms of the operationalisation of shared learning. This was recognised by the Group CEO and number of the senior management team.

"Trying to get people connecting up inside is quite important but we’re not very good at that. I’m sure you’ll have had lots of things where people say they don’t know what’s happening at group. We do every month now when we talk to the regional MDs give them a picture of what’s going on, they just don’t remember what we’ve told them. So it would be nice to get all the MDs together once a year. " Titanium Group CEO
In Division One the acquired companies appeared to be 'finding their feet' as a Division and the MD. In reflecting on his role as Division MD there appeared to be an issue of trust as each of the Division One companies had worked for themselves and were not used to being part of a larger group. The Managing Directors of these acquired companies were often reluctant to pass on information of customers and suppliers to the Titanium Group corporate headquarters. The Group Business Development described the acquired businesses in Division One as 'naturally hoarders of information' as this was how these companies had survived as small independent businesses.

However, where cross-divisional international learning orientation was evident it included the sharing of a potential contact, product or process innovation. They included the sharing of an Indian agent between Mercury Ltd and Silver Ltd, identified by the Divisional Finance Director. Aluminium Ltd had identified a potential opportunity for Copper Ltd in Brazil. Copper Ltd, Fusion Ltd [equity stake US partner] and Silver Ltd were sharing US customers. There were greater levels of shared learning between subsidiaries within the divisions, compared with cross-divisional working and this tended to focus on new product innovation and the entering of new international markets.

Linked to the international learning orientation of the Titanium Group post the international strategic renewal outcomes of acquisition and organisation restructure, is the international entrepreneurial capability of autonomy. Autonomy allowed the divisions to effectively run their own respective businesses; they adhered to an overarching framework and were expected to seek approval on certain projects as well as report on the project after the event had taken place.

"We consciously allow the MDs to run their own businesses quite autonomously, even within the divisions, you know, the three parts of Division One are all run autonomously; the MDs run their own business... So if they come to us with ideas then we will very much support and listen and facilitate those ideas coming through." Titanium Group Financial Director

However, the Titanium Board recognised the challenges associated with achieving an entrepreneurial balance in a growing sMNE. The Group Finance Director highlighted the cultural shift the divisional companies were undergoing following her implementation of a new way of financial reporting, using dashboards and KPIs, procedures needed for an AIM listed sMNE.
The international entrepreneurial capability of international risk-taking influencing the outcome of international strategic renewal was also evident in the entrepreneurial internationalisation of the Titanium Group. The commitment to acquisition as a strategic growth option following the AIM listing and the equity stake investment in Fusion US [the US equity stake investment] demonstrated the international risk orientation of the Titanium Group. The risk was however guided by the expertise held by the Titanium Board members and questions would be raised by the Board to question the motives and strategic fit of any significant new developments. Not all investments proved successful; in particular the equity investment in the US oil and gas equipment company, following this investment, the oil and gas market slumped as shown in Fig 5.1 and Table 5.3. Contacts were not provided at the US based company, therefore it was difficult to follow up issues pertaining to this particular investment from their perspective. However the Group CEO stated the motives for the equity investment were to access technology following international opportunities identified in third party commissioned research.

"The main objective there is they’ve got some nice technology for a low cost solution for composite oil and gas equipment for hauling natural gas effectively, although they do some other things as well. Terrific-looking market for it ‘cause we had some independent market research done. Just the timing that was wrong. As we got going with that, the oil and gas market dipped. So we signed up with them in December 2014, just as the oil price was going off. These things happen. " Titanium Group CEO

In undertaking international risk through the Redroad LLC acquisition, the Titanium Group also averted international risk. There was a fear if the Titanium Group did not undertake the acquisition they could potentially lose the business they licenced from Redroad LLC. The Group was in the position of potentially losing a growing arm of the business, an arm of the business which also presented a more balanced portfolio for the Group following the uncertainties in the oil and gas sector. Therefore this international risk taking activity was also an international entrepreneurial capability executed by the Titanium Group Board to alleviate risk.

A further example of the Group’s approach to international risk-taking was identified in the possible acquisition of US competitor with an Indian owner, who was beginning to show signs of instability. The Chair’s review of the company demonstrated the
acquisition was not the best route to enter the US market at that particular point, based on the financial instability of the proposed acquisition and economic climate of oil and gas in the US.

In analysing network capital as an enabler of international strategic renewal, human capital played a further role. Rather than the networks, the expertise held by the Board in managing the Group’s obligations as an AIM listed company and their interactions with the City appeared to be of more significance in enabling international strategic renewal. The Chair and Non-Executive directors exercised their expertise in evaluating contacts identified in the City rather than providing the networks to access these contacts. Non-Executive Director 1 had lived and worked in the US, managed the European arm of a global business and established small firms. He later moved into venture capital funding for UK SMEs. He established Venture Capital Trusts (VCT), publicly listed, which he was a Non-Executive Director of and had other Non-Executive directorships including three PLCs and a number of VCTs.

The equity investment in the US oil and gas equipment systems company was a contact of the Group CEO, however in the UK acquisitions they came through knowledge of the sector and external corporate finance investor networks. Another link here to the human capital of the Group CEO, was identified in the conversation with the MD of Iron Ltd. He stated that when they were seeking investors in the firm, of the list of potential investors they drew up, it was only Paul, Titanium Group CEO, that he met in person. As the son of the founder, the MD has significant loyalty to his workforce and was seeking an investor he could trust.

"But I got the feeling that what he told me was how it’s going to be and for these two years it absolutely is. And if I’m now divisional, I look at acquisitions and things, I can hand on heart go to a new potential acquisitions and say I’ve done it, if they were arseholes or whatever I wouldn’t still be here doing this, I’d have thought you’ve screwed me over and I’d have gone." Managing Director Iron Ltd

From a network embeddedness perspective, the ties held with Redroad LLC allowed for the international strategic renewal and is discussed under international corporate venturing. An interesting aspect from a network embeddedness perspective is the fact that network position partly pushed the Titanium Group towards international strategic renewal. Negative network embeddedness is raised here as an influencer on the
international strategic renewal of the Titanium Group from the position in their network with oil and gas customers combined with the decline in the sector. This combination was a factor in the Group’s move to grow through acquisition and diversify into different sectors - defence in Division Two and renewables in Division Four. The oil and gas market dominated by a few large conglomerates, meant the Titanium Group in effect had two or three major clients, which they shared but also supplied different products to. Nevertheless as a group, this had a significant impact. The oil and gas sectors accounted for the entire customer base of Division One (comprising three of the four divisional companies). This gave rise to conglomerate customers reducing the number of suppliers they worked with. Those that remained on their approved vendor lists (AVL) were squeezed on price.

It can be seen from the above analysis, a combination of international entrepreneurial capabilities influenced international strategic renewal in the Titanium Group. International proactiveness, international risk-taking and international learning enabled the Titanium Group to follow growth through acquisition and resulted in the organisation restructure to support the growth of this sMNE. However, in analysing this combination of capabilities, potential influences of autonomy arose as the company continues to grow. The nature of growth by acquisition had resulted in a divisional structure comprised of units expanded through organic growth and those through acquisition. Divisional autonomy and operational management was encouraged by corporate headquarters. This did result in some of the subsidiaries following their own agenda, with some tensions on shared learning. However, when learning was shared, there was evidence of successful harnessing of international opportunities.
Figure 5.2: Causal influences on international strategic renewal in the Titanium Group
5.5 International Corporate Venturing

International strategic renewal as analysed in section 5.4 transformed the Titanium business from the perspective of overall governance and positioning for long term growth. A key part of the international strategic renewal was the international acquisition of the New Zealand based Redroad LLC, the transition from licensee to acquisition is presented in Figure 5.4.

International entrepreneurial capabilities evident in achieving the international corporate entrepreneurial outcome of acquisition included international proactiveness, international risk taking and international networking orientation. From a network capital perspective, human capital of the Group CEO and Division Four MD influenced the acquisition. Network embeddedness, in particular relational embeddedness was found to influence the acquisition of Redroad LLC.

The acquisition of the Redroad LLC New Zealand was influenced by the international proactive behaviours evident in the Titanium Group, predominantly the Group CEO and the Divisional MD. Prior to the acquisition, Copper Ltd was established by the Titanium Group as a start-up venture. This was the result of the Group CEO identifying an opportunity in renewables. The start-up venture acquired a licence from Redroad LLC to supply the UK and parts of Europe. The business began to grow and the MD of the start-up venture (now Division MD) felt there was an opportunity to acquire the New Zealand based company. His motivations were twofold; he saw an opportunity in gaining more international business and he identified Redroad LLC were in some difficulty. If Redroad LLC were to be bought out buy a competitor, as mentioned in section 5.4, this would place the Titanium Group business in a vulnerable position.

"I mean I was shouting and bawling at Paul and the Titanium Board for three years to say we should buy it... And the other thing about it is if Redroad went, where would Copper Ltd be as a business?... And I could see, ‘cause I’m entrenched in this business, I could see the global prospect of it." Copper Ltd UK Managing Director & Europe, Division Four Managing Director

The international networking orientation and the international entrepreneurial drive of the Group CEO was behind the creation of the renewables arm of the business. It was felt this acquisition facilitated rapid internationalisation opening up industry related opportunities for Division Four in the renewables sector.

149
"...that acquisition gave us a global market. So we got Europe, we got North America, Canada. I mean Canada, 90% of renewables going into the grid is from a Copper Ltd system. Europe, the biggest project in the world was in Europe. Now the biggest project in the world is in Montreal in Canada, Copper Ltd. So suddenly we went from being a UK business under licence to a global business." Titanium Group Business Development Director

As mentioned in section 5.4 the financial investment made in this acquisition of a struggling business albeit with a healthy order book, demonstrated the international risk attitude of the Group. Although acquisitions were used by the Group to grow the business, by the time of the acquisition the Group had been operating in the renewables sector for five years, it was the first international corporate venturing activity of the Group. It also represented a significant commitment to diversification into the renewables sector, not aligned to the existing divisions which serviced predominantly the oil and gas sector. Conversely, this allowed for the Group to grow into new areas of international business, an innovative sector to offset the some of the decline the other divisional companies had witnessed in oil and gas.

From a network capital perspective, human capital and social capital had a role to play as enabler of this acquisition. The international trade and financing experience of the Group CEO enabled the acquisition of the Redroad LLC. The Group CEO, led on the financing and processing of the acquisition. It was his alertness to international opportunity which established the start-up venture in Renewables leading to the licencing agreement and finally the acquisition. As shown in Table 4.3, the Division Managing Director had a strong sales and business development background and had worked in highly competitive automotive sector previously; He was international opportunity driven and alert to the new business the acquisition could bring.

The network position the Titanium Group held, connected through the licencing agreement with Redroad LLC, meant it was in a prime position to be alert to the opportunity of a takeover bid. From a relational embeddedness perspective, Redroad LLC was a strong tie to the Titanium Group. The relationship it had built with the owners of Redroad LLC had a significant influence on the acquisition. A relationship actively pursued by the Group CEO at a strategic level from the time they became a licensee until the time of the acquisition bid.
"...I made sure that whilst we had the Copper Ltd business [as a licensee]... and Mike Small and Simon James [now Copper Ltd Division MD] were running it when it first started, is that I made sure I knew all the key players at Redroad LLC. So making sure that I always had a direct route into the top guy in those businesses, so that when the opportunity came to buy them we were always going to be in the best place to do it. So we started really with negotiating the original licence agreement we had with Redroad LLC to sell their technology and that sort of branched out from there [to acquisition]." Titanium Group CEO

At an operational level, the Copper Ltd Divisional Managing Director had built a strong business relationship over the five-year pre-acquisition period. His closeness to the partnership through the licencing agreement meant he also had access to intelligence on their vulnerable position. As a licensee, the Titanium Group had a number of live projects dependent on the licencing agreement.

From the perspective of Redroad LLC, they had been in conversation with a local private equity firm for seven years prior to the sale but had reached significant cashflow problems. A US based company was also interested in purchasing Redroad. However, the licencing agreement and orders held with the Titanium Group, meant the Titanium Group were in a strong network position to acquire Redroad LLC.

"So they were heavily linked, I guess, with us [Redroad LLC] and didn’t want us to go down. And obviously we had a lot on for them at the time but we had major cashflow problems and they didn’t want to, I guess, give us money that they didn’t know [was] going to be spent on their projects to finish." Copper Ltd New Zealand Managing Director

Ownership advantages in Division Four as result of the acquisition allowed for greater access to global markets and reduced the risks of relying on a licencing agreement held by the founding organization in New Zealand. Through acquisition, the Group identified a means to ensure existing contracts were secured as can be seen Figure 5.3.
Figure 5.3: Network embeddedness in the acquisition of Redroad LLC
Following this the acquisition, the division was created to comprise of three subsidiaries, one based in the UK, New Zealand and Canada. As shown in Figure 5.3, the role of the subsidiaries changed to enable each location to be involved in both sales and R&D. This provides an interesting insight into the sMNE in its entrepreneurial approach to the roles subsidiaries play. A further development of the Redroad LLC was the increase in innovation activities across the division. With the three new subsidiaries operating under division three they were all engaged in new product development thus allowing them to enter an underexploited market. As noted in Figure 5.4, their network position also changed, moving from the licencing partnership to a division operating from three main subsidiaries. The new international markets accessed and product innovation emanating from international corporate venturing activity is discussed in section 5.6.

Sensitised by Figure 4.1 in seeking causal explanation for the international corporate venturing outcome of the acquisition of Redroad LLC, a number of international entrepreneurial outcomes were identified. The combination of international proactiveness, international networking orientation and international risk taking enabled this acquisition to take place. This combination of international entrepreneurial capabilities and the human capital of the Group CEO and Division MD resulted in a position of power in their network thus enabling acquisition of Redroad LLC (see Figure 5.4). The causal power of network embeddedness at play in this explanation highlighted the importance of strategic network relationships for the Titanium Group, both from a structural and relational perspective in achieving international corporate venturing outcomes.
Figure 5.4: Causal influences on international corporate venturing in the Titanium Group
5.6 Innovation: New Products, Services, Diversification and International Markets

International strategic renewal in section 5.4 and international corporate venturing in section 5.5 demonstrated how the combination of international entrepreneurial capabilities, network capital and network embeddedness influenced these outcomes. The acquisitions undertaken, diversification into the renewables sector and the positioning of the Titanium Group as an AIM listed sMNE also resulted in a range of innovation in the Titanium Group.

Innovation in the Titanium Group was manifested in product and service innovation, diversification into new markets and the entering of underexploited international markets. As shown in the examples in Table 5.3, the range of innovation was varied between the divisions. All were involved in new product or service innovation as well as entering new geographic markets. Similar to international strategic renewal and international corporate venturing a combination of international entrepreneurial capabilities, elements of network capital and network embeddedness were found to influence innovation in the entrepreneurial internationalisation of the Titanium Group. The conditional influence of oil and gas was often found to drive innovation across the three divisions - One, Two and Three. The analysis found the international entrepreneurial capabilities of international proactiveness, international motivation, international resource coordination, international autonomy, international learning orientation, international customer orientation, international competitor orientation, and international networking orientation influenced innovation in the Titanium Group companies. Again the role of human capital, the range of international trade and investment and sector expertise was significant in enabling innovation to take place. The international networking orientation of the Titanium Group, in particular the Group CEO and of the divisional companies afforded a strong network structure and relational embeddedness for innovation.
Table 5.3: Examples of Innovation

<table>
<thead>
<tr>
<th></th>
<th>Division One</th>
<th>Division Two</th>
<th>Division Three</th>
<th>Division Four</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>New sector</strong></td>
<td>Diversification into nuclear</td>
<td>Diversification into defence sector</td>
<td>Diversification into defence sector (established subsidiary in Germany)</td>
<td></td>
</tr>
<tr>
<td><strong>New geographic market opportunities</strong></td>
<td>Development of subsidiary relationships (global)</td>
<td>Development of US market Development of Chinese market (contract manufacture)</td>
<td>Development of US market</td>
<td>Development of Chinese market (new customers and contract manufacture) Development of Brazilian market Development of US market Development of UK, France, Netherlands, Italy and Germany</td>
</tr>
<tr>
<td><strong>New service</strong></td>
<td></td>
<td>Engineering solutions offer</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>New product</strong></td>
<td>Development of niche oil and gas equipment.</td>
<td>Development of niche oil and gas equipment</td>
<td>Development of three technology offer</td>
<td></td>
</tr>
</tbody>
</table>

Analysis demonstrated an overarching international proactiveness to pursue international opportunity however the motivations for doing so varied across the Group influenced by environmental market conditions.

Market forces pushed Division Three into addressing the question what would happen if the oil and gas market stagnated or if its major client position changed? As a result the division responded through diversification. Evaluation by the division of their core assets and capabilities demonstrated its engineering services as a route to diversification. Through this evaluation it identified a gap in the market and rebranded its offer to service a new market in naval validations an area underdeveloped by competitors. Its market diversification strategy into defence was also a move to alleviate division reliance on the depressed oil and gas market as well as respond to a
competitor's weaker position in the market. International motivation was evident in the recruitment of its competitor's key sales lead in Germany and demonstrated an ability to change strategy focus in line with a dynamic market environment.

The Managing Director of Aluminium Ltd in response to the downturn in oil and gas undertook an in-depth exploration of new opportunities and the nuclear sector. This was as part of the 'Fit for Nuclear' programme with the support of the Welsh Government, an important tie for Aluminium Ltd in enabling this opportunity. Iron Ltd, similarly, was pushed to explore market diversification opportunities as a result of the downturn. Ideas had originated from discussions with their specialist metals supplier who had experienced an increase in demand for Nickel into the motorsport sector for other clients. Although Iron Ltd did not have the technology to service the motorsport market, the Managing Director felt it was a market to pursue in the future, contingent on investment in more advanced machinery. Similarly, Steel Ltd felt it did not have the high specification technology to diversify into more niche high value markets such as aerospace. Further innovation opportunities were mentioned but were relatively few in this division. Iron Ltd was also engaged in new product innovations exploring new ways of tooling which it would supply to the division; it specialised in a highly specialised machining method of machining specific to a certain type of metal which it was hoping to take to South America.

The international proactiveness, delivered through a combination of individual skills and market knowledge, along with technology, was regarded as key to Aluminium Ltd.’s success with major conglomerate OEM. Already an OEM supplier through locations in the UK, Singapore and the US, they developed surface system components which opened up further international opportunities with subsidiaries in Norway, Canada and Germany.

"Because we know we’ve got the approved vendor list, we know we’ve got the qualifications, we know we’ve got the skills, we know they need that and they need the products that we produce through just doing some research and identifying the right facilities [OEM subsidiaries], and then directly going and contacting them." Business Development Director, Aluminium Ltd

However, the international proactiveness to pursue new international market development was most evident in Division Two, Three and Four. The North American
subsidiary was particularly alert to and proactive in their pursuit of international opportunity.

"We are starting to look at other countries. Miguel, our Business Development Director, actually was just speaking at a conference about two days ago in South Korea. But there’s a lot of opportunities coming up in South Korea, Indonesia and Malaysia, and Japan as well… But Mexico, Colombia, Argentina are other countries that we’ll have some activity over the next couple of years."
Managing Director, Copper Ltd NA

Establishing a strong foothold in China and Brazil was a key aim for the North American subsidiary in terms of new market development. This involved both international sales, as well as an outsourcing location.

"The idea with China as well as Brazil is that that is our starting point for those two markets, establish our networks, establish our outsourced manufacturing for local manufacturing in those regions, and then grow from those centres as opposed to targeting it from the North American market."
Managing Director, Copper Ltd NA

The dominant influences of the Group CEO in shaping and supporting international proactive behaviours of senior managing teams across all the divisional companies was clearly evident in the new areas of entrepreneurial internationalisation explored in this thesis. The Group CEO's recognition of his senior management team's knowledge and expertise supported the international entrepreneurial drive of the Divisional companies. This acknowledgement of their expertise also created a culture in which autonomy in pursuing new markets, new products and services was evident in the activities of the Group companies.

"I can’t add anything to what Tim's [Commercial Director, Mercury Ltd] doing, If Tim or Paddy Malone [MD, Mercury Ltd] said to me we’d really like you to come and meet such and such a person because they’d like to see... I’d go. But I just need to leave them to get on with their jobs. ‘Cause Tim knows everybody in the industry. " Titanium Group CEO

"Everybody knows Mike [Copper Ltd UK & Europe Managing Director] as the man to talk to about renewables in the UK, which gives [the Titanium Group] a significant advantage in the market." Titanium Group CEO
The Group Business Development Director similarly referred to divisional MDs as 'gurus' and 'brilliant' in their sectors.

"So you take Mike [BDM at Mercury Ltd], nobody knows more about the market than he does. If we got a report done what’s the market size, actually Mike worked it out, our major competitor has probably got 60% of the world market share. He knows exactly what it is. You can’t tell him anything 'cause he knows it in detail, but we still need to validate that at times." Group Business Development Director

"Colin [MD Iron Ltd]) will kind of know before he’s even written the tender what his margin is going to be and what the price will be because he’s been doing it for 20 years. They’ll get the guy who sits down and does all the quotes and he’ll come back and Colin will be yeah, I think it’s about 200,000 and the guy will come back yeah, it’s about 201 [laughs]." Group Business Development Director

In addition, the Silver Ltd Managing Director was proactive in addressing the 'what if' question on the sustainability of their markets. His approach also demonstrated the motivation at a division level, as he invested in the training and development of shop floor workers to engage more in innovation, they were enrolled on leadership programmes run by a leading UK management and leadership institution. He also utilised contacts through military contacts that ran leadership programmes.

In investigating the different types of innovation the Titanium Group were engaged in, a link arose between international resource coordination, international autonomy and international learning. As discussed in section 5.4, international autonomy and international learning orientation was evident in influencing international strategic renewal but often mixed from an operationalisation perspective. In innovation, the combination of these international entrepreneurial capabilities was more evident. The sharing of information and resource across the Titanium Group, particularly in Division Four, influenced the creation of new products and services for international markets.

Firstly, it was important to recognise the varied nature of the types of projects the Titanium Group were involved in. In Division One an opportunity with international subsidiaries could be fulfilled within three to four weeks. In Division Four, the installation of their renewable systems could be two years, of which six months
involves planning permission. In Division Two defence contracts can require an 18 month lead time and their upgrade work may require a much shorter turnaround time of six weeks. As noted above, the Managing Directors’ experience and expertise meant they were best suited at an operational level in the allocation and coordination of resource. They knew their customers and markets and thus were given the autonomy to pursue new opportunity.

However, the Titanium Group had historically not followed any formal reporting procedures. Yet, as an AIM listed sMNE, it was required to submit investor presentations as discussed in section 5.4. Analysis of annual reports and investor documentation showed a shift change in the level of data and a more corporate presentation of material. Internally, process innovations were implemented by the Group Finance Director including corporate reporting systems. A common system of reporting allowed the Group to access relevant detailed information to support board decision making. Divisional Managing Directors were required to report on specific KPIs such as return on investment and profit margins as well as the details on customer and supplier contracts.

At a corporate headquarter level the Group afforded autonomy to its divisional companies, placing significant value on the expertise held in the divisional companies. It recognised the different nature of projects the Group undertook, however the Group sought consistency in its approach in ensuring terms and conditions were met and in managing risk. Financially any particular projects the divisions were bringing to the Board needed to show how it met the Group KPIs.

Another perspective on international resource coordination was the support provided by the Titanium Group Board in terms of engagement with the development of new product and service offers. This engagement facilitated the international learning orientation of the divisional companies. A particular example identified in this analysis was new product innovation in Division Four, the renewables sector. The Group CEO, Chair, Business Development Director, Financial Director and the three Managing Directors in Division Four were involved in product development team sessions exploring a new technology offer. The initial meetings took place in the Canadian office.

"We can’t run it from here. Which is why I’ve just come back from Vancouver, it’s why Paul (Group CEO) is in Vancouver at the beginning of March, because
that’s the real hub of one of our particular growth markets, and without getting the people all together and sitting round the table you won’t get the strategic direction right, you won’t get the ideas and the knowledge shared.” Group Finance Director

In this example, R&D expertise held by the different subsidiaries was being used to provide a complete portfolio of renewables for global markets. International resource coordination in the R&D of a multi-solution offer to the renewables global market demonstrated multi-site utilisation of human capital; the teams at the Canadian, New Zealand and UK sites worked together on this product innovation. Further international resource coordination activity involved the changing of subsidiary roles post acquisition, whereby sales territories were reassigned from New Zealand to the North American offices and R&D activity was shared rather than domiciling solely at the New Zealand office (see Figure 5.4). Under the original licencing agreement prior to the acquisition of Copper Ltd, expertise in renewables in the UK was limited to a certain technology. As the UK and North American teams started to collaborate they began to develop new product concepts. Historically the design team in the licencing firm was all based in New Zealand post the acquisition the design teams were drawn from New Zealand, UK, Europe and North America and worked on one design project.

"...Copper Ltd North America are running the lead on systems technology. We’ve got a partnership with a company in Portugal who are providing that bit of the technology. The electric design is being done in New Zealand. Copper Ltd North America are doing the physical design. And that’s a huge change from renewables where everything was done and they just got the diagrams and had to build them. So New Zealand did it all and passed it on and it never worked anyway. So that’s a big change.” Group Business Development Director

This activity was also referred to by the Copper Ltd North America, Managing Director who commented on the sharing ideas of ideas on new product development as well as the types of customers and markets they were serving in their respective geographic markets. Again this demonstrated how international learning orientation, international autonomy and international resource coordination influenced innovation, in particular within the group.
"We meet on a quarterly basis all the heads of each one of the regions, we quite often involve our heads of engineering as well, and we’re constantly sharing information about projects that we’re doing...And for all of our designs and for all of our technology we have one common, we refer to it as a vault, where we have all the information there and everybody throughout the organisation they all have access to the information..." Managing Director, Copper Ltd North America

The Chair also made reference to the coordination of activity in developing the new four product offer of the Renewables Division but did allude to some challenges the different market drivers each subsidiary faced, i.e. their own target market conditions. Nonetheless they were collaborating on innovation.

"I was in meetings last week in the States with Paul [Group CEO] and Barry [Group Business Development Director] and the Brits have got some ideas about things we should be doing in terms of building the business and the Americans have got different ideas and the New Zealanders have got different ideas as well, but it seemed to me that they were prepared to throw the ideas on the table and have a meaningful discussion about it." Titanium Group Chair

International resource coordination and an international learning orientation were also evident in Division Two. Silver Ltd Germany and Silver Ltd UK worked jointly on design and engineering projects, where new ideas on product development were fed back to the UK office and production teams. The Germany team had identified an opportunity to target the renewables sector (a different sector segment to Division Four) and were working with the engineers in the UK on developing the product. There were however fewer collaborations on new design with the US subsidiary. Analysis suggested the relationship with the US subsidiary was not as proactive. The US subsidiary was run by three ex US competitor senior executives, recruited by the Titanium Group. According to the Vice President of the US subsidiary he felt Silver Ltd weren't doing enough to represent themselves as US company rather than a US subsidiary of a UK owned company. The US market was viewed as distinctly different to the European market and he felt Silver Ltd was not adapting to the US culture and that they were not sufficiently active in the relevant sector networks in the US. There appeared to be some internal discord on the best approach to entering the United States for the Division Two Three companies; the US Vice President commented on
communication issues between the UK Division Managing Director and the intentions of the Group in expanding the US. The UK Managing Director of this division felt the US did not have the 'right people' in place to capitalise on the opportunities it presented. Therefore an international risk taking orientation was evident in targeting the US as a strategically difficult market to enter. US subsidiaries had been established and equity stakes in organisations made, yet it was felt the international resource coordination and execution of efforts to capitalise on the US market had not been as effective as those presented in Silver Ltd Germany and Division Four. This was supported by comments made by the Group Chair who felt sufficient resources were not being attributed to maximising potential in the US.

"And then we’ve got Division Three down in Houston where we haven’t been successful in all the time we’ve had that business there, for whatever reason. It’s had umpteen changes of management and here we are in one of the biggest oil and gas markets on the planet and yet we can’t make a go of it. It’s bloody frustrating." Titanium Group Chair

Further evidence of the Group’s approach to international resource coordination was in its investment in developing a new management structure in Division Two to try to capitalise on new international market opportunities. Division Two was engaged in new product development and the advancement into new geographic markets. The focus in this division was on expanding the global distribution network; here international proactiveness was impacted by internal inefficient operation systems as well as not having the right people in place. The divisional MD and the Titanium Group Chair felt opportunities had not been fully exploited in the US market. New appointments were specifically brought into the division to seek to reposition it in the global market, exploring new product offers and setting up new distribution networks. This included the appointment of the Commercial Director who had previously worked for Division Two's major competitor. With 20 years' experience in the oil and gas sector he had considerable market knowledge and experience (see Table 4.3), he brought considerable social capital to Division Two. As a result he recruited an employee from a competitor organisation to head up the US market operations for Division Two.

International autonomy was also found to support innovation but the Group companies engage with the Group CEO to seek advice on particular opportunities they had identified. The senior management teams recognised the international autonomy within
the Titanium Group for exploring opportunities and also appreciated the support they provided for particular initiatives. This was evident in both the UK and international subsidiaries.

"So if you’ve got new ideas or new suggestions then Paul's (Group CEO) always of an opinion well let me know, tell me what it is, and then give you his honest opinion on what he thinks of it and whether it’s worth taking forward or whether it’s not. It's a very, very open environment." Managing Director, Aluminium Ltd

International autonomy and international motivation also resulted in a number of the subsidiaries identifying human capital within their networks.

"So when it’s time to hire someone, for example, in Brazil, we put together a case, here’s the individual we want to hire, here’s what he brings to the table, here’s where we see the opportunities in that market and this is why we need to invest in someone right now, that was reviewed promptly and we got approval."

Managing Director, Copper Ltd NA

An interesting observation associated with international autonomy was the way the North American subsidiary had reportedly stated it was good 'now we're on our own' referring to developing their own leads. This was a reference made to splitting from the New Zealand operations, following the acquisition of Redroad LLC. They now operated as a subsidiary within the divisional structure.

Another influence of international autonomy linked to international resource coordination on innovation was the flexibility in realigning roles and structures to take advantage of new expertise brought into the companies. This was evidenced when responsibility for geographic territories were reassigned to allow new appointments to exploit their contacts and networks; in Division Three the Silver Ltd German office managed the relationship in India. In Division Four part of the Asian market moved to Copper Ltd North America due to the appointment of an indigenous Chinese contact who lived in North America and had sector experience and established networks, having worked for the competition. Agility to respond to these international opportunities ensured that the structure did not inhibit opportunity. International resource coordination was based on the expertise of the sales and business development employees and their networks, to ensure these network resources were fully exploited.
A number of the subsidiaries demonstrated a strong international competitor orientation influencing innovation. For example, the Commercial Director at Mercury Ltd continually undertook market analysis, gaps in key competitor product offering were monitored and he responded by investing in new product development to serve a niche area not covered by the main competitor. The same Commercial Director referred to maintaining close ties with competitors to gain information on the competitive landscape as well as their strengths and weaknesses. Vulnerability of one of the major competitors of Mercury Ltd was identified through access to the competitor's main distributor; as a result, the newly appointed contact was targeting the distributor for the competitor business in the US.

"This is where I'm saying we're going for the throat. We know that Fishers [large OEM competitor] are weak... And having this guy with us [former Fisher employee] is key to getting the edge in with these people [new distributors]. I almost don't need to visit them. This guy's already taken care of that."
Managing Director, Mercury Ltd,

The decision to create a new product in Division Four, was influenced by an international competitor and customer orientation. The division MD was frustrated by the fact they were missing out on contracts to competitors who were able to offer a full renewables product portfolio. Copper Ltd at the time could offer only part of the technology required.

"So essentially what the customer was saying is when we start looking at the developers and the engineering firms they say okay, well for this project that we’ve got [Copper Ltd] right now Tech One is great, but what happens next year when we bring in a project where another technology is actually a better fit? We’re not going to work with you because you don't have that technology."
Copper Ltd NA Managing Director

An international networking orientation combined with an international competitor orientation influenced the organisation’s ability to acquire market intelligence and act upon it. Boundary scanning activities therefore included a closeness to competitor ties.

"And it's things like that, maintaining connections, is critical to this... You know, if you're focused on a certain market sector you can't be an island, you have to network, you have to be prepared to physically go visit somebody, take them for
a meal or a beer and just find out how things are going. It’s incredible what people tell you if you just ask. And most of it’s quite innocent but some of it really gives you an insight into the strengths and weaknesses of an organisation.” Managing Director Mercury Ltd

Innovation was found not to just focus on new international markets or new product developments as outlined above. As outlined in section 5.4, a strategic purpose to create and expand Division One by the Titanium Group was to internalise some of the engineering processes they had outsourced. As a consequence, new engineering processes were designed. This had been operationalised but was in its infancy. New machining processes being shared internally within and between divisions included Steel Ltd working with Iron Ltd and Aluminium Ltd within its division to share engineering expertise with Silver Ltd. Therefore through a strategic decision to focus on acquisition for growth, this newly formulated division, had not just resulted in a transfer of process from an outsourced operation to an internal one, it also instigated new process innovation. Another example involved Steel Ltd (Division One) working with Mercury Ltd (Division Two) to create new machining and more cost effective parts.

"As far as inter-company go, we’ve got a working group which next week will be our first visit to Mercury Ltd and we’re sitting down with the Mercury guys and we’re going to try and take costings [out of] Mercury Ltd parts by looking at machine drawings. We’re the guys that are designing it, we’re the guys that are machining it. So we’ll say, do you really need that? Or if you need that what’s that doing? You know, if you increase that tolerance on that then we can reduce the cost on that part when we’re making it." Managing Director Steel Ltd

In seeking an explanation for innovation in the Titanium Group, the above analysis demonstrates how a combination of international entrepreneurial capabilities has influenced innovation. Drawing more specifically on how networks were created to achieve innovation, the following section considers network capital, the type and range of ties involved in accessing new international markets or creating new products and services. Analysis of network embeddedness also demonstrates the influences on innovation.

Network capital, i.e. the human and social capital of the senior management teams was found to influence the identification, creation and utilisation of networks to achieve
innovation. An interesting finding also identified in section 5.3, was the hands-on approach of the Chair and Non-Executive Board members in the contribution they made to the network capital of the Titanium Group. A level of engagement not expected to be mirrored in a large MNE.

Collectively the senior management teams had a range of sector, international trade, strategic management and funding expertise as can be seen in Table 4.3. The Group CEO and the Chair had over 35 years’ oil and gas experience and engaged in FDI across a number of international markets. Non-Executive Director 1 had over 20 years venture capital expertise and Non-Executive Director 2 had previously worked as a finance director and managed a number of UK and overseas acquisitions over a 20 year period. The Titanium Group Finance Director had worked for a global consultancy firm, the Business Development Director was ex-military, had previously worked for an international division of an aerospace and defence company, and worked mainly on establishing partnerships in a range of countries including India and Brazil.

Although experience and oversight were presented by the Chair and Non-Executive Directors as the main facets they brought to the Titanium Group there were a number of incidences where their connections influenced the enactment of opportunity in entering new international markets. The Chair’s connections with one of Division Three’s key customers enabled him to locate the technical buyer they should have been liaising with.

"So in the case of Silver Ltd one of their main customers is Spin Ltd and a couple of phone calls into Spin through my contact network established the fact that the real technical buyer in Spin was someone that we weren’t talking to, and we should." Titanium Group Chair

Non-Executive Director 1 had lived and worked in the US. As well as providing advice on finding the right people to talk to he used his networks to provide access to US defence expertise in particular contacts who had influence at a senior level in the US government.

"We’re doing some work in the States, Silver Ltd is doing some work in the States, and I’ve introduced (Group CEO) to somebody who’s into PR in the States." Non-Executive Director 1
When Division Three was exploring opportunities in South Korea he provided insight into the pipeline of activity in a typical tender process, highlighting to the division the need to be seeking opportunities sooner in the process.

"So being able to take people along the journey of don’t just wait on your customer coming to ask for a tender to make some [product], you can actually follow the bigger sales pipeline, which is an enormous market, many, many months ahead of where you are today." Titanium Group Chair

In exploring the international entrepreneurial capabilities and network capital evident in the Titanium Group to achieve their strategic priorities, it quickly became apparent the key role the Group CEO played in shaping the international entrepreneurial drive for international trade and investment activity across the group of companies. As already discussed in section 5.4, as a shareholder, having led the management buy-out in 2005 to create the Titanium Group, he had insurmountable market knowledge and expertise, portrayed in his accounts of trading in a number of international markets. The Group CEO was also a keen advocate of network and relationship development in providing access to international opportunities creating an international networking orientation across the Group; he personally was involved in a number of trade associations and was well known in the traditional oil and gas sectors the group served. He was chair of the main European sector association and through this position was invited to be part of the leading US trade association in the sector. These networks provided access to other actors in terms of customers, competitors and distributors, as well as international opportunities, including insight into potential acquisitions.

".. again through contacts that we’ve built up through things like ISA [trade association], I know who the key players are at the big machine operators in the States. So we’ve just had a guy from Northern in who potentially we might partner with them in the States, and that’s all borne out of knowing the people in the industry. So when Austin brought the Northern to us as a potential partner over there, I already knew Mary Atherton, who’s the matriarch of the family who runs it". Titanium Group CEO

"So at my level it’s about making relationships through things like international conferences and stuff like that. Similarly, going to OTC [trade association] and walking round with Sam at OTC. We’ve picked up new customers just ‘cause I’ve gone and talked to these guys." Titanium Group CEO
The Group CEO placed considerable emphasis on being part of the right networks for us to develop new international trade and investment activity. In exploring the Chinese market for Division Four he pursued the opportunity to build a relationship with key clients in the region and felt that even when the opportunity may not immediately present itself, the connections built could prove useful in the future.

"Rob Myers [Copper Ltd North America Managing Director] will run all that but Mr Ho [customer CEO] wants to see the top man in the group. But from that we’re starting to make more contacts that might be useful. So off the back of that and our salesman, I got a chance to meet the Operations Director for HF [oil and gas conglomerate] in Asia Pacific. So really I see my role as the best analogy is somebody who puts jigsaws together." Titanium Group CEO

There were few ties at a Group Board level and within Divisions which did not have a sector focus, these tended to be funding ties such as the venture capital contacts in the City. In the acquisition of Copper Ltd, the Board’s previous acquisition experience was used to act upon this opportunity which provided direct access to the global renewables market by acquiring a licensing partner. Associated with the Group's position within funding ties, the Board had potential access to a number of ties through the venture capital networks of a non-executive Board member, the Finance Director’s ties with existing bank and investor contacts and the ties the Group CEO had developed in the run-up to and since the Group AIM listing.

Funding ties provided the potential to access tangible resources to secure future entrepreneurial internationalisation. As part of the international networking orientation, the international venturing activity to grow through acquisition and the proactive behaviours evident in the activities of the Group these ties were part of their overall network with the potential to draw on as opportunities arose. It was a strategic network choice to ensure the Titanium Group was well positioned in these networks; as a result of being AIM listed, the Group had acquired these networks but also needed to be part of 'City' network from an investor perspective. In developing the Chinese market, funding ties were important to enhance their position locally; should finance be required to expand operations in China, Chinese contacts wanted to know the business they were working with had sufficient access to finance. Analysis of international opportunity development in Division Four provided insight into potential connectedness in Division Four, whereby Titanium became the 'broker' filling a structural hole between the
potential buyer of their product and services with a funder interested in the renewables sector.

Networks were also drawn upon to gather market intelligence, thus providing further evidence of the Group CEO's behaviour in creating a proactive and international opportunity driven organisation. He invested resources in accessing external market intelligence. The Group CEO commissioned specialist market sector consultants, BRC, on a number of projects; the reports they compiled included a strategic overview of Division Two, an assessment of a potential US investment opportunity and an analysis of growth potential for Division Three in the Renewables sector.

In relation to the opportunities identified for Division Two, the consultants identified growth opportunities in a specific niche sector in oil and gas equipment which Division Two were not servicing at that time. Investment was then made in product innovation to create a new range to service this market.

"They gauged our market size and they gauged also competitor product ranges and which markets they operate in as well. How the hell they got that information, you know, but that's what they're paid to do. So they've kind of established the size of market and the size of market that this MRS [new product innovation] would allow us to be operating in, which is tremendously bigger than the size of market we’re operating in at the moment. A lot, lot bigger in value. So you only need a small percent of that and it’s quite a lot of turnover." Managing Director Mercury Ltd

Commissioned specialist research into opportunities in the gas market for Division Two had resulted in new product innovation as well as market diversification opportunities to achieve a global market position against a larger global player.

"We are developing a range of products which have a capability that our range doesn’t currently have but will be able to go directly head to head against the Marshall family of products in terms of features and capability.” Titanium Group CEO

From a human capital and network perspective influencing decision making and accessing opportunities, an interesting point was made by one Non-Executive Board member regarding the importance of currency of networks they may hold as Board
members, particularly in his position and one of the reasons for bringing in intelligence from third party sector specialists.

"...it comes back to knowing people who know somebody. Which is why we’ve got these consultants involved in the States because they do have these contacts.... it is the relevance of these networks, that's the key..." Non-Executive Director 1

Penetration of local markets in all Divisions apart from Division One, focussed on achieving reach in international markets by employing contacts who were indigenous to the market with specific sector knowledge. From a structural embeddedness perspective, as contacts were employed the network structure achieved greater reach but also greater sector and market focus. Therefore, resource acquisition involved the employment of indigenous human capital, aligned to the Titanium Groups overarching strategy of achieving local market insight and in some cases physical presence.

"And in the end people do business with people and unless we get to know the people in Brazil, unless we get to know the people in Singapore, unless we get to know the people in Philippines, all those different places that produce different sectors of the oil and gas, we never will get the business." Non-Executive Director 1

This represented a key finding in this analysis in addressing the role of network embeddedness in these examples to create opportunities to acquire more network capital resulting in the entering of new international markets. The analysis revealed the importance of customer and competitor ties as a key strategic resource. Opportunities in the USA in Division Two were advanced with the employment of a competitor employee through the Commercial director's ties, access to Chinese and Brazilian markets was enabled through the employment of former employees of both competitors and customers (see Figure 5.4) and Division Three established a presence in Germany to exploit global naval opportunities through the employment of a former competitor employee (see Figure 5.5).

In the example of employing contacts from competitors to access the US market in Division Two, this demonstrated the resource value associated with the network capital held by the organisation. In particular, linking to human capital, the networking skills, competitive aggressiveness and alertness to opportunity demonstrated by the
commercial director enabled access to customers they may not have been able to reach otherwise.

"So it wasn’t really driven out of the US but we just recognised generally that the industrial base in North America is one of the biggest and most easily accessible to us for our product type. And if we hadn't been able to hire one of the competitors’ businessmen then we would have really been looking at... I would have just been over there hawking myself around, visiting people, trying to convince them to come and buy the product. But having a guy bring all those customers with him, or the potential to bring a lot of them with him, why wouldn’t we hire him?" Commercial Director Aluminium Ltd

In terms of relational embeddedness, the Commercial Director referred to the type of relationships they accrued from the employment of this contact.

"A friend of his becomes a friend of ours and then become a customer and then it’s just a question of not letting them down and actually giving them what they need." Commercial Director Aluminium Ltd

The nature of network embeddedness of Copper Ltd (North America) was evidenced by the development of the Chinese markets in renewables, where competitor ties played a role (see Figure 5.5). Opportunities had been identified in China but it was evident that local indigenous connections were needed to be successful. The senior management teams had previously worked together for a competitor, they also identified their Business Development Manager (Miguel Ruiz) through a relationship at their previous company; he had reported to the Copper Ltd North American Managing Director (Rob Myers) and also had a personal relationship him. Through this strong tie, they were able to approach (Ian Yu) the contact about the new opportunity with them at Copper Ltd North America; the business development manager at this time felt Copper Ltd could provide greater opportunities than his employer at that time.

"When we started to look at potential opportunities we actually had an opportunity to hire someone that we had previously worked with as well, a Chinese fellow who has a home based in Vancouver as well as China. And we hired him as a business development manager for China and he came with five years’ experience in the Chinese renewables market, so knowledge of a lot of the projects that had happened or were being developed and a lot of the potential
customers, and already had those relationships." Managing Director Copper Ltd North America

The Group CEO highlighted the reason the North American subsidiary was covering China was down to connections and to locational factors in Vancouver, the fact it was home to a large expatriate Chinese population. This also raised an interesting observation from an sMNE perspective i.e. the territory in which the subsidiary was located did not only serve its local environment, the network capital held by that subsidiary meant it served beyond North America to China.

"...it's down to knowing the market and it's interesting, we're just at the point now where we're setting up a supply chain in China and, again, a lot of it's because we've got people with specific market knowledge who know who's around and who's good. So it's amazing the number of Chinese citizens who also have a place in Vancouver. Vancouver's got one of the largest Chinese populations outside of China and as a result of that you make very good contacts via the office in Vancouver through to businesses in China." Titanium Group CEO

Other customer ties influenced China as an outsourcing location, also shown in Figure 5.5. To remain competitive in the Chinese market where cost is a key differentiating factor, in 2015 Copper Ltd outsourced manufacture in China. They outsourced to a number of fabricators who were identified via their networks; the main fabricator was through a North American contact they had been working with for a few years but had had operations in China. Copper Ltd North America was therefore embedded in a cross regional market which evolved through Chinese companies investing in projects in North America and from European companies investing in North American projects. Other fabricators were established through contacts of the Chinese Business Development Manager. The Titanium Group were gaining more market intelligence as they increased operations in China.

“It's like one of those puzzles where you keep unveiling a bit at a time and it all works its way through and eventually you get a full picture of the market.”

Titanium Group CEO

It provided the Renewables Division with an opportunity to build the same equipment manufactured locally in North America, UK and Europe at source in China.
"So someone who understands the culture and builds that relationship is key. So having that presence, that person that understands the culture, is based out of China, has all the contacts in order to help them in other aspects of a project. So if they need some finance, to have those connections locally to bring in the financing. If they're looking for another piece of technology for the overall project, having those connections and being able to bring that to that customer is very important." Managing Director Copper Ltd NA

In the example of expanding into Brazil, as shown in Figure 5.5, a Business Development Manager, Manuel Mendez, with eight years' experience and a background as a project developer was recruited through a customer tie (Jerez LTDA). The Business Development Manager was already moving to Canada at the time Copper Ltd North America was looking to recruit to this position for the Brazilian market. The customer was content with the situation as Manuel was leaving anyway; it also strengthened the relationship with Copper Ltd North America as the customer felt they were still able to access their ex-employees experience. This allowed Copper Ltd (North America) to maintain their customer ties in Brazil. Similar to the recruitment of the Chinese Business Development Manager, the Manuel provided access to cultural and market intelligence, as well as a range of contacts with project developers in the Brazilian market, thus increasing the network capital of Copper Ltd and the Titanium Group. As the import taxes to Brazil resulted in a more expensive contract for the client, Titanium Group decided to outsource manufacture equipment in Brazil.

Figure 5.5 demonstrates the overall network embeddedness influencing the expansion into China as both a new international market to sell into and as an outsourcing location. From a network capital perspective the extent to which the different types of relationships held along with the international opportunities these networks brought would be difficult for competitors to replicate and thus represented a strategic intangible resource to the organisation.

A further potential tie for the Copper Ltd North American subsidiary demonstrating the network capital provided the Board was through the Group Financial Director, who had access to RVD [major global consultancy group] alumni having worked their previously.

"So one of my ex-colleagues at RVD Sheffield is now in RVD Vancouver. So there’s a natural linkage there between our Vancouver team and him. If we
need additional services or advice, I can introduce them.” Financial Director
Titanium Group
Figure 5.5: Network embeddedness in Division Four - Copper Ltd
Competitor ties also resulted in the recruitment of the sales manager of Silver Ltd subsidiary in Germany. As shown in Figure 5.6, the Group CEO met the contact (Michael Schmidt) at a trade association event, at that time he was employed by a major competitor, NDT. Based on the international competitor orientation of the Titanium Group and keeping ahead of competitor developments, they capitalised on the fact the company was in a vulnerable position and poached him from the competitor. Michael Schmidt then became the Sales Manager of the subsidiary in Germany to exploit international opportunities in defence through the German and Scandinavian shipyards. The new Sales Manager then brought his engineer, Thomas Maier from his former employer, Silver Ltd.’s competitor. The competitor subsequently did go into receivership.

Expansion of Silver Ltd into the US emanated from competitor ties (see Figure 5.7); the opportunity came to acquire their competitors shortly after floating on the AIM, although they did not acquire the US company they poached three of their top Executives to head up the US office. This opportunity was a result of maintaining strong relationships with the US competitor, previously they had been a supplier and ties had been built over a number of years.

"We then had a look at our next target, which is America, and we have a competitor over there who last year started to wobble. Well we just did the same thing again. So June last year we hired the ex-MD of that company and then they're two VPs of sales and we set up a sales office in the States." Group CEO

In both the entering of the German market to assist in the diversification into defence and in establishing the US subsidiary, the human and social capital of the Group CEO played a role. Silver Ltd also developed new service offerings whilst working on projects with their international customers which they were able to exploit with other clients; Silver Ltd established their client was using an expensive design layout using non standardised equipment as a result they identified two new market segments the low-cost market and an alternative technology market. Their engineering expertise opened up opportunities with the US defence sector.

"We’re the only people who have the ability not only to very quickly design an aircraft part and actually get the thing out to the customer.... [we can] then ship the first product to the customer inside one week." Titanium Group CEO
Figure 5.6: Network embeddedness in Silver Ltd - creation of Silver Ltd (Germany) Division Three
Figure 5.7: Network embeddedness in Silver Ltd - creation of Silver Ltd (USA) Division Three
In contrast to the divisions servicing the oil and gas market, Division Four, renewables, had a greater range of clients.

"It's opportunities and it's all about the people you're working with. We work with a vast number of different people. Water companies, farmers, funding houses, big energy companies. So one day I’m putting my wellies on, the next day I’m putting my suit on. It’s that kind of industry and there isn’t a typical project, if I’m honest." Managing Director Copper Ltd UK & Europe

Division Four connectedness with its customers was impacted upon by the relatively 'newness' of the sector; they saw their role as 'consultative selling' to waste customers who were unaware of the opportunities in the Renewables sector. Their relationship between the funding bodies meant they were positioning themselves as brokers between their customers and funders involved in the Renewables sector. The group was looking to pool private equity funders and customers together where government subsidies weren't needed or available, therefore securing the funding for their customers. By creating a structural bond between themselves, the customer and the funder they aimed to open up new international opportunities for their renewables offer. They aimed to therefore capitalise on structural holes in the sector. They would become the 'bridging ties' between their client and the funders. In this scenario the network embeddedness they created would allow risk mitigation on for their customers; Copper Ltd would act as the broker bringing together the funder and the customer reducing the risk to the customer by locating the funders to support the project.

To be successful in the Chinese market it was important for Copper Ltd to create a presence; in general Chinese customers preferred to operate in their own currency, with registered Chinese business who have access to finance in China. Culturally relationship development was crucial before any contracts were finalised. Although Titanium Group Plc had not established a company in China, the appointment of the Chinese representative addressed the issue of doing business with local contacts in China as a way to exploit the international opportunities China provided. Being based in China, the company was able to locate local finances and seek technology as needed via their local contacts.

Similarly, previous clients are more willing to work in with Copper Ltd based on previous projects and thus achieve favoured status. The North American market displayed similar strength of ties around trust and commitment, with approximately
50% of its clients originating through existing contacts; a lead contact from a previous customer brought their business with them to the new company. The nature of ties is also impacted upon by the size of the market, the renewables sector is small, an evolving industry where ties in the sector tended to know each other.

"So as an example one project that we’re in the final stages of closing right now, I guess the lead person from our customer we actually did business with him about four years ago but he was working for a different company and we had sold a piece of equipment to him in that company. He’s moved to another company now and brought the business with him to that other company."
Managing Director Copper Ltd NA

Reputation provided trust for a number of the divisional companies, the Managing Director, Copper Ltd UK & Europe when describing their relationship with clients referred to their profile as honest.

"You know, I’d rather us be honest rather than trying to win projects effectively lying to people and then finding out because brand reputation for me is very high up there in terms of what a business is looked upon." Managing Director Copper Ltd UK & Europe

Trust was important for Copper Ltd NZ and considerable business from the larger OEMs was through offering exclusivity to the major players compared with their competitors.

"So we were quite successful actually in making it clear to the [the suppliers] sales network, particularly Asia but also in other countries, that we were [the suppliers] exclusive sales agent for gas compression packages and hence we would get quite a lot of leads from their sales network round the world on gas compression because they would know they had a product but they didn’t quite know how to sell it."
Managing Director Copper Ltd, NZ

Although Division Two maintained the right to deal direct with clients, distribution ties in the North American market for Division Two were characterised by territorial boundaries and loyalty to the distributors who were very respectful of these boundaries. The relationship with the distributor in any particular territory can be quite powerful influencing the opportunity or desire to engage directly with the OEM. The strength of the distributor in a particular territory could deter Division Two from selling directly to
the OEM, they would be in a position where they had to work with the OEM in convincing them to go through the distributor and work with the distributor to ensure they understood the need to offer more value added service such as stock for immediate delivery, sales support, site visits and account management.

Distributor ties in the Asian markets were different for Division Two whereby culturally the distributor would see direct orders from the client as disrespectful. Mercury Ltd described this market as being less sophisticated than the North American market whereby the distributors expected to be entitled to everything which came out of a particular region.

Developing distributor ties based on trust and reward were important to Mercury Ltd; they sought distributors who were committed to developing the relationship with client, offering local support and holding stock then this would accrue a higher commission on product sales.

"And the best partners are the ones that are already probably selling other types of equipment into these companies, so they already have that network and connections and they're just introducing a new type of product that is known to be of use to that company but now they're offering that local capability, local supply capability. So yeah, that's roughly the profile of a partner. "

Commercial Director Mercury Ltd

Trusted relationships in this division were built on months of negotiations with their key distributors. International trade and investment events in developing the Middle East market demonstrated this point whereby a distributor in Oman had identified Mercury Ltd presenting themselves as the key distributor for their particular product. Mercury already has facilities and long term partners in Abu Dhabi and Dubai and after six months of negotiations visited the Oman contact whilst visiting their other partners in the region.

Division Two had diversified into defence and implemented a new engineering services offer which alleviated some of the pressures of the uncertainties in oil and gas. Division Two mainly worked with global distributors and designed a new product offer for a niche segment in oil and gas. Division One however was tightly bound to their OEM customers. In Division One, customer ties comprised of a small number of large conglomerates who dominated the oil and gas sector. Companies in this division were
on Approved Vendor Lists (AVL) and new international opportunities came from the subsidiaries of these Divisions at different international locations; the Saudi Arabian market was established through the OEM supply chain ratings Steel Ltd had accrued from previous work. New entrants did not exist in the oil and gas market due to the market share of the large conglomerates in this market, the resources required to enter such a market as a new player and due to the considerable decline the market had suffered since 2008. Therefore the Division One companies were bound to the conglomerates; structurally new ties came through subsidiaries seeking new suppliers from the AVLs. Much of the ICE activity of Division One firms was focussed on maintaining existing relationships to ensure they secured their position within the OEM network as OEMs sought to consolidate their AVL lists.

"What's happening just now in oil and gas in particular is the majority of companies are reducing the amount of companies on their supply chain. So if they've got 30, they're reducing that down to 15. My first bit of good news in about a year and a half was last week I got an e-mail from Seatime in Hull and they're stating that they've just won a pre-order from Pipeline, and basically they're cutting their AVL, approved vendors list, down to 15, of which Steel Ltd will be one of them." Managing Director Steel Ltd

There was recognition by MDs in this Division that diversification was needed into new sectors, however initial opportunity exploration identified the markets would not necessarily bring the repeat business they were used to in oil and gas, entry into new markets such as high performance automotive sectors and nuclear required significant investment in new machinery and in some cases they needed to establish where their position in the supply chain of these new customers would be.

Due to the specificity of oil and gas existing ties, the structural embeddedness of Division One in this sector meant the use of ties for diversification was limited. This required the MDs and BDMs in the three Divisional companies finding new ties, therefore human capital became an important factor in the exploration of new opportunity.

In terms of reach, the supply chain within the sector played a role. In the oil and gas sectors of Division One, physical local market presence to attract contracts from the OEM subsidiaries was not used; the structure of the network to generation international orders matched the structure of the OEM and their subsidiary networks the route into
these subsidiaries mainly involved contacts at the local market. Language and cultural issues were evident in securing new subsidiary orders where the project engineer did not speak English.

OEM subsidiaries were the key customers of the Divisional companies and purchasing decisions on which supplier from the AVL they decided to work with were made by the subsidiary rather than the HQ. Moreover, the Group CEO did not want the OEM to know the Divisional companies were part of the Group as this could lead to them putting further pressure on prices to achieve a Group discount.

"The one we have to be really careful with is FG [oil and gas conglomerate], and I don’t want FG [oil and gas conglomerate] to see us too much as a group because they’ll use that to their own advantage to try and negotiate the worst possible terms with one part of the group and then insist the rest of the group sticks with that." Titanium Group CEO

The divisional companies were selling to the same companies, but different contacts in those large OEMs. As the Divisional companies were focussed on sales to their respective contacts within the shared customer they often saw no benefit in sharing information on oil and gas customers. However, the Group CEO’s aim was to bring the different parts of the Group together to improve cross divisional communication irrespective of the lack of shared customers or markets.

"...we have one company that sells to Flimco Romania [subsidiary] and another company that sells to Flimco Norway [subsidiary] and they’re buying totally different things for totally different projects and never the two will meet. So it’s difficult to lump Flimco’s together. There might be six or seven people that we sell to, actually none of them are the same person, none of them are purchasing for the same project, so that’s quite a challenge." Titanium Group Business Development Director

The influence of these powerful ties on structural embeddedness was also mentioned in relation to Iron Ltd choosing the Titanium Group as their preferred acquiring organisation, as discussed in section 5.4. Two large OEM conglomerates were interested in buying Iron Ltd. An influencing factor for the owner, now MD of Iron Ltd, was as family business, he did not want the powerful conglomerate potentially taking over the company, stripping the assets and not providing any security for the employees.
He was also concerned with the remaining conglomerate then taking away all the business if they were not successful in the acquisition. From a relational embeddedness perspective, this also demonstrated some of the imbalanced relationships between the smaller manufacturing organisation and the larger conglomerate buyers in this relatively small tight network.

Relational embeddedness in the oil and gas sector between a small number of conglomerate buyers and many suppliers, meant when influential contacts in organisations moved on, the smaller suppliers could be hit by a change in decision maker. This was evidenced by Steel Ltd, when contacts moved on they tended to take their supplier leads with them. Despite being on the Approved Vendor List, the relationship building then had to begin again.

"...one of the biggest drawbacks on the oil and gas side, because before people had this structured approved vendors list which they run the supply chain off of we could have guys, and it happened to us in ACCA Solution, where a guy started in ACCA Solution who came from FMC, they were FMC’s competitors, then all of a sudden they bring in their own suppliers." Managing Director Steel Ltd

However, from a relational perspective, the Titanium Group companies had developed strong relationships with their client and had a strong reputation.

"I went to see HF [oil and gas conglomerate] a few years ago and I was meeting with sort of one of the lower buyers, if you like, just trying to get in the door, get the initial stage rolling, and word got out somehow that Iron Ltd have come to visit and one of the high up people just came down to say oh, I’ve just popped in to say hello and meet you, I’ve heard of Iron Ltd. ... It makes you think you’ve got a good brand." Managing Director Iron Ltd

Trusted relationships with their key clients were important for Steel Ltd, in particular the buyers and the quality engineers. The MD at Steel Ltd would use the quality audits to gather market intelligence on orders within the OEM and what forecasts looked like. In some cases, Steel Ltd MD had 20 year relationships with his clients.

"So PQ [oil and gas conglomerate], as a group we are the second largest supplier to PQ. So the head of supply chain, [Mike Hive], knows me and can pick the phone up. His number two is more likely to do that. Those sort of
relationships are important because they want to know that the group’s actually interested in the businesses that they’re buying from.” Managing Director Steel Ltd

In terms of influence on innovation, the power of the conglomerate customers along with the position in the network influenced their international innovativeness to enter new international markets or diversify. Aluminium Ltd was focussed on working within existing OEM networks hoping to maintain existing relationships and securing new business from their subsidiaries. This was influenced by the historical buoyant oil and gas sector, the pressures to seek new markets had not arisen before, and again coupled with the small number of customer ties the companies held. This appeared to affect the innovativeness of some of the Division One companies.

"I think rather than an exploratory forefront I’m more of a maintaining forefront, because we’ve already got markets in the US and in Saudi Arabia and in Australia and in various other places around the world. So what I’ve done is really sort of enhanced the co-operation with those, so therefore from that brought more business with those and then brought recommendations from those.” Managing Director Aluminium Ltd

From a supply side perspective, the group had a number of supplier and outsourced manufacturing ties. Outsourced fabrication ties increased across international markets and created a network structure in Brazil and China of both contracted manufacture ties and customer ties (see Figure 5.5). To remain competitive in the Chinese market where cost was a key differentiating factor, in 2015 Copper Ltd outsourced manufacture to China. It provided the Renewables Division with an opportunity to build the same equipment manufactured locally in NA, UK and Europe at source in China. They outsourced to a number of fabricators who were identified via their networks; the main fabricator was through a North American contact they had been working with for a few years but had had operations in China. Other fabricators were established through contacts of the Chinese BDM. As the import taxes to Brazil resulted in a more expensive contract for the client, Titanium decided to outsource manufacture equipment in Brazil.

Titanium’s strategy was to set up networks with local fabricators, build up its capability and presence to expand from these regions. This was also driven by experiences associated with being structurally bound to one fabricator as evidenced in the
outsourcing activity for Copper Ltd, where a key supplier in North America reduced its workforce by 50% and order times moved by three months resulting in Copper Ltd accruing penalties from clients as delivery times were missed.

Supplier network positions provided access to customer market intelligence on the stability of customers and potential acquisition opportunities.

"Customer suppliers who are saying they’re worried ‘cause they haven’t been paid by X should be red flagging us to look at our customers. They may be paying us but if they’re starting to stop paying some of the smaller suppliers then we need to start worrying. Very important." Titanium Group Business Development Director

In terms of supplier ties for potential resource, previous experience and relationships of senior management played a role extending the network of supplier ties, thus demonstrating the influence human capital had on supplier relationships. The international trade and investment event of outsourcing supply to China for Mercury Ltd involved ties brought to the company by the recently appointed MD; in his previous role he had set up teams in China and one particular contact was located in a very strong and reputable engineering area of China and was using this tie to provide more contacts, as well as using a manufacturing organisation contact to source components.

"Well first of all I got those contacts from my time working at Henkel and I’ve kept friends basically with three of the team I was with. We’re always chatting on the internet. One of them, Arthur, there’s a particular area he lives in Shenzhen, which is a very strong engineering area of China, it’s outstanding for work, so I’m using Geoff to find me some suppliers that he would recommend that I can tap into." Managing Director Mercury Ltd

The human capital of supplier ties i.e. sector experience of suppliers was also a potential source for diversification opportunities; Iron Ltd having consulted with a specialist materials supplier was notified of opportunities in the high end motorsport sector.

Supplier ties across the Group were geographically diverse in China, USA, Canada, Germany, the Netherlands and Italy. Some customers dictated the source of supply therefore demonstrating a connectedness between supplier and customer ties. This was evidenced in Silver Ltd operations
"So we have good suppliers, to be fair to them, excellent product; we have a great relationship. Other than that, it can be that the customer dictates in certain instances where we buy from. They will have a global agreement with, say, people who supply oil and gas equipment; so all their suppliers are dictated to buy from a particular supplier, so we’re told to go to a number of ...suppliers and they give us a fixed price which they’ve negotiated with our customer."

Managing Director Silver Ltd

"On the oil and gas products side of the business, where we’re buying specialist component things, we tend to have long-term relationships with the supply chain and some of it's very specialised. You know, one of our key suppliers is a five-man outfit based in Arizona... So I, as Group Chief Exec, will probably go and visit all our major suppliers at least once a year and our divisional people are visiting them and dealing with them almost on a daily basis.” Titaniam Group CEO

China and Brazil are locations for both buyer and supplier markets for the renewables market. The aim of Copper Ltd NA was to secure a position in these markets as a springboard to exploit South East Asia and South American markets respectively. Its strategy was to set up networks and outsourced manufacture with local fabricators, build up their capability and presence to expand from these regions. South Korea (which the BDM for China had visited), Indonesia, Malaysia and Japan were identified as target markets as well as Mexico, Colombia and Argentina; these markets were described as being three to four years behind the Chinese and Brazilian market.

The negative experience of the Silver Ltd MD whilst at a large global automotive engine company influenced the relationship he wanted to create with his suppliers whereby he felt the aim was to continually pressure them on price, however the downturn in oil and gas did mean they needed to go back to their suppliers on price.

"So that’s more than a customer supplier... I prefer to look at it as partners...So we prefer to try and treat our suppliers as we’re in this together; if you help us be successful you’ll get more work by nature of the fact that you’re helping us be successful. So we don’t really want to be beating them up on price. We’ll encourage and help them to find cost reduction solutions if we can but not beat them up on price. We need our suppliers to make money and a healthy profit as well.” Managing Director Silver Ltd
Supplier collaboration on innovation was evident in a few cases; Italian suppliers were working with an Italian University to look at achieving more lightweight materials and Iron Ltd had explored opportunities with their specialist metals supplier on market diversification opportunities.

Sector specific ties were evident in the connections with trade association, industry sector and geographic market groups; 20 different trade associations were mentioned but not all demonstrated some level of contribution to international trade and investment events observed and Aluminium Ltd did not engage with any trade associations in relation to international trade and investment activity. Trade Association ties provided forums for government lobbying, an opportunity to gather market intelligence and make connections for international trade and investment activity.

"The ECMA is a kind of association from all manufacturers of oil and gas equipment in Europe. So it’s a kind of association where all the competitors in Europe are engaged in, so we are not talking about projects, it’s a kind of association where we’re discussing market opportunities, trends; we are discussing technical standards and so on. But it’s not direct project oriented ‘cause all the competitors are located together." Germany Sales Manager Silver Ltd,

Trade associations providing ties for lobbying was particularly useful for Copper Ltd, NA and Silver Ltd. In the case of Copper Ltd in the international trade and investment event associated with US market entry, trade association ties provided in market reach and connectivity.

"[The absence of] one blanket policy that covers the US, [means] every state has different policies, different pricing schemes, different loan guarantees for developers. So these organisations are doing a lot of lobbying on behalf of the industry to try and make change to policies and help grow the industry. So being members in those organisations is very helpful, they give us opportunities to speak, gives us opportunities to see where the market is going and have all those connections in the industry as well." Managing Director Copper Ltd NA

Lobbying trade association ties in the UK also provided Silver Ltd a chance to position itself as a key contributor to their sector, raising its profile not just in the UK.
"I mean the new SDSR defence review, Security and Strategic Defence Review, has just been announced and part of that is looking at a national shipbuilding strategy from the UK, and it’s also linked to how the UK economy can be helped. As an Association we’ve written a letter to [then chancellor] George Osborne direct because he’s sort of promoting the SDSR, and we’ve written a letter as the BNEA Council to ask for an understanding of how the national shipbuilding strategy is going to influence the economic benefits of the UK and if we can help in any way as an advisory.” Sales Manager UK Silver Ltd

Trade association ties also provided access to more human capital. The Group CEO met the Silver Ltd Germany sales manager at an association event who at that time was working for a competitor. When the competitor showed signs of instability Silver Ltd were in a position to offer him a role managing a German office. The ties were further increased after his appointment when he connected Silver Ltd to an experienced engineer, further enhancing the human capital of the division.

Ties with customers were advanced through trade association and industry groups; Silver Ltd are members of the International Marine Contractors Association (IMCA) through attending an event with the sole motive of networking they forged links with a key contact presenting at the event and as a result they became Silver Ltd’s largest customer in oil and gas.

"These are networking opportunities where, you know, you go to a lot of them and you can’t quantify what you’ve got really, the benefits of it a lot of the time. But that was one significant one, yeah, which has brought millions into the business over the last four years.” Sales Director, Silver Ltd

Trade associations were a forum where new connections were made and demonstrated an exchange of information from a low embeddedness base. The forum provided a context in which actors were already connected i.e. sector based which facilitated the exchange of supply chain knowledge, technical and policy developments, trust was implicit through the connection rather than a determining factor. Division Three sales director was a Board member of a key trade association for their naval business.

"I actually attend a lot of events now where we’re talking to rear admirals, the First Sea Lord. I mean I was sat having a half an hour chat with the Managing Director of CBD Systems UK, the top guy for the whole of CBD Systems UK,
very nice chap; but you wouldn’t get that opportunity if you weren’t in that network. And we’re looking at engaging with the US on their nuclear submarine programme and this guy gave me some really, really great insight into what’s happening and how to approach it and also offered his support.”

Sales Director Silver Ltd

In Division Two, they also referred to the importance of one particular trade association tie, but felt the rest were not as useful.

"...us being part of the [trade association] we can get right in there, right in the heart of it. We just have to accept that we will be part of a regional pavilion rather than a company on their own. We have our own booth and we can dress it up any way we want, but we are part of UK pavilion. So that’s good but other than the [trade association] no, there isn’t really any other organisation."

Commercial Director Mercury Ltd.

The fact that individuals within the group held positions within key trade association and industry groups also raised the profile of the subsidiaries and increased sector specific network ties. Lobbying possibilities as mentioned above but also in providing access to human capital of other higher profile organisations. Structurally, trade association and industry ties provided opportunities for stronger positioning within their sector network; stronger in that ties were formulated with contacts with greater influence in terms of market share, position within their target sectors and without the tie to the association would potentially not have been possible.

Sector specific ties beyond customer and competitor links are fewer and often provided niche expertise; Titanium Group commissioned detailed sector specific reports to support international entrepreneurial opportunity exploration in Division Two and Division Three. Such commissioned research was deemed considerably more effective by Titanium Group than the more generalist reports and advice often presented by government related support.

Division Three established the human capital they possessed through its engineering expertise and saw? an opportunity to exploit a gap in the market around quality standard approval. The sector did not have a quality standard to work against, as result they decided to diversify into providing engineering services and branded this arm of the business. As specialists in the field they then co-wrote the British Standard and
introduced a European Standard. Through the identification and exploitation of this opportunity they positioned themselves within their networks as a key player in driving quality in the engineering services sector and resulted in stronger network ties with major clients such as the Ministry of Defence.

In addition to the international entrepreneurial capabilities explored at the beginning of this section, network capital was shown to influence innovation in entrepreneurial internationalisation of the Titanium Group and its divisional companies. The depth and breadth of human capital in senior management teams and the range of networks ties they enabled including customer, competitor and trade association ties, created a network structure to enable the product, services and process innovation along with accessing new international markets. The relationships developed within this network of ties allowed the divisional companies to identify and enact upon innovation opportunities. However, those companies in networks with few powerful conglomerate customers servicing in the oil and gas sector, were inhibited in terms of new international markets and diversification was sought as route of a negative network position. Again sensitised by Figure 4.1, a summary of the findings in seeking causal explanation of innovation in the Titanium Group is presented in Figure 5.8.
Figure 5.8: Causal influences on innovation in the Titanium Group
5.7 Chapter Summary

In seeking to explain the influence of international entrepreneurial capabilities, network capital and network embeddedness on international entrepreneurial outcomes of international strategic renewal, international corporate venturing and innovation in the sMNE, a number of key findings emerged (summarised in Figure 5.9).

The Titanium Group, the entity, was engaged in a range of international trade and investment activity. As an sMNE it allowed the firm flexibility in the pursuit of innovation through diversifying into new markets and seizing new international market opportunities. Structurally, leading up to the restructure of the organisation, the growth through acquisition building on the organic growth of the founding company the Titanium Group, was found to influence the international learning orientation of the Group. There appeared to be a temporal nature to this influence, as the Titanium Group transitioned to the divisional structure, with pockets of the sharing of information particularly influencing innovation.

In investigating the causal powers and liabilities at play in the entrepreneurial internationalisation of the Titanium Group, analysis unearthed a significant influence of the role of the Group CEO. His knowledge, expertise and behaviours moulded the international entrepreneurial opportunity seeking and enactment behaviours and strategic direction of the Group. More specifically the ties and relationships he had built and continued to build as part of the Titanium Group and pre-management buyout directly influenced international acquisitions, international outsourcing opportunities and new international market entry. Combined with the human capital of the remaining Board members and senior management teams this had a strong positive influenced on all of the international entrepreneurial outcomes. The human capital investment and outcomes influenced firm actors’ alertness to international corporate entrepreneurial opportunity and their alertness to using networks as a strategic resource. An important point for reflection in exploring the causal mechanism in this thesis, is given the significant influence the human capital the Group CEO in particular, had on the international entrepreneurial capabilities and the networks of the Titanium Group and divisions, how the international corporate entrepreneurial outcomes may have differed.

In the context of network capital, the extent to which the network embeddedness of the group could be viewed as a strategic resource to the organisation.
The structure of ties associated with companies within the Titanium Group demonstrated a sector focus to their purpose and role within the network. All international trade and investment activity related events explored involved sector specific customer, competitor, research, and trade association or supplier ties. More specifically the subsidiary sector customer and competitor ties held key positions within the network structure; ties developed enhanced their global position within their respective markets and there were instances of cross border connectedness i.e. customer ties associated with one geographic market presenting opportunities in other geographic markets. The power of customer and competitor ties in international corporate venturing and innovation, demonstrated the influence of network capital in acquiring more network capital i.e. access to the expertise of indigenous contacts in customer and competitor ties increased access to further useful ties for international trade and investment activity. The resultant structural and relational embeddedness of the ties created within the Group, represented a strategic resource influencing the innovation of the Group.

Negative network embeddedness influenced innovation in the divisions servicing the oil and gas sector. Powerful relationships combined with the network structure, i.e. position in the supply chain, resulted in Division One companies being 'trapped in their net' and pushed the need for diversification. The powerful influence of market conditions was evident, the decline in the oil and gas market along with network embeddedness impacted on international corporate entrepreneurial outcomes of diversification and innovation. Market conditions in this sense pushed these outcomes.

International autonomy emerged as a key influence on innovation within the Titanium Group. Subsidiaries were allowed autonomy in the pursuit of international trade and investment activity, thus influencing the international pro-activeness and international motivation at a subsidiary level. Resources were allocated aligned to the autonomy awarded by the Titanium Group i.e. if the international trade and investment activity aligned with the key strategic objectives of the Group meeting KPIs, the resources would be allocated. Table 5.4 provides a summary of the international entrepreneurial capabilities observed across the Titanium Group Divisions. As shown in the analysis above, Division One showed less evidence of more of the capabilities than the other divisions. This was due to their negative network position with their large conglomerate oil and gas customers and the influence of the oil and gas negative market conditions.
However, the summary does show international entrepreneurial capabilities were evident across the group.

Across all of the international corporate entrepreneurial outcomes, key conditional influences on the international strategic renewal of the Titanium Group included the uncertainties of the oil and gas sector and the growth of the global renewables sector. The former pushed diversification into new sectors and new international markets, influenced acquisitions and restructure. The latter again, influenced diversification into the renewables sector and subsequent acquisition in this division and the entering of global markets for the group in this sector.
Table 5.4: Summary of presence of international entrepreneurial capabilities in the Titanium Group Companies
(adapted format taken from Dimitratos, et al, 2016)

<table>
<thead>
<tr>
<th>International …</th>
</tr>
</thead>
<tbody>
<tr>
<td>Proaciveness</td>
</tr>
<tr>
<td>Risk Orientation</td>
</tr>
<tr>
<td>Innovative -ness</td>
</tr>
<tr>
<td>Resource Coordination -inc. Autonomy</td>
</tr>
<tr>
<td>Competit -or Orientation</td>
</tr>
<tr>
<td>Customer Orientation</td>
</tr>
<tr>
<td>Supplier Orientation</td>
</tr>
<tr>
<td>Learning Orientation</td>
</tr>
<tr>
<td>Motivation</td>
</tr>
<tr>
<td>Networking Orientation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Titanium Group</th>
<th>++++</th>
<th>++++</th>
<th>+++</th>
<th>+++</th>
<th>++++</th>
<th>++++</th>
<th>+++</th>
<th>++++</th>
<th>++++</th>
</tr>
</thead>
<tbody>
<tr>
<td>Division One</td>
<td>++</td>
<td>++</td>
<td>++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>++</td>
<td>++</td>
</tr>
<tr>
<td>Division Two</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Division Three</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
<tr>
<td>Division Four</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
<td>+++</td>
</tr>
</tbody>
</table>

++++ = strongly present  +++=partly present  ++= weakly present +=absent
Figure 5.9: Proposed causal mechanism of the Titanium Group international corporate entrepreneurial outcomes
6. Chapter Six: Discussion

6.1 Introduction

This chapter discusses the key findings arising from the analysis presented in the previous chapter. It draws on the literature underpinning the conceptual framework in Figure 3.5. It demonstrates how the findings from the empirical investigation of international entrepreneurial capabilities and networks of the sMNE undertaken in this thesis contribute to the field of international corporate entrepreneurship.

The chapter discusses key findings in relation to how the Titanium Group, as an sMNE, achieved international corporate entrepreneurial outcomes. This includes the role of human capital, subsidiary power, growth by acquisition, network creation, the role of customer and competitor ties and negative network embeddedness. It therefore considers influences observed in the process of entrepreneurial internationalisation of the Titanium Group. The analysis highlighted the fact that these activities focused on international strategic renewal, international corporate venturing and innovation. International strategic renewal activity included an organisation restructure following the group's AIM listing, significant growth through acquisition, and subsequent insourcing. International corporate venturing focussed on the acquisition of a New Zealand based company, previously the licensor of technology to Copper Ltd and innovation including the entering of new international markets such as Brazil, China and US, new outsourcing locations in China, new product and service developments and diversification into the defence sector.

6.2 Power of human capital

In exploring causal influences in the entrepreneurial internationalisation of the Titanium Group, the findings demonstrated the significant role of human capital in achieving the observed international entrepreneurial outcomes. At a corporate headquarter firm level, the collective international trade, finance, and sector experience of the Group CEO and Board members facilitated the acquisitions and restructure of the Titanium Group. The findings unearthed an interesting combination of human capital influences on the behaviour of the Group CEO and those of the Chair and Non-Executive Board Members with respect to internationalisation activities. The Group CEO had insurmountable knowledge of the oil and gas sector, a finance background and had traded in many international markets. Alongside his experience and expertise, at a human agency level,
the Group CEO's alertness to international entrepreneurial opportunities influenced the international entrepreneurial capabilities of the Titanium Group. He employed senior management teams with international trade and sector experience, in some instances those who had worked for larger MNEs as identified in the appointment of the managing directors for Division Two, Three and Four. In promoting entrepreneurial internationalisation through building international trade and sector specific human capital across the division companies, the Titanium Group created more innovation opportunities and more opportunities for international corporate venturing. For example, market diversification into the defence sector was enabled through appointment of a sales manager in Germany with expertise of selling into this sector. Division Two commercial director, with a strong sales background in the global oil and gas market having worked for a global competitor enabled expansion of their international network of distributors.

Proactiveness of individuals within the Titanium Group was evident in its drive for new international market opportunities, influenced by the human capital of actors within the Titanium Group. Prior international trade experience has been previously recognised as influencing alertness to international opportunity (Jones and Casulli 2014; Mary George et al. 2016). Knowledge gained through previous international trade experience informs future internationalisation decisions, decisions on the resources and skills to deploy in achieving internationalisation outcomes (Jones and Casulli 2014; Leppäaho et al. 2018). Human capital of leadership and management teams was also considered an important influence on the drive for international growth and success (Zahra and Dess 2001). Alongside human capital influencing alertness to identifying and enacting upon international opportunities was the propensity to seek and build networks as a facet of human capital (Loane and Bell 2006). Thus, international motivation, organisation culture and human behaviour, was seen to have a significant influence on international corporate entrepreneurial outcomes in the Titanium Group.

From an international networking orientation perspective, the Group CEO was very much at the forefront of promoting the value of networks and relationships in entering new markets, working with new international suppliers and gaining insight into opportunities for acquisition. Senior management teams consistently discussed the value of being part of network creation, building strong relationships with customers, suppliers, distributors, trade associations and competitors. Networks were therefore viewed as a strategic resource by the Titanium Group, creating an international
networking orientation across the Group. These findings highlight the crucial role of human capital in promoting international corporate entrepreneurship.

The human capital of the Chair and Non-Executive Board members was also observed in the entering of new international markets. The USA, a target location and difficult market for the Titanium Group to enter, involved Board members advising on accessing supply chains with oil and gas customers as well as being directly engaged in the strategic development of new products for global markets. This engagement, although perceived as advisory by the Chair and Non-Executive Board members, also demonstrated the 'hands on' influence of entrepreneurial internationalisation. Expertise accessed via external directors and venture capitalists has been found as a way for young internationalising firms in their transition to an MNE to remove the need for experiential learning to take place, thus increasing the speed with which new markets were entered (Monaghan and Tippmann 2018).

The findings suggest that the human capital accessed via the Chair and Non-Executive Directors, combined with the human capital of the Board and the senior management teams enabled experiential learning. The Group companies were still finding their feet in the US for example, despite the access to significant human capital held by the external directors in this particular market. The acquisition activity of the Titanium Group both in the UK and internationally appears to rely heavily on the financing and international trade expertise of the Senior Management Team. This finding thus confirms the importance of outside directors with long board membership, external directorships with other firms and prior cross border acquisition experience as having a positive influence on shareholder value in a study of cross border acquisitions (Basuil and Datta 2017). Therefore, the findings of this shared human capital at the Board level through to the subsidiary level activity, showed the role of external directors in promoting international corporate entrepreneurial outcomes. It also showed the invaluable resource they brought to the Titanium Group, a combination of resource difficult to imitate.

The senior management team's human capital was also notable in its influence on innovation at a subsidiary level. The international proactiveness, international customer orientation and international competitor orientation observed in the senior management teams appeared to be driven by extensive international trade, engineering and sector experience of subsidiary teams. Diversification into the defence market, was a
culmination of management level previous MNE strategic experience and oil and gas knowledge of the managing director, specialist skills of engineering teams, international sales and oil and gas expertise of the German subsidiary sales manager and the strategic marketing and oil and gas expertise of the Chair of the Group.

In summary, the findings in this research suggest that human capital plays a significant role in international corporate entrepreneurial outcomes. Human capital has been identified as a key attribute to network creation and utilisation (Loane and Bell 2006; Leppäaho et al. 2018) yet few scholars consider human capital at a firm level. Human capital is therefore somewhat overlooked in international corporate entrepreneurship research.

During the empirical observations and as the analysis progressed, further aspects of human capital were evident in the Titanium Group, the ability to acknowledge the human capital, the expertise of others in the organisation and allow them the autonomy to enact upon their own international entrepreneurial skills and expertise. This leads to the next key finding in addressing this research objective, namely international autonomy and the influence subsidiaries had on their own decision making.

6.3 Subsidiary power, network capital and the pursuit of international opportunity

International autonomy refers to the freedom awarded to the subsidiaries in pursuing and enacting on international opportunity. Network capital comprises of the human and social capital held by the firm. It includes the combined international trade, sector and finance experience and expertise of actors in the sMNE. It includes the networks and the resources available to the sMNE. Of the international entrepreneurial capabilities observed in the analysis, the role of international autonomy in the sMNE, i.e. the freedom to pursue international opportunities was identified as an important factor. The extent to which independence and self-governance was enabled within the subsidiary locations was significant in the Titanium Group. Firstly, the Titanium Group corporate headquarters recognised in order to capitalise on the expertise and networks held by the subsidiary i.e. their network capital, subsidiary autonomy was required. It was clear from the analysis that all international subsidiaries led in the pursuit of new international markets. Furthermore, evidence of competing for internal resources among the subsidiaries was not apparent. This is in contrast with existing literature where the interplay between the subsidiary and headquarters suggests a battle for authority or privileges (Birkinshaw 1998). For example, although these findings support the fact
that subsidiary initiative on new product innovation is often aligned to the corporate headquarter MNE strategic priorities, the findings differed in relation to the MNE’s perception of subsidiary initiative being viewed as ‘self-interest behaviour’ by the MNE should it not be fully aligned to strategic priorities (Birkinshaw, et al., 1998 p. 236). The extant literature often considers the allocation of resources by the headquarter location and subsidiaries is taken from the perspective of which organisation exerts the most power. Often, MNE headquarters are considered to stifle innovation and subsidiaries are considered to seek to assert influence over centralised headquarters, suggesting ways in which corporate headquarter should manage the subsidiary to allow for innovation to flourish (Andersson U. 2003; Birkinshaw and Hood 1998; Birkinshaw J. 1998) (Birkinshaw J. 2000). This is typically posited from empirical studies on larger MNEs, therefore these findings offer a new perspective by suggesting the role of international autonomy may differ in the sMNE.

Furthermore, Titanium Group subsidiaries were not restricted by geographic location in terms of which new international clients it pursued. In Division Three, expertise, capacity at the different subsidiary locations to manage the contract and whether the client was a global customer were part of the considerations made on who would act upon the international opportunity. In Division Four, the North American subsidiary was active in the development of new international market opportunities in Brazil and China along with possible outsourcing opportunities in these regions. The German subsidiary in Division Three, was assigned India based on its specific expertise associated with the client needs. In this sense, the network capital held at this subsidiary influenced the role it played in innovation and potential international corporate venturing activity. This builds on studies of the activities of the micro MNE and transitioning MNEs who recognise the sales and business development roles of subsidiaries (Dimitratos et al. 2003; Dimitratos et al. 2014; Monaghan and Tippmann, 2018) but shows how subsidiary activities in the sMNE are not limited to the geographical location in which they are situated. Subsidiaries in transitioning MNEs were found to have sales functions supporting a regional strategy (Monaghan and Tippmann 2018). The findings presented in thesis showed the subsidiary roles were not necessarily aligned to regional segmentation strategies.

Network capital differences were apparent in the subsidiaries of the Titanium Group, with some more sales oriented and others having a combination of technical and sales expertise. The role of subsidiaries in the Titanium Group, were influenced by the
Division they were in and the network capital they held. Subsidiaries in Division Four were all involved in business development and R&D, following the acquisition where R&D was previously held at the founding firm in New Zealand this was dispersed across the subsidiaries in the UK, North America and New Zealand. The German subsidiary was mainly sales and business development but also provided engineering services, contributed to product design and service developments, and most manufacture was coordinated via the UK subsidiary. Therefore in the Titanium Group there appeared to be less of a systematic allocation of functional roles as traditional MNE literature often suggests (Ghoshal and Barlett 1988; Rugman 2011). The development of R&D activity at a subsidiary level, combined with their business development initiative increased the contribution they made to the overarching strategic priorities of the Titanium Group to build on global niche markets and achieve international growth through acquisition. This supports the suggestion of other scholars that the strategic influence of subsidiaries increases as they are awarded an R&D mandate by their corporate headquarters (Gilmore, et al. 2018). A difference observed in this context, was the fact that the innovation and knowledge created from a product development perspective enabled by international autonomy and organisation structure, was shared within the division but not across the MNE. This was also partly due to the fact that technology transfer was technically not widely possible in the other divisions.

The entrepreneurial internationalisation of the Titanium Group showed subsidiary roles in innovation could be determined by the network capital held by the subsidiary irrespective of its geographical location or the geographical market it served. In this thesis, international autonomy therefore enabled the enactment of international opportunity identified by the subsidiaries to achieve new international market entry. This therefore adds to the findings of other studies which identified international proactiveness as the identifying dimension of international opportunity, with innovativeness and strategic renewal enabling the opportunity (Kreiser 2011). The findings support the suggestion that autonomy should be included in research pertaining to the international entrepreneurial activity of the MNE as an antecedent to the international entrepreneurial orientation displayed in subsidiaries and their MNE headquarters (Birkinshaw, et al. 2005). This thesis therefore suggests international autonomy is awarded greater prominence in exploring enabling dimensions of innovation.
Influence of acquisition and organisation structure

Growth by acquisition enabled the Titanium Group access to global markets through the acquisition of technical resource, opportunities to acquire new engineering skills as well as start to in-source activity. Typically, acquisitions are used by firms to address a resource gap, access resources not held within the organisation or as a means to enter previously inaccessible markets (Teng, 2007; Wiklund and Shepherd 2009; Lockett, et al. 2011). The results from this case study show that in this context, acquisitions led to an organisation restructure, enabling the reallocation of resources to the divisions. This strategic renewal allowed the Titanium Group to present to external stakeholders an sMNE with a strong structure and global strategic direction focussed on four defined business units servicing oil and gas, defence and renewable sectors.

The changes in organisational structure represented the transformation of Titanium from an SME engineering firm pre-management buy out to that of an sMNE with international subsidiaries. Acquisitions allow the recombination of resources and enable the organisation to position itself for future growth opportunities (Lockett, et al., 2011). Board members suggested the divisional structure could allow for expansion of certain activity or divestment aligned to strategic priorities should the Titanium Board decide to reposition the divisions in the future. Organisation structure in MNEs has been linked to the ability of subsidiaries to innovate (Birkinshaw 1997; Birkinshaw 2000; Andersson 2003; Andersson, et al. 2015) and decentralisation allowed for greater responsiveness to local environments but remaining interconnected across international markets (Cantwell, et al. 2009).

These findings showed that the creation of a Divisional structure supported by the desire of the Titanium Board to create an international learning orientation within the Group enabled the creation of new products and services for international markets as evidenced in the intra-divisional product development activity of Division Four. The success of this acquisition was therefore also enabled through the coordination of human capital resources across the subsidiaries to achieve product innovation development. International resource coordination following acquisition was found to influence the success of such ventures (Wiklund and Shepherd 2009), this finding contributes to this discussion by considering the human capital element of international acquisition in the sMNE. In contrast to McCarthy and Aalbers (2016) who suggest international technical acquisitions are less successful than domestic ones based on the distance from the
headquarter location, in this thesis the international acquisition proved more successful post acquisition for the Titanium Group with technological learning being shared across the subsidiaries and driven by international subsidiary locations. Post-acquisition, subsidiaries located further away from the corporate headquarters have been found to be more likely to innovative as they will experiment with new ideas if they not under the eyes of the HQ (Birkinshaw 2000). In seeking explanation for innovation following acquisition, this case study supports the notion that distance does not impede innovation but not for the same reasons. Organisation structure in terms of distance from the subsidiary was not an issue for innovation, it did not restrict it nor did it specifically promote it in the events observed.

The aim of the domestic acquisition was to create operational efficiencies through in-sourcing, bringing the capabilities of each of the acquired companies together in one Division. A key finding emanating from these two different types of acquisition was the nature of shared learning in Division One and potential influence on innovation. Evidence suggested shared learning was beginning to develop, but influenced by the fact each of the acquired companies were previously autonomous companies, now merged into a division. This was compounded by the challenges of the uncertainties in the oil and gas sector where each company was fighting its position in large conglomerate oil and gas supply chains. This is also linked to a key finding discussed later in this chapter in relation to negative network embeddedness, where a network position can restrict entities within it from accessing new opportunity (Gulati, et al. 2000).

The role of the corporate headquarters for the Titanium Group appears to be to provide strategic direction, where international strategic renewal was designed and masterminded. The Group Business Development Director facilitated the coordination of international corporate entrepreneurial activity across the Titanium Group of companies. Actors within the corporate headquarters were increasingly concerned with creating the processes and mechanisms to build the bigger picture of Titanium Group engagement with customers and suppliers. This supports the view that corporate headquarters value added activity lies in the creation of adapting and information processes, although this was suggested from a large MNE perspective (Piekkari, et al. 2010). The implementation of this processing activity at the corporate headquarters of the Titanium Group was created as the organisation had grown to structurally position itself as an sMNE with a range of external stakeholder requirements.
The results highlight the crucial role of networks. In this case, networks were ultimately used to access new international opportunity and acquire resource, enabling international strategic renewal, international corporate venturing and international strategic renewal. They enabled the Titanium Group subsidiaries entry into new international markets, diversification into new sectors, and access to outsourcing partners and provided the opportunity for acquisition. The influence of networks on international corporate entrepreneurial outcomes was evident through their global reach of ties, the richness of their sector specific ties and receptivity through relationships built as a consequence of the human capital of the Group CEO and the senior management teams at a subsidiary level (Gulati, et al. 2011).

The international networking orientation of the Group was found to span all levels and divisions of the group, however market conditions and supply chain position restricted innovation for Division One. The purpose of networks tended to differ at a corporate headquarter and subsidiary level. At a headquarter level, external director networks were found to be few for the purpose of influencing international entrepreneurial outcomes and if used were found to influence mainly innovation. Board members provided access to occasional customer contacts or specific contacts in international markets such as the defence contact in the US via a personal tie. Their contribution to network development was therefore less evident than their contribution as advisors or in supporting specific international entrepreneurial outcomes i.e. acquisition, entering the US market and facilitating divisional innovation development as explained in Objective One.

However, an important observation of the networks utilised by the subsidiaries emerged when tracking how networks were created for certain events. The Group CEO played a role at some point in the evolution of the networks used. His networks allowed the expansion into new international markets of Silver Ltd Germany and in the US and in the acquisition of Redroad LLC. Historic relationships of the Group CEO enabled the creation of the US subsidiary, a former customer and competitor. The US President along with two other executives chose to go with the Titanium Group, having been acquired by an Indian owned competitor. Relationships built by the Group CEO with an employee of a competitor at an oil and gas trade association resulted in them joining Silver Ltd and manage the German subsidiary. In the Redroad LLC, the opportunity to enter into the initial licencing agreement was made by the Group CEO, continued relationship building with the founder facilitated the subsequent acquisition. This
finding contributes to the MNE network debate, as the influence of key actors at a corporate headquarter level are overlooked in international corporate entrepreneurship and network research.

At a subsidiary level, networks were found to be mainly used for innovation activities, such as the diversification into the defence sector and expanding into Brazil and China. It was also apparent that subsidiaries had their own networks and ties, created and capitalised upon as a result of the expertise and entrepreneurial behaviours of the actors at these locations. This supported the view that entrepreneurial capabilities and initiative active at a subsidiary level were developed through their own external networks (Dimitratos, et al. 2014). The findings therefore suggest human capital of actors at a subsidiary level influences innovation as they engage in selective identification of potential opportunities through boundary scanning activity in their network (Zahra and George 2002). Experience and skills to identify networks, to be able to position the company in that network, to develop and nurture ties defines human and social capital in an international corporate entrepreneurial context. The networks held at a subsidiary level tended to be mainly sector specific, their purpose to identify and act upon international opportunities arise through their network resulting in the entering of new international markets. In this thesis customer and competitor ties were initiated through engaging in trade association or sector specific events. The sector events often spurred contacts which were not often expected outcomes of actors attending the events. The findings suggested sector events created unexpected ties and unforeseen international opportunities to enter into new sectors and international markets.

A key finding emanating from this research in terms of the purpose of networks was the potential to enact upon new international opportunities by playing a broker role in the sMNEs network. In Division Four, customers, those organisations for example producing animal waste, needed funding to install the Copper Ltd systems. Funding organisations sought customers who wanted to renew waste thus potentially allowing them access to revenue share from a renewable energy source. Division Four became the connector between these two ties. Organisations that hold such a position have access to privileged market information (Burt 2008; 2017) and this thesis demonstrated the filling of a structural hole enabled innovation. This suggested that ties within a network can actively bridge dyadic relationships along their own supply chain to create international opportunity. A further finding on structural holes was the dilemma of the Titanium Group wanting to maintain a structural hole in its network for its subsidiaries
to manage the dyadic relationship with its customers who were subsidiaries of the large oil and gas conglomerates. The large oil and gas conglomerate customers could leverage their position to gain cheaper contracts from the Titanium Group if the customers were managed at a corporate level, rather than a subsidiary one; keeping the subsidiary to subsidiary relationships between Titanium and its oil and gas companies allowed them to offer differential prices. Tie sharing was therefore limited in this context and intentionally so.

6.5 Influence of customer and competitor ties on resource acquisition

An interesting finding was the use of networks in resource acquisition, namely customer and competitor ties to further enhance the network capital of the organisation. This was evidenced in Division Two, Three and Four. Although, the author expected customer and competitor ties to play a role in achieving international corporate entrepreneurial outcomes, the strategic way in which they were used to recruit staff was not expected. The subsidiary senior management teams, along with the Group CEO were alert to competitor activity as a route to actively attract new employees indigenous to the new international markets they wanted to enter. In Silver Ltd, diversification into the defence sector could be enabled through German shipyards; a German contact was acquired through competitor ties. Brazil and China were new international markets for the Titanium Group, employees indigenous to Brazil and China were acquired through customer and competitor ties. These ties also provided contacts for outsourcing opportunities. This process of network development can be conceptualised as a virtuous circle evolving over time as more and more human capital is acquired. Important to note is that it is not just the human capital which is acquired but also their social capital, thus contributing to the overall network capital of the sMNE.

Together, these findings make a timely contribution to literature on the nature of ties in sMNE networks, in particular the role of different types of ties. The extant international entrepreneurship literature tends to discuss competitors from the perspective of positioning the organisation against competitors in global markets, focussing on the international market orientation of an organisation (Dimitratos et al. 2012) its competitive aggressiveness (Covin 1999) and alertness to the vulnerability of competitors for acquisition purposes (Burns 2013). A further observation from the literature, was subsidiaries in larger MNEs had few and if none external competitors, mainly competing with sister subsidiaries (Birkinshaw, et al. 2005). However,
competitors in the Titanium Group MNE network observed here were important as a source of new employees, new human and social capital. This is illustrated by the fact that alertness to the vulnerability of competitors enabled the recruitment of the German sales manager to head up the new subsidiary in Germany and access his expertise and defence contacts. This perspective builds on international competitor orientation as an international entrepreneurial capability to achieve international corporate entrepreneurial outcomes as a source to access future strategic resource. This finding therefore suggests that relational embeddedness can occur at potentially two levels with competitor ties, strategic positioning against the competitor organisation and in strategic resource acquisition.

Subsidiary networks may, therefore, be a key influence on innovation and are maintained through relationships at a subsidiary and as stated earlier in this section through engagement of specific actors at a headquarter level, the Group CEO in this thesis. Subsidiaries are therefore alert to international opportunity through their networks (Andersson et al. 2002; Dimitratos et al. 2014; Monaghan and Tippmann 2018), the thesis builds on MNE external network debates by advancing the role of subsidiary networks to specifically focus on customer and competitor ties as a source of network capital acquisition.

The intricate networks held by the headquarters and the subsidiaries provided access to a range of resource to support entering new international market, international outsourcing opportunities and acquisition opportunities. Networks were also identified as source of resource in particular to access future employees. The international corporate entrepreneurial sMNE sees networks as a strategic resource and from this, further resources are acquired. This dynamic approach to network embeddedness furthers the resource based view of the firm building on networks as a strategic resource in itself rather than just route to acquire resource.

The effectiveness of these networks to achieve international corporate entrepreneurial outcomes was a combination of membership in sector networks comprised of a range of customer, distributor, competitor and trade association ties and the specific relationships the headquarters and their subsidiaries had nurtured with these ties over time. This intricate web of ties and relationships, from a resource based view perspective would be extremely difficult for competitors to imitate. The unique structure and relationships developed by an organisation means network embeddedness can be viewed as a
strategic resource to an organisation, supporting the view of Gulati et al (2011). For Titanium Group, it provided leverage to access resource, to further build on its competitive advantage but the combination of relationships further created an increasing pattern of ties which were difficult to replicate. 'Intimate' business relationships, which were nurtured and valued by the organisation, were a result of positive network development and building of trust (Loane and Bell 2006). Actors in the subsidiaries, through international networking orientation and international autonomy, were allowed to explore opportunity through the building of networks of contacts and relationships across international markets.

Network embeddedness allowed the Titanium Group to achieve its strategic objective of growth through acquisition, thus creating a direct link, between network embeddedness and international strategic renewal and international corporate entrepreneurial outcomes. Firmly positioned in sector specific networks, acquisition opportunities were identified and enacted upon opening up new international markets. Such acquisition opportunities are defined as entrepreneurial outcomes (Hoang 2003) of network embeddedness. This was evidenced in this case study through existing sector specific relational ties where the company moved from a licensing agreement to acquisition; being embedded in this network and having an existing relationship with the licensor at a headquarter and subsidiary level, the Titanium Group was able to act on intelligence that the licensor was in financial difficulty, capitalise on existing strong ties with the licensor to position itself as a key contender to acquire the business opening up international markets and access to patented technology.

Similar to previous studies, the ability to acquire Redroad LLC was linked to the alertness of actors in the subsidiary to the vulnerability of the organisation being acquired (Burns 2013). In terms of the nature of ties involved in this particular acquisition, this developed a strong tie into an even stronger tie; however the power in this dyadic relationship switched between ties - the licensor moving to acquired firm. The shift in roles was successfully managed by the Titanium Group and post-acquisition accrued positive results in terms of additional entrepreneurial outcomes namely innovation and new geographic market entry. The success of this acquisition may in part be due to the size of the acquiring firm i.e. the smaller MNE and its ability to more easily bring the acquired firm into their network albeit in a new network position as a subsidiary rather than licensor. This finding also demonstrates a potential evolutionary process of relational embeddedness associated with the sMNE; discussions tend to focus
on the evolutionary process in early entrepreneurial firms and not necessarily in an international entrepreneurial context. Hite (2005) states monitoring the evolutionary process can advance our understanding of relational embeddedness in emerging firms and impact on opportunity discovery; in international corporate entrepreneurship it can assist in understanding how network embeddedness develops to support the smaller MNE to explore growth through acquisition as a way to speedily access new international markets.

The selective nature of network development evident in these findings showed the Titanium Groups network was built based on their strategic choice to be part of that network. This concurs with Lorenzoni and Ornati (1998) who suggest network relationships are not formed by chance, they move from unplanned, to planned and structured. The finding that relationships are selected, and subsequently nurtured and valued by the organisation, attributing specific resource to develop this relationship is supported by Uzzi (1996; 1997). The findings advance the selective nature of networks in the role of sector ties (Leppäaho et al. 2018). In this case for the sMNE, general business support was not considered of value, where external market intelligence was sought this was commissioned through a specialist research consultancy. Sector networks were also used as a position of influence in their network, by becoming embedded in sector specific quality networks, writing and contributing to European quality policy they achieved a strong network position in niche oil and gas sectors.

The importance of sector specific network embeddedness, particularly in the oil and gas and renewables sector, was a key finding from this study. Strategic relationships were pursued and mainly formed in sector networks. This was particularly evident as the Titanium Group operated in niche segments of the oil and gas and renewables sector. These niche sectors were characterised by different organisations which invariably knew of each other. This supports the view of Echols and Tsai (2005) that niche firms operate in high network embeddedness, however the findings in this thesis took this concept to a further micro level whereby competitors and customers are intrinsically linked.

Structural embeddedness, the reach and density of ties an organisation has in its network (Gulati, et al. 2000) in this case showed the importance of the sector in exploring the specific types of ties organisations engaged with to seek and fulfil international opportunity. Distributor, supplier, competitor and customer organisations
are typically seen as sources of information and expertise (Brown and Butler 1995), more specifically when the sector perspective is considered. Hornsby et al (2013), state that benchmarking within a sector, allows an organisation to transform itself; this was evident in the Titanium case study whereby competitor actions were identified through customer conversations, as a result the organisation sought to innovate and fill a product gap their competitors were offering in international markets. This advances the importance of specific ties within a sector to locate information on international opportunity; it demonstrated the structural connections between customer and competitor ties but also the relational embeddedness whereby customer relationships can yield market intelligence on competitors in the same sector network. Operating in a niche network, also suggests competing firms could structurally have similarly ties, therefore relational embeddedness is the opportunity to create uniqueness in their strategic network resource.

The Titanium Group, from an organisation structure and size perspective was able to expend a certain level of governance across its networks, its closeness to its networks allowed it manage its network as a strategic resource. Organisation structure, size and a combination of international entrepreneurial capabilities of the Titanium Group companies working in a tighter network of ties allowed them to be more alert to competitor and customer activity and therefore more agile in its response to international opportunity.

In summary, the global reach, the range of sector specific ties, the respected and trust based relationships within the sMNE network enabled through international entrepreneurial capabilities of the Titanium Group, showed the complex nature and pattern of ties held across the Divisional companies. It supported the view of a firm's networks as a heterogeneous and thus difficult to imitate (Gulati, et al. 2000).

While the discussion has highlighted the opportunities afforded to the Titanium Group through customer ties and being embedded in a positive network relationship, there were some drawbacks. However, conditional factors were found to play a role and demonstrate the influence of difference contexts, in this thesis the sMNE as a supplier to the oil and gas sector. In this case study the relationships the organisations held with their customers i.e. customer relational embeddedness, through longstanding trusted relationships enabled subsidiaries and sales offices to maintain their position in the customer supply chain. Strong relational embeddedness with customer ties is
considered of benefit to jointly innovate and share key market information (Uzzi B. 1996). Conversely, customer ties which are limited in number and to which organisations are strongly bound have been found to stifle innovation (Bonner and Walker 2004). The latter point was evident for the Titanium Group companies servicing the oil and gas sector. The long standing trusting relationship between the Titanium subsidiaries in oil and gas allowed its customer to have considerable power in their relationship over the Titanium Group companies. This builds on existing research on levels of customer network embeddedness in certain sectors (Leppäaho et al. 2018), in this case where a strong customer embeddedness was identified but from a negative perspective. It is important however to consider the specific context to this finding; a supplier providing parts and engineering services to a market, oil and gas, which had taken a significant hit due to declining oil prices but was also dominated by a few conglomerate customers. The value of the network was therefore influenced by the broader environment, the macro level context including - sector, market and economic influences (Hagedoorn 2006; Slotte - Kock and Coviello 2010).

The Titanium Group was also one supplier amongst many which was fighting to maintain a position in its customer network. Strong standing relational embeddedness enabled it to keep its position but returns were lower as conglomerates forced down supplier prices. This is partly addressed by consideration of embeddedness values, which differ significantly depending on firms' positions in the supply chain (Lin, Huang, Lin, and Hsu 2012). Contracting types, referred to by Ryo et al. (2013) denoted hard or soft buyer and supplier relationships, from a network embeddedness perspective could reduce opportunistic behaviours. International opportunity, in a network where the customer ties were powerful conglomerates with global subsidiaries, suppliers are bound in the relationship with the conglomerate. Suppliers firstly have to establish a strong tie with the conglomerate, followed by relationships with subsidiaries however the subsidiary relationships are only possible if the headquarter ties have been secured and the supplier is accepted on their approved vendor list.

A key insight arising from this study is therefore the fact that the effectiveness of network embeddedness to identify and create new international opportunity is moderated by the organisation's position within its customers' supply chain and the density of its customer base. In this same context, relational embeddedness provided both positive and negative effects; where a strong relationship with a key customer is maintained and the position an organisation holds on to their customers approved
vendor list is paramount to the winning of new business, relational embeddedness positively influences the enactment of international opportunity. Conversely, this position in a constrained, pressurised sector dominated by companies seeking to achieve cost competitiveness results in supplier organisations constantly pushed on price. This can be referred to as negative network embeddedness, where network structure and relationships can become either a 'constraint or facilitator of international entrepreneurial behaviour' (Kilduff and Tsai 2003). A negative network position therefore may occur when the entity is positioned in a network from which it is difficult to exit. This may occur when the entity is bound to a few powerful customers as in this case and is also subject to external environmental conditions, such as a contracting target market. The entity is thus unable to expand out of that network to enact upon international opportunity (Gulati, et al. 2000).

Where network embeddedness was characterised by a limited number of customer ties and strongly bound as in Division One, fewer incidences of international entrepreneurial capabilities enabling international corporate outcomes were evidenced. In this sense, due to environmental pressures Division One companies were forced to consider diversification into new markets, if the oil and gas market had continued to be buoyant there was little evidence to suggest they would have considered alternative markets thus engaging in international corporate entrepreneurial activity. New international markets would have continued to emerge from developing relationships with existing subsidiaries of the major conglomerates. The significant losses as a result of the declining oil and gas market coupled with the density of their network drove Division One companies into new sectors such as the nuclear sector, rather than a proactive international entrepreneurial orientation.

This demonstrates the complexities of network embeddedness and a simple uniform approach to its impact cannot be applied; both structure and relational embeddedness had to be explored to understand the constraints the Titanium companies faced. A further point to consider was that this particular negative network position concerned mainly the domestic acquisitions, and this instance was therefore less successful to stimulate international corporate entrepreneurial activity for the Titanium Group, as the acquired companies structural and relational embeddedness was high with a small number of powerful customer ties.
To enable the sMNEs network position and relationships within it to form a key strategic resource for international entrepreneurial outcomes, a certain level of governance is required by the sMNE across its networks, governance required for dynamic network relationships (Hite 2005). Governance to be alert to changing network positions, relationships and environments in which they operate, the sMNE may not be able to fundamentally change the structure of specific customer ties as in the case of the oil and gas sector, however by diversification into new sectors can reposition the sMNE out of a negative embedded position.

This discussion has provided a number of insights into the causal explanation of international corporate entrepreneurial outcomes. It has shown the influence of human capital in driving the entrepreneurial internationalisation of the sMNE at all levels. Thus suggesting human capital requires greater prominence in international entrepreneurship. International strategic renewal outcomes of acquisition and organisation structure showed the role they can play in the entrepreneurial internationalisation of the sMNE. It also demonstrated how autonomy as a causal power enabled international corporate entrepreneurial outcomes, however greater understanding is needed on how changes in approach to autonomy may provide a different outcome for the sMNE. The discussion confirmed the importance of networks in entrepreneurial internationalisation of the sMNE. In particular, the role of specific sector, customer and competitor ties to enable international trade and investment opportunity. Network ties allowed for the acquisition of more human and social capital, building the overall network capital of the organisation supporting the view of networks as a strategic resource in entrepreneurial internationalisation. Network embeddedness was further posited as an important causal influence on international entrepreneurial outcomes. This was discussed from both the perspective of positive as well as negative position, and poses further areas for consideration when the sMNE seeks to govern its networks across international markets. In summary, the discussion has provoked a number of themes to explore in answering the research questions set and providing further areas of international corporate entrepreneurship research.
Chapter Seven: Conclusion

7.1 Introduction

This thesis set out to examine the international entrepreneurial capabilities of the sMNE, more specifically the role networks played in achieving international corporate entrepreneurial outcomes. In order to achieve this goal, the following three research questions were set.

1. How and in what ways can entrepreneurial internationalisation promote international corporate entrepreneurial outcomes in the small MNE?

2. How and why are networks created in the small MNE, who creates them and what role they may play in achieving international corporate entrepreneurial outcomes?

3. How and in what ways might network embeddedness be viewed as a strategic resource to the small MNE to achieve international corporate entrepreneurial outcomes?

This concluding chapter now addresses each question based on the key findings of this thesis. It then outlines the limitations and theoretical, practical and empirical contributions it has made as well as areas for future research.

7.2 Research Question One: How and in what ways can entrepreneurial internationalisation promote international corporate entrepreneurial outcomes in the small MNE?

Entrepreneurial internationalisation, as the firm level demonstration of international entrepreneurial capabilities, was promoted through the human capital of the sMNE. The role of human capital in achieving international corporate entrepreneurial outcomes was significant in this case study. The human capital of actors within the sMNE was characterised by their international trade, sector and financing skills as well as alertness to international opportunity and alertness to networks to enable international opportunity. In addition the individual level component of sMNE network capital observed in this case study, shaped the sMNE's international entrepreneurial capabilities and thus influenced international entrepreneurial outcomes - its entry into new high growth markets, the commitment to international risk in acquisition investment, and a
renewal of the organisation through restructure. Although human capital was significant across the sMNE at the corporate headquarter and subsidiary level, the human capital in the leadership of the sMNE displayed considerable influence. The Group CEO was a key figurehead in positioning and shaping the international entrepreneurial capabilities of the sMNE. The global outlook of the sMNE was down to the vision of the Group CEO who had extensive sector, international trade and finance knowledge, but also placed considerable importance on external networks and relationships. As a result, the sMNE acknowledged human capital as a key component of network capital, placing significant importance on international motivation. Consequently, senior management teams were recruited with extensive sector and trade expertise. In this sense, human capital in the sMNE breeds human capital.

Across the sMNE, firm level international entrepreneurial capabilities are exercised and different combinations are at play in achieving the different international corporate entrepreneurial outcomes. However, a dominant international entrepreneurial capability, linked to the human capital of the Group CEO, was the international autonomy afforded to subsidiaries and this influenced the level of innovation undertaken by the sMNE. In allowing subsidiaries the international autonomy to manage their own operations, and to create their own networks, new international market opportunities were opened up, new outsourcing locations were identified, and the diversification into new international sectors was achieved.

In this thesis, context played an important role in the fulfilment of international corporate entrepreneurial outcomes. Sector influences, in this case the oil and gas sector, were significant in the shaping of the entrepreneurial internationalisation of the sMNE. Fluctuations in the oil and gas sector along with the position in the supply chain of a few dominant conglomerate oil and gas customers, pushed subsidiaries to diversify into new sectors. The potential vulnerability this created for the sMNE influenced international strategic renewal decisions to diversify into completely new sectors. A further contextual issue was the evolution of the sMNE and the way in which it achieved its growth; a combination of organic growth and domestic and international acquisition. This creates an organisation culture of differing ownership paths and influences international shared learning across the sMNE.
7.3 Research Question Two: How and why are networks created in the small MNE, who creates them and what role might they play in achieving international corporate entrepreneurial outcomes?

The sMNE networks can originate from historic connections at Board level, notably those of key figureheads, for example in this case the human and social capital of the Group CEO was evidenced as a key influencer in some of the ties subsidiaries held in the oil and gas divisions. However, sMNE actors were part of those networks and did develop their own.

The creation and utilisation of networks, particularly at a subsidiary level, was important. The sMNE subsidiary is encouraged and supported in the identification, creation and sustaining of its own networks of customers, suppliers, competitors, distributors, trade associations and other ties it deems useful to its operations. Networks are used by the sMNE subsidiary to alert them to new international opportunities, to new sources of supply, and changes in competitor status. Information absorbed through these networks enables the entering of new international markets and possibly international acquisition opportunities to be communicated back to the sMNE corporate headquarters.

Customer and competitor ties provide the sMNE not only with new innovation and international strategic renewal opportunities, but also access to resource, more specifically future potential employees. Employees of former customers and competitors are sought by the sMNE to add value to their network capital to gain access to new routes to international markets. They are often indigenous to or have considerable insight into the target markets being pursued. This can become a virtuous circle of network capital for the sMNE as focused sector specific actors are added to the sMNE subsidiary each time, bringing with them their own array of customer, competitor, distributor and other associated ties.

The extent to which these contacts become part of the wider network capital of the sMNE rather than localised at the subsidiary is down to the sMNE corporate headquarter oversight but also in relation to the boundary spanning activities of key actors at a subsidiary level. The sMNE subsidiary actor for example identifying potential outsourcing contacts to be used by the sMNE corporate headquarters across the group. This is also moderated by the ability of the sMNE to create an international
learning orientation, as mentioned in answering research question one across an sMNE comprising of often diversified and autonomous business units.

7.4 Research Question Three: How and in what ways can network embeddedness be viewed as a strategic resource to the small MNE to achieve international corporate entrepreneurial outcomes?

The case study showed this sMNE is positioned in networks at a corporate headquarters and subsidiary level, providing reach across a number of international markets. Across these networks they are engaged in a range of dyadic relationships. Sector specific ties, such as in the oil and gas sector, may require relationships with the same global customer at a headquarter to headquarter and subsidiary to subsidiary level. At the same time, other business units may be involved in a number of relationships along the supply chain, each with a different requirement of the sMNE subsidiary i.e. as a supplier, as a customer or potential partner. All of these relationships form part of a global network of ties, a pattern difficult to replicate by global competitors. For this intricate network to be deemed a strategic resource, the sMNE is active in positioning itself in the appropriate networks and in effectively managing the relationships within them. Governance of such networks requires oversight and can be difficult to achieve for the sMNE, if international learning associated with the types and range of ties the sMNE is part of, is potentially limited to subsidiaries.

In addition, where the sMNE affords considerable international autonomy to its subsidiaries, the strategic importance of those networks is commanded by the subsidiary. In sMNEs with diversified units of activity, to offset potential vulnerabilities in other sectors, the strategic importance of the structure and position within different sMNE networks may require governance at the corporate headquarter level. The sMNE, in its approach to governance of its network structure and relationships within it, is influenced by the strategic influence of that network at both a subsidiary and headquarter level.

Another consideration concerning the extent to which network embeddedness can be viewed as a strategic resource for the sMNE, relates to the opportunity to open up further resource or international corporate entrepreneurial outcomes. If sMNE subsidiaries are positioned to fill structural holes for the benefit of connecting ties to allow them access to new international customer and new international partners, then this level of network embeddedness can be viewed as a strategic resource. Structural
holes in the sMNE network may also need to be maintained where it is beneficial to keep ties separate in its global supply chains.

Conversely the findings suggest a drawback to network embeddedness is if the sMNE subsidiary is tied into relationships in a sector dominated by a few large customers. When market conditions change, they are vulnerable due to the position they hold in that customer relationship. Although historic relational embeddedness may afford privileges to the sMNE subsidiary as a trustworthy customer, the significant pressures associated with potentially volatile markets can restrict the international corporate entrepreneurial outcomes of the sMNE subsidiary.

7.5 Theoretical Contribution

The thesis makes five key contributions to international entrepreneurship: 1) the sMNE as a distinctive type of organisation, thereby moving beyond the INV as a focus in entrepreneurial internationalisation; 2) the role of autonomy as an international entrepreneurial capability at a subsidiary level; 3) how the sMNE utilises human capital as a key dimension of network capital to enable entrepreneurial internationalisation; 4) how subsidiary mandates play a key role in the entrepreneurial internationalisation of the firm; and 5) how negative network embeddedness can influence the need to engage in international strategic renewal.

Firstly, the thesis contributes to growing evidence that entrepreneurial internationalisation is more than an INV phenomenon (McDougall–Covin, et al. 2014). A number of international entrepreneurship scholars recognise the paucity of research undertaken from the perspective of the more established organisation (Dess 2003; Zahra et al. 2000; McDougall–Covin, et al. 2014), therefore these findings begin to address this gap. Where scholars have suggested the empirical focus on small firms and the INV limits the development of international entrepreneurship theory (Keupp and Gassmann 2009) these findings show there is value in extending this focus to consider a wider range of organisations and subsidiaries. Typically international entrepreneurship research of the more established organisation tends to concern the large MNE, with few studies focusing on other types of MNE such as the mMNE and global smaller firm (Dimitratos, et al. 2003; Dimitratos, et al. 2010; Dimitratos, et al. 2012). This has created an entrepreneurial internationalisation continuum comprising of the INV at one end and the MNE at other, with little consideration of the variety of organisations that
sit in between. In exploring the entrepreneurial internationalisation of the sMNE, this thesis places other types of entrepreneurial organisations on this continuum.

Secondly, this thesis responds to calls from scholars requesting further investigation into subsidiary level autonomy (Hakala, 2016), in particular as part of a holistic approach to understanding entrepreneurial activity of the subsidiary (Birkinshaw, et al. 2005). These findings provide a clearer understanding of autonomy when considering the MNE headquarter subsidiary relationship in how ownership and constellation activity should promote autonomy in the sMNE. In this case, autonomy has been shown to play an important role in encouraging individuals to successfully implement cross border expansion through acquisition, joint ventures or strategic alliances. While it has been suggested that autonomy can enable the development of subsidiary level customer and competitor networks (Anderson et al, 2005), little has been explored on the specific nature of these ties and their influence on international corporate entrepreneurial outcomes. More specifically, this thesis advances our understanding of how the role of autonomy within the sMNE perspective, allows customer and competitor ties to be identified and developed by the subsidiary. In particular the ties that can act as a source of new subsidiary human capital, bringing additional network ties to the sMNE. The increased network capital in turn allows for new international trade and investment opportunities for the sMNE including new international markets, new sources of supply and outsourcing opportunities. Thus, its importance in promoting entrepreneurial internationalisation should not be ignored.

Thirdly, the results show how subsidiary networks afford access to specific resources, local market insight and knowledge (Andersson 2003; Andersson, et al. 2002; Birkinshaw, et al. 2005; Monteiro and Birkinshaw 2017; Gilmore, et al. 2018). While scholars recognise the advantages of subsidiary level social capital as a capability to identify international opportunity through access to market knowledge (Monteiro, et al. 2017), this thesis has expanded this understanding by showing the role of network capital. Another important theoretical contribution is the utilisation of the concept of network capital, the calculative relations of organisations (Huggins 2010, Huggins et al. 2012), as a framework with which to explore entrepreneurialisation internationalisation in the sMNE. The key finding is that human capital is a crucial dimension of network capital, in doing so it extends our understanding of how specific human capital investments and outcomes can aide the creation and identification of networks. By positing human capital as part of firm level network capital it creates a more holistic
approach to how entrepreneurial internationalisation occurs at a subsidiary and corporate headquarter level in an sMNE.

Although human capital is recognised as vital to the growth of the firm (Crick and Spence, 2005; Unger et al. 2011), this has mainly been explored from the INV perspective. This thesis has shown the influence of actors on positioning the sMNE strategically in international networks. The international trade and investment, finance and sector expertise of actors all had a significant influence on the international entrepreneurial capabilities of the sMNE and influences network choice. It demonstrates the power of human capital in developing new network ties. It is important in an sMNE context, where fewer intra-organisational constraints may exist, human capital is allowed to flourish in its pursuit of international opportunity. This thesis posits that in exploring the role of networks to influence entrepreneurial internationalisation, the combination of human capital to identify and develop networks is needed to fully understand how networks enable international corporate entrepreneurial outcomes. This thesis highlights the power of human capital of specific actors to locate and capitalise on relevant networks at both a headquarter and subsidiary level, suggesting multiple layers of network capital exist in the sMNE. Although previous scholars have identified the influence of external Board members on international trade and investment activity (Basuil and Datta, 2017), little has been explored on the role of subsidiary level executives (Birkinshaw et al, 2005).

Another important consideration is the power of human capital of significant figureheads at the corporate headquarter level including external board members and of subsidiary level leadership teams. Therefore the findings in this thesis show a more combinatory effect of network capital at headquarter and subsidiary level than one of conflict or stifling initiative. The findings demonstrate in order to link these different levels of network capital in the sMNE, an international learning orientation is required. This thesis has therefore shown the importance of human capital in achieving international corporate entrepreneurial outcomes and addresses calls to explore more individual level international opportunity-seeking behaviours influencing internationalisation activity (Birkinshaw, et al 2005, Leppäaho et al. 2018).

In relation to network capital this thesis has furthermore contributed to the subsidiary network debate in developing and utilising specific ties at the subsidiary level. The findings provide an insight into how subsidiary customer, competitor and trade
association ties can enable international corporate entrepreneurial outcomes for the sMNE. The findings also contribute to the discussion of network structures and internationalisation behaviours, as self-reinforcing that network structures can influence internationalisation (Jones and Coviello 2005; Leppäaho et al. 2018).

As such this investigation of the nature of ties and the relationships held across the sMNE also addresses requests for scholars to consider the influence of different combinations of ties and relationships on international entrepreneurial orientation and on international entrepreneurial outcomes (Covin and Miller 2014). More specifically it contributes to our understanding of how international corporate entrepreneurial activities and networking activities unfold at both a corporate headquarter and subsidiary level.

Fourthly, the unpacking of international entrepreneurial activity at the subsidiary level has been called for by scholars to expand our understanding of how entrepreneurial activity occurs at this level (Dess 2003; Young, et al. 2003; Birkinshaw, et al. 2005). The subsidiary of the MNE is considered to be a source of innovative activity (Birkinshaw, et al. 2005; Gilmore, et al. 2018) and scholars have requested further insight is needed to understand the role of the subsidiary in achieving international entrepreneurial outcomes (Young, et al. 2003). The MNE is considered to fine slice its value-adding activities across its subsidiary network and internalise activity to achieve a competitive advantage in international markets (Dunning and Lundan 2008; Rugman 2010; Rugman, et al. 2011).

As the sMNE allows for the entrepreneurial growth of their subsidiaries, mandates are potentially less likely to be assigned but may instead evolve through changes to the international entrepreneurial capabilities within them. The findings in this thesis have demonstrated the importance of the role of subsidiaries for entrepreneurial internationalisation. Each subsidiary in the sMNE therefore plays a more integral role entrepreneurial internationalisation, the subsidiary is valued by the sMNE in the knowledge, capabilities and networks it contributes to the success of the sMNE in global markets.

Typically subsidiaries are considered to compete for corporate headquarter attention (Birkinshaw 1998), more specifically compete against each other. This thesis found the power dynamic between the controlling corporate headquarter and sMNE subsidiary was not observed. Similarly, within this sMNE, subsidiaries did not compete against
each other to vie for headquarter resource. This suggests our understanding has thus far been limited to or predisposed in the MNE debate to one of subsidiaries mainly competing in large internal networks. As mentioned above, as sMNE subsidiaries were not required to compete against each other, international resource coordination between subsidiaries was less evident, this showed international entrepreneurial capabilities to be more prominent at a subsidiary level. Coupled with autonomy this suggests the sMNE subsidiary compared with the larger MNE is potentially less influenced by the constraints of international resource coordination thus enabling international entrepreneurial outcomes.

If the subsidiary had access to human capital and the networks to pursue an international opportunity, then the subsidiary would be encouraged to enact upon that opportunity. Innovation as a value chain activity in this case was not assigned by the corporate headquarters to subsidiaries but evolved as the network capital of the subsidiaries evolved. These findings therefore provide a different lens through which to explore the roles of subsidiaries, from an international entrepreneurial perspective of a different type of MNE the sMNE.

Despite scholars requests to consider actors influences on international corporate entrepreneurial activity (Dimitratos and Plakoyiannaki 2003), in particular the influences of internal and external directors (Zahra, et al. 2000; Dess, et al. 2003; Covin and Lumpkin 2011; Wang, et al. 2015) few studies consider the role human capital plays in achieving international corporate entrepreneurial outcomes or their influence on the creation of networks (Loane and Bell 2006). The finding that human capital influences on sMNE international entrepreneurial capabilities and international entrepreneurial outcomes, allowed for greater understanding of how networks were created and by whom. In particular the role significant actors can play. The Group CEO shaped the international corporate entrepreneurial direction of the sMNE and its subsidiaries through international strategic renewal, allowing autonomy at a subsidiary level, creating an international networking orientation and attributing value to the sustaining of network capital.

Finally, in light of the debates on subsidiary roles and mandates, these findings contribute to furthering our understanding of the role of network embeddedness at a subsidiary level and how this may negatively influence entrepreneurial internationalisation. Where the sMNE is bound to powerful global customer ties, this
dense network structure may restrict entrepreneurial internationalisation. An sMNE with fewer subsidiaries may be more vulnerable in negative networks, unable to offset negative network embeddedness across other parts of their global markets. In this situation, the sMNE must therefore seek to reposition itself through diversification or identify new ways to renew their strategic direction in international markets. International corporate entrepreneurial activity may therefore be more prominent in the sMNE where negative network embeddedness is evident. Consequently, the importance of network governance for the sMNE is highlighted by these findings. A lack of oversight of network embeddedness may lead to fewer opportunities for the sMNE to engage in entrepreneurial internationalisation. International entrepreneurial capabilities at the subsidiary level should support the sMNE in network governance, by being alert to changes in network position and relationships. In summary the contributions of this thesis include the sMNE as a new contextual lens through which to observe entrepreneurial internationalisation. Network capital is also presented as a new framework to explore entrepreneurial internationalisation. This thesis has also increased our understanding of potential subsidiary roles in promoting international corporate entrepreneurial outcomes.

7.6 Empirical Contribution

This thesis contributes to the empirical gap of studies mainly focussed on the large MNE in extant international corporate entrepreneurial literature by investigating the sMNE, building on the relatively few existing studies on the mMNE (Dimitratos, et al. 2003; Dimitratos, et al. 2014) the transitioning MNE (Monaghan and Tippmann 2018) and the smaller global firm (Dimitratos, et al. 2010).

Scholars have requested research addresses both process and outcome in entrepreneurial internationalisation (Birkinshaw, et al. 2005; Zahra, et al. 2000). That entrepreneurial internalisation should be explored as a process of behaviours over time (Jones and Coviello 2005). Critical realism is best suited to clearly bounded but complex phenomena (Easton 2010) and thus enabled the exploration of international entrepreneurial capabilities within the context of the sMNE. Research from a critical realist perspective requires a sensitivity to process (Sharpe 2018). In adopting a critical realist approach in this thesis, the author sought explanation of how the different international entrepreneurial capabilities were manifested in the behaviours of actors in the sMNE. Actors who had different roles at a subsidiary, divisional and corporate
headquarter level. The interplay of human capital, social capital, the structure and position of the different actors, subsidiaries and the Group itself allowed for a greater understanding of behaviours and processes influencing international corporate entrepreneurial outcomes in this case of the sMNE.

More broadly, few international entrepreneurial studies use a critical realist approach to their research (Easton 2010; Morais 2011; Ryan, et al. 2012). This qualitative study within a critical realist approach allowed for the exploration of how international entrepreneurial capabilities unfolded to achieve international strategic renewal, international venturing and innovation in the sMNE case. It demonstrated in this instance, that in order for these international entrepreneurial outcomes to exist, there were causal powers and liabilities interacting at an organisational level; the interplay of human capital, the dimensions of international entrepreneurial capabilities and the relationships established in sector networks influenced these outcomes. The critical realist underpinnings sensitised the research to the role conditional factors play through causal explanation and the significant influence it had in this case in driving key international strategic renewal activity.

Research from a critical viewpoint firmly acknowledges the role of human agency in the transformation or change in structures (Ryan, et al. 2012) and therefore lends itself to the exploration of network embeddedness in the sMNE. The critical realist underpinnings also allowed for the exploration of network relationships as a change agent within the structure of the sMNE and sensitised the research to the autonomous leadership style deployed by the sMNE. It raised further questions to support future research in how the sMNE, with alert, internationally entrepreneurial drive, actors may function in a growing sMNE when structures become less flexible. If this is not addressed, entrepreneurial human agency may be restricted by the structure in which it is situated thus influencing the extent to which international corporate entrepreneurial outcomes can be achieved.

7.7 Practical and Policy Implications

In terms of practical implications, the findings from this thesis suggest four main areas the sMNE should consider in sustaining its international entrepreneurial capabilities: 1) how the sMNE maintains international autonomy as they expand their international trade and investment activity; 2) the importance the sMNE should assign to the role of senior leadership teams in maintaining an international entrepreneurial culture; 3) how
the human capital of senior leadership teams including external board members can be sustained and practically shared across the sMNE; 4) the emphasis the sMNE should place on subsidiary networks as a strategic resource and the governance of those networks. From a policy perspective there are three key contributions: 1) how governments and business support agencies need to position themselves as key ties in the sMNE network; 2) how sMNEs can be supported in their expansion through acquisition; and 3) how governments and business support agencies can combine international trade and investment and innovation initiatives to drive entrepreneurial internationalisation of the sMNE.

The first practical implication of this thesis is focused on how the sMNE maintains their international corporate entrepreneurial outlook as it continues to grow. Challenges may arise when more acquisitions are undertaken or significant growth occurs in different business units. As the international trade and investment activity of the sMNE increases resulting in more subsidiaries in different international locations, how will the international autonomy afforded to subsidiaries be managed across the growing sMNE? One way to address this is to create an agile organisational structure enabling international learning to take place. An international learning orientation requires a behavioural change, where actors within the subsidiaries seek to share information internally. This can assist in allowing autonomy to flourish at the subsidiary level yet maintain a Group ethos. It also requires significant investment in specific initiatives to encourage cross subsidiary learning, in particular where the sMNE operates a number of different business units. Such initiatives can be supported by the sMNE corporate headquarters where annual events allow time and space for subsidiary members to communicate and share their international trade activity experience. Secondly, human capital was identified in this thesis as a key factor in the enabling of international corporate entrepreneurial outcomes, often sourced through network ties at a corporate and subsidiary level. The sustainability of human capital should be at the forefront of the sMNE entrepreneurial internationalisation strategy. This leads to a number of important considerations for the sMNE in maintaining an international entrepreneurial culture namely the role of senior leadership, recruiting senior candidates and subsidiary access to Board level human capital. These are now discussed in more detail.

The role of senior leadership teams in enabling autonomy requires the the maintenance of an international entrepreneurial culture across the sMNE. In this case, the Group CEO was pivotal in driving the international entrepreneurial capabilities of the sMNE.
In sMNEs where leadership teams differ on the international autonomy awarded to the subsidiaries, this may create conflict in the organisation. Having created an organisational culture where autonomy is the norm, once leadership changes, how might teams within the sMNE respond to different leadership styles? Organisations should therefore consider the effects of the exit of influential figureheads on the international entrepreneurial capabilities of the sMNE. This requires the sMNE Board to monitor the composition of its leadership teams, to ensure a balance of international entrepreneurial capabilities is maintained. Induction of new leadership teams in the sMNE would then require a clear outline of how their international entrepreneurial culture supports the strategic direction of the organisation.

The sMNE should incorporate essential criteria to be met by candidates into their recruitment practices at both headquarter and subsidiary level, criteria which place significant importance on human capital investment and outcomes and the networks they can bring to the organisation. This includes sector, international trade and networking experience. At a corporate headquarter level, where the Board plays a significant role in both an advisory and strategic oversight capacity, essential criteria in the recruitment process should identify key human capital investment and outcomes. The role of external directors and the Chair can provide the sMNE with vital international trade, sector and financing experience. In the sMNE they are a key resource contributing to innovation, international strategic renewal and international corporate venturing activity. As the sMNE grows the maintenance of a Board with relevant human capital will allow them to sustain international corporate entrepreneurial activity. This is of particular relevance to the sMNE, where the corporate headquarters may be smaller in size and external board members influence the strategic direction of the sMNE. This is an important contribution for the sMNE to consider, a small focussed Board allows the sMNE to maintain its flexibility in decision making on new international corporate entrepreneurial activity. The Board in the sMNE is therefore not just a strategic group placed at a corporate headquarters but supports innovation and international strategic renewal activity at the subsidiary level.

Subsidiary leads in the sMNE should, therefore, have access to Board level human capital whereby opportunities are provided for these actors to share expertise and knowledge. Senior teams at a subsidiary level should consider how they can introduce Board members into their subsidiary level activity, how these Board members can support network development as well as support innovation. The sMNE should consider
how external Board member success is managed and monitored. The sMNE may require specific expertise and strategic guidance in sectors that may be dynamic in nature. To maintain the currency of human capital, the sMNE should ensure external Board membership is reviewed through insight accrued from subsidiary leadership teams alongside monitoring the Board contribution in achieving the sMNE KPIs.

Thirdly, the findings in this research suggest the corporate headquarters should place significant emphasis on subsidiary networks as a strategic resource to access future human capital. Notably, the sMNE should encourage subsidiaries to be active members of sector networks to enable a network position close to customer and competitor ties. This requires subsidiary actors to be alert to international opportunity not just from an accessing a new market perspective but to opportunities to acquire new resource and new human capital. This will require gatekeepers at a subsidiary level to monitor opportunities to build on their current levels of network capital and feed this back into the sMNE headquarters. International autonomy in the sMNE does not however suggest the subsidiary is able to recruit new human capital irrespective of the resources expended in doing so. The sMNE should ensure certain measures are in place to monitor the development of human capital at subsidiary level, not to stifle international entrepreneurial activity but to ensure resources are spent wisely by the subsidiary and appropriate levels of human capital are maintained. To continue to capitalise on the network capital of the subsidiary, an international networking orientation should be maintained, promoting the sustained creation and engagement of subsidiary networks. However, the sMNE and its subsidiaries, with actors alert to international market opportunities and resources available accessible via its networks, also needs to alert to conditional changes influencing the networked environment in which they operate. The sMNE needs to employ careful network governance, not to impede the international entrepreneurial orientation of the subsidiary teams, but to provide guidance, should their network position change. Such network position changes may result from changing market conditions or a change in the power of ties within that network. The governance of network position should take place at both the subsidiary and corporate headquarter level. This requires the sMNE to invest in the development of collaborative relationships across the subsidiaries. The shared learning on network position and relationships across the sMNE allows for potential weaknesses across the network to be unearthed as well as create further entrepreneurial internationalisation opportunities. While international autonomy is suggested here furthers entrepreneurial
internationalisation, the sMNE should ensure this does not restrict the sharing of network capital. Through communication mechanisms enabled via the sMNE headquarters an international learning orientation can be maintained. This requires visibility of leadership teams across the sMNE subsidiaries.

Fourthly, acquisition was identified in this thesis as an international strategic renewal option creating speedier access to global markets for the sMNE and as a consequence resulted in further innovation, entry into new markets, as well as new product innovation. The challenge the sMNE faces is the maintenance of international entrepreneurial capabilities as new international venturing takes place. If acquisition is the desired route to rapid internationalisation, accessing intellectual property or achieving new global manufacturing capabilities, the sMNE has a significant task in incorporating a number of new organisational cultures into the intra-network of subsidiaries. Where the sMNE is made up of a combination of subsidiaries that have been acquired, the result of organic growth and may also include equity stake investments leadership teams may be required to ensure cross subsidiary communication takes place. To overcome the challenge this may present, this requires the sMNE to work with newly acquired organisations and their leadership teams to immerse them in their international entrepreneurial culture. This may also require the sMNE to provide opportunities for leadership teams to meet at international subsidiary locations to understand the opportunities and challenges each subsidiary may face in its respective locations and the market it serves.

The first policy implication of this thesis concerns governments' role in supporting the sMNE in its growth ambitions through international corporate venturing activity. Growth by acquisition enabled rapid international growth for the sMNE and governments can play a role in supporting the sMNE in such growth ambitions. Initiatives to aid the sMNE in acquisition opportunities through their networks at international embassies may prove a useful level of support. Alongside the events hosted in international markets by government agencies to promote exports to these locations, governments can seek to enable connections for prospective acquisition opportunities. Growth by acquisition also suggests support should be provided to high growth sMNEs in adapting cross cultural leadership styles to manage more complex organisational structures as the sMNE continues to grow.
International trade and investment government policy tends to place considerable emphasis on raising the international trade and investment activity of indigenous organisations. The findings in this thesis suggest in order for business support agencies to add value to the international corporate entrepreneurial activities of the sMNE, they would need to seek a position in the specific and heterogeneous networks of the sMNE. The value the sMNE places on network positions to enable opportunity means any tie in that network forms part of their strategic resource. This suggests international trade and investment support agencies need to demonstrate the value they bring to the sMNE network. Specificity is a key attribute of the sMNE network and suggests generalist network ties do not contribute significantly to their network capital. A challenge policy makers face in supporting the sMNE is the level of resource required to be part of the sMNE heterogeneous networks. Therefore an approach may involve targeting high growth specific sector networks, where the internationally networked and oriented sMNE views the international business support agencies as an opportunity to access more network capital. This could be achieved through the introduction of a sector peer learning programme based in international hubs.

A final policy contribution emanating from this thesis is the move to integrate innovation and international trade and investment initiatives. By combining such initiatives the government agencies can create their own network capital where support for new products and services is aligned to international trade and investment support. This would include the connecting of the myriad of overseas embassies, international trade support teams and innovation focussed policy teams. This could result in an international corporate entrepreneurial policy framework to support high growth sMNEs.

7.8 Limitations

This research focussed on a single case providing rich data to address a valid research problem associated with understanding network creation and utilisation in an international corporate entrepreneurship context. This approach is supported by scholars (Coviello and Jones 2004). However, the author recognised a single case study has limitations and acknowledges smaller samples in case study research have been criticised (Zahra and George 2002).

The use of a single case is also often questioned from the perspective of its generalisability (Easton, 2010). However, the research aims of this study using a critical
realist approach were not to generalise, but to seek deep and meaningful causal relations exploring multiple influences on the international corporate entrepreneurial outcomes cognisant of the context specific findings. The fundamental explanations emanating from the critical realist case provide a basis upon which to explore similar cases (Easton, 2010). Therefore a limitation from the perspective of a single case in this thesis is that it has not yet allowed for exploration of the outcomes observed in this case, of the sMNE to be considered in other similar settings. However, the reflective questioning in this case, outlined in Table 4.1, enabled the author to consider how different conditions may influence the international corporate entrepreneurial outcomes of the sMNE, such as different sector conditions or a different leadership team in an sMNE. In conducting this questioning, this also informed the practical contributions to this thesis, for example how might a change in structure and process influence the international entrepreneurial outcomes of the sMNE? Therefore a limitation from the perspective of this thesis poses opportunities for further research of the sMNE. How might the international corporate entrepreneurial outcomes of the sMNE observed in this case be explained in different sectors, organisation culture or international corporate headquarter location?

Although the case involved exploration of the international entrepreneurial capabilities of international subsidiaries, the case was limited to an sMNE with its home location based in the UK. The case is therefore predominantly subject to a UK institutional setting. Again, in the reflective questioning adopted in this research, this provides for further cross comparative case study research. The case did however address calls for case research in international entrepreneurship to address more studies involving non high tech firms (Jones & Coviello 2005) by focusing on an sMNE engaged in manufacturing and engineering services.

The author was sensitised to existing literature on the INV, to posit the paucity in international entrepreneurship research, therefore a proposed limitation may be presented in how the causal explanations awarded in this case compare to that of the INV. However, the aim of this thesis was not to compare the international new venture and the sMNE. Again, in order to address in more detail how networks differ between different types of firms, this poses opportunities for further research. A cross comparative case study including an INV may provide further insight into the development of the role networks in entrepreneurial internationalisation.
A final limitation to consider in this research, and one posited by many international entrepreneurship scholars, is the request for paradigmatic consensus and clarity of definition in international entrepreneurship. Entrepreneurship as a field was bound in multiple interpretations and terminology. It was a challenging task to conceptualise a field with so many varied interpretations. However, the author devised a firm level approach which could have allowed scholars to draw comparative interpretations in this study. A further limitation associated with this research was issues associated with different definitions of MNEs - those at the smaller end of the MNE scale. The few studies which consider MNEs at this end of the scale were found to differ in their interpretations. The author addressed this issue by considering definitions in extant literature alongside extant UNCTAD world investment reports. A future opportunity for international entrepreneurship scholars exploring the sMNE would be to explore a common definition thus allowing for a more comprehensive body of research to grow in international corporate entrepreneurship, which is thus far dominated by the large MNE.

7.9 Future Research

This thesis demonstrated the role of international autonomy in enabling international corporate entrepreneurial outcomes. Future research could address how autonomy continues to play an enabling role as the sMNE grows. Will autonomy lead to greater power at the subsidiary resulting in spin off venture activity? Would this be welcomed in sMNEs as part of their international strategic renewal activity? Furthermore, customer and competitor network ties emerged as key contacts in the subsidiary level network. Although access would prove difficult in competitor ties, future research could involve more external ties in the investigation.

A central finding in this research was the role of human capital and how actors were recruited through networks. Multidisciplinary research combining international corporate entrepreneurial and international human resource and organisation behaviour could explore in more detail the role of human capital, potentially in cross cultural comparative cases.

Furthermore, future research should continue to build on critical realist approaches in international corporate entrepreneurship, allowing for more detailed insights into how international entrepreneurial capabilities unfold in entrepreneurial organisations. The findings from this research clearly posit the role of networks as an enabler of international corporate entrepreneurial outcomes. The critical realist approach is
depicted as an innovative case study research design. This allows for more creative investigation into the mechanisms at play in the heterogeneous network structures and relationships apparent in the sMNE. The interplay between human agency, the organisational setting and the dynamic global environment in which the sMNE operates provides exciting opportunities to expand the international entrepreneurship domain.
References


BOURDIEU, P. (1985). The social space and the genesis of groups. *International Social Science Council* 24(2) 195-220


Word Count:

74,413 (including tables and figures, excluding references and appendices)
Appendix 1: Client Research Brief

Doctoral Research Project Background: Titanium Group Plc

Research Proposal Background

A preliminary study was undertaken by Alexandra Anderson during 2015 in which Titanium Group Plc was identified as an innovative small MNE engaged in global trade.

This research will focus on the international entrepreneurial capabilities of Titanium Group Plc. It will involve:

- exploring the networks and relationships used by Titanium Group in developing all aspects of international trade i.e. direct export, Foreign Direct Investment (FDI) including acquisition and the creation of new subsidiaries and importing.
- identifying how the Group supports new and creative ideas in products, processes and services to enact upon opportunities in international markets.

Doctoral Research Working Title and Research Questions
"International Entrepreneurial Capabilities: The Role of Networks in the small MNE"

- Do networks play a role for the small MNE in the development of international trade and investment activity? Do these networks support innovation and how do they impact on the development of international trade and investment activity?
- What is the nature of these networks; how, why and by whom are they formed?

Methodology

A case study approach will be used involving in depth interviews with key contacts for the group including non-executive directors and the division as shown in Fig 1.

Working with Titanium Group Plc Chief Executive and Business Development Director, a number of key leads were identified for this study.

Where possible a face to face interview is preferred, if this is not possible then interviews will be undertaken by Skype. It is anticipated all overseas interviews will take place via Skype. Tape recorded with permission and a transcript can be provided as requested.
**Timeframe**

I would like to undertake the interviews between 16th February and 31st March 2016.

**Confidentiality**

Doctoral students must adhere to strict research University ethics guidelines (The complete policy can be accessed here: [http://www.shu.ac.uk/research/ethics/](http://www.shu.ac.uk/research/ethics/)). Alexandra Anderson, Dr Andrew Johnston and Dr Diana Sharpe, doctoral supervisors, have signed an NDA with Titanium Group Plc. In line with these guidelines, no reference will be made to the company and pseudonyms will be used where direct quotes are published. In addition, you are free to not answer any question and withdraw from the study at any time.

**Background to Researcher: Alexandra Anderson**

Alexandra Anderson is currently undertaking a doctorate at Sheffield Business School where she lectures in international business and is also Executive Lead for the Department of Management and Head of External Accreditation. Having worked in public and private commercial organisations for over 15 years, which included...
establishing a mobile phone gaming company, she became a full-time employee of Sheffield Hallam University in 2010. Her interests and experience in the field of international business includes support for SMEs in developing international trade operations, international entrepreneurship, global supply chain management and developing regional international trade strategy initiatives across Yorkshire and Humber.
Appendix 2: First Interview Guide

Company Name: Silver Ltd 1

Date of Interview: 14/09/15, 5pm    Location: At premises

Introduction

Many thanks for taking the time to speak to me today. I would like to start by collecting some background information on your company, then we’ll move on to discussing the international trade activity of your organisation including the opportunities you see and the challenges you face.

Section A: Contact and Background Information

<table>
<thead>
<tr>
<th>Interviewee Data</th>
<th>Literature Review</th>
</tr>
</thead>
<tbody>
<tr>
<td>Contact Name</td>
<td></td>
</tr>
<tr>
<td>Job Title</td>
<td></td>
</tr>
<tr>
<td>Interviewee Role</td>
<td>Human capital - prior cross international trade experience</td>
</tr>
<tr>
<td></td>
<td>(Crick &amp; Spence, 2005; Fernhaber &amp; McDougall-Covin, 2009;</td>
</tr>
<tr>
<td></td>
<td>Unger, Rauch, Frese, &amp; Rosenbuch, 2011; Mary George, et al.,</td>
</tr>
<tr>
<td></td>
<td>2016).</td>
</tr>
</tbody>
</table>

What is your role in the organisation?

What role do you play in developing international trade?

How long have you worked here?

Others Role

Who else in your organisation has a key role in developing international trade? How?
<table>
<thead>
<tr>
<th>Section B: International activity of your organisation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Your Firm</td>
</tr>
<tr>
<td>Year Established</td>
</tr>
<tr>
<td>Company Ownership</td>
</tr>
<tr>
<td>What are the key areas of your business?</td>
</tr>
<tr>
<td>How would you describe the current general business climate?</td>
</tr>
<tr>
<td>How would you describe your sector?</td>
</tr>
<tr>
<td>How do you feel your company is currently performing?</td>
</tr>
<tr>
<td>How do you feel you are positioned in the market place?</td>
</tr>
<tr>
<td>Nature of International Trade - International trade and investment activity</td>
</tr>
<tr>
<td>What type of international trade is your firm engaged in? e.g. exporting/importing/franchising etc.</td>
</tr>
<tr>
<td>Are all your products sold in international markets?</td>
</tr>
<tr>
<td>(Explore if products have been specifically designed/adapted for international markets)</td>
</tr>
<tr>
<td>What do you source internationally?</td>
</tr>
<tr>
<td>(This is may include services not just raw materials and parts)</td>
</tr>
<tr>
<td>Innovation Propensity (Dimitratos and Plakoyiannaki 2003) (Dimitratos, et al., 2012)</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>When did the company start exporting?</td>
</tr>
<tr>
<td>What % of your turnover comes from exports?</td>
</tr>
<tr>
<td>When did the company start supplying internationally?</td>
</tr>
<tr>
<td>What is the value of the supplies you source internationally?</td>
</tr>
<tr>
<td>Which markets are you currently dealing in?</td>
</tr>
<tr>
<td>Current Markets</td>
</tr>
<tr>
<td>Which markets do you consider are the most important to the company?</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>Which of these markets would you consider are the most important (in terms of sales)? This will help to link to events</td>
</tr>
<tr>
<td>How long have you been operating in this market(s)?</td>
</tr>
<tr>
<td>Aspirational Markets</td>
</tr>
<tr>
<td>To ensure dimensions of international corporate entrepreneurship are explored, it is important to understand how new market opportunities are created and enacted upon by the organisation.</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>How entrepreneurial is the organisation in pursuing new buyer/supplier markets?</td>
</tr>
<tr>
<td>Which markets are you aiming to enter in the next few years? (explore if the company has a specific plan of entering aspirational markets)</td>
</tr>
<tr>
<td>How much freedom do you have to explore Autonomy in international markets</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Identifying the Opportunity</td>
</tr>
<tr>
<td>How did the opportunities in these markets arise?</td>
</tr>
<tr>
<td>Relationship driven?</td>
</tr>
<tr>
<td>Who identified the potential opportunities in these markets?</td>
</tr>
<tr>
<td>Are there key people in the organisation who tend to locate the</td>
</tr>
<tr>
<td>opportunities? Who is the gatekeeper in the organisation who translates 'new' knowledge into opportunities.</td>
</tr>
<tr>
<td>Has your company developed new products to specifically service new</td>
</tr>
<tr>
<td>international markets?</td>
</tr>
<tr>
<td>Does the company innovate with a domestic market focus or any market focus? Or does the 'need' or 'opportunity' in the geographic market lead to the product or service innovation?</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>What are the key risks operating in your key markets you are operating in?</td>
</tr>
<tr>
<td>Market selection</td>
</tr>
<tr>
<td>Why did you choose these markets? Criteria?</td>
</tr>
<tr>
<td>What role did you play?</td>
</tr>
<tr>
<td>Who in your organisation makes the final decision on which markets to enter? (Possible constraints, support from the organisation)</td>
</tr>
<tr>
<td>What were the key challenges you faced in particular around identifying opportunities and market selection? (Explore if personal networks were used)</td>
</tr>
<tr>
<td>Given your prior experience in international trade, how does this influence your choice of new markets to pursue?</td>
</tr>
<tr>
<td>---</td>
</tr>
<tr>
<td>Routes to Market</td>
</tr>
<tr>
<td>Given the relationships/networks you have identified, what was their input into developing this market? (Explore if specific physical resources, contacts, knowledge of how to do business in the market, challenges, opportunities, risks.</td>
</tr>
<tr>
<td>Were you aware of the risks when you identified this market?</td>
</tr>
<tr>
<td>If yes, what motivated you to continue exploring this option?</td>
</tr>
<tr>
<td>Networks and Relationships</td>
</tr>
<tr>
<td>If we were to map some of the people/organisations involved outside of your UK base, in taking your products to market, who/which organisations would be involved?</td>
</tr>
<tr>
<td>Who in your organisation found these contacts? Who in the organisation had a 'relationship' with them?</td>
</tr>
<tr>
<td>Value Added/Outcome</td>
</tr>
<tr>
<td>How successful have these new ventures (new supplier or buyer markets) been?</td>
</tr>
<tr>
<td>Do you feel your company has constraints to develop international markets?</td>
</tr>
<tr>
<td>Operating in market</td>
</tr>
<tr>
<td>For your current overseas markets (buyer and</td>
</tr>
<tr>
<td>Supplier</td>
</tr>
<tr>
<td>----------</td>
</tr>
</tbody>
</table>

**Size of Firm**

Do you think you face any particular challenges trading internationally, given your firm size? …compared with the larger firm?  

Perceptions of size.

(Dimitratos & Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012)
### Appendix 3: Interview Guide and Theoretical Underpinnings

#### A. About you and your role

<table>
<thead>
<tr>
<th>A.1. How long have you been in the company?</th>
<th>Selected theoretical concepts</th>
</tr>
</thead>
<tbody>
<tr>
<td>Working in your role?</td>
<td>Human capital experience (Becker, 1964)</td>
</tr>
</tbody>
</table>

| A.2. Where were you before you worked here? (explore experience in international trade and investment activity - positions held, geographic market experience, sector experience, responsibilities in managing JV, acquisition, WOS, distributors, etc.) |
|--------------------------------------------|---------------------------------------------------------------|
| Human capital - prior cross international trade experience (Crick & Spence, 2005; Fernhaber & McDougall-Covin, 2009; Unger, Rauch, Frese, & Rosenbuch, 2011; Mary George, et al., 2016). Human capital - experience specific to situation or transferable - task or none task related. (Becker, 1993; Unger, et al., 2011) |

| A.3. What is your role at Titanium Group? Your engagement in developing new international trade opportunities? (explore how they might influence international opportunity) |
|--------------------------------------------|-----------------------------------------------------------------|

| A.4. To what extent does your role involve the development of new ideas; i.e. new processes, new products, new services |
|--------------------------------------------|------------------------------------------------------------------|
| International innovativeness (Dimitratos & |
(explore in the context of international trade)?

Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012

International motivation

(Dimitratos & Plakoyiannaki, 2003; Hornsby J., Bloodgood, Hayton, & Kuratko, 2013; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012)

**B. Innovation in the Group/Division**

**B.1. What is your main product/service offering - finished products or intermediate products (components of finished products)?**

International innovativeness (Covin & Slevin, 1989; Miller, 1983; Lumpkin & Dess, 1996; Dimitratos & Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012; Covin & Miller, 2014)

**B.2. Which are your key current international markets by turnover? How long have these been developed?**

International customer orientation (Dimitratos & Plakoyiannaki, 2003; Perks & Hughes, 2008; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012)

**B.3. Where do you source your products/services from? What relationship do you have with your supplier? (explore opportunities with suppliers)**

International resource coordination, international supplier orientation.

(Dimitratos & Plakoyiannaki, 2003; Roy & Sivakumar, 2004; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012; Roy & Sivakumar, 2012; Dimitratos, et al., 2016)

**B.4. How do you access these markets - for example by export using distributors/agents, direct selling, joint**

International networking orientation, international risk attitude (Dimitratos & Plakoyiannaki, 2003; Liesch, et al., 2014; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012)

B.6. Please outline a recent international business opportunity (who identified the opportunity, how was the opportunity developed i.e. from idea to market entry, who in the organisation was involved?) Human capital - alertness to international business opportunity (Tang, et al., 2012)
Collaborative international human capital (Kim, et al., 2015)
International pro-activeness (Stevenson & Jarillo, 1990; Lumpkin & Dess, 2001; Perks & Hughes, 2008)
International opportunity identification (McDougall and Oviatt, 1997; McDougall and Oviatt 2000)
International innovativeness International innovativeness (Covin & Slevin, 1989; Miller, 1983; Lumpkin & Dess, 1996; Dimitratos & Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012; Covin & Miller, 2014)

B.7. Where do the ideas for new products/services/processes for international business tend to originate in the Group/your Division? (explore examples) Human capital - alertness to international business opportunity (Tang, et al., 2012)
International innovativeness International innovativeness (Covin & Slevin, 1989; Miller, 1983; Lumpkin & Dess, 1996; Dimitratos & Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012; Covin & Miller, 2014)

B.8. Do you feel you have the freedom within the Group/your Division? International autonomy (Burgelman, 1983; Lumpkin & Dess, 1996; Verbeke, et al., 2007; Lumpkin, et al., 2009; (Dimitratos, et al., 2014)
to develop new ideas? International trade opportunities? Are there any internal barriers? External barriers?

<table>
<thead>
<tr>
<th>C. Networks and Relationships</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>C.1.</strong> <strong>Which external (outside of the group of companies) relationships/networks do you feel are key for your role/Division/Group from an international perspective?</strong> (explore examples, consider how may have changed based on experience, explore purpose, explore all international trade and investment activity) Scope of engagement and international trade experience influence on use of networks for international trade and investment activity (Anderson, et al., 1994) (Andersson, et al., 2002) International networking orientation (Dimitratos &amp; Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, &amp; Nakos, 2012) International network embeddedness (Granovetter, 1973; Coleman 1988; Burt, 1992; Mcevily &amp; Marcus, 2005; Gulati, et al., 2011; Jones, et al., 2011; Hornsby et al. 2013)</td>
</tr>
<tr>
<td>Question</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
</tr>
<tr>
<td>If an acquisition or joint venture has been undertaken...</td>
</tr>
<tr>
<td>C.5. Focussing specifically on acquisition and joint ventures, what was the objective of these acquisitions/joint ventures from an international business perspective? (explore in connection with the overall strategic objectives of the Group)</td>
</tr>
<tr>
<td>C.6. What specific Identification of international opportunity</td>
</tr>
</tbody>
</table>
**international business opportunities have arisen from this acquisition/joint venture?**

Dougall and Oviatt, 1997; Mc Dougall and Oviatt 2000)

International corporate venturing performance (Brouthers, et al., 2015)

**C.7. Describe how the opportunity for the acquisition and joint venture arose?**

(Stevenson & Jarillo, 1990) (Perks & Hughes, 2008).


**C.8. Which networks were created from the acquisition/joint venture?**

International networking orientation (Dimitratos & Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, & Nakos, 2012)

International network embeddedness (Granovetter, 1973; Coleman 1988; Burt, 1992; McEvily & Marcus, 2005; Gulati, et al., 2011; Jones, et al., 2011; Hornsby et al. 2013)

**Use of networks within the Group**

**C.9. Focusing on the development of new ideas, new processes, new markets - who do you liaise within your company? Within the Group? (consider both formal and informal meetings)**


Communication across the organisation (Andersson, Forsgren, & Holm, 2002; Andersson U., 2003; Ireland, et al., 2009; Hakala, 2016)

**C.10. How do you**

International learning orientation
<table>
<thead>
<tr>
<th>Share international market information within your company?</th>
<th>(Dimitratos &amp; Plakoyiannaki, 2003; Dimitratos, Voudouris, Plakoyiannaki, &amp; Nakos, 2012; Xu, Wu, &amp; Cavusgil, 2013)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Within the Group? (explore examples)</td>
<td>Communication across the organisation (Andersson, Forsgren, &amp; Holm, 2002; Andersson U., 2003; Ireland, et al., 2009; Hakala, 2016)</td>
</tr>
</tbody>
</table>
## Appendix 4 Code List

### Level 1 Coding

<table>
<thead>
<tr>
<th>Event Code</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>EVENT 1.1</td>
<td>Nuclear Market Expansion</td>
</tr>
<tr>
<td>EVENT 1.2</td>
<td>OEM Subsidiary</td>
</tr>
<tr>
<td>EVENT 1.3</td>
<td>Supplier Relationships</td>
</tr>
<tr>
<td>EVENT 2.1</td>
<td>Mercury Ltd New Product Development</td>
</tr>
<tr>
<td>EVENT 2.2</td>
<td>Mercury Ltd USA</td>
</tr>
<tr>
<td>EVENT 3.1</td>
<td>Oil and Gas Systems</td>
</tr>
<tr>
<td>EVENT 3.2</td>
<td>Development of German Office</td>
</tr>
<tr>
<td>EVENT 3.3</td>
<td>US Office</td>
</tr>
<tr>
<td>EVENT 3.4</td>
<td>Defence Diversification</td>
</tr>
<tr>
<td>EVENT 3.5</td>
<td>Major OEM</td>
</tr>
<tr>
<td>EVENT 4.1</td>
<td>Renewables Brazil</td>
</tr>
<tr>
<td>EVENT 4.2</td>
<td>Product Innovation</td>
</tr>
<tr>
<td>EVENT 4.3</td>
<td>Acquisition</td>
</tr>
<tr>
<td>Event 4.4</td>
<td>Renewables China</td>
</tr>
<tr>
<td>Copper Ltd</td>
<td>Managing Director EUUK</td>
</tr>
<tr>
<td>Iron Ltd</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Mercury Ltd</td>
<td>Commercial Manager</td>
</tr>
<tr>
<td>Silver Ltd</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Steel Ltd</td>
<td>Managing Director</td>
</tr>
<tr>
<td>Titanium Group</td>
<td>Business Development Director</td>
</tr>
<tr>
<td></td>
<td>CEO</td>
</tr>
<tr>
<td></td>
<td>Chairman</td>
</tr>
<tr>
<td></td>
<td>Finance Director</td>
</tr>
</tbody>
</table>
### Level 2 Coding

<table>
<thead>
<tr>
<th>DECISION MAKING</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENVIRONMENT CONDITION</td>
</tr>
<tr>
<td>EC - COMPETITION</td>
</tr>
<tr>
<td>EC - ECONOMIC</td>
</tr>
<tr>
<td>EC - HOME GOVERNMENT</td>
</tr>
<tr>
<td>EC - HOME MARKET</td>
</tr>
<tr>
<td>EC - HOST GOVERNMENT</td>
</tr>
<tr>
<td>EC - LEGISLATION</td>
</tr>
<tr>
<td>EC - SOCIOLOGICAL</td>
</tr>
<tr>
<td>EC - TECHNOLOGICAL</td>
</tr>
<tr>
<td>EC - HOST MARKET</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>SECTOR</th>
</tr>
</thead>
<tbody>
<tr>
<td>HUMAN CAPITAL</td>
</tr>
<tr>
<td>HC - Ability to Network</td>
</tr>
<tr>
<td>HC - Absorptive Capacity</td>
</tr>
<tr>
<td>HC - International Trade Experience</td>
</tr>
<tr>
<td>HC - Knowledge</td>
</tr>
<tr>
<td>HC - Prior International Trade Experience</td>
</tr>
<tr>
<td>HC - Prior Sector Experience</td>
</tr>
<tr>
<td>HC - Sector Experience</td>
</tr>
<tr>
<td>HC – Skills</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Internal Networking</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Corporate Entrepreneurship</td>
</tr>
<tr>
<td>ICE International Corporate Venturing</td>
</tr>
<tr>
<td>ICE Strategic Renewal</td>
</tr>
<tr>
<td>ICE Innovation</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>International Entrepreneurial Culture</th>
</tr>
</thead>
<tbody>
<tr>
<td>IEC - International Competitor Orientation</td>
</tr>
<tr>
<td>IEC - International Customer Orientation</td>
</tr>
<tr>
<td>IEC - International Innovation Propensity</td>
</tr>
<tr>
<td>IEC - International Learning Orientation</td>
</tr>
<tr>
<td>IEC - International Motivation</td>
</tr>
</tbody>
</table>

| IEC - International networking orientation            |

<p>| 281 |</p>
<table>
<thead>
<tr>
<th>IEC - International Risk Attitude</th>
</tr>
</thead>
<tbody>
<tr>
<td>International Entrepreneurial Orientation</td>
</tr>
<tr>
<td>IEO - Autonomy</td>
</tr>
<tr>
<td>IEO - Competitive Aggressiveness</td>
</tr>
<tr>
<td>IEO - Innovativeness</td>
</tr>
<tr>
<td>IEO - Proactiveness</td>
</tr>
<tr>
<td>IEO - Risk Taking</td>
</tr>
</tbody>
</table>

International Opportunity Process

<table>
<thead>
<tr>
<th>IOP - Acquisition</th>
</tr>
</thead>
<tbody>
<tr>
<td>IOP - Discovery</td>
</tr>
<tr>
<td>IOP - Enactment</td>
</tr>
<tr>
<td>IOP - Evaluation</td>
</tr>
<tr>
<td>IOP - Exploitation</td>
</tr>
<tr>
<td>IOP - New Customer</td>
</tr>
<tr>
<td>IOP - New Geographic Market</td>
</tr>
<tr>
<td>IOP - New Sector</td>
</tr>
<tr>
<td>IOP - Source of Supply</td>
</tr>
<tr>
<td>IOP - TYPE</td>
</tr>
<tr>
<td>IOP New Product</td>
</tr>
</tbody>
</table>

NATURE OF INTERNATIONAL TRADE

NETWORK CAPITAL

<table>
<thead>
<tr>
<th>NC Connection</th>
</tr>
</thead>
</table>

NETWORK EMBEDDEDNESS

<table>
<thead>
<tr>
<th>NE - NEGATIVE</th>
</tr>
</thead>
<tbody>
<tr>
<td>NE - REACH</td>
</tr>
</tbody>
</table>

RELATIONAL EMBEDDEDNESS

STRUCTURAL EMBEDDEDNESS

PEOPLE - Acquisition

PRODUCTS SECTORS

<table>
<thead>
<tr>
<th>Size of Firm</th>
</tr>
</thead>
</table>

SOCIAL CAPITAL

<table>
<thead>
<tr>
<th>SC - NET</th>
</tr>
</thead>
<tbody>
<tr>
<td>SC - Potential Resources</td>
</tr>
<tr>
<td>SC - Resource Secured</td>
</tr>
</tbody>
</table>

Supply