

DBA Thesis – Martin E. Bennett

*A Conceptual Framework for International Defence Industrial Alliances:  
Motivations, Advantages and Business Entry Mode Preferences*

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**By**

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## **1 Abstract**

Research into organisational alliances in the context-specific domain of the international defence market has to date been predominantly focused on multinational enterprises' (MNEs') motivations, competitive advantages and entry modes related to foreign direct investment decisions. This is a highly topical area as traditional markets continue to evolve rapidly due to macro environmental pressures such as decreasing defence budgets and increasing competition, thus propelling MNEs to seek business in new, emerging, markets. Emerging market organisations (EMOs) are however now demanding more value from their national defence procurement programmes, for example building the development of indigenous capability through the production of major complex programmes e.g. ships or aircraft, or the development of the local supply chain through second and third tier level supply. The pluralistic nature of the host market EMO and the changing trends in strategic collaborative decision-making, are highlighted in this research.

This work adopts a rigorous practice based view of the analysis of data collected from a representative sample of professionals from within the defence sector across emerging and developed countries. Further, it extends theory by exploring the efficacy of the eclectic paradigm as a theoretical lens to further understand the implications of the diverse collection of motivations, advantages and entry mode preferences on both MNEs and EMOs in alliances. An action research methodology using an abductive, mixed method approach was used across two separate phases. Employing a multi-national, cross-sectional sample of stakeholders from across defence MNEs in UK and the USA, and EMOs in Colombia, Brazil and Turkey, my empirical model developed through this research, the Emergent Alliance Adaptation Framework, validates the importance of motivations and advantages in determining entry mode decisions within the dyadic. Highlighted during the interviews is evidence suggesting that a mutual desire for industrial level partnerships is moderated by environmental influences, such as politics and macro-economics, and further that market access and technology/capability are respectively value factors on MNE and EMO decision-making within alliances. These are of immediate, practical interest to those contemplating international industrial alliances and have proven of specific value to practice.



## **2 Introduction**

### **2.1 Overview**

The delineation of roles between provider and customer is becoming increasingly opaque and dynamic within the influential context of industrial participation, with these changes in stakeholder relationships within the defence market taken as the basis of this research. Academia and the body of knowledge, through the literature review, informed and shaped the definition of the practice based problem which in turn precipitated the four guiding questions and the framework on which this research was based.

Action research comes from practice, and it is practice's voice that helped understand this wicked problem. The methodology reflected this using a qualitative biased mixed methods research approach aimed at collecting a varied yet relevant expression of views. The emerging narrative from the interviews was unpicked, reiteratively reflected against both extant theory and experience from my practice. A survey of stakeholders allowed increased granularity of findings and subsequent conclusions and reflections. This was an abductive, iterative process from which a set of outcomes emerged. These are namely i) a clear understanding of stakeholder dynamics within industrial level alliances in the international defence market, ii) my empirical model developed through this research, the Emergent Alliance Adaptation Framework, on to which relevant practice based alliance initiatives can be reviewed and iii) tangible benefits to practice in the pursuit of strategic alliances within a wider route to market set.

### **2.2 Alliances**

It is crucial to initially define terminology around business relationships. Alliances in this context can come in many forms, from transactional programme based supply relationships, through increasingly cooperative alliances to joint ventures and ultimately mergers and acquisitions. Alliance structures across these levels of integration span the spectrum of activity (e.g. research, development, assembly, manufacture, full capability), partner characteristics (e.g. industry type, place in the value chain, location) and, legal structure (e.g. loose partnership; consortium; joint venture; merger; acquisition, etc.) (Albers et al, 2013). In this research study the term

“alliance” is adopted to signify all inter-organisational relationships, sharing this continuum with the breadth of international routes to market.

So, typically levels of alliance range from coordinated transactions, to acquisition of one organisation’s assets by another (Todeva & Knoke, 2005) with an increasing level of organisational integration through this taxonomy. Within this alliance continuum, a critical concept for this research is “collaboration”. Ang (2008), after Gulati (1998), gives collaboration a broad definition involving voluntary cooperation around sharing of co-development and/or production of offerings and associated technologies. There is a difference between cooperation and collaboration highlighted by the degree of partner integration in alliance tasks. Ventures that are cooperative, have distinctly designated tasks differentiated between parties in achieving a set goal, whereas collaboration has the parties in a deeper, more integrated, working relationship, jointly developing and producing the whole, together, towards a common goal (Michaelides et al, 2013, p.246).

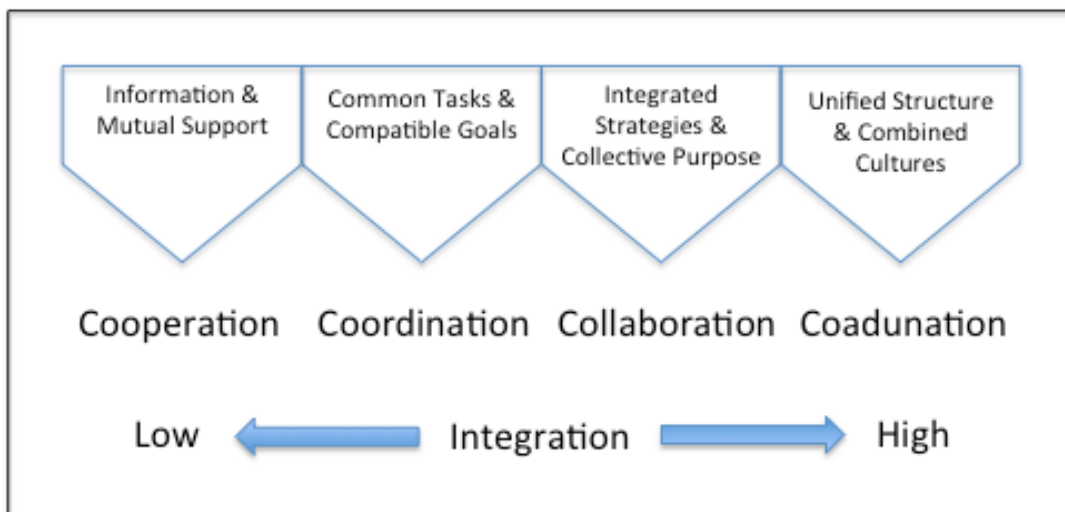


Figure 2-1 Alliance Continuum (Gajda, 2004, p.69)

This range of alliances and how collaboration fits within this wider construct is described on a continuum defining stages of alliance integration in Figure 2-1, which in turn relates directly to entry mode types. Participant organisations’ business motivations and advantages are viewed against the prevalent environment and prospective partner’s position, to best determine their preferred entry modes for pursuing alliances (Ripollés et al, 2012, p.651). Further, within any particular

business sector there are environmental dynamics, which will have an impact upon the ultimate success of entry investment by collaborative partners.

Therefore, for this research the generic “alliance” will be discussed, which pertains to a relationship within the continuum noted above. Also discussed will be “Collaboration”, which is more specific and relates to a higher integration of business relationship as reflected in its position on the continuum.

### 2.3 Research Structure

The thesis is structured as follows: This introduction is designed to contextualise the research area and its relevance to practice. Chapter 3 is a systematic literature review providing the theoretical background that underpins the study research objectives. Chapter 4 presents the methodology and particularly the extension of current theory to provide a framework on which the research is based. It then describes the qualitative and quantitative data gathering approach and design, how data was collected and the analysis methods used. Chapter 5 presents the findings of the interview and survey phases of the research and compares and contrasts the value of the data gathered. Chapter 6 offers a deeper analysis of what the data is telling us and how it relates to my practice and the research questions. Chapter 7 looks at the implications for practice in terms of strategic and tactical decision-making and looks at options for related future research. Figure 2-1 shows the thesis structure.

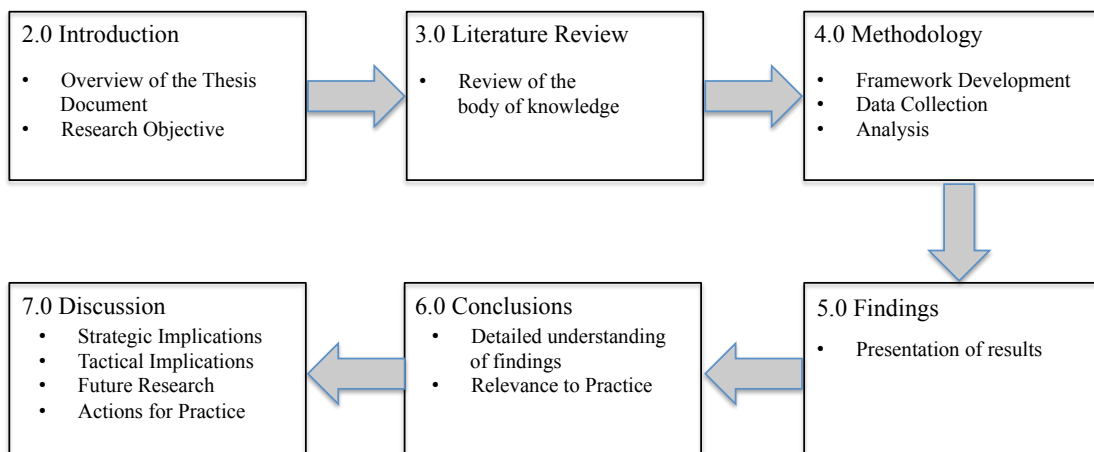


Figure 2-2 Thesis Structure

## 2.4 Background

The global defence sector is worth over \$1500bn annually (IISS, 2017; Tovey, 2016; Perlo-Freeman et al, 2015). The present trend of reducing spend in Western and Central Europe (-8.5%) and the USA (-3.8%) is countered by increases in Asia where a 64% increase in defence spend in the period between 2006 and 2015 was experienced (Perlo-Freeman et al, 2015, p.3). The importance of MNEs therefore to diversify away from domestic markets and successfully penetrate international markets becomes evident (Guay, 2007, p.49). The defence market has wider implications for industry more generally as the technology development involved has benefits for multi-sectorial/product companies with developments spun through to other sectors (EuropeEconomics, 2009, p.133) such as aircraft, IT, security and space (Steinbock, 2014).

The defence industry has been historically sustained through home state demands and funding, with any export revenues aimed at supplementing investment as well as providing a diplomacy tool (e.g. The UK Secretary of State for Defence, 2005, p.46; Schake, 2012, p.11). Research and development has been a corner stone of the industry with operational advantage through technology leading to competitive advantage in the export market while still maintaining the prime aim of domestic security (Hayward, 2001, p.116). There is however a structural change occurring in the industry globally. In developed countries the strength of the indigenous defence industry has paralleled domestic government investment, with increased privatisation and consolidation, driven by the increasing costs of maintaining a technological edge, leading to an overall reduction in capacity (Ikegami, 2013, p.437). This consolidation has seen the demise of broad, vertically integrated national capability within individual developed states, particularly in Europe and the USA (Hartley, 2006). This process has resulted in the creation of large MNEs such as Lockheed-Martin, BAE Systems, Boeing, Raytheon, Leonardo and Airbus, all of which are headquartered in the USA and Europe (Hayward, 2001, p.115). At the same time, newly developed and emerging economies are looking to build their own defence industries both to drive import substitution and to create a technology base within their own countries (Bitzinger, 2013, p.372). Further, globalisation is having a marked effect on defence industrial policy as the supply chain becomes increasingly diverse internationally

(Devore, 2013, p.569). Cross border cooperation and collaboration is also becoming more prevalent in emerging economies, for example in South America (Kotabe et al, 2000) and Turkey (Eceral and K orođlu, 2015).

It has been widely reported that expansion of international business favours industrial collaboration within new markets (e.g. Reid et al, 2001, p.79; Jassawalla, et al, 2006, p.557; Ikegami, 2013, p.438; Hartley & Braddon, 2014, p.541). However, literature to date adopts a narrow, singular perspective by studying international alliances predominantly from the view point of Multi-National Enterprises (MNEs) and the dynamics surrounding their entry mode decisions (e.g. Dunning, 1973; Hill et al, 1990; Agarwal & Ramaswami, 1992; Wrona & Trapczyński, 2012). These moves from host governments and associated organisations in the international defence market to widen indigenous value through alliances at a specific programme level (DeVore, 2013), or a broader industrial level (McGuire, 2014, p.615), is lacking academic study.

In the literature, emerging market companies, enterprises or institutions have been identified as Emerging Market Enterprise (EME) (Hong et al, 2014) or Emerging Market Firm (EMF) (Contractor et al, 2007). In the specialised defence industry sector, state/public and privately owned organisations feature highly, therefore for the purposes of this research these will be referred to as the “host” Emerging Market Organisations (EMOs). This practice based research looks to further understand in depth the diverse collection of motivations, advantages and entry mode preferences of both MNEs and EMOs in terms of business value.

Potential partners bring different advantages to an alliance, the value of which will be in part dependent upon the environment in which they operate (Cantwell & Narula, 2001, p.159; Cummings & Holmberg, 2012, p.142). These factors will in turn ultimately dictate the type of business relationship they enter into. Literature on the subject tends to be biased towards elements of international business success mainly as seen from a MNE perspective, with no real voice given to host ownership advantages, particularly when considering the alliance in question is made within the EMOs local environment. This local element is arguably richer than as viewed from a MNE Foreign Direct Investment (FDI) perspective, so therefore, there is a need to

better understand the dynamics at play for both MNEs and EMOs when approaching such relationships. The complexity of organisational and business structures, demonstrating differing values, cultural norms, identities and motivations has made operations and strategy making processes more dynamic, so understanding these relationships from an alliance perspective is key.

The current environment is one of reducing traditional home market budgets for MNEs (e.g. Ikegami, 2013; Bove & Cavatorta, 2012; Riley, 2012) and, with the defence industry becoming increasingly globalised, emerging states' demands for indigenous value is only matched by established, largely western, MNEs needing to position themselves in new markets. This increasing need for new market access is leading to a diversification of routes to market, in turn increasing cross border strategic alliances (Butler, 2005) and industrial collaboration in defence (Ben-Ari et al, 2012). Moreover, using alliances as a route to market could also act as a springboard into further third party markets where competitive advantages derived from alliances can open up further opportunities through, for example, export from a Joint Venture (JV).

Around 120 host states as purchasers of defence related goods and services (Spear, 2013, p.430) have formalised offset regimes primarily designed to transfer relevant technology and create jobs, ultimately adding value as a “quid pro quo” for the purchase of defence equipment (e.g. Welt & Wilson, 1999; Utley, 2001; Jang et al., 2007; Khan, 2010). As with any business environment, decisions for EMOs around international industrial cooperation are driven by motivations and advantages (e.g. Nielsen, 2003, p.301). However, decisions to enter an industrial alliance within an emerging defence market can, for example, lead to the following questions: Is it more advantageous for current defence industrial leaders (MNEs) to form a contingent or a strategic approach to defence industrial alliances? Can tensions between globalisation and the need for national security be balanced by alliances as suggested by Kapstein (1991)?

*“As a policy instrument, collaboration seeks to resolve the underlying tension between nationalistic conceptions of security and the globalization of advanced industries”.* (Kapstein, 1991).

Traditionally the developed world's defence industry's business environment was structured for home market governments to provide funding for research and development, product design and manufacture, all primarily for the use of home armed forces, with this often protected in law (Hartley, 2008). The key motivation behind this approach was to establish an operational advantage for state forces extensively through the exploitation of leading edge technology. Therefore capital investment in the defence industry had the prime focus of achieving the goal of technological superiority, with subsequent sales to third party governments used to help subsidise the escalating capital demands of the defence industrial complex (Thornton, 2007, p.324). Such sales to procuring countries were simply transactional and rarely included industrial opportunities, with any technology transfer associated benefits heavily caveated through export licencing controls.

Increasing observations indicate a subtle change from an export transactional orientated market to one driven by an increasing demand for added value by procuring governments. The rise in competition post the end of the cold war, and more recently the 2008 economic recession, have exacerbated this customer demand for further value from transactions, notably in the form of offsets (Spear, 2013, p.433). Importantly this is coupled with MNEs needing to constantly forge a differentiated position in an increasingly crowded market place. The fundamental premise of this research is that there is the emergence of a new bilateral relationship between suppliers and customers, with the transfer of technology and industrial collaboration increasingly becoming the norm, precipitated primarily through customer pull. This evolution has largely developed to date through emerging market governments applying offsets to defence contracts, where direct involvement in the production or support of the equipment, or supplier investment in other national programmes, are enforced against the equipment supply contract. This is all despite the development of policy by the World Trade Organisation prohibiting such practices noting that they should be used only as a means of qualifying, not awarding, contracts (Khan, 2010, p.140). Such policies are either informal, without set criteria for levels or performance, or mandated through policy or law with offset percentages ranging typically from between 20% to 100% of contract value and even extended to 135% (Ianakiev & Mladenov, 2009, p.187).

The extant problem is that a clear understanding of the dynamics within the collaborative dyadic is required. There are a number of questions being asked by those involved in today's defence sector: How does today's international defence business impact on those involved when collaborative relationships are becoming more prevalent? How can we better understand the motives and advantages held and how do these determine business entry mode decisions? Further, can an existing framework be used as a research structure for understanding all collaborative participant advantages and motivations and how could these help collaboration participants understand optimal business mode selection?

In this research Dunning's eclectic paradigm of foreign direct investment (e.g. Dunning, 1973; 1988; 2006) is introduced as a theoretical lens to develop a framework to help both MNE and EMO decision makers understand the intricate defence industrialisation processes and how the elements of their internal environment together with variations in the local alliance environment catalyse business entry decisions. The eclectic paradigm, or OLI paradigm, where Ownership, Location and Internalisation advantages are considered, was derived to provide a framework to understand motivations and advantages of MNE's as they entered new markets.

This research is unique in studying the perspectives of bilateral collaboration between major defence MNEs with operations in the US and the UK and organisations from the emerging markets of Brazil, Colombia and Turkey. The use of a research framework based on the eclectic paradigm as a theoretical lens has academic rigour though is unique to the defence sector, with this study having the practical objective of understanding issues surrounding decision-making for all participants when contemplating investment in defence industrial collaboration.

The action research approach brings particular advantages to this study. The research is systematically developed (Bargal, 2006) within a deep understanding of the research environment, with associated research questions being of practical importance to both researcher and the practice. The environments researched are not derived specifically for the research, with this low environmental control reducing the



risk of intervention and manipulation thus deeming data more representative (Kock et al, 1997, p.17). Fundamentally the desire to improve practice (Anderson et al, 2015, p.52) is a prime motivator in the use of the action research methodology.

The market environment under consideration is often categorised as the aerospace and defence sector (Marketline, 2012) though for the purposes of this thesis this will be narrowed down to defence to ensure that dynamics inherent within the commercial aerospace industry do not impinge upon the research and subsequent findings. The security market is increasingly categorised within the defence sector given the ever-growing importance of cyber security and intelligence, however this industry sub-sector will also not be included in this research.

## 2.5 Research Problem

Observation within practice, particularly over the past ten years, has identified a growing challenge in building international business within the context of increasing demands from customer stakeholders for extended industrial value. These challenges are primarily manifested through formal offset requirements, mandated through government policy in many countries, specifying elements such as percentage of contract value to be offset, technology areas to be involved, time taken to realise offset, liabilities etc. (e.g. Mathew, 2004; Welt & Wilson, 1999; Khan, 2010). Essentially a percentage of contract value needs to be fed-back to the customer country, either in a form related directly to the procurement project e.g. manufacturing specific parts of an aircraft, or through indirectly providing technology insertion into the wider industrial base. This is now increasingly evolving into formalised defence industrial policies aimed at development of the state defence industry and indigenisation of defence equipment supply, with an example being the "Strategic Guidelines" policy (Decree nr. 5.484/2005) in Brazil (Correa & Bondarczuk, 2015, p.851). The observation of a continuing evolution of industrial collaboration in the defence industry over the past thirty years indicates a shift from a predominantly transactional approach, where sales of product are born of MNE domestic government funded technology, to an increasingly value driven approach demanded from industrial partners. The stimuli and advantages that the involved parties hold must therefore also change, with practice leading to a view that the

demand for market access on one side is being balanced with a demand for capability on the other. Location type advantages, as described by Dunning's Eclectic Paradigm do identify market, resource and asset seeking investment (e.g. Buckley et al, 2012, p.881) and although the body of knowledge notes the potential for a "market access for technology" trade (Nielsen, 2003, p.303), a clear view within the context of the defence industry is difficult to identify. The purpose of this research is to provide a better understanding of the subject matter through the presentation of a suitable descriptive structure.

## 2.6 Research Approach and Objectives

The action research approach adopted here is primarily geared towards solving practice based problems while generating new knowledge (Anderson et al, 2015, p.60) gaining a deep set understanding of practical solutions for my practice-based problem. Comprehension of my position in my practice, how the importance of reflexivity in identifying and challenging assumptions and values (Anderson et al, 2015, p.72) required to recognise my impact on the status quo, are significant in this applied research. This action research methodology uses an abductive approach through mixed methods data collection and analysis, with, again, the relevance and application to practice having primacy. This research is designed to inform business development within practice, particularly in the creation of strategy and the setting, and execution, of plans in building market access and subsequently market share in new domains in an international market. The approach is designed to drive thought on how to influence success, with the body of knowledge reviewed providing insight into the strategic options available. So whilst acknowledging the practical emphasis and root of this study, this research takes the investigation of international alliances in a direction informed by rigorous theoretical domains and will intensively explore dynamic defence sector collaborative environments, both theoretically and empirically, in order to better inform decision-making. This thesis is designed to gain an understanding of the dyadic perspectives of MNEs and EMO, principally within industrial alliances. More specifically: uncover what motives lie behind collaborative decision-making; what effects comparative advantages have upon participants' motivations; how these dynamics impact upon entry mode decision making, and; the effect that subsequent operational experience has upon the participants in alliances.

In abduction observed phenomena are recontextualised with associated connections (Mayer & Lunnay, 2013, p.2) beyond the initial theoretical position and thereby subsequently to explanation (Downward & Mearman, 2007, p.88). Triangulation within a mixed-methods, abductive approach, can be seen as a natural strengthening of inference (Downward and Mearman, 2007, p.88) where association is developed to describe and contextualise, in this case the broadest practical phenomena extant in alliances. The value of abduction in this research is essentially that the research framework is modified through practical findings from analysis reviewed against the body of knowledge and practice experience (Olsson & Olander, 2005, p.4).

## 2.7 Research Contribution

There are changes in dynamics within the defence market with both MNE and EMO industries needing to understand how they are affected and how best to position themselves for the future. Despite the recent growth in international defence industrial alliances the literature review identifies that theoretical and practical research into the relationships in the dyadic in this sector is lacking. Further, the literature review makes clear the lack of specific research into motivations for, and the decision-making processes behind, international market entry modes in the defence industry from both EMO and MNE perspectives. This research therefore questions the differences in understanding of MNE and EMO perspectives in the international defence industrial environment and further asks whether the eclectic paradigm could offer the basis for a tool to aid better understanding. To this, the gap in the body of knowledge offers the opportunity to develop and present here a theoretical framework called the “Emergent Alliance Adaptation Framework” (EAAF), which has been extended from Dunning’s eclectic paradigm (Dunning, 1973). This research has clear theoretical and practical relevance to practice. The identification of organisational learning, as well as the environment as moderating factors on motivations and advantages of both EMO and MNE collaboration participants in the defence sector is described in the Emergent Alliance Adaptation framework.

### 3 Literature Review

#### 3.1 Introduction

This structured literature review provides theoretical background to the study. It has the primary aim of better understanding the diversity of knowledge surrounding the dyadic between international industrial collaborators in the defence industry. This underpins theory and the development of the alliance framework used in this research.

By way of an overview, the first section looks at the key literature domain of alliance and collaboration related theory and how this relates to the research subject. The second section reviews internationalisation theory and introduces the eclectic paradigm, which forms the theoretical basis of the framework proposed and developed in this research. The third section considers literature relating to the moderating effects of the international environment. This includes elements from political, economic and social theory including organisational culture theory, with a focus on values, attitudes and beliefs as they provide relevant foundations to understanding regional differences. Within the context of international defence industrial alliances, aspects relating to internationalisation and collaboration are systematically defined and analysed through the lens of the research problem. Important aspects of these different exogenous elements are defined here, specifically in the context of their impact upon the endogenous, domain environments. This chapter is then summarised.

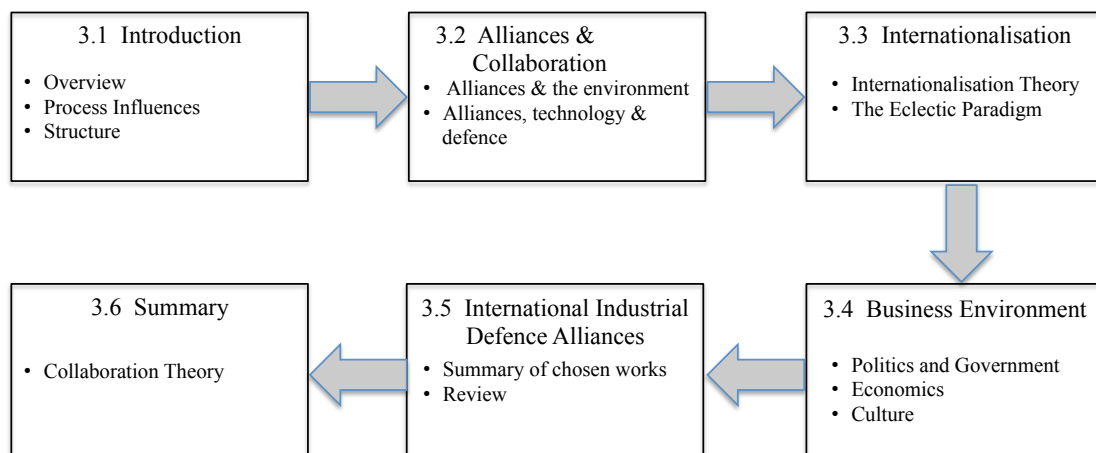


Figure 3-1 Literature Review Structure

The section on internationalisation focuses on understanding structures and dynamics in the process of business forming in international markets. Decisions to enter into alliances will have a profound effect on the partners in terms of the venture itself and how the venture impacts on the parent organisations more broadly, including corporate learning (Huang, 2010, p.454). These impacts will differ between organisations. Resources are finite so well before entering into such ventures the wider implications of forming international businesses, including the evolution of the partnership and the potential for its eventual dissolution (Hoffmann & Schlosser, 2001, p.364), are important to be understood within practice.

The environment within which alliances take place is key when trying to make sense of the dynamics of decision-making within collaborations (Kogut, Walker and Anand, 2002). Within an overall context of collaboration, the wider environment was searched as it related to the subject matter using the PESTEL framework for environmental scanning (Burt et al, 2006; Yüksel, 2012).

The literature review structure and associated search was influenced by works, and existing relevant literature reviews, by researchers such as Vom Brocke & Lippe (2015), Eikey, Reddy & Kuziemy (2015), Laursen & Svejvig (2015), Milch & Laumann (2016), Montoya-Torres & Ortiz-Vargas (2014), Hudnurkar, Jakhar & Rathod (2014). The literature review methodology adopted here followed an unstructured scan and a structured search (Laursen & Svejvig (2015) across five main phases as per Montoya-Torres & Ortiz-Vargas (2014) after Denyer and Tranfield (2009) and Wong et al. (2012). These five phases are:

- Question Formulation;
- Locating Studies;
- Study Selection and Evaluation;
- Analysis and Synthesis and;
- Reporting and Using the Results.

The literature search made use of the following knowledge repositories and databases: ProQuest, Science Direct, Emerald, HighWire, Springer, JSTOR, Taylor and Francis,

Cambridge, Wiley, Oxford Journals, Sage and MetaPress. The inclusion criteria (Willis-Shattuck, 2008) used were:

- There was a clear relevance to national defence;
- Collaboration of some form was involved;
- There was an industry/industrial element;
- There was a multi-national and/or emerging market perspective.

Ensuring applicability of academic work to this research proved time consuming as non-related returns, such as research collaboration figured highly in literature searches, all of which is of reduced value in the context of this study. Relevant literature was identified through key words as a part of the overall international defence industrial collaboration search. This area of literature is of particular importance so those relating to business alliances through a manual search filtered this out further.

The search for relevant international defence industrial alliance literature was done in English however there was awareness of spelling differences between American and UK English. For example searching “defence” OR “defense” returning higher than “military” for example as it included papers relating to legal/court matters. Because of the differing meanings of defence (defense) likely to skew results, and the less ambiguous nature of the search term military, it was decided to use the latter term in the search. Using the key terms within the question i.e. international defence/defense/military industrial collaboration; industrial collaboration; international collaboration; defence/defense/military collaboration. As international business, be it through export, import or forms of collaborations, is of substantial interest in this research words relating to internationalisation were also used as search strings. This extensive search was undertaken within the breadth and depth of work available with the database of over 1600 citations collected.

Unsurprisingly the initial literature search yielded overwhelming results with many thousands of papers flagged against the main literature search themes. The focus was to systematically filter the works through rigorous inclusion and exclusion criteria identified against search strings that would allow the research to be properly informed

in a manageable manner.

The perspective on the international defence market taken throughout this research considers multi-national and emerging market perspectives, therefore the criteria “MNE” or “MNC” or “Multi-national” and “Emerging Market” were used to search the knowledge databases. Specifically searching with “Emerging Market Organisation” which gave no results and “Emerging Market Company” which had one return therefore the search term “emerging market” was settled upon.

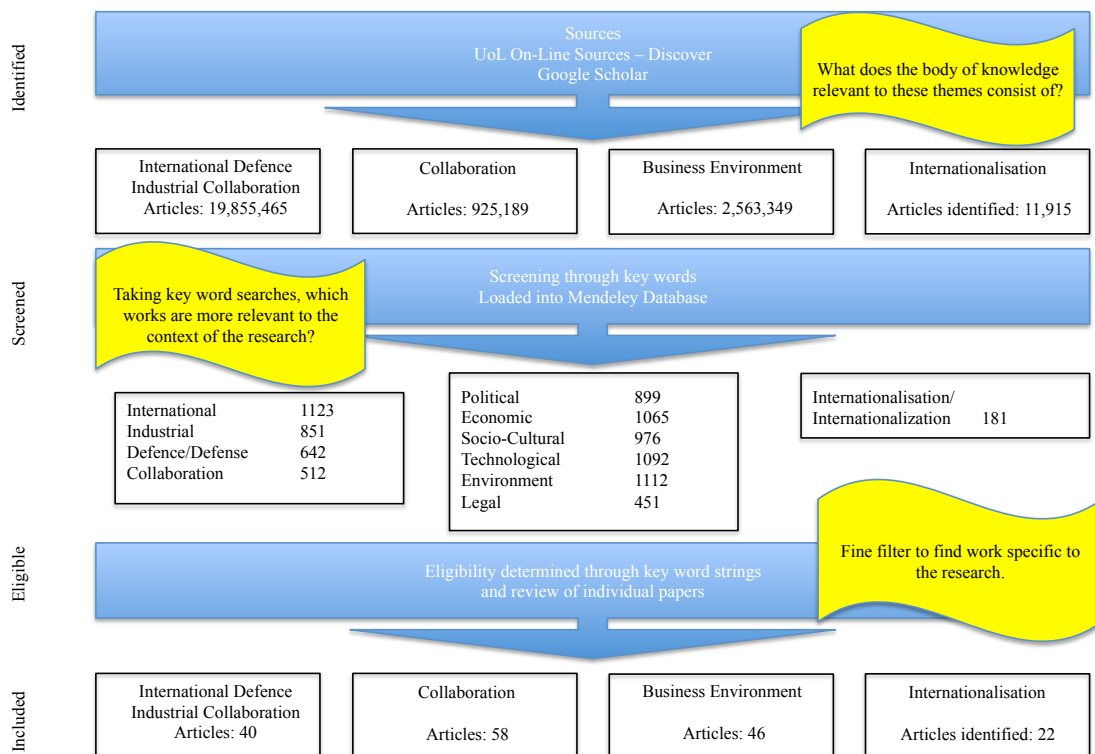


Figure 3-2 Literature Review Flow Diagram

The structured search took the database and looked closer at relevant terms to find a set of papers and book sections that provided more focused research into international defence industrial collaboration. Because the automated searches would not necessarily be able to adequately differentiate the subtleties of language relating to the subject and therefore might miss out on relevant papers, individual documents were scanned manually by reading the papers’ abstracts to build sets relevant to each section of this literature review.

## 3.2 Alliances and Collaboration

### 3.2.1 Background

*“Collaboration occurs when a group of autonomous stakeholders of a problem domain engage in an interactive process, using shared rules, norms and structures, to act or decide on issues related to that domain”* (Wood, and Gray, 1991, p.146)

*“In a true collaboration, there is a commitment to shared resources, power, and talent: no individual's point of view dominates, authority for decisions and actions resides in the group, and work products reflect a blending of all participants' contributions”* (John-Steiner, Weber and Minnis, 1998, p.776, citing Minnis, John-Steiner, & Weber, 1994, p. C-2)

Alliances are formed across many different environments for many different reasons. Small numbers of people working together in social situations to achieve short term goals or large complex cross border industrial alliances all have common theoretical underpinnings. In fundamental terms alliances are initiated to reduce the risk and uncertainty around environmental complexity (Wood, and Gray, 1991, p.155) with protagonists holding shared, differing or opposing interests (p.161) on subject areas within the dyadic which will have an impact on the relationship and alliance efficacy. In the context of the research domain chosen here complexity is a relevant concern. There are conflicting views on complexity and alliances with a strong view from the literature seeing alliances as a means of spreading risk in a complex environment, however the increased complexity of alliances can in itself be deemed a risk to the success of ventures. Wood and Gray (1991) offer the view that complexity can also be seen as a resource (p.160), which might be true with opportunities needing to be navigated though the collaborative environment having the potential for one party to better understand this complexity thereby offering its own particular advantage. This extrapolates to issues around individual interests and benefits and how advantage is leveraged in the dyadic. Theoretical structure can be provided through a set of principles of alliances offered by Rebecca Gajda (2004, p.76), which are précised in Figure 3-3.



From an economic perspective it can be argued that there are two main theories of motivation behind alliance formation, these being “transaction-cost theory”, where essentially costs are lowered through an alliance, and “resource-based theory”, where the need for currently unavailable resources precipitates alliance (Hoffmann & Schlosser, 2001; Figueira-de-Lemos et al, 2011; Das & Teng, 2000). This has relevance in the context of both MNE and EMO motivations both individually and within the dynamics of the dyadic.

Principle	Description
Imperative	Increasingly utilised in a complex world
Definition	Broad continuum of alliance types
Journey	Organisational learning builds knowledge and experience
Relationships	People are central to alliance formation and development
Stages	Alliances develop and evolve along the alliance continuum

Figure 3-3 Alliance Principles (after Gajda, 2004, p.76)

Further, the differences between exchange and integration type alliances are researched by Chen & Chen (2003) within the context of resource alignment in international cooperation and how these motivate the venture type, or entry mode, undertaken by the partners. The depth of alliance, is dependant upon what the partners bring and how the use of resources evolves within a relationship. There is a more integrated alliance, or collaboration, where resources and capabilities are pooled, alternatively there is an exchange alliance, where specific areas are maintained within the partners in what would better mirror an evolved cooperation between the partners (Ibid, p.13). This all offers relevant theory when considering the motivations of alliance participants though differences in motivation e.g. transactional versus resource, offers the potential for further complexity within the dyad.

From an economic standpoint the use of valuable resources, (know how, technology, IPR) is often differentiated between the parent and the venture i.e. an exchange type alliance does not demand an irrevocable commitment to the particular venture partner

to the detriment of other commitments outside of this venture. An integrated alliance however involves committing investment specifically to the venture (Chen & Chen, 2003, p.13). This is underlined by Mayrhofer (2004), who notes less integrated alliances as having reduced demand on resources than mergers or acquisitions (p.85) which all help to further understand motivations particularly when consideration of longevity of investment against perceived value of the market is taken into account.

Level of Integration	Purpose	Strategies and Tasks	Leadership and Decision-Making	Interpersonal and Communication
Networking  1	Create a web of communication  Identify and create a base of support  Explore interests	Loose or no structure  Flexible, roles not-defined  Few if any defined tasks	Non-hierarchical  Flexible  Minimal or no group decision making	Very little interpersonal conflict  Communication among all members infrequent or absent
Cooperating  2	Work together to ensure tasks are done  Leverage or raise money  Identify mutual needs, but maintain separate identities	Member links are advisory  Minimal structure  Some strategies and tasks identified	Non-hierarchical, decisions tend to be low stakes  Facilitative leaders, usually voluntary  Several people form "go-to" hub	Some degree of personal commitment and investment  Minimal interpersonal conflict  Communication among members clear, but may be informal
Partnering  3	Share resources to address common issues  Organizations remain autonomous but support something new  To reach mutual goals together	Strategies and tasks are developed and maintained  Central body of people  Central body of people have specific tasks	Autonomous leadership  Alliance members share equally in the decision making  Decision making mechanism are in place	Some interpersonal conflict  Communication system and formal information channels developed  Evidence of problem solving and productivity
Merging  4	Merge resources to create or support something new  Extract money from existing systems/members  Commitment for a long period of time to achieve short and long-term outcomes	Formal structure to support strategies and tasks is apparent  Specific and complex strategies and tasks identified  Committees and sub-committees formed  High	Strong, visible leadership  Sharing and delegation of roles and responsibilities  Leadership capitalizes upon diversity and organizational strengths	High degree of commitment and investment  Possibility of interpersonal conflict high  Communication is clear, frequent and prioritized  degree of problem solving and productivity
Unifying  5	Unification or acquisition to form a single structure  Relinquishment of autonomy to support surviving organization	Highly formal, legally complex  Permanent re-organization of strategies and tasks	Central, typically hierarchical leadership  Leadership capitalizes upon diversity and organizational strengths	Possibility of interpersonal conflict very high  Communication is clear, frequent, prioritized, formal and informal

Figure 3-4 Strategic Alliance Formative Assessment Rubric (SAFRA). (Gajda, 2004)

Decision-making on entry modes is fundamental to alliance success with Martin & Eisenhardt (2010) contending that the level of management decision-making in a business hierarchy can affect alliance success. They argue that in collaboration business unit led examples prove more successful than those that are corporately led (Martin & Eisenhardt, 2010, p.295) due in great part to the detailed knowledge of the activities held in the individual business units. The broader understanding of and adaptation within the environment by the corporate level of an organisation, determining internal and external boundaries, provides the top level, strategic level structure within which individual business can then effectively collaboratively evolve (Eisenhardt & Piezunka, 2011, p.518). The extrapolation of this to MNE/EMO alliances and therefore relevance to this study has theoretical validity.

As relevant to the research are issues surrounding the failure of collaboration type alliances. When considered as a change programme, the level of partial or full failure in such efforts can be as high as 50% to 70% against objectives set (Smith, 2011). The importance of culture both internally to the organisation and, more broadly, in the operating environment, is a factor in the ability to lead common purpose through common goals in successful collaboration (Chen & Tjosvold, 2005, p.417). More starkly, fundamental differences in organisational culture are a potential driver of alliance failure (Brettel & Cleven, 2011, p.256).

The inability to maintain pace against joint objectives (Davis & Eisenhardt, 2011, p.184) and the inappropriate selection of partners in the light of extant market competition can also drive collaborative failure (Ang, 2008, p.1072). The rates of failure of collaborations have also been differentiated by market sector and particularly experience gained regarding success in collaborations within those sectors (Simonin, 1997). There is a particular ability within certain sectors, e.g. the oil and gas industry, to transfer successfully collaborative “know-how” from collaborative “experience” without which collaborative benefits are less likely to be realised (Simonin, 1997, p.1152).

### 3.2.2 Alliances and the Environment

Earlier work on the subject has Anderson (1995) focusing on the economic drivers inherent within collaborative type alliance decision-making, particularly

differentiating between research and market orientated collaboration (Anderson, 1995, p.75). He further identifies the importance of globalisation in enhancing the flows of foreign capital into international economies, and in this context how production is moving outside of these traditional borders with the positive and negative aspects for domestic industries (Anderson, 1995, p.57). Anderson (1995) proposes that the economically large, globalised, specialised, collaboratively minded businesses with suitable flexibility and a multi-faceted portfolio of relationships will be best positioned for future success (Anderson, 1995, p.57).

For Western industrial organisations, Chen & Chen (2003) argues that an exchange alliance type relationship would be best suited to enabling international collaborative success, as compared to a more highly integrated relationship, with an iterative approach as per the Uppsala stepped method (discussed later in this chapter) preferable (Chen & Chen, 2003, p.12). The importance of congruence of assets is further argued (Chen & Chen, 2003, p.12) however Butler (2005) sees organisational size is also relevant noting that compared to smaller organisations, large enterprises have more constraints upon them in alliances, as there are few sized equals with whom to partner. This however does not take into account the parents' integrated collaborative entities that have the potential to offer more flexibility in building further alliances.

As well as tensions created within the alliances themselves, entering new international markets will bring new competitive dynamics into play (Camisón & Villar, 2009) with location and ownership specific advantages experiencing change and having an impact upon eventual success. Competition and collaboration describe the two most often stated types of alliance held by market participants, with hybrids of the two possible in the case of “co-opetition”. The relationship between the intensity of competition in a market and the motivation to collaborate is one very relevant to the particular dynamics of international business environments. The dynamics of the seemingly opposite situations of competitive intensity between organisations on one hand and their collaboration on the other is discussed by Wu & Pangarkar (2009) who theorise, after research into the Chinese market, of a “U-shaped” relationship between these two forces, with collaboration being most sought in a situation of medium competitive intensity (Wu & Pangarkar, 2009, p. 517/8). Such tensions of competition

and cooperation (or more integrated collaboration type alliances) remain also with both EMOs and MNEs as they understand their dyadic within the context of the wider environment and the third parties that also operate within it.

Ang (2008) posits that there is a relationship between market competition and collaboration (Ang, 2008, p.1057). Further, the type of market one is in will also have a determinant affect with high intensity technology markets showing a positive correlation of higher growth between those in a less competitive situation compared to those facing higher levels of competition, with it being converse for those in less technologically intensive markets (Ang, 2008, p.1071). As alliances grow there will become increasing instances of “co-opetition”, as earlier noted, a term described by Gnyawali & Park (2011) as cooperating and competing at the same time. In practice this often happens when sub-systems are provided to Original Equipment Manufacturers (OEMs) with whom organisations compete in different areas. A major reason for such loose alliances is the need within high technology markets to balance capital and technology requirements against indigenous research and development cycles and costs.

When considering entry into international markets a clear understanding of the new environment is essential for success, with the intensity of competition within that market an obvious parameter to recognise when considering alliances (Ang, 2008). Therefore competition is having a direct impact upon alliance modes. The position of local market organisations competitively will have a bearing on market access and therefore arguably their attractiveness to overseas suitors (Ang, 2008, p.1058). The same could be said for those MNEs looking to penetrate new local markets with their overall global market competitive position indicating their comparative worth in local markets. The value of ownership advantages on either side of alliances can be viewed differently, dependent upon a number of factors including market type and local culture (Apfelthaler et al, 2002) all of which can have a direct effect upon that organisation’s comparative ownership advantage.

### 3.2.3 Alliances, Technology and Defence

Research by Graham et al (2001) suggests two main motivations for decision-making in collaboration type alliances, namely price and technical differentiation (Graham et

al, 2001, p.251). They further hypothesise that the success of collaboration through strategising around technical differentiation is significant (Graham et al, 2001, p.252). This points to the success of collaboration using technology as the differentiator, as well as the importance of supplier/buyer relationships within this context. Cost as the differentiator is noted to being more likely in a low risk competitive scenario, i.e. procurement of more commodity type products or when competitors have similar delivery risk profiles. Graham et al (2001) highlight the advantages to local collaborative ventures of relationships (market access, trust in suppliers) and affordability around high technology programmes due to the provision of capital (local) and technology (MNE partner).

Organisational constructs in alliances are of increasing importance, particularly when contemplating increasingly integrated models. Research by Hoffman & Schlosser (2001) propose that organisational size, between SME's and large corporations, are an indication of a propensity to collaborate, with the former less likely than the latter to do so (Hoffman & Schlosser, 2001, p.358). The parallels in this context to EMOs and MNEs obvious. In contemplating the drivers of international industrial alliances in the defence sector certain relationships have to be understood, for example that between economic growth and defence expenditure, and how one influences the other. Considering the effect of wider economic growth, Dunne et al (2005) review prevailing models including "within-country" growth relationships and "between-country" relationships (Dunne et al, 2005, p.452). This research helps understand the relation between growth and military spending, suggesting that an earlier model used, the Feder-Ram Model (Dunne et al, 2005, p.453) is open to severe econometric problems (p.460) and although the Augmented Solow Model (Dunne et al, 2005, p.456) and the Barro Model (p.458) might prove tighter it is concluded that neither can provide an all encompassing, and safe model for prediction (Dunne et al, 2005, p.459). Importantly however they do conclude with the, perhaps intuitive, claim that military expenditure has a positive effect on economic output when the threat is high and vice versa when the threat is low (Dunne et al, 2005, p.459/460).

The increasing cost of high technology developments and production mean that cooperation and collaboration are becoming more the norm within an increasingly globalised defence industry (Bitzinger, 1994; Dussauge & Garrette, 1995; Giegerich,

2010; DeVore & Weiss, 2013). Defence research, development and production have rarely been done on purely efficient economic terms with open competition often coming second to national security and other economic imperatives (Bitzinger, 1994, p.172). Bitzinger (1994) further notes that the move from a national to a global collaborative approach is becoming a critical strategy for both industry and governments if a viable national industrial base is to be retained (p.171). This need for government to subsidise the high costs of entry into the sector is termed “The Infant Industry Argument” (Hartley, 2000, p.6).

When considering differentiation between organisations Guay (2007) acknowledges the importance of consortia in major product development programmes however identifies politics, through the economic benefits associated with job creation/sustainment, as playing a great role in alliance decision-making (Guay, 2007, p.50). This is amplified by Giegerich (2010) who talks of a new paradigm of collaboration and has a slightly different perspective introducing the increasing cost of operations and the subsequent impact on overall budgets into the discussion (Giegerich, 2010, p.87). The pooling of investment as a means of acquiring high technology equipment and capability is seen as a natural consequence of increasing budget squeezes, with such systems unaffordable on a single national level (Giegerich, 2010, p.89). Disadvantages of this can include the need for increased management costs and concerns over national operational requirements being diluted for a common good (Giegerich, 2010, p.89) i.e. compromise will be inevitable. International collaboration has a political dimension. The case of the Airbus A400M is cited as a particular case of a European programme unaffordable on a national basis and one that saw cost escalations of around 50% and many years delay. As it encountered cost issues, it was later stated as being a programme that for various reasons, not least political, was deemed “too big to fail” (Giegerich, 2010, p.93). This point is amplified by Graham et al (2001) who stress that the post-cold war environment where extant symmetrical threats have reduced, together with the ever increasing cost precipitated by the need for technological advantage, limits national solutions and drives towards increased cooperation/collaboration (Graham et al, 2001, p.250). These examples of motivations driving alliances in the defence industry have relevance to the questions raised in this research particularly regarding the dynamics created through participants’ advantages.

The issue of globalisation is however seen as a risk with the associated proliferation of capability through collaboration, and further through subsequent export to third parties, potentially presenting undesirable consequences of competition (Bitzinger, 1994, p.171). Reducing duplication of effort, and therefore conserving resource, as well as economies of scale through access to new markets, are often noted as drivers behind cooperative ventures in defence, with all of this made increasingly achievable through globalisation's reductions of geographical boundaries (Bitzinger, 1994, p.186). The importance of the skills base in maintaining a technological advantage is identified and further how globalisation blurs national distinctions for MNE defence stakeholders and how risk/reward is problematic. For example, by maintaining US technology advantage it can threaten US national security and economic competitiveness (Guay, 2007, p.2). Politics and governments' desires for indigenous capability as a driver behind alliance formation behaviour can further be argued, with the case of the UK and the consolidation of many defence firms into BAE Systems specifically identified (Guay, 2007, p.64). This is arguably a sound observation in the case of the UK for the naval sector, and arguably for the air sector, though the land sector has been lost as a UK sovereign capability with the conflict between national loyalties and business opportunities exposed (Guay, 2007, p.65). Butler (2005) expands on the theme of home market openness to imports and how corporate behaviour towards international alliances evolves the characteristics of industry (Butler, 2005, p.15). The national industry as a strategic asset for developed nations, generating technology at virtually any cost is essentially gone, with arguably a few exceptional cases, e.g. that of the US, arguably not withstanding (Guay, 2007, p.37). This all highlights changes in MNE advantage sets and needs to be understood in the context of the international alliance dyadic.

Investment in the development of high technology, defence industries through capability based R&D programmes will generally be the responsibility of government thus, in general terms, the need for individual emerging organisations to have inherent economic might is of secondary importance as liquidity responsibility is undertaken by home government. They will in effect be nascent national players who will have the potential to move to a prime position as envisaged by Butler (2005) and therefore hold an advantage over their MNE partners. Further to this theme, the technology



related advantages of collaborative innovation would be open to challenge by the competitive environment and the structures of the market itself (Wu, 2012). This is underlined when trying to understand motivations and preferences of protagonists in an international context; the eclectic paradigm framework will be impacted by competitive tensions around all three of the advantage criteria. So when compared to other entry modes, such as wholly owned local acquisition where the route to market will be slower (Anderson, 1995), the opportunities to stifle competition through alliance also exist as not only does it reduce the number of potential future competitors in a particular market place it also allows the quick and agile access to resources.

### 3.3 Internationalisation

#### 3.3.1 Background

A number of theoretical directions have been taken in literature when considering internationalisation with different elements including: The Firm; The Market; Opportunity; Cost; Relationship; Experience; Knowledge; Resources. (Whitelock, 2002, p.346). Theoretical descriptions of international trade and investment include: absolute and comparative cost advantage from Adam Smith (1776) and David Ricardo (1817); gravity models of trade and latterly FDI, which equate market size and distance (e.g. Hijzen et al, 2008, p.858/859); Heckscher - Ohlin's model of factor endowment (Heckscher & Ohlin, 1991); Porter's Diamond Model (1990) of six elements determining advantage in international trade first published in his book "The Competitive Advantage of Nations"; Hymer's work on multinational enterprises and trade ((De Blas & Russ, 2013); the Uppsala Model of stepped international movement into international markets (e.g. (Johanson & Vahlne, 1977), and; Dunning's OLI framework which evolved to the eclectic paradigm, which pulls together many strands into a comprehensive theory of foreign direct investment (e.g. Dunning, 1973).

In recent history there has been a constant evolution of academic thought regarding the internationalisation of organisations from the economic and philosophical roots of international business, (Buckley, 2009). It can be argued that Stephen Hymer brought study of internationalisation in business, more specifically relating to MNEs, to the fore with his seminal 1960 doctoral thesis finally published posthumously by

Kindleberger in 1976 (De Blas & Russ, 2013, p.392). His argument is that the main drivers for an organisation to control an overseas enterprise and gain market power, are to exploit its organisational or technological advantages, reduce trading costs and reduce local competition all to gain local customer access (De Blas & Russ, 2013, p.381). This would make the practical assumption, of relevance to this study, that differences in knowledge of the market environment, in this case between MNE and EMO, determine that a position of perfect competition in the market is broken (Kindleberger, 2002). The importance of organisational advantage is central to Dunning's (1973) work and fundamental to this research.

The Uppsala model of internationalisation, named after the University of Uppsala where it was first theorised, states that future export behaviour is borne of past export experience (Johanson & Vahlne, 1977, p.31). Increased market knowledge will engender confidence and therefore greater investment through increasingly integrated entry modes (Johanson & Vahlne, 1977, p.24). The building of experience in decision-making is highlighted within the evolution of this research framework. There is a wide body of knowledge concerning the motivations and determinants of organisations in pursuing and investing in international business, with one particular line of research undertaken by John Dunning who in his 1973 paper "The Determinants of International Production" (Dunning, 1973) discussed the OLI framework of ownership, location and internalisation advantages. This evolved into the eclectic paradigm where the relationship between ownership, location and the desire to internalise is put within a framework, this being first presented by Dunning during a conference in Stockholm in 1976 (Dunning, 1988).

### 3.3.2 The OLI Framework and its Evolution

When considering internationalisation, and particular theory around multi national enterprises, the efficacy of Dunning's OLI framework to investigate the determinants of foreign direct investment (FDI) (Stoian & Filippaios, 2008, p.351) has been argued and tested with its evolution building increasing relevance to the business practitioner. It suggests that more foreign direct investment will be undertaken by an MNE when greater ownership (O), location (L) and internalisation (I) advantages are enjoyed. The importance of this to the MNE is underlined by Dunning (1988) when he makes the differentiation between structural and transactional market advantages and how

these can be leveraged to add value in cross border intermediate trade. If MNEs' location advantages favour the home market then foreign markets will be supplied by exports from them. Where ownership advantages are more efficiently leveraged in an overseas market through the open market or in alliance with an EMO, then asset transfer will be used (Dunning, & Dilyard, 1999, p.13). This equates essentially to issues around competitive advantage (Martin, 2014, p.56). Further, factors relating to location and the optimisation of entry modes, and particularly arguments relating to the advantage of an internalised approach, are reviewed (Dunning, 1988, p.3). This has particular relevance to the defence industry when considering route to market decision making where differing levels of technological maturity, organisational sophistication, cultural similarity, economic position, competitive and institutional landscapes, all offer risks of transactional failure (Dunning, 1988, p.3).

### 3.3.2.1 Ownership

The evolution of the taxonomy of ownership advantages (O) has progressed as the eclectic paradigm itself has progressed. Experiencing evolving definitions across the years, the earlier version was described by Dunning as being differentiated as i) firm specific, ii) across multiple plants and iii) being a multi-national (Eden & Dai 2010). Dunning & Lundan (2008) classified them as Asset Advantages (Oa), Transactional Advantages (Ot) and Institutional Advantages (Oi). Within the eclectic paradigm "lexicon" there remains constant debate around the definitions of advantages. Understanding the arguments on cross over between asset, institutional, transactional and location type advantages, it then behoves one to make decisions which will maximise clarity within the research at hand. This dictated that for this research I took the advantages as described by the interviewees and placed them into the following primary types, as per the accepted taxonomy after Dunning (Dunning, 1998, p.2):

The Asset Advantages (Oa) e.g. technology, human resources and management know-how, relate to more tangible elements held by a firm that provide comparative advantage. In the context of this research it included for example technology and product differentiation and importantly an advantageous position in a market (Lundan, 2012, p.54). These are what the organisation owns and the market power and superior economic rents that results therefrom. Further examples include products and capabilities owned through intellectual property e.g. patents and trademarks, tacit

proprietary knowledge, economies of scale, marketing and distribution networks, finance/credit advantages and internal cost reduction (Eden & Dai 2010; Verbeke & Yuan, 2010; Lundan, 2010).

Ot (Transactional Ownership Advantages) are defined as bringing advantage through size, scope and common governance across the organisation (Lundan, 2010). These can include firm specific advantages (Rugman, 2010, p.3) that stem from multi-nationality (Eden & Dai, 2010), which relates them closely with internalisation advantages (Rugman, 2010, p.3).

Institutional Ownership Advantages (Oi) are associated with the social and political environment that the organisation sits in and what the “rules of the game” are (Dunning & Lundan, 2008). These advantages are associated with, for example, the relationship enjoyed with government in supporting their efforts and how this influences their market position. Further, they relate to the organisation’s institutional infrastructure and non-market advantages that are less tangible (than Oa advantages). Examples would include knowledge and experience of the stakeholder environment e.g. political capital, branding position, particular knowledge of, and access to, political institutions (Lundan, 2010). If positively competitively differentiated, one could term this as Institutional Capital (e.g. Martin, 2014, p.60; Leitch et al, 2013, p.14).

### 3.3.2.2 Location

The Location element of the eclectic paradigm pertains to the country or region in question and advantages that are inherent and essentially non-transferable (Lundan, 2010). For example, the market potential and actual sales demand, geographical position, local culture, costs associated with production and distribution, local economic, political and trade policies and investment incentives (Lundan, 2010; Dunning, 1995; Dunning, 1988);

The significance of location in affecting internationalisation success determines an understanding of organisations and leans on institutional theory in this respect. Guisinger (2001) discusses geovalent factors of the experienced environment, which are outside of the organisation itself (Guisinger, 2001, p.266) with Dunning proposing

the importance of a wider social capital (Dunning, 2009, p.26). More specifically the Location Advantages, or “L” in OLI, are broken down into location specific factors which are under three sub sections i.e. Political (government policies, stability), Social (cultural, geographical and language) and Economic (factors of production e.g. land, labour, capital and entrepreneurial disposition, local infrastructure costs, size and shape of the market) (Agarwal & Ramaswami, 1992, p.12). The contention being that Ownership type advantages will be predominantly owned by MNEs and Location type advantages predominantly by EMOs.

### 3.3.2.3 Internalisation

Dunning’s Internalisation advantage essentially refers to entry modality (Rugman, 2010, p.11) and therefore a consequence of the outcome of decisions made within the dyadic rather than an inherent advantage per se. Internalisation Advantages (I) are largely transactional in nature and refer to the ability to operate in alliances maximising value within the relationship. This can, through unique tools, experience and knowledge within the organisation, include the ability to mitigate potential contractual risks or security of supply, infringement of intellectual property rights and protection against the actions of competitors (Dunning, 1988, p.13). They are concerned with those innate capabilities enabling the organisation to derive maximum value from the commercial relationship. This will often be through experience and knowledge gained in previous relationships, which together with the design of the organisation will provide the ability to optimise gain in relationships in lowering contractual risk, for example when entering into a lower control mode of alliance (Wrona & Trąpczyński, 2012, p.). In the coding for this research it was deemed more logical to have them sit together with Transactional Advantages.

### 3.3.2.4 The evolution and application of the eclectic paradigm

The reason for using Dunning’s eclectic paradigm as the basis of a theoretical lens is that this research is concerned with both MNE and EMO decision-making when considering market entry and how this is affected by internal and external factors, for example the location being considered by the MNE and the capabilities and experience inherent within the partner’s organisation for EMOs.

Hill et al (1990) seek to look at how different entry modes should be viewed in a more holistic, rather than isolated, way when assessing their impact upon organisations' decision-making. They map out a decision framework made up of Strategic, Transactional and Environmental variables, which determine entry mode decisions (Hill et al, 1990, p.120). Internalisation and ownership issues need to be considered, as does how a multi-domestic approach compared to a global one, has particular implications for control, resource commitment and the risk of dissemination (Hill et al, 1990, p.120/121). Further, when considering the defence industry and the strong involvement of government in the domain, Dunning's later inclusion of the institution as an ownership advantage (Oi), crucial in determining international alliance decision-making, underlines this theoretical lens as being particularly well suited to this research.

The structure of the global defence market, at least that available to western aligned MNEs, has particular characteristics that determine that it is in the purest sense structurally broken through exogenous, immutable factors (Dunning, 1995). These can include, inter alia, indigenous technology and work share transfer demands with relationships within this context between strategic, environmental and transactional variables (Hill et al, 1990). Defence is essentially an oligopolistic competitive market, populated with previously home market funded MNEs engaging with international monopsonies (Guay, 2007, p.63). Therefore, the importance of equity based alliances as a means to gain a foothold in markets like Brazil, where there are effective political restrictions on external organisations making majority direct investments in defence, could be seen as augmenting ownership advantages through "strategic asset seeking" foreign direct investment (Dunning, 2000, p.165) and therefore acts as a conduit to market entry.

It can be argued that the level of control of the MNE will differ between those taking a multi-domestic approach, where low control entry modes such as product licensing would be acceptable, as compared to global organisations where control is more centralised at the headquarters with risks of failure, particularly transactional, reduced through more control via their joint venture or wholly owned entities (Hill et al, 1990, P.121). The realisation that profit performance rather than production efficiency is the fundamental aim and that this is determined through the MNEs relationship with the

exogenous rather than endogenous environment is highlighted by Li et al (2005). This is tested through understanding the effect of a high amplitude exogenous shock, in this case the 9/11 attacks, on MNE strategy and performance (Ibid, p.484). In a multi-national situation the impact of such exogenous shocks needs to be understood within the context of each country the MNE operates in. Li et al (2005) propose that globally integrated MNEs will be affected more negatively than those following a multi-domestic strategy (Li et al, 2005, p.490). A more recent example would be the impact of the Snowden revelations regarding alleged US government complicity in phone tapping on senior world leaders and subsequent sensitivities and sanctions experienced. Arguably the closer a country and their MNEs are to the US the more impact it will have upon them in markets more sensitive to the allegations. This has been recently witnessed in Brazil for example (Bajaj, 2014, p.585).

The implications of pursuing international business by MNEs is central to this research however experiences of smaller enterprises need to be understood to see if there are any differences in approach or result and if anything can be learned from these. Brouthers et al (1996) researched the US computer industry to look at the entry mode selection activities of small and medium sized enterprises to see how, if at all, they differed from that of large organisations. Fundamentally there was little difference discovered between the sizes of the firms involved, with a positive correlation found between the level of entry integration and perceived ownership and location advantages (Brouthers et al, 1996, p.390).

It is the expansion of the different advantage criteria within the eclectic paradigm that leads to the work by Guisinger (2001) who argues for higher levels of understanding of organisational and structural complexity incorporated into the framework (Guisinger, 2001, p.257). The need for relevant experience in different markets leads Guisinger to identify appropriate operational adjustment as an explicit variable within the eclectic paradigm (Guisinger, 2001, p.258). This adaptation to the external environment is further split into “interactors” i.e. competitors, customers and suppliers, and a fixed, geovalent component consisting of, inter alia, regulations, laws, interest rates within the borders of the alliance nation (Guisinger, 2001, p.266). This environmental complexity increases as you move from home to international business and is arguably exacerbated as you move to newer markets where knowledge and

experience are not as available. From this Guisinger (2001) contends that a refined eclectic paradigm where “internalisation” is replaced by “mode of entry” and “adjustment” is added to underline the need for business process change to tackle the structural and environmental complexity inherent in international business (Guisinger, 2001, p.270). This expanded model offers the basis to better understand the relationship between different markets and entry mode motivations and execution.

The extension of the OLI to this expanded Ownership, Location, Mode of Entry and Adjustment (OLMA) model, acknowledges greater involvement of geovalent elements, as described by Guisinger (2001), which, through the process of broadening the framework, provides further thought regarding the application of an extended eclectic paradigm against practice based experience. Taking the advantage relationships exposed in the OLMA framework and highlighting country and firm specific advantages (Rugman, 2010, p.7) an arguably simpler matrix emerges where market entry motivation and therefore mode are in fact dependent on firm specific advantages. In his model the motivation assumes that the market is in itself attractive. This however does question the efficacy of advantage measurement in the case of individual countries and presumes further that these are relative between the protagonists and not wholly objective within the context of the overall market. Cultural and economic similarity provides indicators regarding market entry preferences with Stoian & Filippaios (2008) researching the expansion of Greek companies internationally. They found that similarities in geovalent components between the investing and host countries had a bearing, as did the relative size and openness of economies. Further, regulation, law and “bureaucratic quality” were also positive factors in encouraging alliances with, conversely, higher levels of corruption a clear deterrent (Stoian & Filippaios, 2008, p.349).

The evolution of the eclectic paradigm has continued, as outlined in Figure 3-6, with the increasingly international approach taken by organisations, in an increasingly globalised marketplace, putting focus on the market entry motivations of MNEs and specifically the importance of alliances with EMOs. In his 1995 paper John Dunning discusses how intermediate product markets are seeing increasing interdependencies and discusses how this will impact upon MNE competitiveness (Dunning, 1995, p.461). The choice between collaboration and a hierarchical, internalised, approach is



based on a balance perceived by the MNE between sharing risk and loss of control (Dunning, 1995, p.467). In this research, specific location factors will have a large bearing on alliance attractiveness/success with Dunning’s identification of for example the influence of local authorities (Ibid, p.473) of particular pertinence when considering the defence market.

<b>Year</b>	<b>Title</b>	<b>Contribution</b>
1958	Dunning, J. H. (1958) 'American Investment in British Manufacturing Industry'.	Ownership (O) and location (L) advantage components of what is to become the eclectic theory are identified in direct North-American investments in the English industry (Ferreira et al, 2013, p.62)
1972	Dunning, J. H. (1972) 'The Location of International Firms in an Enlarged EEC. An Exploratory Paper'.	Ownership and Location advantages are employed to explain the probable consequences that result from the United Kingdom joining the European Common Market (Ferreira et al, 2013, p.62)
1973	Dunning, J. H. (1973). 'The Determinants of International Production'.	Presents international production eclectic theory and reasons for this designation. The internalisation advantage (I) is added (Ferreira et al, 2013, p.62).
1977	Dunning, J. H.. (1977) 'Trade, Location of Economic Activity and the MNE: A Search for an Eclectic Approach'.	Applies eclectic theory to explaining changes in countries’ FDI stance along four phases of economic development (Ferreira et al, 2013, p.62).
1979	Dunning, J. H., (1979). 'Explaining Changing Patterns Of International Production: In Defence Of The Eclectic Theory'.	Pleads case for need of eclectic theory to show how theories of FDI need to be modified and explain both the way in which overseas markets are served by enterprises of different nationalities and the industrial and geographical composition of such activities. Makes use of this theory to suggest reasons for differences in the industrial pattern of the outward direct investment by five developed countries (the US, the UK, West Germany, Japan and Sweden)
1981	Dunning, J. H. (1981) 'Explaining the International Direct Investment Position of Countries: Towards a Dynamic or Developmental Approach'.	Applies eclectic theory to explaining changes in countries’ FDI stance along four phases of economic development (Ferreira et al, 2013, p.62).
1981	Dunning, J. H. (1981) 'International Production and the Multinational Enterprise'	Changes terminology. Eclectic theory becomes eclectic paradigm. Explains change. (Ferreira et al, 2013, p.62).
1988	Dunning, J. H., (1988). 'The Eclectic paradigm of International Production: A Restatement And Some Possible Extensions'.	Divides ownership advantages into two types: asset-based (Oa) and transaction-based (Ot). Gives various suggestions for research applying the eclectic paradigm – for example: foreign disinvestment, FDI effects, dynamics involving FDI, formalisation of the paradigm etc.
1993	Dunning, J. H. (1993) 'Multinational Enterprises and the Global Economy'	First edition of his seminal work presents a new version of the eclectic paradigm, which now encompasses FDI for improving resources (parallel to FDI focused on exploiting resources that are already available).
1993	Dunning, J. H. (1993) 'The Globalization of Business'.	Recognises the importance of strategy as a company’s dynamic and specific variable, capable of influencing the OLI configuration faced by companies.
1995	Dunning, J. H., (1995). 'Reappraising The Eclectic Paradigm In An Age Of Alliance Capitalism'.	The paradigm now includes advantages that emerge from value-added operations and from relationships with institutions and/or resources in foreign countries. That is, it encompasses phenomena that are characteristic of a time of alliances between companies.
1996	Dunning, J. H.. & Narula. R. (Orgs.) (1996) 'Foreign Direct Investment and Governments'.	Considers theory on internationalisation as a gradual process (investment development path) and adds a fifth phase of development to encompass FDI seeking resources (asset seeking) (Ferreira et al, 2013, p.62).
1998	Dunning, J. H.. (1998) 'Location and the Multinational Enterprise: A Neglected Factor'.	Analyses how technological development and globalisation determine the content and configuration of OLI advantages. Explains intra triad investment of resource seeking type investments. (Ferreira et al, 2013, p.62).

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1998	Dunning, J. H. and Lundan, S. M., (1998). 'The geographical sources of competitiveness of multinational enterprises: an econometric analysis'.	Organisations engage in FDI not to exploit existing ownership (O) advantages, but to acquire such advantages, which, when deployed with their existing O advantages, help sustain or further their global competitive positions. However, MNEs are increasingly sourcing overseas assets, which are knowledge-intensive and appear similar, rather than complementary to their existing activities.
1999	Dunning, J. H., & Dilyard, J. (1999) 'Towards a General Paradigm of Foreign Direct and Foreign Portfolio Investment'.	Expansion of the OLI paradigm, now including foreign portfolio investment components (as such, shorter term investments).
2000	Dunning, J. H., (2000). 'The eclectic paradigm as an envelope for economic and business theories of MNE activity'.	Eclectic paradigm as an "MNE envelope theory" (Ferreira et al, 2013, p.62). Demarcates ownership advantages into 'Static O advantages' i.e. the advantage of income generating resources and capabilities possessed by a firm, at a given moment of time; and 'Dynamic O advantages', which are those which treat such advantages as the ability of a firm, to sustain and increase its income generating assets over time.
2001	Dunning, J. H., (2001). 'The Eclectic (OLI) Paradigm of International Production: Past, Present and Future'.	States that internalisation is a discrete advantage. The eclectic paradigm is better in explaining the changing characteristics of international production than to its level and composition at a particular moment of time.
2006	Dunning, J. H., (2006). 'Towards a paradigm of development: implication for the determinants of international business activity'	Institutionally related variables need to be incorporated into the eclectic paradigm and as a result of globalisation the content and quality of institutions are becoming more important components of both the competitive advantages of firms and the locational attractions of countries.
2007	Dunning, J. H., Pak, Y. S., and Beldona, S., (2007). 'Foreign ownership strategies of UK and US international franchisors: An exploratory application of Dunning's envelope paradigm'.	Research uses the eclectic paradigm to better understand international franchisors finding that those with different foreign ownership strategies have different global strategic objectives and a different understanding of foreign locations and partners as sources of dynamic learning.
2008	Dunning, J. H. and Lundan, S. M., (2008) 'Multinational enterprises and the global economy'	Rework with Lundan of seminal 1993 book. Looks in more detail at MNE micro economic decision-making and further the environmental influences outside of the MNE's boundaries. How the eclectic paradigm can be used to understand macro level institutions affect MNE value adding opportunities (Verbeke, 2008)
2008	Dunning, J. H. and Lundan, S. M., (2008). 'Institutions and the OLI paradigm of the multinational enterprise'.	Introduces the institutional ownership advantages (Oi) into the eclectic paradigm as the third ownership advantage as a means of exploring and evaluating how both country and firm specific institutions might affect the value adding opportunities of MNEs, and how the attitudes and actions of MNEs might affect the content and significance
2009	Dunning, J. H., (2009). 'Location and the multinational enterprise: John Dunning's thoughts on receiving the 2008 Decade Award'.	The geography of international business activity is not independent of its entry mode; nor, indeed, of the competitive advantages of the investing firms. Examines the dynamic interface between the value-added activities of multinational enterprises in different locations. Argues location as a variable affecting the global competitiveness of organisations both in terms of value add in a specific example and as global competitive advantage through its location portfolio.
2010	Cantwell, J., Dunning, J. H., and Lundan, S. M., (2010). 'An evolutionary approach to understanding international business activity: The co-evolution of MNEs and the institutional environment'.	Authors argue that the main drivers for institutional entrepreneurship are now found in the increasing autonomy of MNE subsidiaries with decentralised nodes in international corporate networks. These can create new ideas and even centres of excellence, which can grow together with local institutions.

Figure 3-5 Evolution of Dunning's Eclectic Paradigm (Extended From Ferreira et al, 2013, p.62)

To better differentiate between ownership and internalisation advantages Dunning notes that the former offers the ability, while the latter offers the motivation, to internalise within markets (Eden, L. & Dai, L., 2010, citing Dunning, 1988, p.25). Further, it is underlined that optimising location advantages with those inherent within the organisation provides, perhaps obviously, competitive advantage (Eden, L. & Dai, L., 2010, p.263). It is therefore arguably of particular importance that a MNEs selection of international markets is a) specifically optimised, and b) optimised within the context of their overall international investment portfolio (Eden, L. & Dai, L., 2010, p.263). The entry mode is therefore one of the crucial variables that will influence market success, with the relationship between ownership and location advantages discussed by Brouthers et al (2009), suggesting that the former could actually influence decisions regarding the latter (Brouthers et al, 2009, p.263) with this dynamic relevant to the MNE/EMO dyadic.

When considering the dynamics within international business, and how these impact upon investment decisions, the relative knowledge of, and commitment to, a particular market will in itself drive behaviour. The importance of market knowledge and experience is highlighted by Johanson & Vahlne (1990) with the specificity of experience noted as being largely non-transferable between markets (Johanson & Vahlne, 1990, p.12). The differentiation between perceived risks in decision-making between large and small firms is also highlighted as relevant (Johanson & Vahlne, 1990, p.12) due to relative levels of resource availability. More fundamentally regarding the eclectic paradigm in relation to the internationalisation model of Johanson & Vahlne (1990, p.11), the basis of international production being established where certain advantages can be realised, in this case of ownership, location or internalisation. Their internationalisation model holds geographical distance in high regard as a driver for investment, starting close and then expanding further afield. The eclectic paradigm is seen as more applicable to globalised organisations (Johanson & Vahlne, 1990, p.17). The potential therefore for the eclectic paradigm to be shaped to explain different types of cross border international production (Dunning, 2000, p.166) is of obvious interest with the task to see how applicable it is to entry mode decision making in the international defence market.

### 3.4 The Business Environment

#### 3.4.1 Politics, Economics and Globalisation

The international nature of markets and therefore competition is as applicable to the defence industry as it is to commercial sectors. The political nature of the market however provides some market distortion (e.g. Guay, 2007, p.45; Pollin & Garrett-Peltier, 2012, p.15; Khan, 2010, p.140), which has to be understood and catered for when making strategic decisions. Competition in such a global marketplace brings challenges to those ill prepared in terms of size or brand positioning, with alliances as a potential solution (Hansen and Nohria, 2004, p.22). The possibilities for collaboration and the associated benefits that it brings will become increasingly important within the competitive context as traditional economic models are overtaken by globalisation (Hansen and Nohria, 2004, p.30). Viewed primarily through the optics of internalisation, collaboration is seen by Hansen and Nohria (2004) as offering competitive differentiation due to the not inconsequential barriers that need to be overcome to achieve a successful position in the market (Hansen and Nohria, 2004, p.22), which reinforces the relevance of OLI location type advantages.

As discussed earlier in the section on alliances and collaboration, in terms of the defence market and competition within the industry, globalisation presents increasing challenges including the intensification of competition (Guay, 2007). This creates issues around the relationships between capital, operational superiority and technology, with the restrictions on technology diffusion through export licencing amplifying imperfections within the market. Such challenges can range across to the availability of raw materials from which products are made being restricted, by barrier or cost, by those that do not hold the technologies involved (Guay, 2007, p.47). There sits an interest paradox. The increase in home market competition, through the lifting of trade barriers or changes to state defence industrial priorities, leads industry to find new markets (Butler, 2005). This liberalisation of markets can also lead to MNEs forming collaborative ventures within their own home markets. A lack of capital resources also promotes collaboration between competitors in large-scale design, development and manufacture projects with the Eurofighter Typhoon and Franco-Italian “FREM” Frigate being two examples.

Defence procurement is fundamentally a responsibility of the state (Taylor & Louth, 2013) and therefore issues around politics and economics are crucial when considering industrial alliances in the international defence market. The fundamental economic structural issues predominant within the defence industry today are declining budgets coupled with increasing costs of equipment, which in turn have an impact both on defence capability and nations' defence industries (Hartley, 2000, p.1). Within this environment where increasing costs of generating differentiated technologies have to be reconciled against declining investment from domestic governments, it becomes clear that the economics of maintaining a sovereign research and development capability as well as production facilities, will continue to be more problematic (Hartley, 2000, p.7). This will have a number of effects, identified by Hartley (2000), as:

- The need for sufficient equipment production volumes, not least for economies of scale and associated learning of associated processes (Hartley, 2000, p.4);
- A better understanding of the overall defence supply chain and how it can reduce costs and increase efficiencies (Hartley, 2000, p.5);
- An increasing incentive to collaborate (Hartley, 2000, p.4).

Beyond the essentially economic considerations of Transaction-Cost Theory, where value is derived by weighing internal costs against those in the environment (e.g. Mroczek, 2014; Rugman and Verbeke, 1992) and Resource-Based Theory, where a firm is deemed equal to the resource it owns (e.g. Das & Teng, 2000; Hoffman & Schlosser, 2001), in alliance formation there are softer organisational issues to review. These include Social Exchange Theory, where partners expect reward for cooperation (Nyaga et al, 2013) and Knowledge-Based Theory where partners create value through knowledge collaboration (Hoffman & Schlosser, 2001; Fransson et al, 2011). The relationship between Resource-Based Theory and the organisational form that alliances take, is studied by Das & Teng (2000) who see the primary motivation for collaboration being the need for value creation through the pooling of resources between partners. The different profiles of relationships stem from resource needs of individual organisations within the context of the alliance, which arguably would ultimately predict success. Partner resource alignment, the ability to access partner's resources offers more advantage to those involved as compared to a transactional cost

approach (Das & Teng, 2000, p.56). The theoretical position that participants' individual advantages outweigh this suggested advantage of alliance needs to be better understood.

The linkages between organisational type and alliance success are highlighted by Dussauge & Garrette (1995) who found that the literature on the subject of partner asymmetries was not conclusive though a point raised was that of local influence in alliances where the conclusion is that the structure-strategy-performance linkage in relationships are critical (Dussauge & Garrette, 1995, p.509). The issue of structural and role equivalences within a greater pan-industry network is highlighted by Mizruchi (1993) and shows the importance of influences from third parties on alliance success. The extent to which an organisation is rooted within a network, and the implications for alliance success, is researched by Ahuja et al (2009). Within the context of the defence industry, when considering the position that new industrial players have and can attain without outside assistance, this arguably becomes an important element to be considered in the relative power play between potential alliance partners. The level of homophily in partner selection (Gulati, 2012, p.545) within the industry needs to be considered, and how new industrial players from emerging markets can become embedded and what level of assistance international industrial alliances play in this. Organisations that are already highly embedded will have a propensity to form further ties and alliances due primarily to their ability to gain network information about collaborations and collaborators (Ahuja et al, 2009, p.941). The question therefore begs as to what price would EMOs place upon using alliances as a short cut to entering such networks?

The tendency for structural homophily to motivate alliance formation, mainly due to similarity offering reductions in perceived risk (Ahuja et al, 2009, p.942), does however counter arguments for strengths borne of asymmetry, for example in resource ownership, therefore risking sub-optimal alliance decisions (Ahuja et al, 2009, p.943). When considering the attractiveness of an embedded organisation to those on the peripheries of a sectorial network this could in itself be seen as valuable capital when negotiating collaborative relationships. The position in the overall network will be sought after as it will provide better network knowledge (Ahuja et al, 2009), with highly embedded organisations seeking alliances with those towards the

periphery of the network and vice versa. Emerging market industry would then be attractive to MNEs with the highly embedded partner tending to be senior in alliances (Ahuja et al, 2009, p.956). Further, viewing alliances as a third party venture separate from the parent is important, as it will offer a level of autonomy and the responsibility to perform on its own.

From a EMO perspective Robins et al (2002) state that the differentiation of strategic resource and operational resource from foreign and local partners respectively plays a vital role in the success of an alliance venture. Domain expertise and associated competitive advantage from foreign partners will best compliment the market expertise from local partners. The balance of contribution underlines the importance of interdependence with a lack of equilibrium upsetting success (Robins et al, 2002, p.897). This issue is highlighted by Haeussler et al (2012), where the potential risk of opportunism in high technology markets by more experienced partners is researched. New entrants can be vulnerable to exploitation if they trade their own market position against the desire to acquire technologies and capabilities quickly (Haeussler et al, 2012, p.217). New firms' own advantages through niche specialisation need to be retained and used to bargain better in alliances, especially with more experienced market players (Haeussler et al, 2012, p.231). This trade between market access and technology acquisition relates to a primary research aim of understanding comparative advantage and participant position within the MNE/EMO dyadic.

Globalisation is driving organisations to be increasingly transnational (Butler, 2006, p.43), with alliances important in terms of technology development, manufacturing efficiency and market penetration (Guay, 2007; Dunning 2006). The impact that culture plays on the creation and success of international collaborative ventures cannot be underestimated. The foundation for understanding in this subject area is found through the works of Hofstede (e.g. 1983; 1993) who provides a categorisation of cultural traits which helps better understand how and why cultures differ and how these differences provide energy or barriers to a relationship.

### 3.4.2 Culture

Hofstede (1993) contends that the very understanding of management will differ between cultures and calls for such understanding to be embedded within

management theory. In his seminal publication 'The Cultural Relativity of Organisational Practices and Theories', Hofstede (1983) proposed a categorisation of cultural differences. The importance of nationalism with the political, sociological and psychological implications that drives national cultures, has a major impact on management traits within nations. Hofstede (1983) sees culture in this context as a collective programming. Bennett (e.g. 1986) addresses an individual's ability to relate to different cultures in his publications concerning intercultural sensitivity. Bennett (1986) offers a continuum ranging from a position of Denial; through Defense and Minimisation in the Ethnocentric phase to Ethnorelative positions of Acceptance, Adaptation and at the other extreme Assimilation or Integration (p.182). Mayrhofer (2004) researches inter-firm linkages and the differences in behaviours and actions for particular alliance types, for example with international market entry or gaining new technologies, differentiating between cooperative alliances and mergers & acquisitions based upon direction from transaction cost theory (Mayrhofer, 2004, p.84 citing Williamson, 1991).

Within the context of mergers between three European aerospace and defence companies from France, Germany and Spain, and to better understand how the integration process impacts upon cultural differences, Barmeyer & Mayrhofer (2008) identify culture as a non-objective theoretical construct. They note that the interaction between ethno-cultural and organisational-cultural issues impinges upon one another precipitating complexity in integration (Barmeyer & Mayrhofer, 2008, p.29). This starts to differentiate between cooperative and collaborative ventures, as the bringing together of discretely produced elements in a cooperative arrangement largely dispensing with the need for major interaction. Shipper et al (2013) conclude that cooperation and collaboration are distinctly different, with the latter implying full commitment whereas the former has mutual survival as a tenet (p.100), which then dilutes the need for cultural integration. Dimitratos et al (2011) discuss how home cultures influence organisations' strategic decision-making processes. Further, the cultural orientation as part of an overall perspective of senior management will have a crucial impact upon such decision-making and therefore, ultimately, organisational performance (Dimitratos et al, 2011, p.194). The effects of acculturation would need to be understood when contemplating international collaborative ventures. This would assume that MNE and EMOs would go through a process of cultural adaptation



(Bennett, 1986) affecting ethno-cultural positions which acting upon the partner's organisational cultural position would create a hybrid, new organisational culture.

Understanding culture as a means of increasing competitive advantage has been extensively published (e.g. Apfelthaler et al, 2002; Welch and McCarville, 2003; Zekiri and Angelova, 2011). Apfelthaler et al (2002) reflect upon organisations outgrowing their original cultural boundaries (Apfelthaler et al, 2002, p.108) for example mixing elements of German and Japanese manufacturing philosophy with US workers. These were defined as cultures of expertise, lean production and pragmatism respectively (Apfelthaler et al, 2002, p.110) with this diversity bringing heterogeneity to the organisational culture. It is argued that a strong culture acts as a transformational agent in a dynamic environment (Brettel & Cleven, 2011, citing Kitchell, 1995), which would be relevant in the context of international industrial alliances when considering the bringing together of different cultures and processes under pressure to deliver commercial success. Further, organisations with a strong innovation culture have a propensity towards collaborating based on technology needs (Brettel & Cleven, 2011, p.260). Raelin (2006) views the role that critical reflection can play in producing a non-judgmental perspective as being essential in garnering an optimal outcome from alliances. It could therefore be argued that 1) critical reflection in an individual or organisation and 2) an ethnorelative position that optimises intercultural sensitivity, are essential if outcomes of international alliances are to be optimised.

Advantages to alliances tend to lead with competitiveness, with Daoudi & Bourgault (2012) noting the importance of synergies between organisations despite geographical and technological discontinuity. A strong thread throughout the literature relating to the impact on culture within international collaborative ventures is the seeming dominance of the MNEs' human and corporate culture in moderating performance (Abdul Wahab et al, 2011). More specifically in terms of such moderation Abdul Wahab et al, (2011) differentiate between the impact of technology transfer on corporate and human resource performance and suggest that the relationship between business success and technology transfer are more positive when there is compatibility in partner cultures, though in terms of corporate learning such differentiation is not significant.

### 3.4.3 Technology, Intellectual Property and Absorptive Capacity

When considering the implications that technology has upon alliances and market entry modes within an international context, the assumption within this research is that technology transfer takes place between the multi national enterprise (MNE) and their emerging market organisation (EMO) collaborative partner. The need to understand the importance of know-how and technology readiness from both the perspectives of the MNE and the EMO is therefore critical. Technology readiness levels were first derived at NASA in the 1980's (Sadin & Povinelli, 1989; Nakamura et al, 2012) to provide a more objective view of an organisation's maturity within a technical environment and further their ability to absorb new technologies. There is an understanding that a level of know-how infrastructure is required as a base from which to operate in more sophisticated fields with NASA first introducing the Technology Readiness Level as a risk assessment tool (Lee & Chang Chien, 2011). Associated metrics include Systems Readiness Levels (Sausser et al, 2008), Innovation Readiness Levels (Lee & Chang Chien, 2011) and Manufacturing Readiness Levels (Dietrich & Cudney, 2011).

The importance of the transfer of both know-how and technology to the economic growth of the international market is focused upon by Teece (1997), who highlights the cost of transfer as a fundamental factor. He states that the ability of MNEs to internalise such transfers is not only efficient but underlines their importance in the global economy (Teece, 1981, p.81). This is associated with MNE investment and entry mode decision-making as they relate directly to venture profitability. The resource costs of both transfer and absorption must ultimately be related to the economic rents derived from the venture (Teece, 1981, p.82), which will in turn act as a primary decision point for both parties. Teece (1981) further notes that similarities in transmission and reception of experience and technology between involved parties will enhance transfer efficiency (Teece, 1981, p.82). The efficiency of transfer is also closely related to the codifiability of that being transferred. If know-how is innate then it will take longer for it to be understood with it therefore debateable as to whether it could be exactly copied, particularly as not all skills are programmable and therefore easily transferred (Teece, 1981, p.83). This has an obvious impact on relative advantage in alliances, with an argument that an MNEs' proprietary

information that is more efficiently transferred internally, than through the wider market (e.g. together with EMOs), affords greater control and value for themselves (Teece, 1981, p.86, citing Magee 1977, p.318). This therefore reinforces theory around the advantages of internalisation (e.g. Dunning 1995).

Further to these ideas regarding the importance of intellectual property (IP) within the dyadic trade, the broader issue of its impact on entry mode decisions is important both in terms of the building of theory and its practical implications for business. The ability to protect IP within alliances, affording it's holders retained and extended value, will be dependent upon the ability of the recipient to imitate technology and the holder to maximise internalisation (Puttitanun, 2006, p.). Levels of relevant protection in customer/partner markets will determine the willingness of holders of technology to expose IP. The relationship between patent protection and entry modes, particularly relating to levels of integration in alliances, has been exposed with less internalised modes more frequently used when there is greater protection of IP in the market in question (Papageorgiadis et al, 2013). The levels of protection of US companies' IP has been quantified in an index of patent system strength (Papageorgiadis et al, 2014, p.593) with the scores for the EMO's in this research moderate when compared to strong scores for the UK. Further, the relative value of IP when considering the longevity of rents to be gained will have an impact upon the importance of protection and therefore entry mode, which can differ depending on the industry involved (An et al, 2008, p.874).

In his seminal work, Simonin (1997) researched into how know-how is derived within an alliance and, importantly, how it can then be exploited. It is the learning experience involved in internalising experiences both negative and positive that leads to the creation of know-how within an organisation (Simonin, 1997, p.1167) concluding that internalisation is an important step in grounding know-how within an organisation (Simonin, 1997, p.1167). This points to internalisation having relevance beyond MNEs as this research suggests it is just as important for recipient industries i.e. EMOs. Problems with the learning process is however not overlooked with organisational structures both a facilitator and barrier depending on how efficient internal communication is and whether experiences are unknowingly discarded or insufficiently recognised due to prevalent strategies and priorities, which can lead to

the prevention of know-how generation (Simonin, 1997, p.1167). The relationship between experience, know-how and performance is highlighted by Simonin (1997, p.1168) and is a consideration when understanding the dynamics within the EMO/MNE dyadic.

Zervos & Swann (2009) discuss issues surrounding the openness of standards and networks within markets and their impact upon technology diffusion and ultimately market costs and efficiencies. In defence the predominance of operational advantage, and particularly its security, leads to technology “gate keepers” for armed forces end-users which builds barriers to market entry and thus arguably increases costs and reduces the diffusion of know-how and technology (Zervos & Swann, 2009, p.28). Dietrich & Cudney (2011) research the costs associated with developing recipient industries to a suitable readiness level and thus becoming a value-add partner. They concluded that high technology companies would tend towards existing suppliers due to quality maturity timescales, which will have an effect on cost, and delivery timescales (Dietrich & Cudney, 2011, p.2830). This has relevance when contemplating alliances as supply risk is identified as an issue. There will inevitably be costs associated with the process of maturing partners’ technology and manufacturing readiness levels. Dietrich & Cudney (2011) point to the importance of alliances readiness as an important factor when considering the identification of supply chain partners (Dietrich & Cudney, 2011, p.2825). This all has relevance regarding comparative advantage between the holders of technology and EMO partners in the collaborative dyad.

Kapstein (1991) had a rather negative view of international technology transfer and posits that international collaboration in defence amounts to protectionism (p.658). He identifies capital and technology as prerequisites of defence system development and production and sees a state’s preference towards maintaining an indigenous capability only countered when it is unaffordable or required technologies are unavailable (Kapstein, 1991, p.659). There are exceptions to the economic imperative with for example Sweden having during the period of the Cold War maintained strict neutrality and defence independence through large investment in its own industry (Ikegami, 2013, p.437). This is an example of national policy overriding economic disadvantage to strictly maintain indigenous capability in defence production. Even

this succumbed to economic realities post-Cold War, with the need for strict neutrality having gone precipitating a proportionate reduction in indigenous defence industrial capacity.

A linkage between market access and alliances is highlighted by Kapstein (1991), who suggests that a “Faustian bargain” was precipitated in Europe during the second half of the 20<sup>th</sup> century with an exchange between market and technology access (Kapstein, 1991, p.668). Concerns within the US regarding comparative advantages both in ultimate capability and technology development remain now as it did when Kapstein (1991) wrote the paper in question, with the US industry’s reliance on exports far smaller than that seen by European companies (Kapstein, 1991, p.675). The concept of exchange of technology for market access is an important element to focus on in this research. Technological disparity between transferors and transferees is inevitable when established defence MNEs form industrial alliances with EMOs, though the possibilities of creating further market competition needs to be understood.

Relative positions between MNEs and EMOs in the levels of technology transferred, balance EMO advantage with MNE risk of competitor creation, with a limiting factor being the value balance between short term market access and differentiated market position (Tucker, 1991, p.89). Tucker (1991) further posits that such implications are not necessarily understood when based within specific programme collaborations as opposed to wider alliances (Tucker, 1991, p.119) e.g. industrial level collaboration. Absorptive capacity is deemed to have an impact upon collaboration success with Cohen and Levinthal’s (1990) paper defining absorptive capacity as the ability of an organisation to i) recognise the value of new externally sourced information, ii) successfully assimilate it in iii) commercial applications (Cohen and Levinthal, 1990, p.128). Further, they see a priori knowledge as being critical in building capabilities involved with the evaluation and utilisation of outside knowledge (Cohen and Levinthal, 1990, p.129) all of which will have an influence on organisations’ comparative advantage in the dyadic.

Badillo and Moreno’s (2015) research concluded that collaboration across geographic boundaries enabled greater benefit in terms of gaining technological knowledge against purely local collaboration. Further there was a positive linkage between

absorptive capacity and international collaborative research (Badillo and Moreno, 2015, p.20). There is evidence that context has relevance on absorptive capacity (Lane et al, 2001, p.1143), which would indicate both geographical and industry sector factors will influence the relative ability to assimilate to an organisation's betterment. It is suggested that forming a joint venture has a positive impact on an alliance's ability to increase absorptive capacity (Ireland et al, 2002, p.432), through the introduction of a broader resource. What is clear from literature on the subject is that absorptive capacity has to be increased for the value of new knowledge to be successfully realised (Ibid, p.433). This suggests a stepped process in building absorptive capacity (Lane et al, 2001, p.1156) with internal research and development and manufacturing capability both indicated as means by which the understanding of value of new, externally generated, knowledge is more readily realised. Direct investment in knowledge is a further route (Cohen and Levanthal, 1990, p.129). The relevance to this research pertains to relative advantages in: capability, particularly to assimilate and use successfully new knowledge; entry modes, and how they are constructed to best allow suitable learning with the alliance, and; the impact of the environment on the process of increasing absorptive capacity within an alliance.

### 3.5 International Defence Industrial Alliances

#### 3.5.1 Background

Ikegami (2013) states that the two major elements required for developing leading edge defence systems today are technology and money (p.439). The need for self-reliance in defence production has been seen as key due to reliability and security of supply issues (Bitzinger, 2013, p.371). Traditionally this has evolved into a national strategic policy with the support of a national defence industrial capability becoming an indication of its position in the world both in terms of technological capability and power (Bitzinger, 2013, p.371). As noted earlier, Kapstein (1991) argued that collaboration in defence was a second best solution (Kapstein, 1991, p.660) and further argues that it is tantamount to protectionism (Kapstein, 1991, p.658). These arguments are central to this research in that they bring forward the themes of industrial capability, its development and security of supply against operational efficacy, technological advantage and cost. Expanding on affordability versus efficacy, Kapstein's (1991) technology/finance matrix (Figure 3-7) consists of a two

dimensional view of choices open to a developing state with joint working between two partners being categorised either in terms of co-production or co-development depending upon technology resource availability. Kapstein (1991) using this research into European case studies, finds that a state’s policy preferences lie in the following order: Autonomy; Co-develop; Co-produce; Import (Kapstein, 1991, p.660).

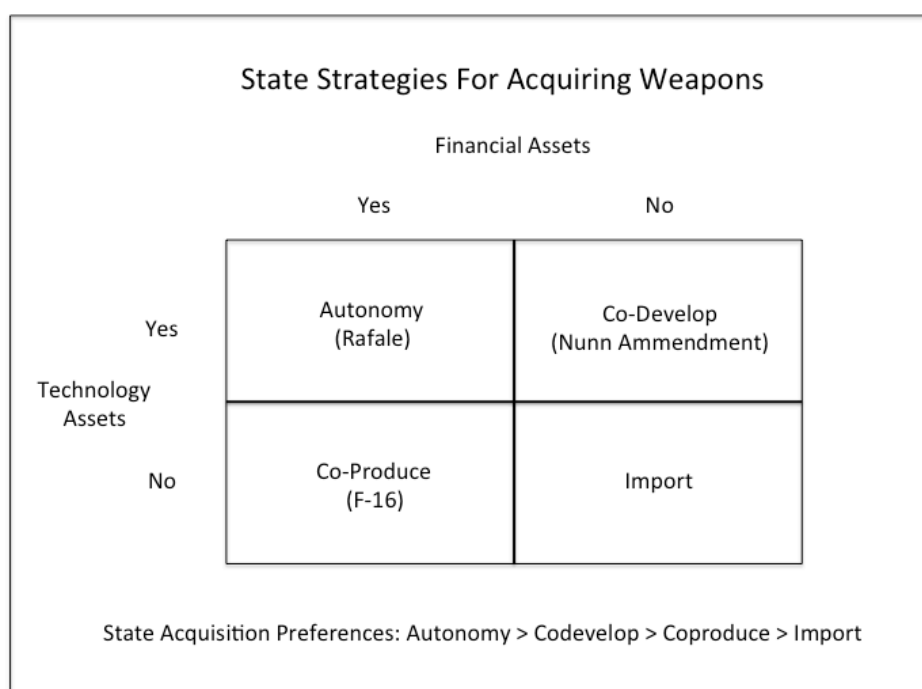


Figure 3-6 Kapstein’s (1991) Technology/Finance Matrix

More fundamentally Krause (1992) provides a historical view on arms transfers. He states that the global system of arms production and arms transfer has three functions namely: to distribute the means for fighting wars and winning conflicts; to assist in establishing a state’s location in the international and regional military hierarchy, and; as a mechanism for the diffusion of the technology of arms production (Krause, 1992, p.206). He further provides a three-tier taxonomy of producers. The first being the biggest powers of the time (Krause, 1992, p.101). The second being able to innovate technologically but can only do so selectively (Krause, 1992, p.127) with the third not capable of grand innovation or autonomous large scale production though good at selective application of given technology and supplying niche equipment (Krause, 1992, p.153). Krause (1992) argues that recipients are at a structural disadvantage and further that there are different levels of capability between states. The general premise for this taxonomy can be argued as remaining sound with the categorization of all but

superpowers below “Tier 1” implies technological hegemony in defence with the equipment advantage essentially lying in the hands of one state.

The increasingly competitive nature of the defence marketplace and the effects of alliances need to be seen in the context of increasing globalisation and a restructuring of the marketplace (Anderson, 1995, p.55). It can be argued that this is of particular advantage to large MNEs exacerbated through global alliances (Anderson, 1995, p.57). It could be concluded that alliances offers competitive advantage (Anderson, 1995, p.75) however the identification of the uneven spread of such advantage between MNEs and EMOs is an important distinction that needs to be considered in this research. This view obviously counters that of Kapstein (1991) and in terms of the position of the EMO in the dyadic it underlines Krause’s (1992) view of the lack of balance in the relationship.

There is an increasing issue around budget reductions and equipment cost with this having increasing primacy in defence decision-making and as a result, arguably driving industry towards collaboration (Giegerich, 2010, p.88). A trade-off between affordability and vertically integrated national industrial capability clearly exists (Giegerich, 2010, p.89). Such compromises will become increasingly common with nations needing to be realistic about their influence on equipment specifications and their industries’ role in increasingly collaborative ventures (Giegerich, 2010, p.97).

When the relevance of alliances is viewed within the context of affordability it arguably puts those that are technologically emerging though rich in capital in a stronger position than perhaps previously thought. Can capital be tradable for technology in terms of collaboration and the building of indigenous capability, and will this start to promote balance in the dyadic? Bishop (2003) looks at issues around organisation size and the propensity to enter into international collaborations (Bishop, 2003, p.1965). From an MNE perspective, the paper offers insight into the differences between large and small entities within the UK and how they view alliances with Bishop (2003) concluding that although there are no real differences between organisation size and domestic collaboration in the UK, there is a positive link between business size and a likelihood to collaborate overseas (Bishop, 2003, p.1969). A further and relevant suggestion is that, although advances in



communication and other related technologies can help in reducing the cost of pursuing international alliances, the assistance of government policy in promoting smaller organisations might prove key (Bishop, 2003, p.1969). The relationship between relative organisation size, government policy and propensity to internationalise is therefore usefully highlighted.

A transatlantic polarisation precipitated by government policies on both sides hamper collaborative efforts and create barriers to optimising industrial development (Guay, 2005, p.15). Such a lack of collaboration amongst developed nations through protectionist policies (Guay, 2005, p.6, 9) and its impact on development needs to be understood also in terms of MNE/EMO relationships. The drivers behind collaboration in a developed nation environment is explored by DeVore & Weiss (2013) who contend that it is institutional structures of national political economies (DeVore & Weiss, 2013, p.497) that can direct essentially similar states to take different approaches to the development of defence capability. Again, the importance of national policy is crucial in determining industrial development in defence (Hartley, 2006, p.473), which needs to be understood in terms of emerging markets as well as those that are already developed.

Further, to the theme of affordability and the ability for EMO's to build indigenous capability, Hartley & Braddon (2014) underline the issues around cost and affordability in defence procurement (Hartley & Braddon, 2014, p.535) and link these with the motivation to collaborate (Hartley & Braddon, 2014, p.536). The efficiency of collaboration when considering the number of partners involved has relevance with Hartley & Braddon's (2014) research indicating that the number of nation partners involved does not have a real effect on development times. An earlier paper by Fontanel & Smith (1991) discuss the potential implications of wider European military alliances and how deeper integration could cause problems around national sovereignty, external political and competitive issues, and rent-seeking from industry (Fontanel & Smith, 1991, p.393). Cost and scale are again raised as a driver behind industrial level collaboration (Fontanel & Smith, 1991, p.420).

Although in his earlier perspectives on the subject (Kapstein, 1991) arguing against the efficacy of industrial collaboration in defence, Kapstein's (2002) later paper

explores military alliances and procurement policy and draws a thread between political relationships, the propensity to collaborate and how such alliances can stimulate industrial collaboration through joint developments (Kapstein, 2002, p.142). So although seeing defence collaboration as essentially protectionist he identifies politics as a driver towards it.

Environmental change, precipitated by the end of the Cold War, and government policy, with its impact upon collaboration and the defence industrial base (Thornton, 2007, p.295), highlight a continuing sensitivity amongst major nations to their defence industrial bases and the implications of these being eroded, with exports used to compensate against the increasing costs involved with defence equipment development and production (Thornton, 2007, p.324). This changing market place confirms that a developed MNE is subject to change and needs to adapt. This makes explicit the change in paradigm between domestic capital use in ensuring sovereign defence capability, offset by defence sales, and the later paradigm, where collaboration and the use of external capital is used to secure domestic capability.

### 3.5.2 MNE's Perspectives

When looking at MNE alliances with local companies taking place in the defence market, understanding the contingent nature of the different elements involved (Todeva & Knoke, 2005, p.141) strengthens the rationale behind this research. Fjeldstad & Snow's (2012) case study looks at alternative organisational models within the context of a rapidly changing technical environment and sees collaboration as creating value, reducing risk (Fjeldstad & Snow, 2012, p.734) and providing access to new markets through the leverage of knowledge (Fjeldstad & Snow, 2012, p.735). Fjeldstad & Allen (2012) conclude by stating that fundamental organisational change is required if the benefits of collaboration are to be realised (Fjeldstad & Snow, 2012, p.747). Their views on the individual and their openness to collaboration through associated positive values and incentives is relevant to the framework of this research highlighting the importance of motivation and advantage when considering the dyadic in collaboration.

Regnér & Edman (2013) research the two-way dynamics between local institutions and MNEs and how the latter respond in order to gain competitive advantage (Regnér

& Edman, 2013, p.275). Findings indicate that MNEs' exposure to multiple, complex international environments can in themselves constrain their overall international effectivity (Regnér & Edman, 2013, p.277). Regnér & Edman (Regnér & Edman, 2013) developed a four-box model, which relates host country (EMO) location dynamics with the MNEs' own cultural position and how it would respond, as shown in Figure 3-7. As with many studies in this area, the MNE perspective is paramount in this research with the opportunity for them to enact institutional arbitrage arguably exploitative and again underlines the importance of EMOs to realise advantage in the dyadic.

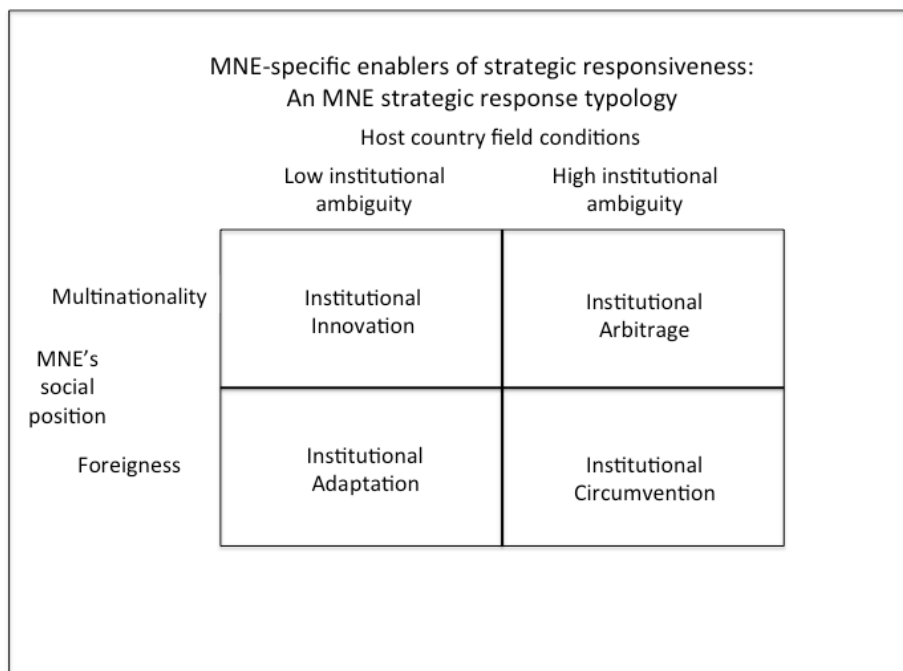


Figure 3-7 Regnér & Edman's (2013) Four-Box Model of MNE Strategic Response

Butler (2005) looks from a UK perspective at how the opening up of their domestic market has precipitated firms moving internationally through alliances with USA and European partners to spread costs and acquire technology (Butler, 2005, p.15). Of particular relevance is the identification of elements driving collaborator selection namely: reputation, technology transfer, the declining number of potential partners, the holdings of foreign governments in their respective industries, and the restrictions of governments on exports (Butler, 2005, p.21). Hartley (2006) considers the importance of military alliances in influencing defence industrial policy (Hartley, 2006, p.473). The potential advantage of an indigenous capability has to be balanced

against economic realities, with alliances within a wider military relationship providing greater congruence of requirements and therefore procurements (Hartley, 2006, p.487). This exposes issues around the costs of technology, with potential barriers and restrictions needing to be understood in terms of both the military, and industrial imperative.

The issue of industrial subsidy creating an imbalance in advantages is discussed in literature. Brauer (2002) questions the efficacy of defence offsets and advocates a free market, non-subsidised approach (Brauer, 2002, p.13). However this arguably does not recognise the political aspect of defence procurements and the desires of governments to hold sovereign capability, which might be viewed as a reasonable opportunity cost. Kenny (2006) sees national governments as protecting important industrial actors irrespective of ownership and questions the EU's role in security and particularly alliances in defence procurement (Kenny, 2006, p.484). Subsequent EU legislation bears this out, concentrating on competition in procurement rather than the development of a EU wide defence industrial policy. Therefore there remains the issue of national industrial protection particularly through the invoking of Article 346 by countries wishing to heavily involve national industries in local procurements (Ben-ari, Hofbauer & Crotty, 2012, p.27). Garette & Dussauge (2000) suggest that in the face of market over capacity consolidation through alliances, even to the extent of mergers and acquisitions, is positive for European defence and aerospace industry (Garette & Dussauge, 2000, p.63).

Considering entry modes, Kopač (2006) compares alliance types from merger and ownership to joint ventures, and how in the defence industry these can offer opportunities to restructure in the face of the pressures of globalisation (Kopač, 2006, p.13). He contends that European industry can cope with over-capacity better than that in the USA as it consists of a complex network of intra-European alliances (Kopač, 2006, p.14). A degree of caution is perhaps required as higher levels of internalisation would demand greater management resource (Medcof, 1997, p.724), which could actually hinder agility when creating wider international alliances. Kopač (2006) contends that US industry is better supported by its government in exporting compared than that in Europe (Kopač, 2006, p.14) though in the wider context this highlights governments' role in internationalisation and therefore on the

building of alliances which will have a subsequent impact upon entry modes and their ultimate success. This would arguably be true as the US Foreign Military Sales system is of great help to US industry though this is aimed from a foreign policy perspective by the USG, not industrial support per se. The French government has traditionally been very supportive of its defence industry as it has a positive attitude borne of defence industrial policy supporting demand for sovereign capability. Neuman (2010) makes clear the dominant position of the US defence industry and the advantage that gives the companies therein and the government in international policy terms (Neuman, 2010, p.105). Be it seen as state power or influence (Neuman, 2010, p.106) this extreme example provides insight into the issue of relative industrial strength and power which can be extrapolated to offer comparison in bilateral relationships for example between MNEs and EMOs.

### 3.5.3 EMO's Perspectives

Using the example of Turkish defence and aerospace industry, Eceral & Köroğlu (2015) state that government policy is crucial for creating, and importantly sustaining, an environment conducive to investment in developing technology companies, through the use of strategic sectoral incentives and support (Eceral & Köroğlu, 2015, p.1563), with this policy enshrined in making the defence industry central to its defence procurement policy. Pardesi & Matthews (2007) analyses an emerging market (India) approach and perspective to defence industrial development and how it acquires technology from overseas suppliers (Pardesi & Matthews, 2007, p.420). The use of offset policy to plug technology development gaps is uncovered (Pardesi & Matthews, 2007, p.429) as is the conflict between the politician's desire for technology independence and the military's need for qualitative superiority reaching a compromise due to economic considerations (Pardesi & Matthews, 2007, P.432).

Over thirty years ago Neuman (1984) noted the increase in technology transfer in comparison to finished goods and how this changed relationships between supplier and buyers (Neuman, 1984, p.167). He however still stood by an MNE's ability to retain competitive advantage in the market place (Neuman, 1984, p.191). Do the arguments for positive assistance therefore hold if EMOs are to gain a relevant industrial position in the market? Hayward (2001) states that globalisation has an accelerative effect on change in transnational defence markets and the corporate

structures of organisations within it (Hayward, 2001, p.115). More specifically, Guay (2007) focuses on the change that globalisation brings, discussing the increasing blurring of lines between domestic and foreign defence companies (Guay, 2007, p.2) reflected in an increasing introduction of technology to EMOs. Bitzinger (1994) offers further insight into this change stating that the globalisation of the defence industry pushes towards an ever more internationalised market place whether the developed world wants this to happen or not (Bitzinger, 1994, p.170). Bitzinger (1994) does caution on the proliferation aspects, which will inevitably come with such global expansion of defence industrial capability (Bitzinger, 1994, p.198). When considering EMO development, Bitzinger (2013) offers an understanding of the importance of absorbing know-how being as crucial as the transfer of technology (Bitzinger, 2013, p.375 & 379) in the context of South East Asian industrial aspirations. The challenges faced in developing a sustainable industry becomes clear with the need for continued investment being balanced against competing national economic demands (Bitzinger, 2013, p.369). It does however highlight increasing examples of alliances in defence technology that do not involve traditional Western MNEs, for example the Indonesian/South Korean collaboration on a new fighter aircraft development (Bitzinger, 2013, p.385).

Discussing the mutual advantages available to partners in pursuing alliances, Butler (2006, p.45) highlights from a MNE's perspective the management risks associated with alliances with Asian EMOs. Butler's (2006) discussion around increasing global competition giving comparative advantage to EMOs when demanding increasing value from alliances (Butler, 2006, p.52) is of particular relevance to this research and reinforces the concept of the new paradigm of defence industrial collaboration. Is there an argument therefore that collaboration for EMOs is inevitable, irrespective of the detail around motivation or advantage? Devore (2013) discusses how EMOs maintain a defence industrial base through alliances and the development of areas of technology within the supply chain (Devore, 2013, p.543). This, coupled with foreign direct investment and imports, offers greater indigenous capability and value (Devore, 2013, p.572). The issue of niches in the wider market, and particularly the availability of space outside of domestic markets, needs proper evaluation when understanding motivations and advantages. Using the aerospace industry as an example, McGuire (2014) identifies increasing difficulties in developing a technology position in higher

supplier tier levels due to incumbent barriers to entry, and suggests that niches in Tier 2 and Tier 3 supply might actually be better value routes (Mcguire, 2014, p.636).

### 3.6 Summary

The literature review provides insight into the areas of alliances and collaboration, internationalisation, the environment and more specifically looks at international defence industrial alliances. Collective understanding of the dynamics of strategic alliances has become prevalent across organisational studies. There are a vast number of research papers in the area of alliances and collaboration, however many questions relating to the practice of large multi-national defence companies and their decision making when entering into emerging markets is still lacking empirical evidence. When considering the research problem, the depth of environmental factors that influence actors in defence industrial alliances are broad and intense. They impact upon decision-making as participant motivations and advantages will be shaped by the prevailing economic situation, both locally and globally, as well as local structures and market position with Regnér & Edman's (2013) work on market entry informing the argument. The literature offers direction on issues surrounding alliance building (e.g. Kapstein, 1991; Giegrich, 2010; Hartley & Braddon, 2014). This builds a multi-faceted picture of complexity within which sense has to be made by both MNEs and EMOs when contemplating business ventures today. It is clear from the literature that the world has changed as far as the defence industry is concerned and that a new understanding of increased industrial demands from customer stakeholders will become increasingly the norm. Arguments around market entry barriers experienced by EMOs and concerns over market share erosion by MNEs, paints a picture of complexity in determining where motivations, advantages and the optimisation of entry modes lie. A structure to evaluate this complexity is needed. The eclectic paradigm is, by definition, broadly encompassing and as such offers the basis for a sector specific research framework from which more sense of the discussed phenomena can be realised.

## 4 Methodology

### 4.1 Introduction

This chapter discusses the methodology used in this research. Observations in practice together with theory gleaned from the Literature Review informed understanding of the phenomena. The philosophy underpinning this research is discussed with the research questions then subsequently formalised. The research framework is then presented. Taking place in practice, this action research study uses a mixed methods approach to data collection and subsequent analysis, with the development of the qualitative interview and quantitative survey instruments explained. Validation of the process is discussed as is the ethical considerations that have gone into this research project.

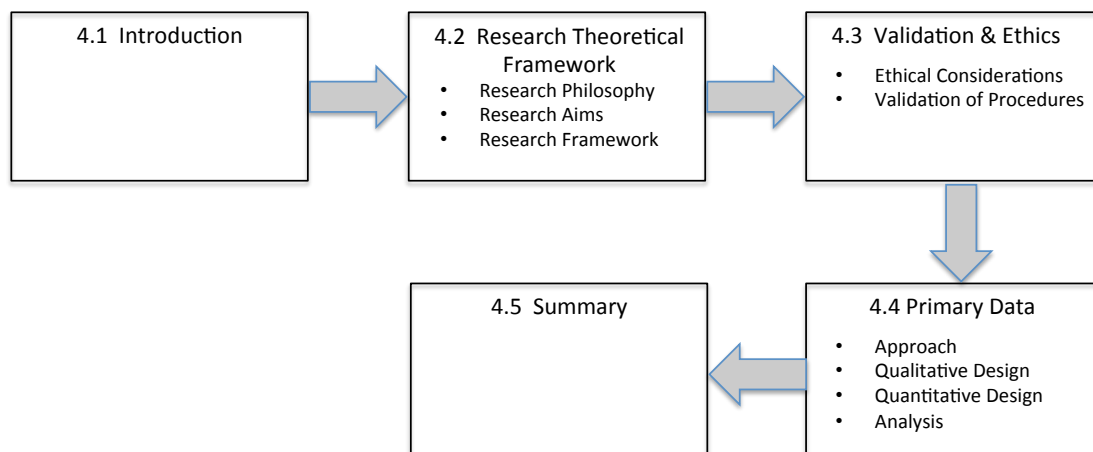


Figure 4-1 Methodology Chapter Structure

### 4.2 Research Theoretical Framework

#### 4.2.1 Research Philosophy

The methodology used for this research is fundamentally positivist. A deductive approach with its rational, logical, formalised structure looking for a single measure of truth (Meredith et al, 1989, p.305) would not be applicable as the complexity and, perhaps more relevantly, subjectivity involved dictates that an absolute hypothesis is troublesome to derive and uncovering an absolute conclusion highly unlikely. An inductive approach has relevance to this research as it relies on accumulated evidence from an initial proposition, within its own environment, identifying unique characteristics (Meredith et al, 1989, p.305). However due to the unlikelihood of all possible evidence being gathered, only a general conclusion could be reached based



on the probability of the evidence pointing to the truth. Such an approach can generate theory and provide an applied predictive tool for use in observing other such situations.

As previously noted, this research is borne of practice based observation over a number of years querying the evolution of market dynamics and its affect upon future business. This research therefore is designed to build upon this loose collection of initial practice based observations and generate a robust set of evidence through the research process. This then coalesces, through a vision of what the data and information suggest against the original observations, to form a cogent explanation of the relevant phenomena moving between envisaged, formative theory and empirical data thereby developing theory in an iterative, spiral type manner. This stems from experience and knowledge in the field, however, the need to ensure sufficient reflexivity is crucial to ensure the theory generated has a generalisable value. From the review of both practice and research questions it became clear that an abductive approach (Anderson et al, 2015, p.47; Olsson and Olander, 2005, p.3) was appropriate to this research, with its modern day research usage first associated with Charles Sanders Peirce (1839-1914) (Lipscomb, 2012, p.246). It will take observations from practice and, together with the analysis of data and the body of knowledge, form exploratory theory and an associated framework (Kaiser et al, 2014).

#### 4.2.2 Research Questions

The Literature Review has offered a rich insight into the subject matter and offers the following observations:

- There is a shift in the defence market paradigm, with collaboration at programme and, increasingly, at industrial levels becoming more the norm due to environmental factors pertaining particularly to political and economic shifts;
- There is a clear majority of work done on the MNE perspective in alliances which in turn suggests that, in the context of the collaborative dyadic, the EMO perspective needs to be better understood;
- The act of internationalisation has prompted much research, however, again, it is viewed in the literature primarily from an MNE perspective. Across the literature there is a constant theme of motivation and advantage being scheduled by

commercial model and geographical location, all of which ultimately impacts upon success. The eclectic paradigm structures these dynamics and offers a framework well suited to this research.

These observations lead to the specific research questions, which form the basis of this research, as, described in the Figure 4-2.

Research Questions	Literature Gap
Research Question 1 - What motivations do EMOs and MNEs hold when contemplating collaboration in the defence industry?	The Literature Review identifies a broad range of research on international business entry for MNE's though a greatly reduced amount pertaining to EMO's. The literature however is not explicit about what EMOs want out of collaboration and how this relates to MNE motives?
Research Question 2 – Where do EMOs and MNEs believe their comparative advantages lie within the dyadic and what impact does location have upon this?	The market is dynamic with an increasing move towards industry having a more central role in emerging nations. When contemplating strategy the literature does not provide a clear understanding of the relative advantages that participants bring in the dyadic and further whether this changes depending upon collaboration location.
Research Question 3 – Within this context what business entry modes are favoured?	Forms of business model are defined through the literature with relative integration moving along a continuum. The understanding of preferences and subsequent choices is not clear particularly within the context of the defence industry where emerging and established multi-nationals collaborate.
Research Question 4 - Does the Eclectic Paradigm offer a useful basis for a framework in understanding international defence business relationships?	Internationalisation literature tends towards a multi-national's perspective however the dynamics within the eclectic paradigm cover the parameters relevant to the requirement to understand the dyadic with emerging market participants. The need to understand how a framework based upon this theory within the narrow context of the international defence industry is lacking .

Figure 4-2 Research Questions and Literature Gaps

The approach to this research is crucial as there is a need to identify valid and useable knowledge from the data collected. The analysis, within the context of practice based research, is essentially interpretive of data captured within a complex and dynamic environment across a wide geographical area consisting of many different stakeholders with varying backgrounds. It is therefore essentially hermeneutic in construction (Gummesson, 2003, P.484; Jackson et al, 2007, p.23) and from this premise takes an abductive approach thus combining deductive and inductive (Storbacka, 2011) elements. This offers a structure to interpretation through guiding research questions and an associated research framework providing a cyclic, iterative approach to analysis and theory development. The principal practice based empirical observation regards the increasing strength of emerging market organisations in the defence market place changing the dynamics within industrial alliances. The literature adds rich context and further offers the potential for a framework around which this research can be structured. The abductive process of constant movement between

initial conclusion and questioning (Döös & Wilhelmson, 2012, p.1092) as graphically described in Figure 4-3 fits well with this applied research.

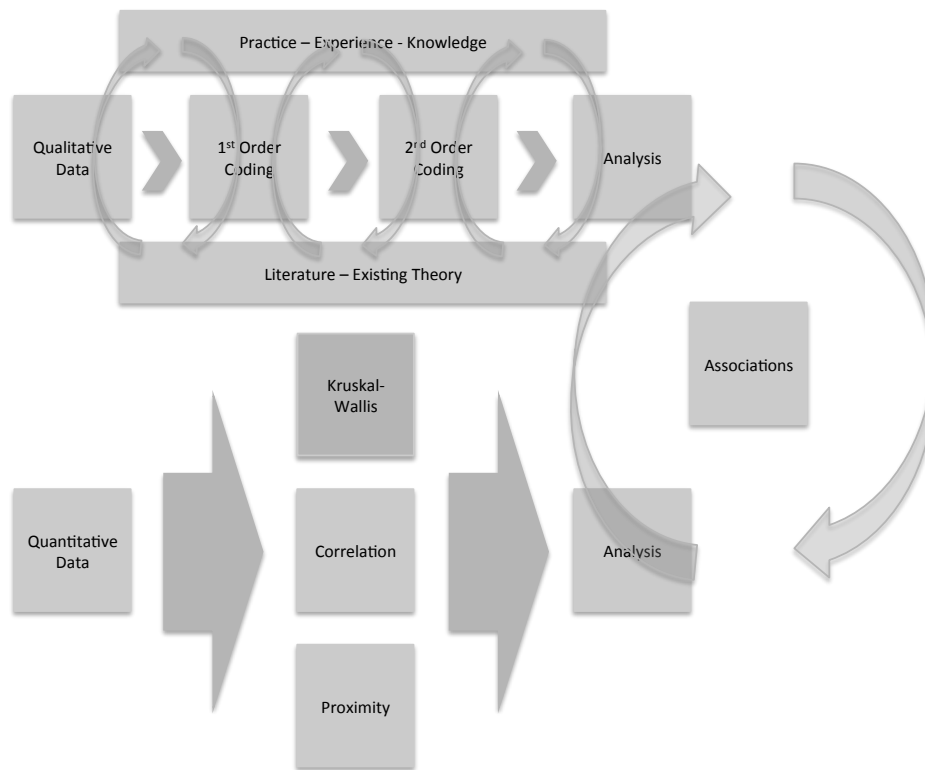


Figure 4-3 Abductive Research Process

#### 4.2.3 The Research Framework

To consolidate the theoretical findings that came from the literature review and to build the theoretical lens that will guide the empirical part of this thesis, a research framework has been developed. This research framework consolidates and extends Dunning’s OLI framework, latterly renamed the Eclectic Paradigm, thus providing a visual representation of the main research questions of this thesis with its inherent identifying and evaluating factors suggested as both predictive and normative by Brouters et al. (2009, p.263). To paraphrase Dunning, the eclectic paradigm is not the descriptive panacea by which all international production can be explained, but more a framework offering the means of explaining particular types of international value added-activity (Dunning, 2001, p.177). It is with this ethos that the eclectic paradigm, suitably engineered, is used to assist in explaining better the drivers for, and the differences between, alliances in international business, particularly in the defence industry. The research contemplates an organisation’s estimation that a move

into a new market will be successfully sustainable (Narula, 2010) and further how local organisations make decisions regarding the introduction of foreign parties into the development of their capability.

When researching the dyadic between MNE and EMO we can use the OLI framework, or Eclectic Paradigm, to help describe the dynamics of the relationship in terms of understanding how individual motivations combine with held advantages to influence modalities of business relationships. In the traditional OLI framework the perspective is from the MNE and how it uses its inherent advantages and comparative location advantages to maximise value through internalisation in the overseas market. This is obviously a “one-way” view and does not take into account the motivations and advantages held by the EMO in the bilateral. The EMO location will still play an important role in determining the modality of the bilateral business relationship, however, again, it can be seen as a part of the EMO advantage set. Such differentiation can be described as “Country Specific Advantages” (CSA’s) and “Firm Specific Advantages” (FSA’s) (Rugman, 2010. P.11). This logic led to the development of this idea further in this research and differentiated the two parties further by describing them as EMO Specific Advantages (EMO ADV) and MNE Specific Advantages (MNE ADV).

From these definitions, differences between MNE advantages and EMO advantages were experienced particularly when considering transactional advantages, which are particular to those that have ready access to diverse organisations and can leverage advantage due to inherent multi-nationality. From an EMO standpoint this will be visible in emerging market multi-nationals, which although extant in other market sectors, are less prevalent in the defence industry. Considering MNEs, transactional advantages are differentiated between market access and market knowledge. The former is about the network of specific relationships, routes to market and how this affects sales directly, with the latter being softer in terms of accumulated experience and positioning, the way business is done, for example in terms of branding and understanding the nuances of international business.

Over the past ten years there has been a marked increase in offset projects and latterly deeper collaborative requirements attached to defence procurements (Pardesi &

Matthews, 2007). Intuitively it seemed that market access was being traded against the intellectual property of MNEs through the provision of equipment and capability. This linkage was becoming increasingly sophisticated with host nation defence industrial strategies integrating with offset policy (Petersen, 2011, p.489) with developed governments like the US seeing the latter as a trade distortion (Ianakiev & Mladenov, 2009, p.190).

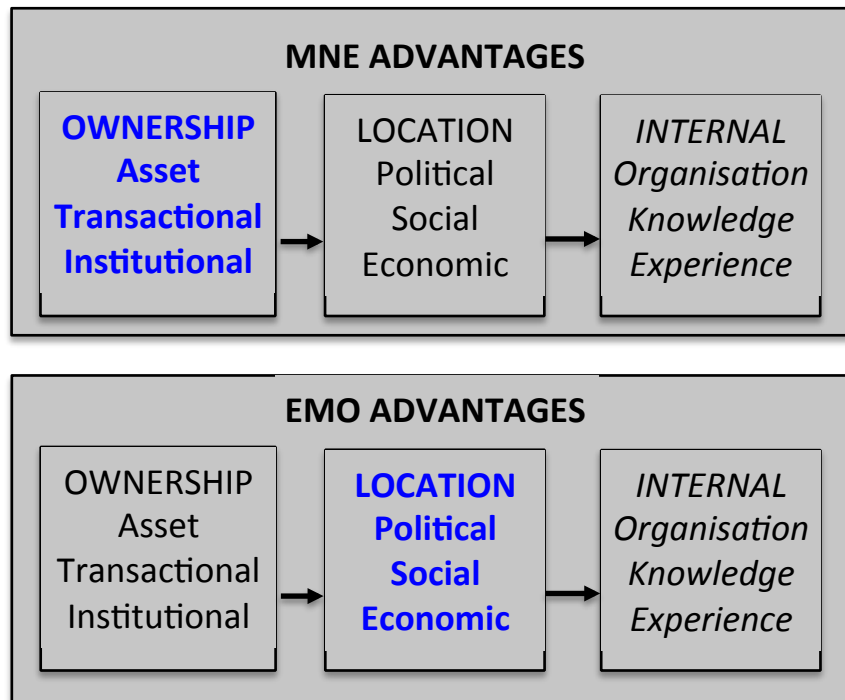


Figure 4-4 MNE versus EMO Typical Advantages

Furthermore, increasing competitive differentiation is demonstrated in approaches to alliances with host nations by MNEs vying for procurement funds. The hosts' needs differed with predominance of economic growth, jobs and technology transfer, depending on the particular circumstances prevailing. There did appear however to be a trajectory towards increasing collaboration, which was in turn moving away from specific project focus and more towards a broader strategic industrial agenda.

Offset policy has continued to evolve in the European Union such that except in cases of national security (where exemption Article 346 is invoked) offsets are now essentially prohibited in European defence procurements (Ben Ari et al, 2012, p.29). This, together with a more pro-active approach from MNEs, arguably as a reaction to

increased competition in the market, appears to be precipitating more non-mandated collaborative ventures. It is therefore of particular interest to better understand the motivations behind these behavioural changes and how they manifest themselves in terms of entry mode decision making.

Although often with home government assistance, internationalisation is in the industrial world essentially an enterprise level decision (Fonfara & Collins, 1990, p.86). In the defence industry however there is generally a closer relationship between home governments and (particularly prime level) MNEs with in some cases, inter alia, the USA, Russia, China, defence exports are an integral element of national foreign policy and therefore coordinated and supported as such. With a heavy government political influence in the sector, understanding the circumstances under which alliance entry modes are optimal, and how differences in host country environment will impact upon related decision-making, is critical in the defence industry. These differences may be as much to do with the contemporary political and economic environment within which the potential business sits, as it is to do with structural, geovalent issues. A more fundamental question to ask perhaps is whether ownership advantages can actually be exploited in a host location (Demirbag et al, 2009, p.447) and how this is best achieved? The literature has provided a great deal of knowledge with a deeper understanding of the eclectic paradigm, with the contention that international economic involvement changes depending upon the influence of ownership, location and internalisation contexts (Dunning, 2006) with these constituent elements and their contents providing a suitable grounding for building research questions intended to test the nature of collaborative relationships.

The research undertaken relies primarily on perception as it can be argued that this best reflects how an individual views reality and therefore how their decisions are influenced. Further, to attain complete objectivity in such a complex environment is very challenging (Agarwal & Ramaswami, 1992, p.2/3). Questions regarding how MNEs come to entry mode decisions will provide insight into how the framework provided by the evolved eclectic paradigm used compares to current methods MNEs use. The literature review makes clear the lack of specific research into motivations for, and the decision-making processes behind, international market entry modes in the defence industry. This gap in the body of knowledge offers the opportunity to

pursue research which will be of value to my practice and industry overall. In addition, seeking to better understand business relationship decisions and how their subsequent operationalisation will lead to a potential compromise between the primary value motivations of the involved parties.

As noted previously, to uncover more generalisable theory from this research a mixed method, abductive approach is adopted to offer a broader insight into the subject matter. The research philosophy is influenced by my practitioner experience and knowledge and the action research methodology therefore reflects the epistemological position of the paper. While this approach may seem nomothetic, in that this study uses the eclectic paradigm as the basis for the research framework to generalise the positions of both EMOs and MNEs in the context of international industrial alliances, there will inevitably be an individually derived richness of perspective, an idiographic nuance based on practice based views.

There have been a number of examples of the eclectic paradigm being used as a framework in research with the work by Stoian & Filippaios (2008) noted earlier joined by others including Cole et al (2007) looking at the US reinsurance market, Dunning et al (2007) looking at entry mode choices of international franchisors, Brouthers et al (2009) on how MNEs make international market selection decisions, and Li et al (2005) developing the framework to look at global strategy tested through investigating the impact on MNEs of global shock, in this case the September 11 attacks. In an abstract sense the use of the eclectic paradigm as the basis for a research framework for understanding in detail the relationships and interactions between protagonists in international alliances is perhaps easy to comprehend. The OLI framework is based on understanding outward Foreign Direct Investment (FDI) taking MNE ownership advantages and applying them to foreign markets. The application of the eclectic paradigm as a research framework continues with the table in Figure 4-5 noting examples of its use in research since 2010.

Internalisation theory as developed by Coase (Coase, 1937) states that knowledge is transferred when MNEs enter new markets and that capital is introduced essentially to protect that knowledge through investment in its own operational infrastructure (Casson, 2015, p.55). The success of internalisation is essentially dependent upon

how the ownership advantages transfer to the location in question and how this affects the level of MNE internalisation retained in that market through choices around Entry Mode (Rugman, 2010). I suggest that “Entry Mode” in the context of the EMO/MNE bilateral is actually a “Business Entry Mode” i.e. the mode of business being entered into by both parties rather than the traditional view of the movement into the international market by the MNE. In the context of this research it is important for this distinction to be made and is a discrete extension of Dunning’s eclectic paradigm.

Aziz & Wong (2010).	Research using a combination of the Eclectic Paradigm, "Diamond Model" (Porter, 1990) and the "resource-based view" to understand the internationalisation of emerging market organisations and particularly how firm specific advantages play in determining success.
Hurst (2011)	A journal paper that uses the Eclectic Paradigm as a framework to analyze investment by Chinese state-owned enterprises (SOE) for the period 2003–2008, focusing specifically on the differences between the determinants of Chinese investment in developed (OECD) and developing (non-OECD) economies.
Rahman et al (2011)	Using the Eclectic Paradigm to gain an improved understanding of the determinants of multinational contractors’ willingness to bid in the Australian public sector market infrastructure market.
Bayari (2012)	Uses the Eclectic Paradigm to research the new Japanese foreign direct investment in Australia in the aftermath of the ‘Lehman Brothers shock, as it was noted as offering a comprehensive framework for MNE-specific, and host nation-specific trade and foreign direct investment activities.
Buckley et al (2012)	Outward investment by Indian companies researched with the Eclectic Paradigm as a framework focusing on "host-home linkages".
Ilgün & Tatić (2012).	Uses the Eclectic Paradigm as a framework to better understand market entry decisions within German direct investments in Turkey.
Fotopoulos et al (2013)	Applying the Eclectic Paradigm to research the determinants of international expansion of banks concluding that location advantages have a stronger effect than internalisation factors.
Buddhika (2014)	Uses the Eclectic Paradigm as a "guiding theory" while examining the factors which influence the entry mode choices within the internationalisation process in the nonprofit sector.
Singh (2014)	A Phd thesis that develops and tests a model to explain the determinants of foreign direct investment undertaken by education service providers through the application of the eclectic paradigm concluding differences in approach between profit and nonprofit organisations.
Ayazlar (2015)	Uses the Eclectic Paradigm as a framework to research the Lodging Industry in Turkey with the authors expecting findings of the study to contribute to selection of market entry decisions.

Figure 4-5 Recent Examples of the Eclectic Paradigm as a Research Framework in different contexts

The proposed framework is developed to better understand the bilateral relationship between an established MNE and an organisation in an emerging international local environment. Using Dunning’s taxonomy of motivations (Dunning, 2000, p.165) as one facet of the framework appears a reasonable approach. The relationship between these motivations and mode preferences and how they are scheduled by the reality of comparative advantage is a prime research aim. The framework builds a comparative picture of ownership advantages enjoyed by both EMO and MNE and how location



impacts upon these when it comes to business entry mode preferences. The comparative picture of MNE and EMO ownership advantages and the deltas between their home environments can help to better understand how business entry mode preferences based upon initial motivations, can be modified into business entry mode decisions. The subject of market entry motivations, and associated entry modes, are central to this thesis with a model being extended from Dunning's eclectic paradigm to help understand better the dynamics within decision-making processes, particularly within the defence market.

Although the eclectic paradigm was devised by Dunning (1995) as a compendium of different theories to explain multi national company FDI decisions (Dunning, 1988), in particular with regards to investment in production in overseas markets, I contend that the model has value in determining how business motivations are operationalised within a dynamic, global defence industrial environment. As noted above, four motivations for international market entry are identified by Dunning (2000, p.165), these being Market Access, Resource Access, Efficiency Access and Strategic Asset Access. The incorporation of these motivations within a model have not been widely tested, at least not in the defence industrial environment, perhaps for the reasons that it is assumed that Market Access is the sole motivation of MNEs (Brouthers et al, 1996, p.380). These motivations however uncover the value expectations of protagonists pursuing international business. The alliance continuum offered by Gajda (2004) in Figure 2-1, relates well to the breadth of integration levels developed within the research framework from light to heavy integration, from cooperation through coordination and collaboration to the uniting of participants (coadunation), reflected in the framework as the progression from the transactional supply relationship through minority and majority ventures to whole ownership.

The ability of enterprises to successfully undertake business outside of their home markets is dependent upon their comparative advantages against competition, both domestic and foreign, in that overseas market. Dunning (1988) argues that the enterprise's advantage is net of the sum of their particular Ownership, Location and Internalisation advantages. Essentially the eclectic paradigm predicts that enterprises will prefer to internalise to maintain ownership and location advantages. The more the location market is deemed to be imperfect the more the MNE will wish to internalise

in that marketplace. Today, however, it is argued that the emergence of Alliance Capitalism creates increasing advantages to partnership within an increasingly competitive market place. This drives potential compromise with regards to expectations regarding economic rents emanating from enterprise owned advantages (Dunning, 1995, p.466).

Understanding perceptions through such a model will provide insight into how involved parties will operationalise international business:

- Firstly, the advantages that the organisation holds in the context of the overall market will be a determining factor in eventual route to market;
- Secondly, in a location specific environment how these factors retain advantage;
- Thirdly, what level of internalisation is acceptable in this particular context?

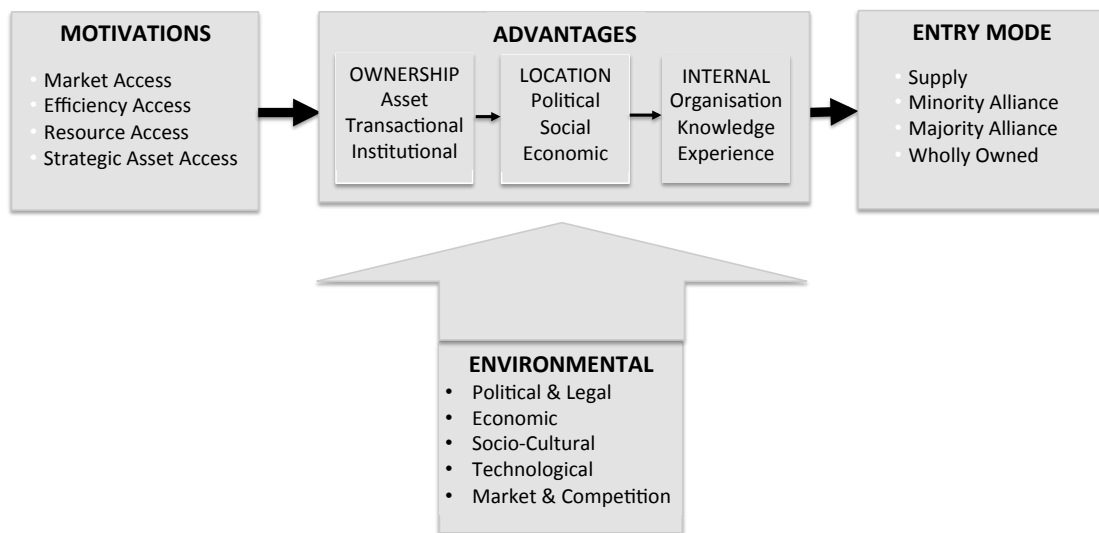


Figure 4-6 The Research Framework extended from the Eclectic Paradigm

This whole model works within a wider environmental context which is described using the well understood PEST framework of Politics & Legal, Economic, Socio-Cultural and Technology. This is augmented to ensure relevance to the defence industry by adding a fifth environmental parameter “Market & Competition”. The moderating effects of these environmental elements needs to be understood.

Therefore this research framework (Figure 4-6) developed from Dunning’s eclectic paradigm shows the flow from motivations to entry mode via the impact of

ownership, location and internalisation advantages and has the further variable of specific alliance environmental elements duly scheduling advantages.

### 4.3 Validation and Ethics

#### 4.3.1 Validation of Procedures

When trying to contemplate producing generalisable research the understanding that bias free interaction is all but impossible as my opinions and cognitive style will have a profound effect on the outcome (Tetlock, 2000). So with my worldview in clear view I need to derive a relevant research strategy and associated methods that can take such an approach into practice (Creswell, 2008).

Reflexivity and reducing the likelihood of bias in framing the question and performing the research is important when considering issues around rigour and relevance. It could be argued that the detachment necessary to ensure that contamination does not occur can be best achieved through a quantitative methodology (Jootun & McGhee, 2009, p.42). I would consider that I hold a post positivist worldview as I manage a deterministic outlook with a need to understand the effects that individuals have on the world (Creswell, 2008). This philosophical position relates to how I see my problem and how I am going to tackle it. As noted earlier, this research is abductive and I employed a mixed-methods approach using both qualitative and quantitative methods of data analysis. The analysis of the anonymised qualitative interviews consisted of two separate rounds of coding to primary and secondary levels with subsequent data analysis providing information on the types and frequencies of motivations, advantages and entry modes. This was then compared against analysed quantitative data. Throughout this process best efforts were made to ensure that bias was minimised.

Action research is fundamentally practice based and develops understanding while providing practical change (Carson, 1990), addressing how and why type questions (Michaelides et al, 2013, p.251, citing Yin, 2003). Blum (1955) defines it as the “diagnosis of a social problem with a view of helping improve the situation” and further offers two stages of diagnosis, where analysis leads to hypothesis and therapy where this is tested ideally in practice (Blum, 1955, p.1). The use of the practice to

extend theory to explain the dynamics of alliances within the defence industry is a prime objective of this research. The process of data capture is, again, practice based and although both qualitative and quantitative phases offer challenges they also offer the opportunity to gain unique insight into how those in the market sector view the development of business within the context of alliances. The applied nature of action research allows a holistic understanding of professional activities in a future orientated fashion (French, 2009, p.190) thereby providing real tangible value as well as the derivation of generalisable theory.

<b>Criteria</b>	<b>Sentences for Coding Research Programs Rigor</b>
<b>Rigor</b>	<b>Rigor variables</b>
1. Conceptual	1. The research program is well grounded in a base discipline, It uses a conceptual framework consistent with existing theories in the field.
2. Methodological rigor	2. The program uses analytical methods and objective quantifiable data to empirically examine research questions.
3. Accumulated empirical evidence	3. The research program has generated a substantial amount of accumulated empirical evidence supporting it.
<b>Practical Usefulness</b>	<b>Practical usefulness variables</b>
4. Meaningfulness	4. The research is meaningful, understandable and adequately describes strategic problems faced by decision-makers.
5. Goal relevance	5. It contains performance indicators which are relevant to managers' goals.
6. Operational validity	6. It has clear action implications which can be implemented using the causal variables used in the research program.
7. Innovativeness	7. It transcends 'commonsense' solutions and provides non-obvious insights into practical problems.
8. Cost of implementation	8. The solutions suggested by the research are feasible in terms of their costs or timeliness.

Figure 4-7 Shrivastava's Table of Usefulness and Rigour (Shrivastava, 1987, p.80),

The spiral nature of the plan, act, observe, reflect action research methodology (French, 2009, p.192) allows development of theory to parallel the emergent nature of in-practice problems (Sankaran and Hou, 2003, p.12). The development of interview and survey questions followed the earlier pilot research survey with first and second order qualitative data coding again following cycles of reflection as the categories are iteratively refined. Underpinning the advantages of this action research spiral approach to ensure appropriate rigour and practical usefulness (Shrivastava, 1987, p.81), Shrivastava's criteria (Figure 4-7) are used for understanding and ensuring both academic and applied facets of this research methodology are robust (Shrivastava, 1987, p.82).

#### 4.3.2 Ethical Considerations

The ethical approach to this research consisted of three main areas of focus:

- 1) The University's ethical policy;
- 2) The ethical policy within my practice, and;
- 3) This research and my moral compass.

The University's ethical procedure was thorough with an ethical proposal submitted whereby a description of the research and associated ethical safeguards laid out to the reviewing panel how the best interests of involved stakeholders would be protected. My proposal was accepted with necessary process and procedures included in the research data collection and subsequent storage. To comply it was important that data is anonymous, which was achieved.

In addition my organisation has policies and structures in place to support a strong commitment to ethics. This covers interactions external to the Company and also to those within an internal context and has learning at the heart of a culture change programme. This all supports an ethically driven approach to this practice based research project. The Company's Conflict of Interests Policy was complied with through my line manager and Group Legal functions. The subject of Data Protection had to be understood and Company policy with regards to the collection of data with all needing to be held on a UK based system including the on-line survey provider's servers.

Within my practice I see a differentiation between ethical issues around how we as an organisation interact with our stakeholder environment and our compliance with legal and regulatory statutes. By way of an example, our Company has a "Compliance Department" but not an "Ethics Department". The difference between the two observed in the paper by Verhezen (2010), offers the vision of a continuum between compliance and ethical integrity, or "legal accountability" and "moral responsibility" (p.195). This has resonated with me both in terms of compartmentalising both concepts but also in terms of the journey to a place that Verhezen (2010) states as providing a tangible legacy and perhaps more importantly opening up further areas of opportunity. I can relate to this directly as within my practice we have formalised (through the auspices of our Compliance Department) policy that drives an

increasingly ethical approach to all that we do. This is becoming recognised by the wider stakeholder community who now see it as a positive discriminator in reducing their purchasing risk, which in turn provides us with better future opportunities for business sustainment.

When defining the primary areas of ethical consideration Badaracco (1992) identifies “Four Spheres of Commitment” namely “as a person”, “as an economic agent”, “as a company leader” and, “beyond the firm’s boundaries” (p.74). I keep this in mind as I wade through the complexity of the relationships that I have within my rich picture and the ethical implications there within. Further, when considering my place within my practice I have to understand the tensions between my own moral and ethical position as an individual and what that means to me as a leader and manager. I see the direct and indirect consequences of the deontological and teleological theories of ethics having relevance to both internal and external considerations of ethical decision-making (Hunt & Vitell, 1986, p.6.). I need to understand how to strive for “ethical universalism” rather than an “ethical egoist” position (Hunt & Vitell, 1986, p.6.). Already the opportunity for conflict between different relationship levels, due to cultural norms and biases, is highlighted with moral reasoning in decision-making having the potential to change depending on the particular environment, including the importance of stakeholders, at a particular point in time (Passini, 2010, p.445). The concept therefore of ethical decision-making being affected by context and evolving over time (Hepler & Feltz, 2012, p.154; Hendley, 2009, p.532) has particular resonance with my research as international alliances will prompt all involved into considering operating in new environments.

The primacy of one’s individual moral compass is explored by McDonald (2010), who looks at the constructs of ethical relativism and absolutism and suggests that there is a debate as to whether a single moral truth is extant which supersedes all other views on morals and ethics. individual morals and ethics need however to be seen from a wider perspective. In my practice we have a complex network of relationships between colleagues of similar and different cultures, differing requirements for detailed business performance, diverse customer organisations and supply bases and different political and legislative infrastructures within which to work. The research population also had to be understood within this context. The individual’s reflexive

position has to be understood with Kohlberg offering three major stages of moral development as i) Preconventional, ii) Conventional and, iii) Post conventional (Kohlberg, 1973). Within this “universal paradigm of moral development” are mapped on a continuum six stages of an individual’s moral development, moving from a primarily self serving agenda through to fundamentally an altruistic one, based on the deontological position of the “golden rule” (Donleavy, 2010, p.64), which taken from the new testament means that one should treat others as one would wish to be treated (Rizk, 2008, p.247).

#### 4.4 Data Sourcing

##### 4.4.1 Approach

*“Theory building seems to require rich description, the richness that comes from anecdote. We uncover all kinds of relationships in our ‘hard’ data, but it is only through the use of this ‘soft’ data that we are able to ‘explain’ them, and explanation is, of course, the purpose of research. I believe that the researcher who never goes near the water, who collects quantitative data from a distance without anecdote to support them, will always have difficulty explaining interesting relationships...” (Shah and Corley, 2006, p.1821 quoting Mintzberg, 1979, p. 113)*

The approach is designed to optimise insight into the research questions, which are themselves born of practical experience and associated need, brought together with academic theory. The use of a framework on which to base the research brings advantages of structure, however by its very nature this imposes potential restrictions.

Decisions around choosing a mixed-methods approach hung on the following considerations: i) it builds a breadth of data (from a notoriously reticent population) in a practical manner (Cresswell, 2008, p.14); ii) the abductive methodology is essentially exploratory, and therefore mixed-methods works well in helping generalise theory (Harrison, 2013, p.2156), and; iii) it is a relevant means of triangulation in an abductive (retroductive) approach (Downward & Mearman, 2007, p.80) offering clarification against the data gathered during the qualitative phase (Sandelowski, 2000, p.248). Although there is an understanding that such an approach can create potential problems of conflict between epistemology and method

(Buchanan & Bryman, 2007, p.484), on balance a mixed methods route was undertaken. Further, rather than an equal status mixed method (Johnson et al, 2010, p.66) this research uses a qualitative biased approach, understanding the primacy of the richness gained from interview data.

The first phase of qualitative interviews was spread across Colombia, Brazil, Turkey between October 2014 and May 2015, with the aim of achieving three to four interviews in each country offering insight into host nation attitudes to international alliances. To provide suitable balance, interviews were sought from individuals within MNEs in the developed world with a total of four from the UK and four from the USA being achieved between June and September 2015. The second phase of quantitative data gathering, through on-line survey, from both MNEs and EMOs was used to provide a broader and deeper set of information for analysis and subsequent validation of earlier qualitative results.

The research targets two main stakeholder communities namely participants in Multi-National Enterprises and those in Emerging Market Organisations. From the research questions it is clear that the research population also needs to have interests associated with the defence market and particularly defence industrial alliances. The study population needs to be relevant though manageable within the context of gaining meaningful data, which can be subsequently analysed to provide useful theory. The study populations of both MNEs and EMOs consisted of industry and government individuals with a minimum of ten years experience in or with the defence market.

The study population for the quantitative survey was aimed at the defence community and the on-line survey methodology determined that this became spread across the United States, Canada, the UK, Europe, the Middle East, Asia and Australia. When considering the geographical spread over which to conduct this research, the constraints related to focusing on those countries involved in defence industrialisation as well as the practicalities of data collection.

#### 4.4.2 Qualitative Design

It is a prime objective to ensure that the views of the participant come through during the data gathering process, with answers to open questions having been forged



through those individuals' historical and cultural experiences (Cresswell, 2007, p.8). The role of the researcher has to balance between the need to provide a framework of questions such that the data collected becomes relevant to the research objectives while ensuring that inappropriate bias is not added to the conversation and therefore potentially introducing invalidity threats (Maxwell, 1998, p.219) into the collection process. Arguably difficult to eradicate, however the use of the research framework provides a structure to assist in identifying interviewer bias. Environmental biasing (reactivity) (Maxwell, 1998, p.242) was mitigated through a lack of close relationship with any of the EMO participants and holding the interviews in their country and setting. The open questions were always asked in the same way from a written script and the participants also had the opportunity to review before the interview, thus allowing a view to be formed outside of the researcher's influence.

The design of the interview instrument was specifically based on the research framework described earlier in this section (Figure 4-6), which was in turn based upon learning from the Literature Review (as described in Figure 4-3). Semi-structured in approach, the questions (Appendix 1) were designed to create an open environment for the participant to consider their own experiences within a flow of discussion from motivations to advantages to entry mode preferences, reflecting the flow inherent in the research framework (Broom, 2005). Discussions within and around the answers from the participants became as much about stories and personal experiences as it was about "factual" answers. It was this richness of interaction that allowed the abductive approach to this research to be successful.

The interview phase of the data gathering allowed a richer and deeper understanding of inherent perspectives across different roles and cultures. The dependant variables within the research project are business modes, and particularly the level of their integration, with a better understanding of whether different perspectives are driven through factors contained within the research framework i.e. ownership, location and internalisation advantages and further, how do motivations to pursue international business impact upon the dependant variable. The interview questions were essentially open in nature with the process designed to achieve:

- 1) Greater insight into participant perspectives;
- 2) Understand how these relate to:

- a) Organisations' motivations towards international business i.e. Market Access, Resource Access, Efficiency Access and Strategic Asset Access (Dunning, 2000, p.165);
  - b) Perspectives regarding their organisations' inherent advantages,
  - c) How these advantages stand in different environmental constructs, and;
  - d) How these affect entry mode decisions;
- 3) Validate areas of questioning prior to the quantitative phase of data collection.

The population in question consisted of those involved in defence within the target markets of Colombia, Brazil, Turkey, the UK and the USA. It was important that there was as broad a representation as possible in terms of institutions. There is however structural issues experienced relating to the population in question, which tends to be reticent to divulge what might be deemed proprietary, or even higher classified, information. A list of interviewees was assembled through direct contact and the assistance of local practice offices suggesting relevant individuals and helping organise interview appointments.

For the EMO population the research interviews were focused on the emerging markets of Colombia, Turkey and Brazil for the following reasons:

- They have differing defence industrial development histories;
- They have differing political and economic situations;
- They currently hold different levels of indigenous defence industrial capability;
- They were accessible to me to undertake research interviews.

There were five interviewees from government, seven from industry, one from academia and one from an industrial body. The Multi-National Enterprise interviewee population were all currently working within industry with backgrounds in the military, government and engineering. This provides a good mix of experience and knowledge in both populations with the need for diversification of thought tempered by the realities of getting access to relevant individuals to interview. All the interviews were arranged through informal discussions followed up by a formal communication by e-mail laying out the background to the research, an overview of the interview format and a consent form confirming that the participants' anonymity

would be maintained which was signed to release the interview to the research. All interviews were recorded following the participant's agreement. In Colombia all interviews were conducted "face to face". The Brazil participant interviews consisted of three "face to face" with one held over the phone. For Turkey all six were conducted "face to face". Of the US MNE interviews three were conducted "face to face" and one over the phone and for the UK MNE interviews two were "face to face" and two were over the phone. In all cases interviews were recorded and subsequently transcribed before coding.

#### 4.4.2.1 Interview Pilot Testing

A set of survey questions was formulated to reflect the three main parameters of the research framework with the interview format tested upon employees within my practice. More specifically the pilot was tried out on individuals from engineering, commercial and business development functions from South America, the UK and the USA. These interactions took place between August and October 2014 and indicated a general ease of understanding, particularly if translation was needed as was the case in both Colombia and Brazil. The need for similar "triangulation" type questions elsewhere in the interview to decrease ambiguity and best allow for richness and clarity of interviewee responses was identified.

#### 4.4.3 Quantitative Design

Within the context of a mixed methods research approach, the quantitative element of the data collection and analysis had the primary role of validating and therefore better understanding (Bazely, 2004, p.2) the findings from the interviews. The use of a wider study population promotes more generalisable theory (Yang et al, 2006, p.604). The on-line survey was hosted by "SmartSurvey" and consisted of the questions provided in Appendix 3.

The population, as described earlier, was the defence sector, with considerable effort invested in ensuring that those surveyed were relevant to the research objectives. The need to channel the survey to specific individuals and groups was therefore of the highest importance so that less contamination could occur through responses from those not involved in the defence sector. For example, although MNE or EMO organisations might also work in the commercial aircraft sector the views of those

employed there will not be entirely relevant to the research objectives and therefore should be filtered out. For this reason a judgement sampling method was employed (Fricker, 2008, p.200) with the survey sent to 360 recipients directly stretching across different organisations in the UK, Europe, the USA, Turkey and Brazil. This set of recipients consisted of contacts from my database and those gained from colleagues as well as contact information from relevant companies gained from their internet sites. When considering issues around gaining appropriate contact information in the defence industry, as noted previously, I feel the number of recipients contacted to be acceptable. It is unclear how many responses were gained from these distribution routes. Of those directly sent, half were sent to individuals outside of my organisation with those sent to individuals within my organisation being based in the USA, UK, Sweden, Canada, KSA and Australia. I further sent the survey link to four defence industry associations in Brazil, the USA, Europe and the UK between June and October 2015. Further industry associations, for example Colombia's, did not respond to enquiries.

Due to the arms length nature of contact to industry associations, with their subsequent onward transmission to members, the response rate from this route is difficult to define accurately though I would estimate it as being low. Overall the survey resulted in 221 surveys returned of which 76 were not sufficiently completed leaving 145 completed returns. On evidence available and estimating response to industry associations at around five each, I would estimate an overall 30% response rate.

#### 4.4.3.1 Survey Pilot Testing

An earlier survey had been undertaken to better understand MNE attitudes to industrial alliances used in a conference paper in 2015. It took data from 49 participants from the organisation I work for with the on-line survey being sent to recipients between January and March 2015.

The mean values of results in this research survey showed that the MNEs saw the growing importance of exports on a foundation of many years involvement. There was an acceptance that international industrial alliances would provide opportunity for market growth in the future, although there were concerns regarding cultural

issues as a potential risk. An interesting nuance from a general business development perspective was the importance that MNEs placed on political assistance from home governments in international business success. This is arguably not remarkable in that defence procurements are government led, using government money, therefore the political dimension will always be prevalent. Of interest was the fact that annual sales were strongly positively correlated with the number of years exporting, although this survey could not prove causality per se. The relationship between business performance and exports has been widely written about with the impact of ownership origins, i.e. whether foreign or domestically owned, being significant (Commander & Svejnar, 2011, p.310). Those with experience in exporting are also more likely to have a collaborative industrial relationship. The number of years exporting and success in executing offsets are also positively correlated.

This first pilot was useful in bracketing attitudes amongst MNE's and informed this study's survey which reflected the research framework used. The survey was sent on pilot to a limited number of recipients in my practice and to three individuals outside of the defence industry during March 2015. Direct feedback from survey results received and subsequent discussions allowed the re-formatting of some questions that contained errors and also the flow of the question sections.

#### 4.5 Methodological Limitations

Differing methodological approaches in their comparison have their own limitations when put into the context of this research. Further, balancing the need for rigour in research and the need for practical, applied theory has the propensity to promote limitations (Fincham & Clark, 2009, p.513) in both. This research uses mixed methods. When contemplating using two methods in the same research the limitations of using one method were seen as having the potential to neutralise those from another, thus leading to the adoption of the mixed methods research methodology for purpose of triangulation (Cresswell, 2008, p.14 quoting Jick, 1979). It must be remembered however that validation is highly unlikely and that the overall approach of this research is to increase understanding (Bazley, 2004, p.4) and not offer scientific generalizability.

There are many perspectives on the use of methods in research and their limitations. It can be argued that the abductive methodology employed, with its lack of a conclusive, generalisable evidence, lends itself to bias (East, 2016, p.223). A further example being that action research and the tensions created by competing roles (Morton, 1999, p.221), can introduce pressures of the practice adversely impacting upon rigour needed in research. Interview limitations can include sample pool size (Baker & Edwards, 2012, p.4) however it is unclear as to how many interviews is optimal. Further, “enough” interviews promotes arguments around data saturation (Boddy, 2005, p.427) which in turn talk to levels of generalisability of theory. This research uses an abductive approach which points towards theory, rather being overtly scientific in offering generalisable theory.

#### 4.6 Summary

The challenge was to best structure the research design to optimise the generation of valuable information commensurate with the research questions given that suitable access to defense companies is so limited. The potential in the richness of the interview data structured through the framework, together with ability to review survey data, was a prime consideration with the abductive approach of using analysis of the data iteratively viewed against theory and experience to build an emerging picture of what is happening. A consistency across all areas of data gathering and analysis is provided through the research framework.

Pilot testing in both qualitative and quantitative phases gives confidence in the formal data gathering. These pilots were performed in the knowledge that the population is relatively small and sensitive to persistence with both not involving those outside the greater organisation that I am employed in. They did however involve participants from both developed and emerging nations, which helped with representative validity.

The research framework makes explicit the areas of Motivation, Advantage and Entry Mode and acknowledges the influence of the environment on these variables. It further provides structure to best ensure rigour and validity through the clear delineation of framework sections and associated questioning and data gathering, as well as a firm foundation for an ethical process.

## 5 Findings

### 5.1 Introduction

This chapter provides an overview of the data analysed including more detail on the participants and how the abductive journey between framework and data developed the coding structure used, and further precipitated identification of clear narrative sets from the analysis of the qualitative interviews. This was understood in the broader context of theory identified from the Literature Review and experience and knowledge from practice. This allowed the evolving narrative to further develop. A proximity test of the quantitised interview findings was also made. The quantitative survey data was analysed with results from Kruskal-Wallis and correlation tests reviewed. Finally the evolving, spiral type triangulation of qualitative and quantitative data together with experience and theory built a broader number of clear associations described in the summary.

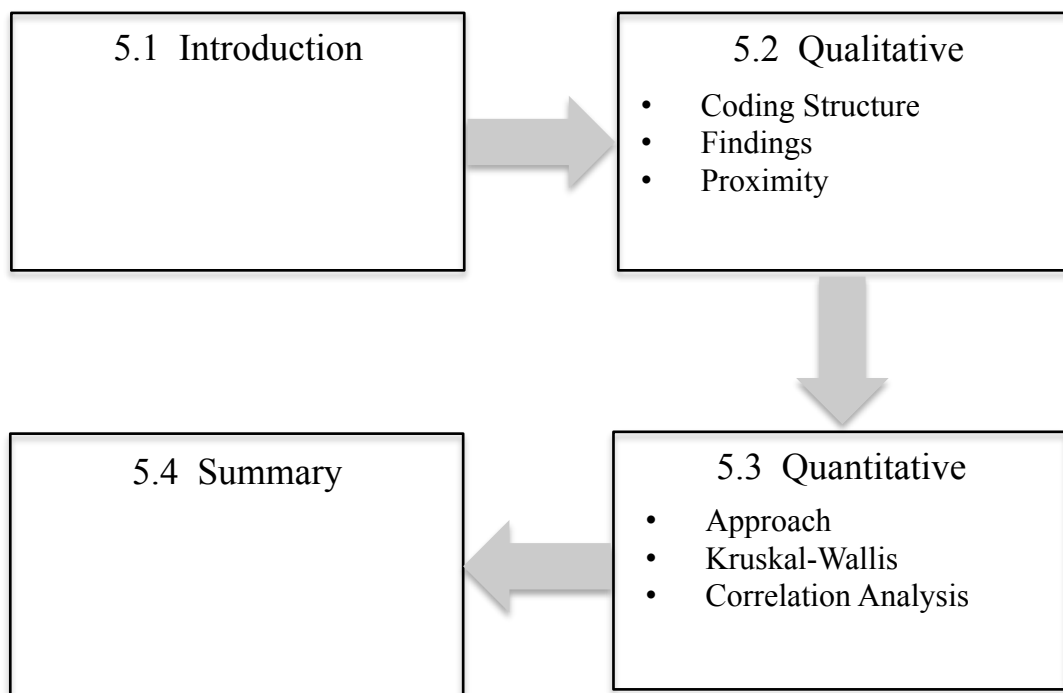


Figure 5-1 Findings Chapter Structure

### 5.2 Qualitative

Data were collected from 22 interviews, consisting of 14 from emerging nations participants and 8 from developed defence industrial nations. The relationships between particular market participants (EMO and MNE) are reviewed against

numbers of relevant responses in different framework categories, i.e. motivations, advantages, entry modes. It is however the richness of the interviews and the complexity that they offer that provides the opportunity to learn much about the subject matter. The patterns revealed through the analysis of the “quantitising” (Sandelowski, 2000, p.253) of the coded interview data within the complexity of the subject matter offers clues as to the “whys” of international industrial alliances, and perhaps more importantly from the perspective of practice application, guides those involved towards value added decision-making. The importance of the qualitative data gathered is in the richness of the narrative that emerges from these interviews.

With the many hours of interviews available there was the potential to build a picture that describes perspectives concerning engagement in industrial alliances. Firstly looking at perspectives within each of the three host countries in question a better understanding of the dynamics within each of these three markets was built and further an understanding of the differences between them gained. The interviews held, detailed in Appendix 2, were transcribed and then coded to reflect the main parameters of the model i.e. motivations, advantages and entry modes. For Colombia, four interviews were held with individuals who were connected with defence in the country through working directly or indirectly for the Ministry of Defence. Two were seniors involved with the development of industrial capability and one was working for a foreign government locally in defence having previously worked within a ministerial department involved with industrial development and technology. The fourth participant was ex-armed forces, who ran one of the state owned defence industries. These interviews provided insight into a country that had been locked in internal conflict for over fifty years. This context comes out in the interviews and drives perspectives both on how they see themselves but also how they believe others see them.

There were four interviews held in Brazil with participants from private industry, a government ministerial permanent under secretary, an NGO promoting the defence sector and the federal internal investment bank. The first was an extremely experienced and successful businessman who ran a company that provided components and sub-assemblies to OEM’s. The second has an academic background in technology and beyond ministerial duties is responsible for a technology incubator



that provides an interface between academia and industry. The third served in the armed forces and now has responsibilities for an NGO promoting the Brazilian defence industry and the last had sector responsibility for the defence industry for a Brazilian national development bank.

The last of the three focus markets was Turkey where six participants were interviewed. The first was a serving senior civil servant in the Ministry of National Defence who had industry related responsibilities. The second, a retired senior official in the Ministry of National Defence, had been involved in the development of the state owned defence foundation companies and now worked in private industry. Further from private industry were two business leaders in the defence platform business and a third who had senior responsibilities in the defence aerospace sector. Lastly, a manager from a technology development park who, with an academic background focused on technology innovation and incubation, provided a link between academia and industry.

The eight MNE interviews were split equally between UK and US participants. The first US interviewee was an offset specialist who had worked the majority of his career with a major US defence MNE before moving into consultancy. The second was ex-US forces involved predominantly in the Foreign Military Sales organisation before joining industry. The third had been in industry his whole career working for a number of major MNEs in the US and had overseas experience in both Europe and Asia. The fourth was another industry professional having had experience working in major US MNEs and now concentrating on international business development.

The UK participants were: an executive who is responsible for business development in a large pan-European defence company, who is based in the UK; an offset professional who has many years experience in multi-national defence companies based in the UK; a regional business development executive who works for a large aerospace and defence supplier based overseas, and; a business development professional who has lived overseas in many countries and now works for a medium sized defence and aerospace company based in the UK.

Within the context of the research framework, the interviews were coded against the prime criteria of Motivation, Advantage and Mode. The process of coding the individual interviews was made using the MAXQDA software package, which enabled the manual coding process to allocate extracts against the “1<sup>st</sup> Order Type” criteria shown in Fig.5-2. A second order of coding, “2<sup>nd</sup> Order Type” was then undertaken to provide a greater level of resolution in understanding motivations and advantages and therefore creating a clearer, richer picture.

The allocation of Type and Sub-Type created some contention with certain interviews arguably crossing criteria. The need to ensure a manageable level of codes led such decisions to be made on balance, for example discussion around products was allocated against the 2<sup>nd</sup> Order “Technology” within the 1<sup>st</sup> Order “Asset” coding set.

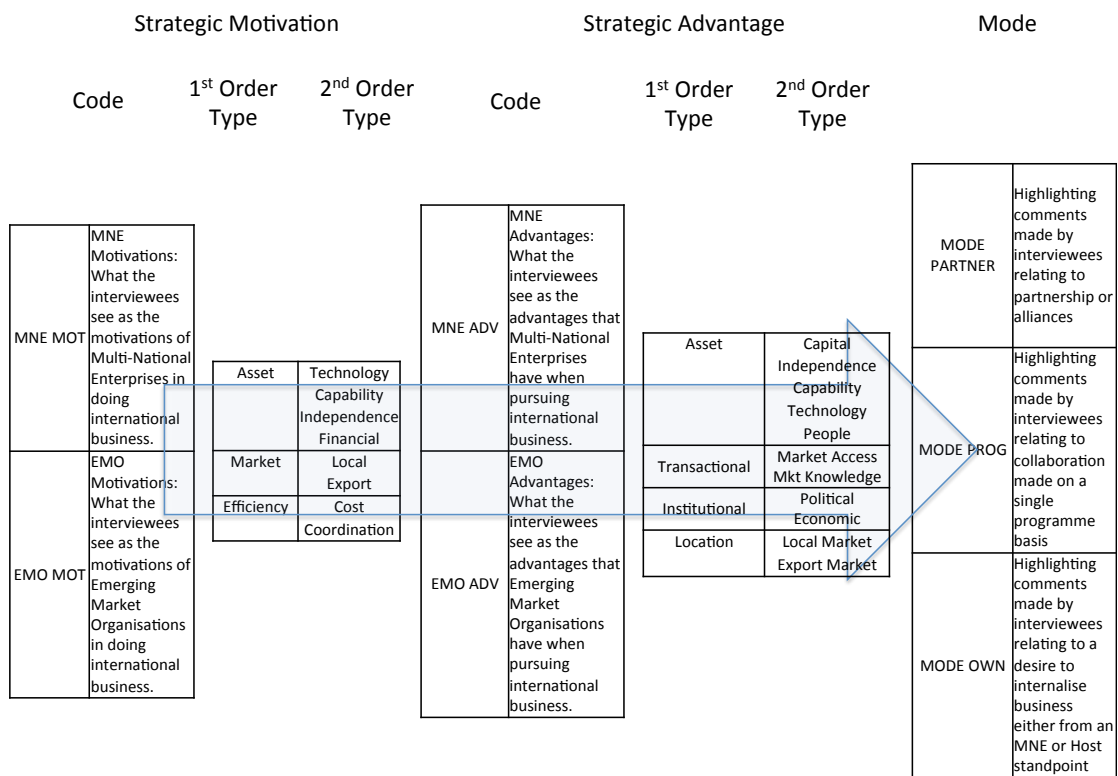


Figure 5-2 Interview Coding Structure

With a basis in template analysis (Brooks et al, 2015) the building of coding sets was an iterative process with a cycling around type and sub-type titles as the rich data became clearer in the context of the whole. The framework (Figure 4-6), together with the associated research questions (Figure 4-3), guided the coding set evolution,

moving iteratively between data, practice experience and theory in the areas of motivations, advantages and entry modes. Building a picture of associations in the data into patterns leads to concepts forming providing explanations as to what is happening and therefore offering more useable theory. This underscores the abductive research methodology (Storbacka, 2011, p.700), again, building on the evolution of the journey experienced during the literature review and extending it during the research analysis phase. Further, the advantage of using action research within this abductive approach allows for the practice to be integrated in to the research (Olsson and Olander, 2005, p.1).

The spiral approach to theory development (French, 2009) in this research reflects the strategy development process within my practice. The involvement of internationalisation and business alliance theory as reviewed in this research, as well as the use of the chosen research framework as a guiding structure, was used to iteratively develop a country business strategy within my practice. The abductive research process in this context was then focused by the action research methodology on the practice and not the researcher (Olsson and Olander, 2005, p.2).

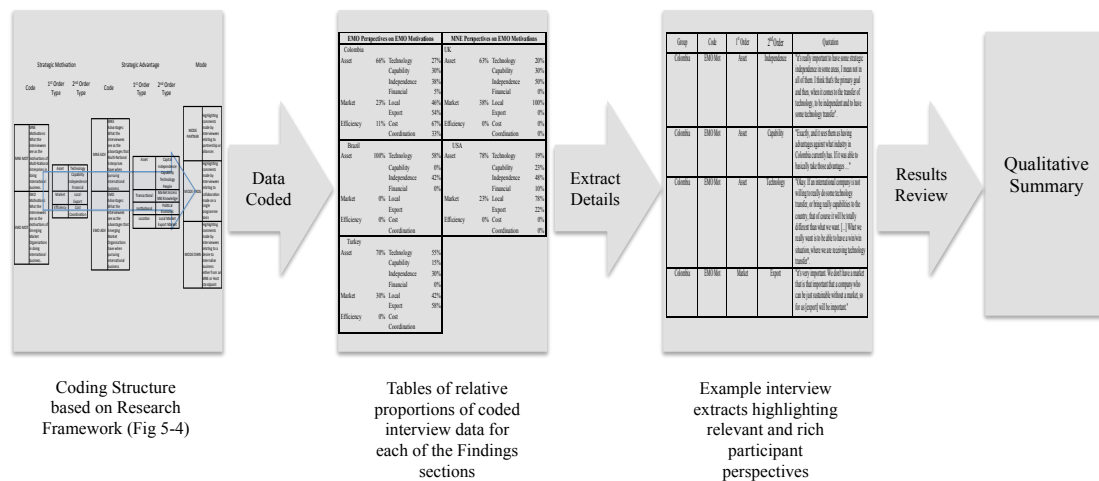


Figure 5-3 Qualitative Findings Flow

Figure 5-3 provides a graphical overview of the flow of results identification in the qualitative findings section with ultimate comparison with quantitative results as (graphically described in Figure 4-3) providing valid associations.

The following three sections analyse the data within each parameter set across the three EMO countries and two MNE countries. Similarities and differences are compared and contrasted.

### 5.2.1 Motivations

The interviews provided a rich depth of perspectives from both EMOs and MNEs on how they viewed motivations behind alliances. From the evolution of Dunning's eclectic paradigm there are four categories of motivation namely: those seeking natural resources; those looking for markets; those seeking efficiency, and; those looking for particular strategic assets or bringing capabilities into the organisation (Dunning, 2006, p.39). As can be seen the "Natural Resource" category was not explicitly noted in the interviews and therefore is not stated in the 1<sup>st</sup> order list in the coding structure. The 2<sup>nd</sup> order descriptions were more challenging as some very useful comments made could be construed as laying in more than one criterion. The coding of the qualitative data was then placed in relevant categories as per Figure 5-2, which when summed provides a numerical indication of interviewee perspectives. This provides signposts to the dynamics in the MNE/EMO dyadic with the narrative providing the depth of understanding, representative examples of which are highlighted in this section.

The issue of motivations is of particular significance when considering the business development role in the research practice. Business growth is of paramount importance with the reflexive nature of this fact needing to be suitably realised when considering the coding and analysis of the interview data. Theory in general suggests that motivations fall into the main categories of price and technical differentiation (Graham et al, 2001) with thought around experience in developing business in practice supporting this view. Discussions around the retention of a viable industrial base has theoretical underpinning in the work of Bitzinger (1994) and is further emphasised by Graham et al (2001) all of which was considered during this section. The commercial imperative and more specifically the cost base as a motivator, for example as discussed by Giegrich (2010), also held meaning while pondering the data.

#### 5.2.1.1 EMO Motivations

The results of the coding showed a clear view from EMOs that the acquisition of assets and particularly technology, independence and capability were of prime importance. The results indicated that they were less driven by markets with issues around efficiency of least interest. From an MNEs' perspective they saw independence as the greatest EMO motivation with the local market as being next in importance.

The following example extracts highlight particular comments made around the need for the transfer of technology into Colombia with these showing the importance of technology transfer to the interviewees though also highlighting concerns regarding the MNEs willingness to adequately transact such transfers. The value of technology in the alliance is clearly identified with the need for balance in the relationship, a win/win situation, a particular objective. Confidence in getting what they want is often doubted. Cynicism as to MNE motivations and behaviours often comes through in the interviews however the understanding that a trade is needed with the provider of technology and that mutual benefit is important, was readily acknowledged. Underlying this desire for technology is acknowledgement of the need to convert the acquisition of assets into practical applied value.

In more specific terms the transfer of know-how, coded as “capability”, was highlighted and particularly around management expertise and the building of infrastructure in high technology areas, which can then more readily absorb transferred technology. The linkage of technology and capability development is explicit both through the use of universities and the local supply chain. The linkage with MNEs advantages and the ability to develop capability was specifically noted. The need to build a better foundation for example through the importation of management skills helps create capability more receptive to further development.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Colombia	EMO MOT	Asset	Independence	"it's really important to have some strategic independence in some areas, I mean not in all of them. I think that's the primary goal and then, when it comes to the transfer of technology, to be independent and to have some technology transfer".	C3
Colombia	EMO MOT	Asset	Capability	"Exactly, and it sees them as having advantages against what industry in Colombia currently has. If it was able to basically take those advantages ..."	C1
Colombia	EMO MOT	Asset	Technology	"Okay. If an international company is not willing to really do some technology transfer, or bring really capabilities to the country, that of course it will be totally different than what we want. [...] What we really want is to be able to have a win/win situation, where we are receiving technology transfer".	C2
Colombia	EMO MOT	Market	Export	"As we don't have a high volume of production, investment for efficiency production is too high. That's why exports is a way to have more production so you can invest money in modernizing your production, your production chain and well, that's the cycle."	C3

Figure 5-4 Example Colombian Quotes on EMO Motivations

Within the basket of strategic asset motivations, the ability to build production independence was the most prevalent. The Colombian desire for independence was articulated in general terms though more specifically around its application through production. The theme linking technology transfer and independence comes through strongly however in the interviews it is clear that the interviewee sees the strategic importance of focus. Specific examples of production independence come out, differentiating maintenance independence from production independence, with the inference that the former is of a lower value than, for example, the opportunity to licence build products.

A further Colombian motive highlighted was the need for self-sufficiency and the ability to craft capability to better match their own needs, with the belief that the latter can only really be successfully done by themselves. The interview extracts highlight the need to support their local customers' requirements indigenously, though the importance of partners is emphasised. Comment is made upon the unique nature of the local market and the need for this to be addressed locally. These motivations are also looking forward to future gained independence being important in the face of future competition.

Efficiency type motivations were divided into “Cost” ahead of “Coordination”. The former is fairly self-explanatory with the latter relating to the desire to have better networks within the industrial base and the assumption that alliances can facilitate this. The ability to produce in a less costly fashion has obvious appeal and together with the coordination of more efficient development and production provides motivation. Comments regarding efficiency as a motivation were noted in the interviews as having relevance when considering alliances though relative frequency of such comments were comparatively low. Related to efficiency the importance of finance was clear with the need for capital identified during interviews. This provides insight into Colombian concerns over budgeting and its impact upon industrial development locally with investment by MNEs seen to be of potential mutual benefit.

The importance of markets is identified in the Colombian interviews, with approximately one quarter of motivations described as being market specific. Further, both the development of the local market and expansion beyond the borders of Colombia, are seen as important motives behind alliances, with relevance to interviewees roughly split half and half between the two. When discussing the local market, the comments relate particularly to maintaining relevance to their customers. The importance of export and the move into third party markets also resonates as a motivation behind alliances. The use of the local market to leverage EMO expansion into exports was specifically mentioned. One reason noted was the limited nature of local market capacity with the implication that there is a need for export to provide the volumes needed for efficient production. It was further noted that this would in itself be a driver towards a more capable and efficient industrial base.

We can see from the Colombian view on EMO Motivations that the desire to gain strategic assets is high. Further, there is a clear understanding that the introduction of relevant know-how, infrastructure and an efficient industry is central, with all this leading to a stronger market position at home and later in the international market. Perhaps most telling as to their motivations is an understanding that there is a trade between those in the dyadic:

*“We are expecting of course something in return” (C1)*

From the Brazilian perspective, motivations were essentially all about gaining assets and capabilities with no real mention of market access as per the Colombian interviews.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Brazil	EMO MOT	Asset	Technology	"Technological benefits. This is the most important motivation"	B3
Brazil	EMO MOT	Asset	Technology	"There's a price to pay, that the armed forces, they are not well-prepared in terms of equipment and in terms of preparations. That presents an opportunity for multinational companies, that have technology know-how, expertise in project management"	B4
Brazil	EMO MOT	Asset	Independence	"On the other hand there is no jobs in the country, there is no income for the country. the money is also exported so we import the good and export the jobs and the money"	B1

Figure 5-5 Example Brazilian Quotes on EMO Motivations

The 2<sup>nd</sup> order coding of the asset criteria shows a predominance of technology as a differentiator against the desire for independence. The first set of interview extracts talk about the need for technology with a clear linkage made between the import of technology and the creation of jobs and the associated self-sufficiency that this would bring. The significance of the application of technology to generate jobs is clear, as is the thread of independence, which explicit in the 2<sup>nd</sup> order coding is also often included together with the prime identification of the need for technology per se. The extracts provide a deeper insight into the relationship between the desire for technology and its greater benefits in terms of infrastructure development and essential capability.

More explicitly in terms of the need for self-sufficiency, the second collection of interview extracts in this section, uncover the desire to build capability, to modernise and ultimately create independence. There is a clear understanding of the relationship between the need to import technology and the price of achieving capacity to fulfil local needs competitively. Further, there is mention of a real need to retain such capability, which might be reflecting on the history in the Brazilian defence industry where a once thriving industry saw a down turn in the nineties and the early 21<sup>st</sup> century (Drumond, 2015). These extracts underline the relationship that the interviewees see between the introduction of technology and the development of independence through indigenous capability. The price to pay is largely seen as



inevitable, with an understanding that overseas involvement is inevitable though beneficial for both parties. It must be understood however that there is again an appreciation of the different perspectives and motivations between MNEs and EMOs.

*“I think in that way, there may be a kind of conflict between the drivers from the multinational company point of view, and the drivers from Brazil’s point of view” (B4)*

When it comes to views from Turkey on the subject of EMO Motivations again the issue of technology is high on the agenda. The issues of know how and the costs associated with the building of capability, was often referred to. The building of a network within the industry to better understand the broader issues around technology adoption and application was discussed. Further, the need to build technology readiness levels and, again, the costs associated with achieving this was highlighted. The mention of how the accumulation of technology can lead to the creation of indigenous products, differentiated within the market is explicit. Acquired technology is seen as a route to market with a clear view of where technology advantage is held leads to the dismissal of other emerging markets as having the potential to provide the level of technology needed and exposes a perception regarding their differentiation as a developed market.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Turkey	EMO MOT	Asset	Technology	"There is no structure in Turkey. In my country, there's no structure to over gap this gap from three to six venture capitals can invest, so I need someone to help me to increase this technology readiness level from three to six"	T2
Turkey	EMO MOT	Asset	Technology	"we're talking about technical capability rather than production. ountry or technology developed country"	T4
Turkey	EMO MOT	Asset	Capability	"First of all, you learn to make business. You learn what standards are leading the industry. As I said, you improve the level of your workmanship, your engineering"	T3
Turkey	EMO MOT	Asset	Independence	"Turkey's aim there is to, at the system level at least, we should be able design our own products, design things that meet our own requirements"	T5
Turkey	EMO MOT	Asset	Independence	"Anyway, to make a long story short, in my mind, the first has to be minimum reliance assurance of dignified self-defense in case of need, in case of failure of your alliances"	T6

Figure 5-6 Example Turkish Quotes on EMO Motivations

The political dimension of motivation is quite explicit during the Turkish interviews both in terms of production for its armed forces and an overarching obligation to the

state. The desire to step up to gaining market access in developed markets is a clear motivation. The use of collaboration to achieve this, as achieved for example through the part production of Airbus A400M and Lockheed Martin F35 programmes, is highlighted. Further, the ability to use their technology as a differentiator when pursuing business in less developed markets is clear.

The desire for technology and production in country and for greater independence is a common theme across host nations. It is interesting that the realisations around the effect of sanctions previously experienced (post Turkish invasion of Northern Cyprus in 1974) had a great impact on the defence industrial strategy in Turkey. Technology differentiation and its importance in the market was also touched upon in Turkish interviews with the following statement underlining this:

*“Once you start to have a product that you can offer, then technical capability will lead rather than production capability” (T4)*

Motivations around the accumulation of strategic assets is not surprising, however with Turkey we see the explicit linkage between the development of technology and the resulting economic benefits derived therefrom. The use of relationships to add value to local organisations through the transfer of know-how is clearly emphasised. The differentiation of “Capability” from “Technology” is highlighted in the 2<sup>nd</sup> order coding. The desire to gain independence through the acquisition of know-how and technology was understandably of high priority. The value of the trade and how to realise advantage leads to discussion around how technology is applied within the organisation as well as the potential of adjacent markets. Issues around the market exposed increasing focus on associated competitive implications and the difference between fulfilling the needs of the local market as a local supplier, and how that translates into international competitiveness.

The move from the protection of being a local supplier to the realities of the international market was discussed in Colombian and Brazilian interviews but more from the perspective of the advantages that MNEs can bring. When reviewing MNEs views on EMO Motivations asset and market related perspectives were particularly discussed. The coding of MNE views on EMO motivations reveals perspective differences from those taken from EMOs. When coding discussions on market

motivations, the desire for market space was by default noted as relating to local markets unless stated otherwise.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
UK	EMO MOT	Asset	Independence	"[EMO] has all the engineering skills and educated individuals to do the job but hasn't got the experience to have done it. They would be really motivated to take on some really challenging work to be able to build that skill capability so that they can become self-sufficient. Ultimately, in N years times, be able to do the full design and development work themselves"	K3
UK	EMO MOT	Asset	Capability	"It's all about them developing a capable, credible world class competitive industry that helps [their] economy moving away from the oil and gas market so they can fit their diversity program"	K2
UK	EMO MOT	Asset	Capability	It also might be about acquiring skills and capabilities that it didn't previously have. In the [sector] business, where we're working, it might be they've got limited skills capacity but actually want to get into something else. They might want to get into, more into, the aerodynamics for examples.	K3

Figure 5-7 Example UK Quotes on EMO Motivations

Of those interviewed from the United Kingdom when citing market related EMO motivations, they were clear regarding the influence of local market issues with a 100% score. When better understanding asset related EMO motivations the acquisition of independence, technology and capability were seen as the main drivers behind alliance formation. Of these three stated motivations the desire to become independent was seen as the strongest. The breadth of different capability positions that EMOs would want is acknowledged with deficiencies seen in their capabilities clearly raised in the context of their ability to achieve such independence. The ability to eventually achieve a more self-sufficient capability, on an incremental path, is mentioned.

As part of this journey to independence, bringing further capability into the industry was noted as a clear aim of EMOs from a UK MNEs perspective. Again, the creation of such capability was often seen as being achieved incrementally. Further, the specific mention of technology within this overall conas all relating to the local market, which again reflects a MNE view that EMOs wish to create capability to serve the local market to in turn generate sustainable business thereby driving further development.

The US interviewees had slightly more variation when considering their views on EMO Market related motivations though again local considerations were in the majority. The majority of discussion was however around asset related motives and although US interviewees saw a variety of EMO motivations, the issue of national independence had the highest score with technology, capability and financial reasons following.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
USA	EMO MOT	Asset	Technology	"Another motivation, which may be in addition to that, or alongside of it would be technology access, so, a company that needs or doesn't want to spend its own internal resources or whatever can partner to obtain some aspect of technology that it wouldn't otherwise get or be delayed years and years from getting"	U3
USA	EMO MOT	Asset	Capability	"They're looking to grow their competencies"	U2
USA	EMO MOT	Asset	Independence	"at the local government level, the motivation for requiring industrial partnership is usually centered around increasing indigenous capability so that their tax dollars stay in the local economy"	U1
USA	EMO MOT	Asset	Independence	"Many, many governments today internalize their acquisition process (.....), they buy outside only what they really, really need to"	U4

Figure 5-8 Example USA Quotes on EMO Motivations

US interviewees see the desire for independence by EMOs as their overriding motivation. The US MNEs see the creation of capability to be an EMO high priority, which they believe cannot be gained organically, at least if they wish to be market competitive. Therefore the taking of the tools to build indigenous capability was seen as the prime motivator amongst EMOs from the perspective of US interviewees. The prime method of building such capability, which in turn builds business, was viewed as the transfer of technology. It was noted that these technologies can be for insertion into products but also for the building of production capability. Financial motivations in terms of saving development capital was a further noted specific asset based incentive. This in more detail sees collaboration as providing a short cut to industrial capability both to drive a greater level of self-sufficiency but also to build jobs growth. There is an undercurrent within the discussions on how such motivations can promote competition and how from a MNEs perspective such collaboration can build competitors.

5.2.1.2 MNE Motivations

The coding of both MNE and EMO interviewees’ views on MNE motivations is clear with the largest frequency of comments relating to market access. The second most frequent MNE motivation viewed by EMOs related to the export market with a small number of Turkish interviewees discussing efficiency related motivations. MNE interviewees cost efficiency was the second most frequent MNE motivation mentioned.

When Colombian interviewees gave their perspectives on the motivations of MNEs in pursuing international business all of the interviewees put this down to a desire to gain market access. Other motivation types such as asset seeking or efficiency seeking were not mentioned. There is a positive differentiation made when considering the local market against incentives around performing business in Colombia as providing a springboard to regional export markets.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Colombia	MNE MOT	Market	Local	"It's also the fact that we actually do have a budget to spend and that we do buy equipment, so I think that that's very attractive to companies"	C1
Colombia	MNE MOT	Market	Local	"Because what they really want to do is get into our market, charge the prices of an international company, but just take us as a subcontractor and then stay, without any technology transfer and everything. Those kind of companies, we really shut the door for them"	C2
Colombia	MNE MOT	Market	Export	".....is very interested in Cotecmar because that's the way they can expanding in the region, Central America and Korea"	C3

Figure 5-9 Example Colombian Quotes on MNE Motivations

MNEs’ prime motivation for engaging in alliances was seen as gaining access to the local market. More depth of view was exposed during the interviews with the linkage between a sustained local presence and the ability to derive better local opportunity clearly articulated. There was a further linkage between access to local markets and the possibility of expansion regionally. The expectation that multi-national enterprises will use the local market to create wider demand was a clear MNE motivator from the Colombian interviewees’ perspective. There was a consistent view regarding MNEs motivations, though not just regarding their home market but also providing a wider regional opportunity.

There were Colombian concerns that such moves would be essentially for the benefit of the MNE and that mutuality was not necessarily a product of alliances. This often made comment, reinforces the concept of MNEs “taking” the market against the best interests of EMOs, reflecting perceptions of relative market power. This could however indicate some bias regarding hosts’ advantages and suggests (perhaps a disproportionate) view of their market's relative importance or perhaps a hope that such a proposition will offer them more leverage (market access) from which to build technological capability. There was quite a lot of further cynicism regarding the MNEs motivations with implications that it was short term in nature.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Brazil	MNE MOT	Market	Local	"I think that the perspective is to achieve our market. We're a big market. Brazil is a real huge market for a lot of products and I think this is the first reason. I think so. Also, now, we have some big products for defense area that will run a lot of requirements for 10-20 years"	B2
Brazil	MNE MOT	Market	Local	"Of course, multinational companies, they want to conquer a larger share of the market, so they have to move to different countries to conquest different clients"	B3
Brazil	MNE MOT	Market	Export	"The Brazilian defense industry, as a platform for exports to other countries where ... With which Brazil has a good relationship"	B4

Figure 5-10 Example Brazilian Quotes on MNE Motivations

The Brazilian view of MNE motivations was clearly seen as being local market driven, though the wider region was also mentioned. These perspectives regarding the importance MNEs’ see in the local market was clear with it outweighing that of the export market, with the expectation that the local market will be attractive and provide a sustainable benefit for MNEs. The interviewees felt that they had an understanding of MNE motivations and further saw the degradation in their local market ownership as a justifiable sacrifice for the betterment of Brazilian industry, for example through the promotion of capability growth. The ability to use Brazil as a point for creating the opportunity for regional expansion was also noted. Such a “land and expand” type strategy was seen across all three EMO interview populations as being a clear motivation for MNEs to collaborate. This again highlights the importance that their local market has in the eyes of EMOs.

As with the other EMO interviewees, access to the local market was seen as the prime reason for MNEs to enter into local alliances. As with other interviewees, Turkish perspectives regarding MNE motivations were that drivers behind moves to new markets were in part due to the slow down in the MNEs’ domestic markets. Therefore the need for MNEs to have a strategy to access market through alliances was an understanding expressed by Turkish interviewees.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Turkey	MNE MOT	Market	Export	"..using some international entity or location to make exports for a country that it's close to"	T5
Turkey	MNE MOT	Market	Local	"The market"	T2
Turkey	MNE MOT	Market	Local	"Of course, first is the domestic market. It is very clear that if you don't have a power of mind power; it's very inherent that the companies, foreign companies, will have demotivated to come into the market. That's the starting point"	T1
Turkey	MNE MOT	Efficiency	Cost	"But another thing might be economical, laborers, especially for labor-intensive work"	T3

Figure 5-11 Example Turkish Quotes on MNE Motivations

Beyond the local market, interviewees were also keen to bring a more international dimension mentioning opportunities for onward export from Turkey. The differentiation of product and market type exported to and from Turkey was also discussed across the interviews with “third world markets” better accessed through Turkey due to political and cost advantages reflected in the Advantages section of the data. The political dimension was prevalent during the Turkish interviews with discussions around alliances having a political motivation for both EMO and MNE. However the exploitation of resources by MNEs within Turkey e.g. cheaper labour, particularly earlier on, was mentioned in the interviews, with cost being seen as another motivation for MNEs putting business in Turkey.

In the case of both UK and USA Multi-National Enterprise interviewee groups the issue of offsets was more prominent. The coding of relevant extracts has been deemed to be “Market” and “Local” as the act of offset is directly related to supporting the sale into the local marketplace. Local market access was clearly seen as the prime motivator by UK interviewees with the understanding that alliances will provide a route to these markets was exposed during the interviews. The reduction in MNE domestic markets is highlighted as a motivation for access to new markets with collaboration a means of achieving this. A further nuance is that alliances not only

accesses local markets but can also provide a competitive edge when competing in those markets against other MNEs. The persistence of presence provided by deeper local collaboration was seen as reinforcing this competitive advantage and helping to build a sustainable business within the particular market.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
UK	MNE MOT	Market	Local	"Absolutely, a key driver for some of the things we are doing on the industrial participation side, there will be a big market access to have in particular. Market's been a big driver there"	K2
UK	MNE MOT	Market	Local	"Slowdown in our perhaps home government's requirements is driving us to look further afield for business opportunities to help supplement the quantities that we have perhaps planned for coming from our own home governments"	K1
UK	MNE MOT	Efficiency	Cost	"In which you could put work into it and you say, "Actually I'll get things done cheaper." Those sophistication things like fabrication or whatever might be done in that particular country. It might take the cost down of a particular offering that you're putting together"	K3
UK	MNE MOT	Asset	Financial	"Particularly some of the things we do around the engineering side would be about getting a partner country or company you might have finances to do something we want to do"	K2

Figure 5-12 Example UK Quotes on MNE Motivations

Expanding market access further to export regionally as a motivation behind local alliances was limited in scale, though noted. Asset related motivations are split 60/40 between financial considerations and a view regarding the bringing in of capability through collaboration. The ability of customers to provide much needed capital was a clear motivation within the financial sub-coding. Motivations relating to Efficiency were all noted as being related to costs and the ability to supply to the organisation in a more cost effective manner particularly at the lower end of the technology scale. The access to capability, in particular skills and facilities useful to the MNE as a whole was mentioned in the UK interviews.

For the United States perspectives on MNE motivations these are a lot more clear-cut with technology, local market and cost efficiencies cited by the interviewees. When the USA interviewees cited local market related motivations, they saw local alliances as helping to execute offset obligations and provide a route to market in itself. For the latter reason the importance of having a “local face” is mentioned, though the realisation that this provides a compromise, or represents a trade of value for access, is understood. In more detail, motivations related to efficiency were lightly discussed



and all deemed to be down to cost with the smallest of the three code types noted by MNE interviewees were asset related with technology the only sub-type mentioned.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
USA	MNE MOT	Efficiency	Cost	"working with a local industry may have an opportunity to have a lower cost of supply and into the big company supply chain that they could use, not only for that country's program, but maybe even back home or on a center of excellence basis"	U3
USA	MNE MOT	Market	Local	"Whether you think you sold it or not you'd better go partner with somebody."	U4
USA	MNE MOT	Market	Local	"Most industrial partnerships are forged to assist in or become a route to market for sales in that partner country"	U1
USA	MNE MOT	Market	Local	"we enter into these relationships because we need a local face to a local customer"	U2

Figure 5-13 Example USA Quotes on MNE Motivations

### 5.2.1.3 Summary of Motivation Results

Local market customer and government considerations were seen as EMO motivations, either in terms of the need to do business for the development of industry or through the specific direction of local stakeholders. The advantages of export, as a part of local industry’s business plans, were highlighted. The interviewees had a range of views on EMO motivations for alliances though the overwhelming reason given was for the acquisition of assets. The market type considerations of Turkish and Colombian interviewees were split roughly equally between local market and export. Surprisingly Brazilian interviews didn’t quote market in this context at all.

Of the “Asset” related motivations the aggregation of views from across all the data returned by EMO participants was less definitive with the majority being split between a stated need for technology and the more specific motivation of gaining industrial independence. All the above being said there is still the understanding that this is a trade, and that both sides will try and negotiate their best position.

*“They don't have to love you. Then you really have to understand what you can acquire from them” (T6)*

MNEs also saw asset related motivations having primacy when discussing EMO motivations. There was further congruence when it came to the relative importance of market led motivations in EMOs with the majority of discussions being around local type market considerations. The majority view from MNEs when it came to asset

related motivations was for the subject of independence, with technology and capability ranked behind.

When consolidating the MNE motivation data from the three sets of EMO participant interviews, the resounding view was that the market is seen as the overriding reason that multi-national enterprises pursue alliances, against a very small number of Turkish interviewees pointing to efficiency as a driver. Again, there is a fair degree of cynicism when it comes to the motivations of MNEs

*“Referring to my real politics, it's like going to bed with an elephant. I mean first of all, you have to recognise the fact that they are not there because they love you” (T6)*

With the importance of overseas markets in maintaining the MNE's home production base also highlighted

*“Market shares and supplementing the market share that we perhaps aren't getting because of reduced spending levels from our own home markets.” (K1)*

MNE perspectives on MNE motivations also reflected the view that market access was the most important issue though the desire to gain efficiencies, exclusively relating to cost, were also revealed. More detail on market access motivations showed essentially that access to the local market of the partner was of prime importance.

*“Slowdown in [.....] requirements is driving us to look further afield for business opportunities to help supplement the quantities that we have perhaps planned for coming from our own home governments” (K1)*

Overall the results would suggest a number of consistencies regarding EMO perceptions with respect to motivations. The need for technology was the most frequently observed requirement with independence also highlighted. Regarding perspectives on the broader issue of relationships these were universally seen as positive with views on what MNEs bring to relationships unsurprisingly reflecting points brought out as EMO motivations i.e. technology and knowledge. Further MNE noted advantages, that formed EMO motivations, were infrastructure and management capability and even the availability of capital. Amongst the interviews there were a couple of interesting comments made regarding the basis of the relationship.

*"I believe it is the same interests it is just that it is something that we really want and that we actually need, but for MNEs I think it is just that we have to do this to have a solid relationship with them and not just sell small stuff" (C1)*

This would suggest EMOs' understanding of differences in demands from themselves and MNEs. There is a slight resignation that a trade is demanded for the technology they require. Further, they often see their market potential as potentially weak both in terms of being able to support indigenous capability and arguably in terms of its value and therefore ability to be traded against technology from outside.

*"We don't have a market that is that important that a company here can be just sustainable with our market" (C2)*

This seems to reveal a deeper cultural issue where there is a deeper lack of confidence regarding their market's value but also in terms of their preparedness for technology-based partnerships.

*"But I think we still have to understand what we want" (C1)*

The practical implications of alliances and the understanding that they are a means to an end in providing a conduit to development is exemplified by the following extract:

*"It's hard to say what's the most ... It really does depend on the phase in the market they are and the maturity of the business. I would think if you were someone [that] really generalised it's got to be ... It's almost like the hierarchy of needs model isn't it? Maslow's, in that what's the most important? Feed me, that's the most important. I need some food. Then after that everything else comes" (K3)*

The concept that alliances are essentially a tactical undertaking with the level of strategic development depending upon the understanding of relative risk, brings out again the fundamental MNE perspective of needing to add sufficient value to make the enterprise workable. The importance of the commercial imperative is easily observed in practice however the counter point to this is observed in EMO behaviours regarding the use of national subsidies for fledgling industry. Theory backs this for example with the "Infant Industry Argument" (Hartley, 2000, p.6). The potential for alliances to expand and grow business is not however lost on Multi-National Enterprises and link to the comments regarding present needs and capabilities. The

springboard that more complementarity in relationships and the potential for common good brings is sensed in this extract:

*“Then depending on the breadth of the capability of that local defense company, there's a chance to grow from that initial [position]” (U1)*

Unsurprisingly the overall perspective within the MNE interviews differed to that portrayed by EMOs. Firstly, when it came to MNEs motivations, beyond the need to access market, issues around competition often came to the fore. The following extract highlights the relationship seen between alliances and competition and the advantages that the former can bring within the context of the latter.

*“They get business out of it. Access to near state-of-the-art technologies because typically we don't ... , we don't want to transfer our latest [technology] and create a competitor.” (U1)*

This can show itself in more tactical scenarios where past performance in the context of collaborative performance is used as a negative differentiation.

*“Yeah, and I think a little of that is on both sides. [MNE] wanted to buy a company in [EMO country] and it was a competing offer with another company, with another multinational. The other multinational was telling the target company, you see what [the MNE] did [previously] with [local company]?!” (U1)*

Motivations and trust in relationships came across strongly, with a degree of cynicism prevailing in EMOs borne predominantly of experience. An example of the perceived lack of equitability:

*“[MNEs] are going to do 10% [of workshare] and are going to charge a lot for that equipment and then “I am going to be able to take your market”” (C2)*

This in turn entrenches perceptions and drives behaviours

*“The Minister has said [on] several occasions that he really wants [local] companies to have JVs with international companies but [...] really working as partners, not [in a] scenario where you do not know anything about the international company and you are paying for everything” (C2)*

### 5.2.2 Advantages

Practice sees advantages competitively and naturally compares and contrasts with others in the market including potential partners who are either from a customer, supplier or competitor background. In conjunction with theory from literature the building of location advantages through international experience as described by Camisón & Villar (2009) holds relevance to both EMOs and MNEs, as do advantages around barriers to market entry as described by Butler (2005) and indigenous technology advantage against the need for capital (Hartley, 2006). Practice and theoretical considerations were used as a prism from which to view the evolving data analysis and when considering the data on advantage, overall those afforded by location and assets were predominant, however institutional types also had significance. The ambiguity found within the data analysis over the importance of advantages when compared to the results for motivations, demands closer inspection.

#### 5.2.2.1 EMO Advantages

There was less clarity on perspectives on EMO advantages, with EMOs seeing location as the main advantage though institutional political advantage and capability also being notable. MNEs were more focused on the ownership of the local market and associated politics as the EMOs main advantages.

The Colombian perspective on advantages held by EMOs fall mainly into those associated with assets and those associated with location. There was a comparatively small percentage related to institutional issues. A level of confidence around the assets owned and deemed differentiated in Colombia was shown as the interview extracts exemplify. This identification of progress in terms of capability has manifested itself mainly in support capability, though increasingly in terms of equipment, for example through the successful indigenous development of riverine craft.

Fundamentally there is a demand to balance advantages with MNEs', which came out across the interviews. The understanding of local industrial deficiencies and associated desires to capture MNE advantages is explicit as is the importance of their operational experience and how that can translate into the development of appropriate, successful products. The industrial fabric in terms of the inherent

infrastructure and the costs associated with doing business in Colombia were cited as advantages.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Colombia	EMO ADV	Location	Local Market	Competitively, I think that what Colombia can provide are opportunities	C1
Colombia	EMO ADV	Location	Export Market	We have a strategic location in terms of geography. We are in the middle of the Americas and also we are an advantage.	C3
Colombia	EMO ADV	Institutional	Political	"In Colombia Indumil has a monopoly through law"	C4
Colombia	EMO ADV	Asset	Efficiency	"We have very good also, very good engineers here in Colombia, and our salaries are not very high, so if you are comparing with us, even think that we are at 30% less pay, so I think that will be something that can be important for a company"	C2

Figure 5-14 Example Colombian Quotes on EMO Advantages

Institutional advantages are identified in the Colombian interviews where they are viewed as providing explicit differentiation. The advantage offered by location is clear to the interviewees with the local market described as being of advantage in terms of equipment acceptance by Colombian customers seen as a useful benchmark for MNEs when trying to sell elsewhere. The structure and growth of the market for MNEs is also seen as advantageous. The ability for Colombian organisations to provide a conduit for MNEs to export markets, essentially within the near region, was readily identified as an advantage with similarities between location, institutional and asset advantages coming through during coding. The cost of infrastructure as a strategic asset, because of either governmental policy or simply inherent through location, all have an influence. Although efficiency will ultimately come down to how individual organisations and firms exploit such advantages, there is arguably an essentially structural element inherent within the location. More difficult to categorise were transactional advantages with the regional advantages offered by Colombia seen as driven essentially by host location, rather than by any network advantage provided by international experience of EMOs.

To be clear on the differentiated positions of MNEs and EMOs Colombian participants' were keen to also offer perspectives on disadvantages. Their perspectives on EMO disadvantages noted during the interviews saw a frustration with what is deemed a short-term strategic outlook, particularly from the government who determines policy around defence procurement and owns the majority of the local

industry. There is a clear recognition of concerns relating to the Colombians’ own culture and how this tends to hold themselves back, again particularly when looking at their vision horizons. There is a strong inference that a short term, cost orientated approach inherent in their culture is holding back their local industrial development. The differences in Colombia’s culture when compared to those of the MNEs as shown by Hofstede (Hofstede, 1983), reflects this.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Brazil	EMO ADV	Location	Local Market	"That's one of the advantages to the local partner. The difficulty in doing business is an advantage to the local partner, to help you navigate in that"	B4
Brazil	EMO ADV	Location	Local Market	First of all, Brazil is a good market, not only for defense products, but for a lot of other products.	B2
Brazil	EMO ADV	Asset	Capability	"I tend to think that more and more Brazil will be able to use its good science to improve in science and put this science in service of its technology"	B3
Brazil	EMO ADV	Asset	People	"Another one is access to ... We spoke of access to human resources, which I think in Brazil, it's fairly well positioned in terms of development of human resources for industrial collaboration"	B4

Figure 5-15 Example Brazilian Quotes on EMO Advantages

When considering the Brazilian interviewees’ thoughts on the advantages that they hold as hosts in industrial alliances, we see that location is seen as strong both in terms of market size but also culturally in its ability to build relationships. The possibility of alliances creating further regional opportunities were mentioned, though this was not perceived overall as a particularly large advantage. The interviewees also highlighted institutional advantages that Brazil holds, with the perception of Brazil’s position in Africa an interesting one, with a positive, sub-hegemonic view, having grown over the past few years. The interviewees also identify some strategic asset advantages that Brazil holds in particular relating to capability in science and in having a creative flair.

Again often keen to also discuss their disadvantages, the interviewees identified technology in this regard, though of more concern was infrastructure and particularly the cost associated with doing business in Brazil. There was far less mention of location specific disadvantages though again the blurring between categories, for example between those categorised as institutional and those as pertaining to location, is notable.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Turkey	EMO ADV	Institutional	Political	"Research support and technology, there are open to have research support, which is also applicable to the foreign companies in the fields of defense industry, so it's an advantage. In the technology part, the state is covering almost 75% of the cost of the project. And if you go for the Turkish Research Council's support et cetera, you may gain some money out of the research. So this is an advantage I think"	T2
Turkey	EMO ADV	Location	Export Market	"70% of our revenue is raised from exports. That means it is not an issue. We still stay competitive. Yes, we see more areas to improve competitiveness and we provide this feedback to Turkish government. For example, a cost of importing right now"	T4
Turkey	EMO ADV	Asset	Efficiency	identical production costs or maybe slightly better production costs, that might be a competitive advantage.	T6
Turkey	EMO ADV	Asset	Capability	"It is on the way of almost all of the local defense industry having its own processes, development process, production process in line with the best of standards, NATO, Stanag, the new standards you know"	T1
Turkey	EMO ADV	Asset	People	"But, for what I may say, they are not taking any in-breeding, so these academicians are coming from the most reputable universities around the world, and they are quite reputable"	T2

Figure 5-16 Example Turkey Quotes on EMO Advantages

The Turkish perspective on their advantages was fairly evenly spread between asset, institutional and location type advantages. The level of developed infrastructure in the Turkish defence industry was often commented upon in terms of the skills of its workforce and quality of its products and capabilities. Of the three countries focused upon, Turkey was the only one where discussions regarding their capability and products were seen as a specific advantage. This includes identification of recognised processes incorporated into the infrastructure. Institutional advantages were mentioned with government support for Turkish industry either internally through incentives or in export markets through export lobbying being explicitly mentioned.

The local market as a draw for MNEs is in itself seen as an advantage to Turkey with the leverage of this to gain a favourable position within an alliance seen as a particular advantage. Further, the relationship between cost, quality and delivery was viewed as critical and an area of understanding within MNEs and as such creating business through alliances offers future potential value to EMOs. When disadvantages were noted, the lack of comprehensive technology transfer allowing broader and deeper indigenous capability was often stated. However, concerns regarding absorptive



capacity and the ability to assimilate transferred technology to a point where real, indigenous value can be gleaned, was also seen as a problem.

During the discussions however a number of disadvantages were uncovered where for example there was shown a lack of perceived confidence in their capabilities and infrastructure and doing the right thing to build a competitive industry. Structural issues within the economy are also seen as a disadvantage. The reach outside of Turkey was discussed as was the experience already held by Turkish companies. However institutional disadvantages were also raised and mainly political in nature relating to the geopolitical situation and often problematic international relations between Turkey and its Middle Eastern neighbours. Further some noted that the need to be seen to “be Turkish” could restrict the openness of relationships with MNEs which might have an impact on MNE investment decisions particularly in the light of competition from other emerging markets i.e. Central and Eastern Europe.

As with other coding categories there are differences in perspectives between EMO and MNE interviewee answers with for example EMO Advantages exposing MNE concerns over the creation of competition through alliances. Asset and location advantages were the most discussed during the Turkish interviews however those relating to institutional issues also held a substantive level of importance. With the former, the importance of efficiency was seen as the greatest advantage that EMOs hold. Cost efficiencies were by far the most cited advantage with manufacturing efficiency and volumes particularly highlighted. MNE perspectives on EMO Advantages were primarily related to the ownership of market space with political advantages seen as the second most important factor with efficiency third.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
UK	EMO ADV	Asset	Efficiency	"In a lot of those markets, they are capable of providing high-quality engineering products at a lower cost"	K4
UK	EMO ADV	Institutional	Political	"because a lot of these big, large industrial activities can only be undertaken with the support of participating governments"	K1
UK	EMO ADV	Location	Local	"Their trump card is often market access to that country"	K4
UK	EMO ADV	Location	Local	To start with, if you are looking for a government contract that's [EMO] or where it's situated, you try and choose a partner that has the skills, has the capabilities, and can help enhance your competitive position for a campaign.	K2

Figure 5-17 Example UK Quotes on EMO Advantages

A particular EMO advantage as seen by UK interviewees was the ability to provide capability to partners and more specifically matching them with the MNEs own skill sets and capabilities. The availability of capital was also highlighted. When discussing location related advantages the relationships of EMOs with their local environment and stakeholders was seen as a particular advantage. More specific discussion around institutional advantages highlighted the political nature of the advantages owned.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
USA	EMO ADV	Institutional	Political	You want to find, one of course, that's technically astute and has the right relationships. Those relationships are not number one in the technical domain. They're number one in political domain.	U4
USA	EMO ADV	Location	Local	"They have a long-term perspective on their country, not just the deal making thing, but a long-term perspective on their customer need, and a desire to fulfill them for the long-term"	U3
USA	EMO ADV	Location	Local	"We think we understand local customers, but the reality is you just don't"	U2

Figure 5-18 Example USA Quotes on EMO Advantages

USA interviewees had a range of views on EMO host advantages within alliances, split mainly between location, institutional and asset types. By far the largest was location which all related to the local market, which again reflects a view that MNEs have the local market as its primary motivation. The second largest advantage seen were institutional with all these being political in nature as was the case with the United Kingdom interviews. This again highlights access to markets and more particularly relative market power as a critical issue to MNEs. Asset type advantages were split between capability and efficiency and not as high a priority area from MNE perspectives.

#### 5.2.2.2 MNE Advantages

The frequency of particular perspectives in the coding for MNE advantages had EMOs seeing technology and capability assets as clearly leading, with people and transactional advantages following. More particularly, technology transfer was the widest cited advantage that MNEs have as perceived by EMOs. The ability to provide product was also specifically mentioned. The inherent ownership advantages of MNEs, beyond the discrete technologies and products that they can provide, were understood. These I have put into the 2<sup>nd</sup> order categories of infrastructure, capability,

technology, efficiency and financial. Regarding the latter, the issue of capital availability arose throughout the interviews, with extracts talking directly to the hope that MNEs can also bring funding to alliances.

Multinationals’ experience as an advantage was clearly seen by EMO interviewees, which in terms of categorisation of Dunning’s advantage definitions, would be seen as a mobile ownership advantage of the MNE (Lundan, 2010, p.52) and therefore as transaction advantages, “Ot” (Dunning, 2010, p.2). This was more specifically expressed in terms of the ability of EMOs to gain market access through this MNE experience.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Colombia	MNE ADV	Asset	Capability	"Exactly, and it sees them as having advantages against what industry in Colombia currently has. If it was able to basically take those advantages ..."	C1
Colombia	MNE ADV	Asset	Technology	Well first, as I mentioned, transfer of the technology.	C3
Colombia	MNE ADV	Transactional	Market Knowledge	"Colombian companies will need time to build an international reputation and this can be assisted by collaboration with international companies"	C4
Colombia	MNE ADV	Transactional	Market Access	"Entering new markets, third-party markets. For us it's very important. We don't have a market that is that important that a company who can be just sustainable without a market, so for us it will be important"	C2

Figure 5-19 Example Colombian Quotes on MNE

The Colombian view of MNE advantages shows how the local interviewees see the differentiated position of those entering their marketplace. The importance of MNE ownership assets is clear and was articulated by Colombian interviewees in terms of the desire for them to gain independence through the acquisition of these MNE asset advantages.

EMO perceptions regarding MNEs disadvantages related firmly to their lack of performance in executing business. The theme that MNEs were purely interested in short term, transactional business was prevalent, and more fundamentally that there was little recognition of the needs of hosts. The importance of “know-how” (coded within “Capability”) as a tangible asset offering capability to organisations is acknowledged, with specifically project management skills being identified. More deeply however, the differentiation of “technology” more as know-how and therefore

actually capability, is clear within the Brazilian interviews. The interviewees related experiences regarding cultural challenges with MNEs and the impact that this has in precipitating a short-term approach from partners. The impact of the issue of reliability in relationships, precipitated through either cultural or institutional issues, was a prevalent theme of discussion.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Brazil	MNE ADV	Asset	Technology	"Definitely, because they are positive. Multinational companies, they are an important source of technology, of know-how"	B4
Brazil	MNE ADV	Transactional	Market Knowledge	..... a comparison of the country that belongs to a defence organisation like NATO for example as a very big expert and market knowledge and more efficient routes on how to work in international markets and this could be bring to Brazil a good experience and expertise that is not very strong in Brazil.	B1
Brazil	MNE ADV	Asset	Capability	"You want to interact with companies that could provide us with good technological capabilities, but also companies that are interested in sharing with us those technological developments"	B3

Figure 5-20 Example Brazilian Quotes on MNE Advantages

The Turkish perception of MNE strategic asset advantages identifies them primarily as bringing advantage to the host through the introduction of technology. This was expressed in the terms of technology and even simpler in terms of the products that the MNE can bring. A richer understanding was offered when more specifically interviewees related MNE asset advantages in terms of technology, know-how, design, production and quality standards. Experience in the building of international business networks was also seen as a clear transactional advantage owned by MNEs.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Turkey	MNE ADV	Asset	Capability	"What has been the role of the foreign companies to help to the local industry to elevate the quality standards, the production standards, even the design standards, through this collaboration"	T1
Turkey	MNE ADV	Asset	Technology	"With this question, I think technology could count into the equation. As you create value by cooperating with the multinational company, you can start to export this value towards parties. That's a big advantage"	T3
Turkey	MNE ADV	Transactional	Market Access	"What you can acquire from multinationals certainly management style, access to international community, getting to know people, exposure"	T6

Figure 5-21 Example Turkey Quotes on MNE Advantages

Transactional advantages are the most of mentioned type of MNE advantage noted during the United Kingdom interviews. The majority related to market access and particularly how working with MNEs could bring the local defence industry the ability to tap into their own local markets, and even further to exports. The opening up of markets, both local and export, is seen as a fundamental to future EMO success.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
UK	MNE ADV	Transactional	Market Access	"the local defense industry rely on big international companies bringing work into their home country to exist and survive because the [orders] coming out of their own home government aren't sufficient"	K1
UK	MNE ADV	Asset	Capability	Work that's matched to the business that they do and additionally a transfer of technology and capability that makes them a richer organization in that you're not just giving them more of the same. You're actually broadening their capabilities.	K3
UK	MNE ADV	Asset	Capability	Capability, experience, credibility, and technology overwrites all those things as well.	K2

Figure 5-22 Example UK Quotes on MNE Advantages

The asset type advantages discussed were primarily about capability, with the UK interviewees having a clear view of their superiority and ability to provide real value in this area to EMOs. This theme of bringing value to the local defence industry was viewed across different category types for example with market knowledge; the objective would be to bring success to the partner through exports. This would highlight the level of development achieved and, again, was also seen as having a particular value in the dyadic. The one mention about institutional advantage related to politics and the influence that could be brought to bear into local markets by their domestic governments.

Asset advantages were the largest of the three types of MNE advantages mentioned by US interviewees, with both transactional and institutional type advantages roughly similar in the minority. Of the asset advantages, capability was by far the most often discussed mentioned. Again, the ability to provide a suitable infrastructure to EMOs and the real value that can provide was clearly articulated. Closely associated with the creation of capability, the ability to provide more specific technologies was seen also as a valuable advantage. Financial advantages were the least mentioned sub-type of the three. Transactional type advantages were all about market access with the

institutional advantages mentioned relating to political type advantages that can provide value to the MNE in the alliance.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	
USA	MNE ADV	Asset	Capability	"the learning from the multi-national to improve their own industrial capability"	U3
USA	MNE ADV	Asset	Technology	"the local industry is looking for technologies, mature products, beyond just basic technology, mature products, mature programs, credible programs"	U2
USA	MNE ADV	Institutional	Political	"It's intended to build, just as it says, partner capacities of defense capabilities in specific nations that are particularly important to the US Peace Foreign Policy, the military side of foreign policy"	U4
USA	MNE ADV	Transactional	Market Access	"Access to world markets, to the extent they have a product with broad appeal"	U1

Figure 5-23 Example USA Quotes on MNE Advantages

### 5.2.2.3 Summary of Advantage Data

The overall view from EMOs on EMO Advantages was split quite evenly between asset and location advantages, with institutional advantages a little way behind these. Multi-Nationals see EMO Advantages as primarily relating to their local market with the difference between EMOs and MNEs in this respect paralleling, though not directly proportionally, the views held on alliance motivations. The MNE interviewees held a range of views on their advantages though the overwhelming their ownership of assets, primarily capability, was seen as being their main advantages when brought to alliances. This essentially matches the EMO perspectives on MNE advantages though they had a far higher regard for technology as an available asset, compared to MNEs, scoring roughly 50/50.

When looking at perceptions regarding EMO advantages local and regional market access were seen as strong positives. From an operational standpoint, the importance of experience with threats came out particularly, and perhaps not surprisingly, from the Colombian participants. The importance of technology and indigenous capability was reflected in discussions around the changing political situation regarding the FARC peace talks and the impact these will have on future planning. Independence in capability production has been highlighted as important with these changes motivating new perspectives.

*"Right now we are changing all our defence planning from a threat based to a capability based plan, so in the future all our acquisitions will be related to capabilities" (C3)*

The size and sophistication of the market overall demands a higher level of technology in products and capabilities when compared to other markets, which determines a higher level of competition between MNEs takes place and therefore promotes differentiation. Although technology is seen by EMOs as an MNE advantage, competition between MNEs offers EMOs the consequent chance to obtain greater levels of technology often without direct investment of their own.

The introduction of data from Turkey provides greater depth in terms of differences in EMO perspectives regarding their strength of their position in the dyadic with MNEs. Moving research locations from Colombia to Brazil there is an increasing level of confidence in the market positions in terms of attractiveness to MNEs and how regional markets can also be leveraged from their countries as bases. Turkey, which has a better developed defence industrial base, sees relationships with MNEs more on an equal footing. Although accepting that the gaining of new technology remains a firm requirement, the narrative is more around the need for partners to add value and ultimately how they can be seen as a collaborative partner in their own right in broader, European, collaborative projects.

*"Since today, more important for me, [is] what I get from that program, what is the industrial benefit ...this should be the main paradigm for any companies who wants to have business in Turkey, and of course for the Turkish government and foreign governments especially as it takes time... it takes five to ten years from idea to programs" (T1)*

Further, those from Turkey increasingly saw their advantages clearer with the balance in relationship with MNEs moving from being focused on developing domestic market capability to one of exploiting export markets. This level of self-confidence is markedly greater than that seen in Colombia and Brazil.

*"We see that in every major supplier there is just one company [in each country], meaning that Turkey should be part of this equation, from government point of view, from user point of view, from industry point of view." (T1)*

Perhaps more telling however is that there was still a general understanding of the relative advantages that MNEs hold and an acceptance of their own shortcomings, which need to be addressed. This was summed up in one interviewee's comments:

*“I need someone to help me to increase this technology readiness level from three to six. But Turkish industrial culture is not in that way. They are not going to invest in the technological products or this high-end risk part of the technology... But multinational companies are quite familiar with the process and they know the win-win situations, so the outcomes of the basic research, is highly qualified, but the integration of this research to the industry is not yet done.” (T2)*

### 5.2.3 Entry Modes

When working through interview data relating to entry modes, practice was constantly reflected upon with experiences relating to commercial imperatives, investment decisions, risk profiling and organisational structures all were at the forefront of thinking. From literature, reflections upon Gajda, 2004, and theories relating to levels of alliance integration and the picture of her continuum, scheduled thinking in this area. Questions regarding competition and collaboration noting particularly Chen & Chen, (2003) also resonated, as did their views on investment commitment together with those of Mayrhofer (2004) and Martin & Eisenhardt (2010).

#### 5.2.3.1 EMO Perspectives on Entry Modes

It can be seen from the results of the data coding that partnership is seen by both EMOs and MNEs as the preferable entry mode with a “programme by programme” approach the second most popular. A wholly owned approach had a very small level of noted interest with those interviewed.

The question of ownership from Colombian interviewees starts to expose a vision of the future, or a dream as noted in one extract, where there is greater, if not sole, indigenous control of industry. There is the acknowledgment however that a state owned monopoly can restrict capital investment and subsequent flow of MNE owned strategic assets, primarily technology. An early point on the entry mode continuum is the more transactional, “programme by programme” approach. It can move to deeper



exchange within industrial alliances, as seen with the Indumil rifle programme, though can come down to a simple supplier/buyer relationship. During discussions around entry modes there were again concerns raised regarding the motivations of MNEs and particularly their use of partnerships to access markets without necessarily returning an equitable level of value to the host.

A sustainable, enduring relationship was seen overall as being preferred with this “quid pro quo” of gaining valuable technology well articulated. The concept of partnership was well exposed as positive within the interviews, which resonates with my experiences in general business discussions in Colombia.

Group	Code	1 <sup>st</sup> Order	Quotation	Source
Colombia	Entry Mode	Ownership	"We are working with ... are earning money from that region. We have here in Colombia a royalties from oil, and those royalties are distributed around the country in the different regions, and one point of that royalties has to go to R&D"	C2
Colombia	Entry Mode	Programme	"The government drive however moves us towards programme based relationships. This is not strategic thinking. If we are to build further we need to have better strategic thinking"	C4
Colombia	Entry Mode	Partner	Enduring relations, yes because those capabilities are for the long-term. The plan is for 2030, the plan we are doing now.	C3
Colombia	Entry Mode	Partner	"As a long-term relationship, of course, because the company would be giving us information and we would have to, the revenues of whatever we do in Colombia or in the region would be shared, so yeah, I believe it would only strengthen the relationship between Colombia and that company. Also, the more you settle in Colombia, the more possibilities you have of actually doing more business"	C1

Figure 5-24 Example Colombian Quotes on Entry Modes

The linkage between partnership and the understanding that the host was more of an equal is an important perception. The view that the market needs to be sufficiently open for MNEs to invest in a partnership is clearly identified, as is the admission that value for MNEs will likely be realised in the longer term. The “flow down” into the supply chain within the country is discussed with the introduction of overseas expertise and market opportunities sought after.

The type of advantage to the EMO host that partnership brings also came out in comments regarding the enhancement of international reputation as well as the development of products suitably branded for international sales. It was seen also as a potential conduit for getting over relationship problems manifested, for example in contract disputes, through a real sharing of assets for the long term. The large majority of those interviewed saw an enduring relationship as positive.

The interviewees from Brazil provided insight into entry mode preferences, which by percentage had partnerships as an overwhelming leader, with programme and ownership modes less discussed. The discussions during the Brazil interviews that touched upon issues around ownership talked largely about control by Brazilian entities ensuring that the ownership and future use of technology introduced was not degraded over time. Generally foreign ownership in Brazil was not seen as positive which is reflected in the recent legislation, which limits overseas voting rights on Brazilian strategic defence company boards to 33% (Correa and Bondarczuk, 2015, p.855.).

Group	Code	1 <sup>st</sup> Order	Quotation	Source
Brazil	Entry Mode	Ownership	"When we have a partnership, the Brazilian company owns the decision, preferable the government wants the decision of some product or some direction that a product will take that belongs to a Brazilian board or a Brazilian company"	B2
Brazil	Entry Mode	Programme	"I think in Brazil in particular, I suspect that some multinational companies, if they are relatively new to the market, rather than trying to test the market, test the partner, before committing to a long-term collaboration in various sectors, particularly if you're not sure about your partner, if he'll be able to deliver. What I see perhaps are, let's test on a small program, and see if it works"	B4
Brazil	Entry Mode	Partner	The situation could bring a new relationship based upon a collaborative venture for a long time [...] more sustainable.	B1
Brazil	Entry Mode	Partner	"Because of the ability of those companies to accept the Brazilian way of doing things and to share and to provide all that is needed in a relationship for both parts to trust in each other. I understand that long-term collaboration tend to be more effective than specific programs to accomplish some very specific target or objective"	B3

Figure 5-25 Example Brazilian Quotes on Entry Modes

When shorter term, programme by programme, alliances were discussed, a recurring theme was the reticence of MNEs to commit to longer term partnerships and instead be more transactional in their approach. This was seen either as relating to a staged approach or simply a lack of commitment. For more niche areas a programme based approach was seen as acceptable though it was unclear what impact the introduction of new technology would have on this mode other than one comment noting the effectiveness of this approach regarding industrial development. The subject of partnerships was further seen as offering such an ability to build indigenous technological capability. Brazilian primacy in alliance relationships was a noted desire with this likely born of experience reducing confidence in partners, however at least conceptually a balanced partnership was seen as ideal during discussions. A richer context was uncovered with some interviewees explaining more about how collaboration through partnership is more likely to bring the type of benefits

envisaged in their original motivations e.g. the transfer of technology and the building of capability infrastructure. The willingness of Brazil to embrace alliances was touched upon, with differences, including culture, between MNEs and host with, again, their related confidence in pursuing relationships, discussed. The requirement to ensure that both partners gain from the relationship was strongly articulated, highlighting particularly the host's role in achieving this.

The Turkish interviewees showed a general acceptance that partnering had its advantages not only for their domestic industry but also for their partners. This theme of advantage to those coming into the market was explicit, particularly in terms of the effect of partnership on success brought by the transfer of technology. The linkage with advantages related to increasing business and the benefits that this brings in a long-term relationship through access to markets was prevalent. As previously seen, the breadth of advantage that partnership can bring was more explicit within Turkish interviews than those in Colombia and Brazil.

For the less committed “programme by programme” approach to alliances, we see that it makes sense to the interviewees and was seen as a credible method of bringing partners together. Uncertainty in the future and issues around the magnitude of the programme undertaken, led to the positive identification of more specific, less integrated relationships providing value, with for example a programme based relationship as a first step towards broader and deeper alliances was seen as a positive option. Further, such an approach was seen as allowing EMO partners to ensure that they protect their future value by not allowing MNEs to internalise in their local market.

The Turkish interviewees further highlighted the importance of offset as being a conduit to technology and industrial alliances as a means of facilitating the alliance with their role as sub-contractor tending to be seen as a necessary rung on the ladder towards greater responsibility. This would be seen as evolving to a position of greater power in the alliance. The strong desire to be a consortium partner, and more importantly to be seen as an equal within such partnerships, was a clear driver particularly of the Turkish government.

Group	Code	1 <sup>st</sup> Order	Quotation	Source
Turkey	Entry Mode	Programme	"Program by program basis. Sustainable, it is not fitting to the nature of the defense industry. The conditions are differentiating, and politics are changing. So programs by programs"	T2
Turkey	Entry Mode	Programme	I mean intentions may be the best from both sides but the first step ought to be always a program.	T6
Turkey	Entry Mode	Partner	"Program limited to the relations are not sustainable anymore. It is indeed old-fashioned programs. Back in the '80s, Turkey, through the offset requirements and other things there, there was founded some joint venture in Turkey. Some are still alive. Some have gone away. The only relations which is sustainable is more integrated relations, like how you get company in Turkey, not only in Turkey but also in the export market"	T1
Turkey	Entry Mode	Partner	Maybe it's better for you to prime in that country, maybe I can prime in this country. That is a very long lasting relationship, I would say. That's the most healthy one.	T4
Turkey	Entry Mode	Partner	"Our motive was to them, our message to them was, "We speak the same language," because you're a foreigner here, foreigner to the rules and regulations, and we know how to deal with them. We can lead you"	T3

Figure 5-26 Example Turkey Quotes on Entry Modes

### 5.2.3.2 MNE Perspectives on Entry Modes

A partnership type entry mode was discussed most by the UK interviewees and seen as a perfectly acceptable method of working together. The lack of long-term commitment and the ability to have a more transactional type relationship is seen to provide flexibility and reduces risk particularly when the majority of value is being provided by the MNE. Purely transactional relationships were touched upon though specifically identified in only one interview which could be due to the lower supply tier level of the owner of that perspective .

Group	Code	1st Order	Segment	Source
UK	Entry Mode	Partner	I would always go much bigger towards the whole joint venture scenario. I think, in that respect, it gives some emphasis and some commitment both from the donating company, international company into the host nation.	K1
UK	Entry Mode	Partner	"If you have the right people managing these organizations, it's quite easy for those teams to work together if they try to achieve the same thing, whatever the cultures might be"	K2
UK	Entry Mode	Partner	My preference is that you go for an enduring, long-term relationship.	K4
UK	Entry Mode	Programme	"If it's an intrinsic, critical subsystem that's really, tightly on the risk curve then you wouldn't want to go any, I would suggest, you wouldn't want to go through any other model than a prime sub type relationship"	K3

Figure 5-27 Example UK Quotes on Entry Modes

The USA participants mirrored to a greater extent the views of those from the UK. Partnership level perspectives were in the majority with programme level entry modes were again seen as flexible and less risky by US interviewees as they were by those from the UK. The internalisation of entry modes through ownership of local entities was seen as having advantage with some US interviewees.

Group	Code	1st Order	Segment
USA	Entry Mode	Partner	"Those markets were multinational defense companies where a defense company has to demonstrate their commitment as it shows skin in the game, the joint venture becomes the easier vehicle than an outright purchase of an entire company"
USA	Entry Mode	Partner	"I guess the other thing that you're looking for is an enduring presence. We're doing a number of things in [region] now to do little business with companies as sort of pipe-cleaning exercises. Learn how to take a contract, learn how to move money, learn how to deliver a product and do that on a lower scale, build confidence, build relationships because ten years from now, we're looking for a position on an indigenous program and the route to that indigenous program is through this influential partner"
USA	Entry Mode	Programme	"It's perfectly fine to start on a program by program basis in order to establish the relationship and merits and proof of commitment and all that sort of thing"
USA	Entry Mode	Programme	"Strategically at acceptable risk might just mean a transactional basis for one large program"

Figure 5-28 Example USA Quotes on Entry Modes

### 5.2.3.3 Summary of Entry Mode Data

The interviewees had a range of views on collaborative entry modes though the most often cited mode discussed was partnership, with programme related modes second, with perspectives on ownership related modes sitting last. The perspectives of MNEs overall also views a more committed partnership as a preferable collaborative route. The ratios of preferences shown between EMOs and MNEs are very similar with the only real difference being the mention of a purely transactional relationship by US interviewees.

Overall this qualitative phase indicates a general preference for building collaborative alliances based on the desire to drive towards a more independent indigenous capability. There is a strong need for externally derived capabilities and technology with, again, an acknowledgement that this will come at the cost of market access. The need for vigilance in negotiating this balance is generally well understood. The assumption that the EMO has market power comes through during the MNE interviews however the level of risk in relationships due to potential problems around partner capability is a clear issue with MNEs

*"They need to be able to deliver that widget, they need to be able to integrate that box inside that platform or outfit that kit or do the final assembly, whatever it is we're asking them to do. They need to come to the party, prepared to do the business"* (U2)

Preferences for sustainable partnerships was strong, although programme based relationships were seen as acceptable more often in the context of providing a first step in a longer process, which echoes the iterative “Uppsala” theory of internationalisation (Vahlne & Johanson, 2013). The ability of the EMO partner to differentiate the MNE positively against its competition, primarily attributed to the EMO’s institutional position in their market, is an advantage keenly prized by the MNE. However perceptions regarding capability and the technical value add that partners can bring, particularly from emerging markets, can be somewhat dismissive.

*“You need to bid the winning equation to say, “What are the factors and what's the weight of the each factor in selecting a partner today?” Then [go for an] acceptable risk business execution.” (U4)*

This issue of balance in the relationship and how risk to the overall enterprise can be influenced by a lack of compatibility in technical and capability areas is apparent to those with a more operational perspective. This can create tension against the route to market advantages of market access seen primarily by those in organisations involved with business development.

*“If you have a 50-50 relationship or whatever the percentage might be to be a component. If one partner is less committed and less focused than the other partner, then it's really, really difficult” (K2)*

The interviews drew interesting insight into a relationship between the level of industrial development held by EMOs, and confidence in the relative strength of their held advantages within alliances. This perception of relative strength in the dyadic and how it influences EMO government defence procurement strategy in light of likely demands from MNEs for their technology and a better overall commercial position in the relationship, precipitate EMO demands for a more powerful position in the alliance. EMOs have aspirations for greater market power afforded through partnerships and MNEs see it more simply as a means to gain market access.

The EMO need for a sustained partnership, and the problems of differing or even competing motivation led strategies, can be seen when third party markets are sought with this borne out in EMO statements relating to MNE commitment. This is one example of issues that can arise in partnerships either due to

industrial/commercial policy or from domestic government legislation, for example with the issuance of export licences to certain end-users.

*“We from time to time see reluctance towards third markets with multinationals” (T4)*

#### 5.2.4 Risks to Alliances

The types of problem that can upset relationships were highlighted through the business risks coding used to provide a moderating impact on the research data. Issues surrounding local bureaucracy and government policy were high on the agenda with laws limiting or banning investment in the defence industry seen as a large risk to progress, with past experience with privatisation going wrong cited as a further reason for government approaches. Overall EMOs saw culture as a major risk factor with their own governments the second most frequently cited threat to alliance success. When considering their situations MNEs clearly saw their own organisations as the biggest risk to alliance success with cultural issues a far second.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Colombia	Risks	Location	Culture	"I think we still have to understand and to honestly believe what we want. Culturally, I think we need to truly believe what we're saying and it is that we're prepared to do"	C1
Colombia	Risks	Location	Culture	"They really ... and because I have seen it. They come here and they say, "Yeah, you are going to do really the 10%? We are going to charge a lot of thing for that equipment, and then I'm going to be able to take your market.""	C2
Colombia	Risks	Institutional	EMO Gov	"Because of their legal jurisdictions or legal regulations, I don't know, being also public, it makes it very difficult for them to do, for instance, a joint venture"	C1
Colombia	Risks	Institutional	MNE Org	"Well, the main problems with international companies has been in terms of contracting obligations"	C3

Figure 5-29 Example Colombian Quotes on Risks to Alliances

The Colombian interviewees were split between emphasising institutional and location related risks to alliances. Issues relating to their home government and associated bureaucracy (EMO Gov) was by far the most cited institutional barrier sub-type. The three other sub-types around their own organisational barriers, MNE organisational barriers and bureaucracy in MNE countries are also touched on. For the latter particularly regarding issues around export licences.

For EMOs cultural differences stood out in terms of the failure to think long term and confidence in their own abilities. Further they saw an inability in overseas partners to understand properly their local cultural norms, and an essentially duplicitous approach of entering partnerships without a real conviction to share.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Brazil	Risks	Institutional	EMO Gov	"Of course, you always compare the experience that you have in going to one country to the experience that you have in going to another country, so I understand that many foreigner companies that come to Brazil, they feel that the burden due to bureaucracy and infrastructure and tax sometimes is too strong"	B3
Brazil	Risks	Location	Culture	"Cultural problem is not difficult to deal with but is probably the biggest one. so the geographical distance is not a big problem because we have the technology so we do videoconferencing, conference calls"	B1
Brazil	Risks	Location	Culture	"In general, the confidence; if you can identify and develop a long-term relationship with a local partner whom you trust, particularly in this sector, particularly in Brazil at the moment, I think that's a big challenge"	B4

Figure 5-30 Example Brazilian Quotes on Risks to Alliances

With Brazil, barriers to collaborative business were divided into three categories, namely asset, location and institutional. With asset related risks, the lack of adequate infrastructure and supply chain were blamed. Location related barriers were majority cultural in nature which was exemplified in a lack of understanding between the parties due to differences in perspective. By far the most consistent theme was however how institutional issues create barriers to success in business alliances. The largest barrier described was that of local government and how their policies impact upon EMOs' abilities to be competitive. All this leads to discussions around the cost of doing business in Brazil and how bureaucracy puts them at a disadvantage. There was an acknowledgement that their own organisations were not necessarily the most efficient and contributed at least in part to competitiveness issues. Problems with MNEs and their governments in facilitating efficient alliances were however also raised.



Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
Turkey	Risks	Location	Culture	"I say, in my rank, the culture becomes the first ... to understand the working environment of the company. There are certain things that doesn't make any sense for you here, but you have to respect them"	T3
Turkey	Risks	Location	Culture	"This Turkish identity, national entity thing, there's no perfect definition of that. It's always working. The competitors have been using it against us. So that's at the back of everyone's head. There is this Turkish foreign question mark. So that's very good sign that Turkey has not adapted itself to global .."	T5
Turkey	Risks	Institutional	EMO Gov	"Taxation and many other things are more like a governmental part of it. I don't know whether it's really effecting a multinational's approach to us"	T4
Turkey	Risks	Institutional	MNE Org	"There may be many reasons why they can not transfer the work over here. I thought regulations in the UK, I guess it's the defense organization making the regulation"	T3

Figure 5-31 Example Turkey Quotes on Risks to Alliances

In Turkish interviews when it comes to barriers to collaborative business the issue of culture was generally seen as a major issue. More specifically Turkish interviewees noted a number of cultural related barriers stemming from MNEs that were seen as a major contributor to problems with alliances. In a number of cases this was articulated in the context of national identity suggesting that differences in culture needs to be recognised when considering alliances. This could be construed as both suggesting that MNEs lack, and even are not interested in, understanding Turkish cultural norms and behaviours and perhaps conversely that Turkish partners do not see deficiencies on their part.

As touched upon earlier, a deeper understanding of EMO frustrations was gained over a seeming lack of interest by MNEs in collaborating to pursue third party markets. There is a difference in perspectives regarding the relative value of third party markets with MNEs regarding the EMO's home market as of value, whereas third party markets of interest to EMOs do not stimulate the same interest. This arguably uncovers a relationship between the organisations' relative market positions and their perceptions regarding export market value. The desire to internalise could therefore be deemed to be a reflection of the EMOs' perspective on their relative ownership advantages, particularly when enhanced by MNE competitive advantages, and its strategic desire to exploit this for further economic rents.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
UK	Risks	Institutional	EMO Org	"They get frustrated if they don't see these big companies ... They think, "You're rich, you can do this, why aren't you moving faster? What's your issue?". I think that's often the biggest obstacle"	K4
UK	Barriers	Institutional	MNE Org	The hoops you have to go through and you have to jump through just to get some very on side, on your side, as a collaborative partner must make them wonder what they're going through when they have all these questions to answer and all these compliance issues to be resolved.	K1
UK	Risks	Institutional	MNE Org	"Making it happen and having the fortitude and stamina to see it through. I often think that's the biggest obstacle"	K4
UK	Risks	Asset	Cost	"There's cost associated with that so you'd look at how can I offset that against future opportunities?"	K3

Figure 5-32 Example UK Quotes on Risks to Alliances

UK interviewees saw institutional related types as the most likely to create a barrier to alliances. They were clear that their organisations provided the largest barriers with questions over the impact on home organisations through overseas alliances and how this can upset the fabric of the company was raised. Issues relating to organisational flexibility however were in the majority.

The risk posed through alliances was another theme that was raised by UK MNE interviewees. Further to the question of risk from alliances the more specific questions around EMO capability and how a lack of competence and quality can adversely impact upon alliances and might be deemed sufficient to present a barrier. A lack of mutual understanding through differences in culture was raised as a potential barrier though the impact of this can be seen as being precipitated through behaviours emanating from both sides of the dyadic.

For United States interviewees, institutionally related barriers were the majority cited risk types. Again the acknowledgement that the problems lay to a greater extent within their own organisations was clearly in the majority. The need to temper internal expectations and foster an appropriate outlook institutionally was seen as crucial in allowing overseas alliances to be embraced rather than rejected due to parochial assumptions around risk. Expectation management was seen by US interviewees as being an issue within EMO organisations. Further the issue of ethical behaviour was raised which if not properly addressed can prove too risky for an MNE to contemplate. The affect that EMO Governments can have in terms of bureaucratic

restrictions was also an identified potential barrier as was local culture and the overall cost of doing collaborative business.

Group	Code	1 <sup>st</sup> Order	2 <sup>nd</sup> Order	Quotation	Source
USA	Risks	Location	Culture	"I think it comes down to cultures, if you can't get common vision and kind of common culture, even if the culture of the collaborative relationship is a bit different than the culture of either company on how they do things on their own, that's fine..[ ]... the people that work in a collaborative relationship have to adapt to that culture of that relationship and the culture of the host country or the third country that they're doing business in, whatever"	U3
USA	Risks	Institutional	EMO Gov	"The foreign country's track record for acceptance of international business "	U1
USA	Risks	Institutional	EMO Org	"There's another side to it which has to do with ethical business conduct. We put ourselves to the mercy of a foreign partner in a nation that doesn't hold itself to the same ethical standards as the US government or the UK government does, in terms of general business"	U4
USA	Risks	Institutional	MNE Org	"Tactical thinking. The lack of strategy, which means the lack of that vision thing and frankly the leadership word be heard in here, it always comes back to "do you have the leadership""	U2

Figure 5-33 Example USA Quotes on Risks to Alliances

#### 5.2.4.1 Summary of Alliances Risk Data

Both EMOs and MNEs saw institutional type issues as the largest potential barriers to alliances though proportionally EMOs were more aware of cultural issues than MNEs. There were a few EMO comments relating to host governments creating barriers to alliances, however by far the largest concerns raised related to MNE government created barriers. The influence of government is clear particularly with US interviewees using the context of US government policy as a driving force behind organisational strategy and tactics.

*“The USG's mandate in this [...] world is to have common capabilities but to also common logistic support and the ability of US forces to rely on foreign government inventories and repair [services] not only common war fighting capabilities. That's a US government imperative that engenders cooperative activities in industry with foreign industry” (U4)*

Restrictions on a company’s ability to properly address the market because of US domestic government policy was a clear frustration amongst US interviewees.

*“That's a major impediment. I will say further on than this the US [Exports Control Reform Initiative] is just a political bad date. It doesn't give US industry the true flexibility it needs. Sometimes with good reason and sometimes just because it's there.*

*It still doesn't go very far at all in allowing us to be competitive in the US government, highly controlled defense export business.” (U4)*

### 5.2.5 Proximity Matrices

The proximity or similarity matrices reflect the analysis of quantitised qualitative data for each of the categories analysed and shows how MNEs and EMOs relate in general direction on the subject areas. This analysis was made using SPSS.

EMO Motivations Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	-0.193	0.199	0.095	0.106
2:Brazil	-0.193	1	0.48	0.132	0.153
3:Turkey	0.199	0.48	1	0.365	0.53
4:UK	0.095	0.132	0.365	1	0.957
5:US	0.106	0.153	0.53	0.957	1

Figure 5-34 EMO Motivations Proximity Matrix

When it comes to EMO Motivations the USA participants are closest aligned with the UK with significance of proximity then decreasing through Turkey, Brazil and finally to Colombia which has the least similar views on the subject to the US interviewees.

MNE Motivations Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	0.95	0.565	0.449	0.395
2:Brazil	0.95	1	0.457	0.301	0.261
3:Turkey	0.565	0.457	1	0.852	0.735
4:UK	0.449	0.301	0.852	1	0.534
5:US	0.395	0.261	0.735	0.534	1

Figure 5-35 MNE Motivations Proximity Matrix

The results regarding perceptions on MNE motivations show a distinct, sliding scale relationship between Colombia and the other focus countries. The USA is the least similar to Colombia followed by the UK, Turkey and Brazil in order of increasing significance.

EMO Advantage Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	0.739	0.878	0.774	0.795
2:Brazil	0.739	1	0.873	0.773	0.867
3:Turkey	0.878	0.873	1	0.802	0.885
4:UK	0.774	0.773	0.802	1	0.949
5:US	0.795	0.867	0.885	0.949	1

Figure 5-36 EMO Advantage Proximity Matrix

The proximity analysis for advantages builds a less distinct picture with the clearest indicator being the similarity between all nationalities when it comes to perspectives on EMO advantages. There are no discernable relationships on MNE advantages perhaps with the exception of strong correlation between the MNEs, the UK and USA.

MNE Advantage Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	0.608	0.608	0.457	0.499
2:Brazil	0.608	1	1	0.013	-0.062
3:Turkey	0.608	1	1	0.013	-0.062
4:UK	0.457	0.013	0.013	1	0.924
5:US	0.499	-0.062	-0.062	0.924	1

Figure 5-37 MNE Advantage Proximity Matrix

The Entry Modes data provides a clear understanding of the preferences across all nationalities taking place with closely aligned similarity between all involved. This reflects the clear preferences for more integrated partnership alliances witnessed during the research.

Entry Modes Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	0.988	0.715	0.888	0.962
2:Brazil	0.988	1	0.812	0.941	0.984
3:Turkey	0.715	0.812	1	0.905	0.823
4:UK	0.888	0.941	0.905	1	0.977
5:US	0.962	0.984	0.823	0.977	1

Figure 5-38 Entry Modes Proximity Matrix

Risks to alliances did not provide stark correlations though did indicate some looser relationships between nations, with the MNEs generally being close to each other in perspective though not exclusively.

Risks to Collaboration Proximity Matrix					
	Correlation between Vectors of Values				
	1:Colombia	2:Brazil	3:Turkey	4:UK	5:US
1:Colombia	1	0.732	0.553	0.367	0.446
2:Brazil	0.732	1	0.254	0.52	0.421
3:Turkey	0.553	0.254	1	0.491	0.34
4:UK	0.367	0.52	0.491	1	0.672
5:US	0.446	0.421	0.34	0.672	1

Figure 5-39 Risks to Alliances Proximity Matrix

Concerns by EMOs around short-term attitudes from MNEs, driven by wider market issues, were often expressed, with an underlying concern being that the trade between market access given, and commensurate value to the host received, was not appropriately balanced. The issue of IPR risk is drawn out in the research data and is primarily seen by MNEs as a risk.

Relationships between R&D and economic growth have been researched for many years with the Institute of Fiscal Studies making a clear relationship (Griffith, 2000, p.2). Nelson (1992) correlated R&D levels with percentages of the economy dedicated to high technology industries, and noted Israel, Sweden and South Korea as exceptions in having considerably higher R&D to GDP levels, with these also having highly capable defence industries, thus offering correlation between R&D levels and technological capability. For high-technology sectors R&D tends to be at a higher intensity (Kayal, 2016, p.77), and organisational growth can be positively correlated with R&D expenditure (Capassao et al, 2015, p.57), which then leads to the suggestion that the level of industrial capability, particularly in high technology intensive sectors, can be reflected in the level of R&D expenditure per-capita.

The limited number of interviewees makes it difficult to generalise correlations between motivations, advantages and entry mode preferences against, say, Hofstede’s cultural constructs. The research and development spend on a per-capita basis shown in Figure 5-40 between the five countries in question shows a similar pattern of relationships to that noticed between the focus countries’ motivations preference data. To extrapolate, it could be argued that there is a relationship between the level of defence industrial development and these relative motivation positions. This is an

interesting dynamic worth further investigation, though not necessarily the basis for suggesting correlation let alone causality.

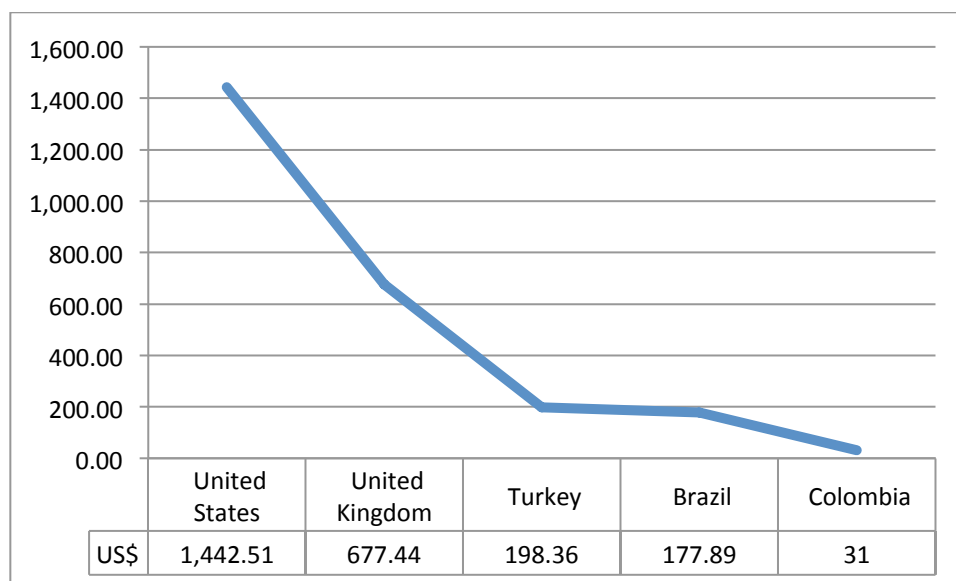


Figure 5-40 R&D per capita in US\$

### 5.3 Quantitative Analysis

I received back a total of 221 responses of which 145 were sufficiently completed. Considering the issues surrounding the sourcing of data from within an industry that is reticent to share information (Butler, 2010, p.703) particularly to someone who is working for a potential competitor, the response was encouraging. It is not possible to determine whether the origin of the recipients were from within or without my organisation. The breakdown of respondents greatly favoured those from MNEs. I have grouped the results into those from UK, USA, Europe, MNE other (Australia and Canada) and EMOs. The latter group for the analysis consisted of respondents from Brazil and Turkey. The breakdown of roles of those participating showed a predominance of Business Developers, with General Managers the next largest group, which together made up nearly 80% of the recipients (Appendix 5).

The survey, detailed in Appendix 3, consisted of questions grouped into different areas relevant to the research framework (Motivations, Advantages, Entry Mode Preferences) with participants asked to respond against a seven point Likert scale. The responses were then batched depending upon their origin i.e. MNE or EMO such that differences and similarities could be assessed. The decisions on data analysis

techniques were driven by the Likert ordinal type data with a technique for one way between groups analysis of variance (ANOVA) for non-parametric data is the Kruskal-Wallis test (Hollingworth et al, 2011, p.3/4) with the three groups of UK, US and EMO. Tables of analytical results output from the SPSS Version 24 statistical analysis tool were then reviewed through a Kruskal-Wallis test and correlation analysis. The Cronbach alpha test undertaken on the data showed reliability of 0.83 which is deemed of a preferable level (Pallant, 2011, p.100).

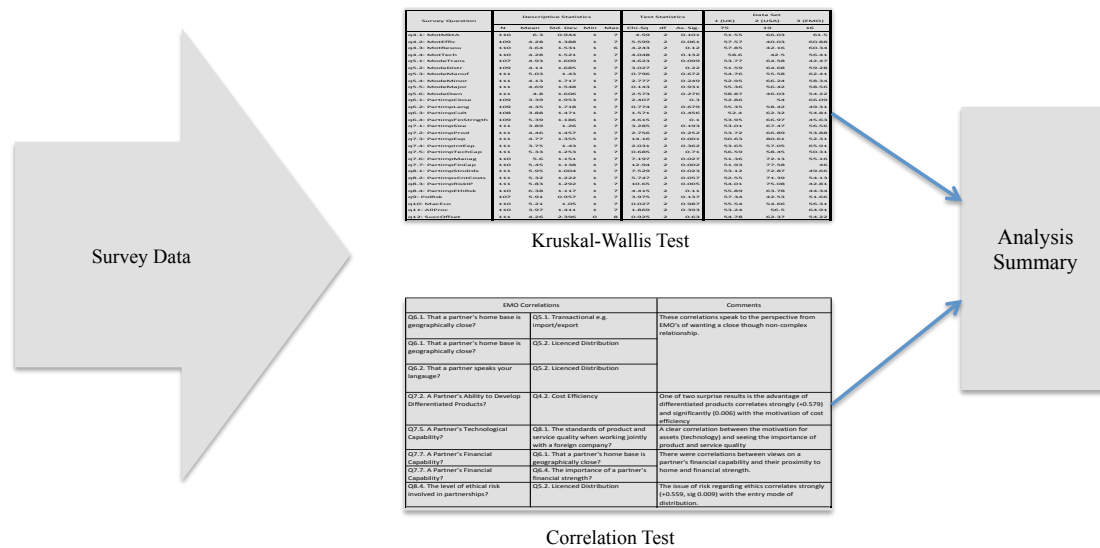


Figure 5-41 Quantitative survey analysis

### 5.3.1 Kruskal-Wallis Test

There is a need to understand what the data from the three groups of survey participants, US, UK and EMO, shows in terms of similarity when discussing perspectives on motivations, advantages and entry mode preferences. This can then be used to reflect against the interview data findings with any associations highlighted. The ordinal type data, gathered from the Likert scale based questions, as described in Appendix 3 and 4, determines that for non-parametric test of more than two groups then a Kruskal-Wallis test would be a valid means of determining significant differences, or not, between the three groups of quantitative data gathered.

The test is to see whether there is a relationship between the three different groups in the survey for the different questions with a significant relationship having the level of significance set at 5% or 0.05. The results of the test show that there is no



significant difference between the three groups with the exception of Questions 7.6, 7.7 and 8.3 where both  $X^2$  and Significance results concur showing significance in differences between the three groups.

The results of the Kruskal-Wallis test (Figure 5-42) provides an indication of relative positioning on the different subject areas. For example do EMO and MNE recipients see a certain motivation as being particularly relevant and what advantages do they see as being most important? The size of data set in the individual groups is not large which brings into question the validity of any test results. The UK set consists of  $n=75$ , USA of  $n=19$  and EMO of  $n=16$ . This exercise therefore will not be able to derive firm conclusions from the survey, however it will be of interest in analysing trends against the different question areas i.e. motivation, advantage and entry mode particularly for comparison against the qualitative data sets.

The subject of market access as a motivation had a high score with all sub-groups identified within the population. Of these the MNEs and particularly the USA stood out as having the issue of market access as a predominant motivator behind international industrial alliances. Strategic resource access was strongest as a motivator with EMOs scoring considerably higher than the lower scoring MNEs.

There were four statistically significant differences identified through the test: Q7.6 “A Partner's Managerial Capability” (0.027); Q7.7 “A Partner's Financial Capability” (0.002); Q8.1 “The standards of product and service quality when working jointly with a foreign company” (0.023), and; Q8.3 “The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company” (0.005). All had outlier results indicating increased concern in these areas from the USA group.

There was general consensus around entry modes with licenced manufacture and majority owned partnerships being generally accepted as suitable however the US respondents had more of a leaning towards transactional relationships when compared to UK and EMO respondents. Ethical and Political Risk were barriers and concerns in alliances identified strongly by all groups through the survey. The USA respondents had higher opinions regarding the level of quality expected from partners and issues

around IPR security, as noted above. EMOs had the highest level of concern regarding macro economic issues affecting alliances. A further result was the concerns around ethical risk in undertaking international alliances with again the overall mean and standard deviation indication a clear view.

Survey Question	Descriptive Statistics					Test Statistics			Data Set		
	N	Mean	Std. Dev	Min	Max	Chi-Sq	df	As. Sig.	1 (UK)	2 (USA)	3 (EMO)
q4.1: MotMktA	110	6.3	0.944	1	7	4.59	2	0.101	51.55	66.03	61.5
q4.2: MotEffic	109	4.28	1.388	1	7	5.599	2	0.061	57.57	40.03	60.88
q4.3: MotResou	110	3.64	1.531	1	6	4.243	2	0.12	57.85	42.16	60.34
q4.4: MotTech	110	4.28	1.521	1	7	4.048	2	0.132	58.6	42.5	56.41
q5.1: ModeTrans	107	4.93	1.609	1	7	4.623	2	0.099	53.77	64.58	42.47
q5.2: ModeDistr	109	4.11	1.685	1	7	3.027	2	0.22	51.59	64.68	59.28
q5.3: ModeManuf	111	5.03	1.43	1	7	0.796	2	0.672	54.76	55.58	62.41
q5.4: ModeMinor	111	4.13	1.717	1	7	2.777	2	0.249	52.95	66.24	58.34
q5.5: ModeMajor	111	4.69	1.548	1	7	0.143	2	0.931	55.36	56.42	58.56
q5.6: ModeOwn	111	4.8	1.606	1	7	2.573	2	0.276	58.87	46.03	54.22
q6.1: PartimpClose	109	3.39	1.953	1	7	2.407	2	0.3	52.86	54	66.09
q6.2: PartimpLang	109	4.35	1.718	1	7	0.774	2	0.679	55.35	58.42	49.31
q6.3: PartimpCult	108	3.88	1.471	1	7	1.571	2	0.456	52.4	62.32	54.81
q6.4: PartimpFinStrngth	109	5.39	1.186	1	7	4.615	2	0.1	53.95	66.97	45.63
q7.1: PartimpSize	111	3.89	1.26	1	7	3.285	2	0.193	53.01	67.47	56.56
q7.2: PartimpProd	111	4.46	1.457	1	7	2.756	2	0.252	53.72	66.89	53.88
q7.3: PartimpExp	111	4.77	1.355	1	7	14.16	2	0.001	50.63	80.61	52.31
q7.4: PartimpIntExp	111	3.75	1.43	1	7	2.031	2	0.362	53.65	57.05	65.91
q7.5: PartimpTechCap	111	5.33	1.253	1	7	0.685	2	0.71	56.59	58.45	50.31
q7.6: PartimpManag	110	5.6	1.151	1	7	7.197	2	0.027	51.36	72.13	55.16
q7.7: PartimpFinCap	110	5.45	1.138	1	7	12.94	2	0.002	51.93	77.58	46
q8.1: PartimpStndrds	111	5.95	1.004	1	7	7.529	2	0.023	53.12	72.87	49.66
q8.2: PartimpsCntCosts	111	5.32	1.222	1	7	5.747	2	0.057	52.55	71.39	54.13
q8.3: PartimpRiskIP	111	5.83	1.292	1	7	10.65	2	0.005	54.01	75.08	42.81
q8.4: PartimpEthRsk	110	6.38	1.117	1	7	4.415	2	0.11	55.89	63.78	44.34
q9: PolRsk	107	5.91	0.957	1	7	3.975	2	0.137	57.34	42.53	51.66
q10: MacEco	110	5.21	1.05	1	7	0.027	2	0.987	55.54	54.66	56.31
q11: AllProc	110	3.97	1.411	1	7	1.869	2	0.393	53.24	56.5	64.91
q12: SuccOffset	111	4.26	2.396	0	8	0.925	2	0.63	54.78	62.37	54.22

Figure 5-42 Kruskal-Wallis Test Results Table

As noted earlier, the results of the survey cannot be deemed definitive due to the size of the group data sets, however there are indications that those from the USA see cultural and linguistic risks higher than the other groups. Further, the importance of

financial strength is also seen as comparatively high. EMO’s see language, culture and financial strength as comparatively lower in importance, though geographical proximity is slightly higher than with the UK or USA.

The perspectives of collaborators to issues around risk provide an insight into how potential partners will cost mitigation strategies. The relationship between perceptions of risk and entry modes was investigated by Agarwal and Ramaswami (1992), with the normative view of entry mode being linked to partner advantage and the highest level of return for adjusted risk (p.3). On this subject respondents from the USA indicated levels of perceived risk markedly higher. With the exception of views around enforcing contracts, EMO respondents returned the lowest scores on the perception of risk.

### 5.3.2 Correlation Tests

For an analysis of data correlation, as the Likert data from the survey was ranked ordinal type data, a Spearman correlation of the UK, US and EMO data was made. The analysis consisted of understanding relationships between question groups reflecting the research framework. Relationships within question groups were ignored as not being relevant to the research questions and likely to show anomalous correlations.

EMO Correlations		Comments
Q6.1. That a partner's home base is geographically close?	Q5.1. Transactional e.g. import/export	These correlations speak to the perspective from EMO's of wanting a close though non-complex relationship.
Q6.1. That a partner's home base is geographically close?	Q5.2. Licenced Distribution	
Q6.2. That a partner speaks your language?	Q5.2. Licenced Distribution	
Q7.2. A Partner's Ability to Develop Differentiated Products?	Q4.2. Cost Efficiency	One of two surprise results is the advantage of differentiated products correlates strongly (+0.579) and significantly (0.006) with the motivation of cost efficiency
Q7.5. A Partner's Technological Capability?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	A clear correlation between the motivation for assets (technology) and seeing the importance of product and service quality
Q7.7. A Partner's Financial Capability?	Q6.1. That a partner's home base is geographically close?	There were correlations between views on a partner's financial capability and their

Q7.7. A Partner's Financial Capability?	Q6.4. The importance of a partner's financial strength?	proximity to home and financial strength.
Q8.4. The level of ethical risk involved in partnerships?	Q5.2. Licenced Distribution	The issue of risk regarding ethics correlates strongly (+0.559, sig 0.009) with the entry mode of distribution.

Figure 5-43 EMO Correlations Analysis

With the EMO correlations and associated comments in Figure 5-43, the desire for closeness both geographically and in language is closely correlated with entry modes at the less integrated end of the integration continuum. Partners bringing quality in technology and capability and differentiated products with cost efficiency offer a view that asset resources are a motivation and a partner advantage, though cost and quality are moderating factors. Financial considerations also correlate strongly.

There was a set of 79 UK responses, which when correlated (Figure 5-44) related the motive of market access with a more integrated entry mode in majority owned alliances therefore linking the relationship between integrated entry mode and market access. The strength, capabilities and experience of partners when entering business relationships is a strong consideration that falls out of the results with a view that financially strong equals a strong capability emerging. Intellectual property and ethical type risks also correlate with entry modes for UK respondents, which highlights their understanding and relative importance.

UK Correlations		Comments
Q4.1. Market Access	Q5.5. Majority Owned Alliance	There was a reasonably strong (+0.307), significant correlation (0.006) between the motivation of Market Access and the entry mode of a majority owned alliance.
Q6.4. The importance of a partner's financial strength?	Q5.2. Licenced Distribution	The relationship between the advantage of financial strength and the distribution entry mode.
Q6.4. The importance of a partner's financial strength?	Q7.6. A Partner's Managerial Capability?	Business type capability advantages correlate with the perspective on a partner's financial strength
Q6.4. The importance of a partner's financial strength?	Q7.7. A Partner's Financial Capability?	
Q6.4. The importance of a partner's financial strength?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	Financial strength also correlates with risk perceptions around quality
Q7.2. A Partner's Ability to Develop Differentiated Products?	Q5.2. Licenced Distribution	The entry mode of distribution and the advantage of a partner producing differentiated products correlates
Q7.3. The international business experience of a partner?	Q5.4. Minority Owned Alliance	The advantage of international operations and experience is seen as important for UK based MNE participants when considering entry mode types
Q7.4. Number of countries a Partner operates in?	Q4.4. Strategic Resource Access (e.g. Technology)	

Q7.4. Number of countries a Partner operates in?	Q5.4. Minority Owned Alliance	
Q7.4. Number of countries a Partner operates in?	Q4.3. Resource Access (e.g. Human Resources)	
Q7.4. Number of countries a Partner operates in?	Q5.5. Majority Owned Alliance	
Q7.5. A Partner's Technological Capability?	Q4.4. Strategic Resource Access (e.g. Technology)	A partner's technical capability is both seen as a motivation for alliances and an operational consideration in alliances
Q7.5. A Partner's Technological Capability?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	
Q7.6. A Partner's Managerial Capability?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	The managerial quality of the alliance partner is seen as important when considering business operational type issues
Q7.6. A Partner's Managerial Capability?	Q8.2. The costs of making and enforcing contracts with foreign organisations?	
Q7.6. A Partner's Managerial Capability?	Q8.3. The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?	
Q7.6. A Partner's Managerial Capability?	Q8.4. The level of ethical risk involved in partnerships?	
Q7.7. A Partner's Financial Capability?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	Risks around quality and IPR loss correlate with perceptions around a partner's financial capability
Q7.7. A Partner's Financial Capability?	Q8.3. The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?	
Q8.3. The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?	Q5.2. Licenced Distribution	IPR loss was also a concern when associated with distribution entry modes
Q8.4. The level of ethical risk involved in partnerships?	Q5.1. Transactional e.g. import/export	Risks around ethical issues correlated with less integrated entry modes
Q8.4. The level of ethical risk involved in partnerships?	Q5.4. Minority Owned Alliance	
Q12. How would you rate the success of offset programmes you have been involved with?	Q7.6. A Partner's Managerial Capability?	The issue of Offset correlated with the importance of partner's managerial capabilities as well as risk of quality issues and the loss of IPR in alliances
Q12. How would you rate the success of offset programmes you have been involved with?	Q8.1. The standards of product and service quality when working jointly with a foreign company?	
Q12. How would you rate the success of offset programmes you have been involved with?	Q8.3. The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?	

Figure 5-44 UK Correlations Analysis

The United States of America set (Figure 5-45) consisted of 21 responses. Market access as a motive correlated strongly negatively with the size of the partner's organisation which can suggest a propensity towards dominating the alliance. Technology is seen as a motivation, correlating with the breadth of international experience, as well as a partner advantage as an asset, which points to technological maturity ideally required from an alliance partner. Financial strength and capability

were again correlated for USA recipients also. These correlations suggest both risk aversion and homophilic tendencies.

USA Correlations		Comments
Q7.1. The Size of a Partner's Organisation?	Q4.1. Market Access	There was a negative correlation found between the motivation of Market Access and the advantage of size of organisation
Q7.3. The international business experience of a partner?	Q6.2. That a partner speaks your language?	The advantage of International experience is correlated with the attribute of partners being able to speak the same language.
Q7.4. Number of countries a Partner operates in?	Q4.4. Strategic Resource Access (e.g. Technology)	The advantage of breadth of international coverage is correlated with the motivation to gain asset resource and the entry mode of distribution
Q7.4. Number of countries a Partner operates in?	Q5.2. Licenced Distribution	
Q7.5. A Partner's Technological Capability?	Q4.3. Resource Access (e.g. Human Resources)	The advantage of technological capability correlates with motivations to gain resources, both human and asset.
Q7.5. A Partner's Technological Capability?	Q4.4. Strategic Resource Access (e.g. Technology)	
Q7.6. A Partner's Managerial Capability?	Q11. What level of changes to your business processes would you foresee when entering into an alliance?	There is a negative correlation between the advantage of managerial capability and the need to change business practices to enter a alliances
Q7.7. A Partner's Financial Capability?	Q6.4. The importance of a partner's financial strength?	There is a strong correlation (.800) between the advantage of financial capability and a desire for a partner to have financial strength
Q11. What level of changes to your business processes would you foresee when entering into an alliance?	Q9. When making partnering decisions what level of importance do you attach to political risk?	There is a correlation between political risk and he need to change processes when entering alliances

Figure 5-45 USA Correlations Analysis

### 5.3.3 Summary of Survey Findings

The mixed methods approach offered the use of analysed survey data to reinforce, in the majority of cases, the findings from the interview data. The quantitative section of the data analysis offered some useful findings through the intent of providing a broader set of primary data, thereby providing deeper exploration into the subject matter. Although with its limitations, the survey data presented results from a clearly differentiated research sample allowing diversification away from the reliance on a single set of stakeholders (Wicks & Harrison, 2012, p.116) leading to a level of triangulation being achieved.

The relevance of the basic tenets of the qualitative and quantitative findings to theory i.e. the importance of new international markets to MNEs and capability/technology to EMOs, was essentially clear across the different research methods, however there was some divergence experienced between results from the two sets of analysis.

When reviewing the subject of EMO motivations in the survey data, local market

access showed strongly. This was noteworthy as it highlights the ultimate aim of EMOs to satisfy local market demands, with the building of capability, indicated by asset motives, providing the road to achieving this. However, although broadly reflecting the qualitative results, there was a seeming ambiguity between EMOs and MNEs in the survey findings towards entry modes as noted earlier. Beyond the implications of an MNE bias in the survey sample, this difference could arguably point towards the complexities within alliances and the need for a contingent approach to entry mode decision making. From a rigour standpoint this is illuminating as it indicates strength in the use of different methods in this research

#### 5.4 Summary

The Findings Chapter has presented the analysis of both qualitative and quantitative data with some clear patterns emerging. The abductive, spiral type approach to this research is reflected in the analyse and reflect nature of moving through the interview coding process to first and second order categorisation of results. When reviewing the data in each section independently against the framework in Figure 5-2 and then back to coding, the richness of the relationships between all the elements became increasingly clear. Mixed methods provides further opportunity to review the understanding of the research parameters within the framework against Kruskal-Wallis test data, together with their standard deviations, provided further confirmation on certain initial results. Moving then around correlations, and quantitised interview data proximity, enabled a layered, more robust view to be uncovered.

##### 5.4.1 Motivations

The qualitative data indicated that MNE motivations were strongly down to Market Access both from MNE and EMO perspectives. This was corroborated by the survey returns. EMO motivations were strongly seen as being towards asset acquisition. EMO perspectives were clear on technology and independence as being the main motives, where MNE's perspectives on EMO motivations saw independence as the stronger motive. The EMO survey data indicated strongly for EMO motives behind asset acquisition though held market access as slightly more important.

#### 5.4.2 Advantages

MNE views on EMO advantages in the interviews highlight the importance of location and more specifically the local market. EMO's have a similar view though put their capabilities a lot higher as an advantage. From both perspectives the importance of understanding local politics is deemed to be high as an EMO advantage. Asset advantages of MNE's are seen as highest in importance in the qualitative data from both MNE and EMO perspectives, with technology and capability scoring high. In the survey, capability as an advantage was deemed high from the perspectives of both EMO's and MNE's, which points more towards asset rather than location advantages having primacy with the survey sample.

#### 5.4.3 Entry Modes

Differences in qualitative and quantitative data gathering approaches were most stark with the entry mode parameter. In the interviews there was a strong leaning towards more integrated entry modes, though with around 10% of EMO comments indicating less integrated types of entry modes as suitable for a relationship. The survey however did not show a clear preference with a slightly stronger leaning with MNE's towards transactional or wholly owned entities and EMO's showing slight preferences towards more integrated alliances. The richness of the data resulting from the interviews could perhaps be a reason behind this seeming anomaly however ultimately the mixed methods approach to research is designed to provide insights into the subject matter (Johnson and Onwuegbuzie, 2004, p.16), which from this a view regarding acceptance of alliances, and further collaboration, would not be unreasonable.

#### 5.4.4 Risks to Alliances

The interviews saw both EMO and MNE seeing risks to progress lying at their own respective doors: EMOs primarily with government, MNEs primarily with themselves. The survey highlighted issues around the dissemination of IPR and ethical issues, with linkages between ethical risk and the less integrated modes of business becoming clearer in the quantitative data correlations analysis. Demarcation between MNE's and EMO's on issues pertaining to risk perception is discernable through the proximity analysis.



Culture was clearly seen during the interviews as having potential for impact upon collaborative ventures, with the impact of current (relative) developmental position and a general desire to do better perhaps a motivator. It can be argued that the wish to gain independence, competitive differentiation and ultimately competitive superiority reflects Maslow's hierarchy of needs in the context of industrial development (Kormanski, 1988). These can in turn be linked directly to the taxonomies of motivation and advantage that each partner will hold.

Beyond that exerted by the external environment, exposure to others within alliances can also impact upon the perspectives of partners, with associated experiences and accumulated knowledge then influencing evolving motivation and advantage sets. Differences between cultural traits at the individual, organisational and societal levels must be borne in mind (De Mooij, 2013) when looking at the results of this research.

## 6 Conclusions

### 6.1 Introduction

Based upon the research framework, this chapter reviews the findings against the research questions and offers structured reflections on the rigour and relevance of the research. As ever with research a number of further subject areas of interest became apparent however restrictions determine that these need to be looked at in more detail in the future. Following the chapter summary, final reflections on the research are then presented.

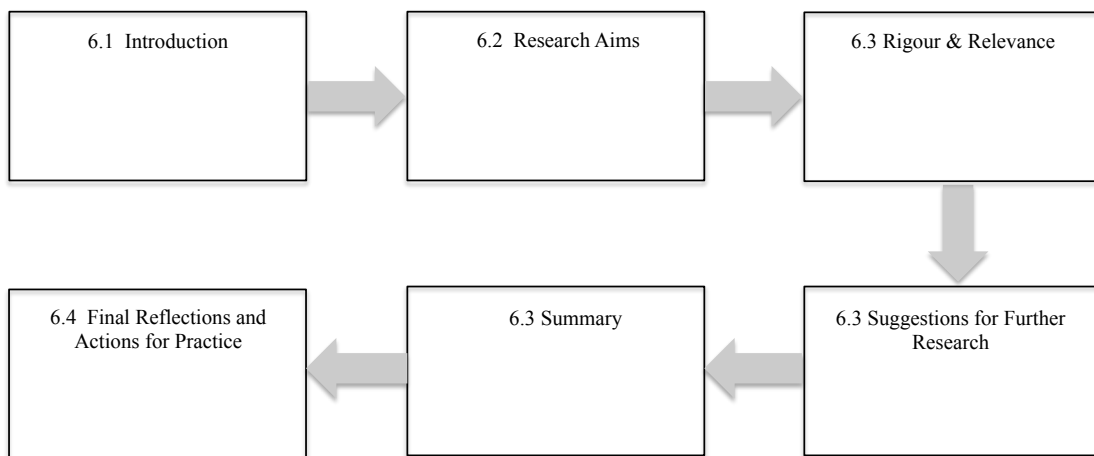


Figure 6-1 Conclusions Chapter Structure

The Findings section uncovered patterns of perspectives from within the rich qualitative data covering all five of the country groups of interviewees. The survey data analysis provided a further indication of relationships between MNE and EMO groups in the research framework areas of motivations, advantages and entry modes. The abductive approach precipitated the development of conclusions determined by the forming of associations (Mayer & Lunnay, 2013, p.2) and subsequent inferences. These associations and inferences lead to theory development and the generation of the revised model (The Emergent Alliance Adaptation Framework, Figure 6-2), that describe the set of relationships and connections within the alliance dyadic tested through reflection on analysed data and practice experience.

### 6.2 Research Questions

When reviewed against the initial Research Questions (Figure 4-3) the following conclusions can be drawn.

### 6.2.1 Research Question 1

*What motivations do EMOs and MNEs hold when contemplating alliances in the defence industry?*

From the results it can be argued that the primary motivation for alliances in international business within Western MNEs is market access. The quantitative survey highlights this however the high score for market access that was also shown by EMO respondents underscores the overall importance of the market, which was expected and reflected in the qualitative analysis. Enterprises and governments within emerging markets were motivated primarily by the import of technology to ultimately generate indigenous capability. This was seen as clear both from the qualitative and quantitative data analysis.

Concurring with literature, the research findings point to MNEs having the prime motivation of seeking new international markets. MNEs view experience in international business as crucial however apprehension exists regarding the maintenance of their competitive position. This is highlighted in concerns explicitly expressed during the research regarding the erosion of technology advantages and the potential for creating competitors when entering into collaborative ventures, an issue which has been raised in past literature (De Beule et al, 2014). Market power and government restrictions on export licensing will play a large part in this dynamic, for example US Defence Diplomacy as a part of foreign policy and International Traffic and Arms Regulations (ITAR) in export licencing, however as market space becomes increasingly competitive then the ability for the procuring side to demand greater technology will arguably increase, rendering such issues a disadvantage to US companies (Ben-ari et al, 2012, p.32/33). The relative strength of the technology edge between competitors will remain crucial in determining sales success. Further to the issue of technology, procuring nations have to understand the relative importance to them of geo-politics, the economy, local politics, industrial development and operational capability when making decisions.

Research to date has provided little real evidence of a clear pan-national strategic motivation behind international alliances. What is emerging however is evolution in overall motivation, which is arguably associated with the level of relative defence

industrial development and therefore the level of perceived host advantage in the context of the collaborative relationship. This research provides insight into how the parties are motivated to pursue alliances, what advantages they see in themselves and partners, and how this precipitates preferences in business entry modes. In the process of this research we can see that there is a relationship between explicit motivations for pursuing international business and the advantages within organisations.

The proximity matrices reflect the analysis of qualitative data showing how MNEs and EMOs differ in general direction on the subject areas. The perceptions regarding MNE and EMO motivations show a distinct sliding scale of relationship with Colombia and the USA at extremes and Brazil, Turkey and the UK then between them in order. Arguably there is a correlation between the level of defence industrial development and the relative positions suggested. Broader practice based experience also suggests an increasing confidence in relative market position reflecting this continuum.

The interviews raised discussion around governments' role in alliances. This can take the form of facilitating cooperative procurement (e.g. Kenny and Brian, 2006) or, more specific to this research, within industrial collaboration directly through the joint design, development and production of platforms, for example the Eurofighter Typhoon or European Meteor missile programmes. Further, emerging market governments can dictate cooperation or collaboration within the local supply chain e.g. through their offset policies. The need for government to foster alliances has broad drivers around technology availability, and inevitably cost, and can expand both within and between continents (Nones, 2007, p.289).

The interviews strengthened the view from the literature that there is an appreciation within the interviewee population that MNE domestic governments will continue to work to ensure that industrial collaboration does not compromise national defence capability (Hayward, 2001) while emerging market governments will continue to work to ensure collaboration is least restricted by licencing etc. The need to understand partners' motivations in a dyadic must be clear, with literature from, for example, Kotabe et al (2000, p.118) reinforcing this from a Latin American perspective. This is a tension often observed in practice. Kotabe et al (2000) offers six

major categories of motivation for Latin American companies to ally with MNEs: access to technical expertise; access to marketing expertise; access to financial resources; direct access to foreign markets; risk and cost reduction, and; access to competitive advantage/blocking further competition. These are all reflected in the results seen from this research.

Motivations will also be potentially set within boundaries, which reflect confidence in capability, particularly when viewed against others e.g. MNE partners. This may in itself temper expectations and therefore diminish value that can be gained from the collaboration (Corker & Donnellan, 2012). A prime motivation within EMOs is to develop ownership advantages through asset seeking, and even asset augmentation, (Demirbag, Tatoglu and Glaister, 2009, p.448) as can be argued is the case with Turkish EMOs. This focus on being in a position to collaborate within developed market programmes came out loud and clear from Turkish interviewees, as they move from a position of capability development to one of competitive advantage which is in turn developed from a local market to a global market position. The development of a competitively differentiated position, to the point of holding transferable ownership advantages, is then a clear point on the overall development continuum.

From this I conclude that there is clear fundamental differentiation in motivations between Multi-National and Emerging Market Organisations with the former primarily motivated by market access and the latter by the introduction of technology and with it capability. Further, motivations develop in a clear path towards growing advantage within the organisation, with this progression being clearly linked to industrial development.

#### 6.2.2 Research Question 2

*Where do EMOs and MNEs believe their comparative advantages lie within the dyadic? What impact does location have upon this?*

From an EMO perspective, the importance of indigenous involvement was underlined as a common thread across the focus host countries. Their perspectives on MNE advantages were unsurprising in that they concentrated upon the areas of particular differentiation sought by developing hosts i.e. technology and market access.

Perspectives on EMO advantages were more diverse with local and regional expertise

facilitating MNE market access a recurring theme. As noted earlier the level of confidence in this technology/market access trade increases with the level of defence industrial development, as highlighted by data from Turkey.

Developing local market expertise and transferring this to export market opportunity highlights the specificity of the domestic market in advancing motivation from advantage. Success in local markets is borne of understanding associated specific market requirements and dynamics and will be transferred advantageously to those markets that hold similar environmental attributes (e.g. Yenyurt et al, 2005; De Beule et al, 2014). This is identified in all three sets of EMO interviews, and particularly in the case of Turkey.

From this research I conclude that perceptions regarding advantage are differentiated between MNEs and EMOs and in turn reflect perceptions regarding motivations. MNEs' advantages spring primarily from their capabilities and particularly technology, and EMOs' advantages lie primarily in their market and those that they have influence upon either geographically, culturally or politically.

### 6.2.3 Research Question 3

*Within this context what business entry modes are favoured?*

There was less clarity in what if any differentiation there was between respondents regarding entry modes. This was similar with both qualitative and quantitative data sets. In general, enduring and sustainable business relationships were preferred to shorter-term programme based arrangements though those with a more developed industrial infrastructure, i.e. Turkey, a “programme by programme” approach was seen as a first step towards a more sustainable partnership. It was however unclear where the generation of an indigenous capability was aimed. For example, some interviews pointed to production independence, with the associated economic advantage of import substitution, as a motivation.

Issues around short-term attitudes from MNEs, driven by wider market issues, were often expressed, with an underlying concern being that the trade between market access given and commensurate value to the host received, was not appropriately balanced. The relationship between motivation and the development of advantage is

highlighted when analysing the research data and comparing and contrasting the EMO responses in interviews. The building of advantage through development of capability in turn drives motivations which reflect an increasing understanding of the value of ownership advantage and its ability to differentiate in the marketplace. This then provides better positioning for collaborators to gain greater value in the dyadic.

Maintaining advantage is of importance, with the protection of intellectual property by MNEs, particularly within knowledge intensive sectors, a priority (Hill et al, 1990). Such concerns would become heightened within collaboration with the level of integration a particular issue when viewed by MNEs, the holders of technology advantage, in this context. This suggests that such concerns will drive those with these ownership advantages to internalise as much as possible (Hill et al, 1990, p.126 citing Dunning, 1983; Rugman, 2010; Vernon and Davidson, 1979).

When considering entry mode control levels, this research would suggest that a more integrated, less internalised approach, for example through joint ventures, is prevalent with those that seek technology type advantages, while higher control is demanded by those that hold these types of advantages leading to a preference for higher internalisation (Hill et al, 1990, p.126). This was however not as pronounced as may have been expected if a competitive dyadic advantage trade environment was expected. This could be a matter of practical contingency with MNEs now expecting the trading of their advantages to be part of the process needed to secure market space in emerging markets.

EMO interviewees remarked upon global reach particularly in terms of networking for success by the corporation as a whole, while there tended to be a narrower product or capability transactional mindset from MNEs. The leverage of the value of the corporation as a whole, as seen by Hill et al (1990), is best maximised when there is closer coordinating control over subsidiaries, particularly in terms of economies of scale in infrastructure. The trade off being strategic flexibility for internal organisational elements (Hill et al, 1990). Corporations will therefore need to consider entry modes into different markets not in isolation but in terms of a broader international strategy.

From this the conclusion is that, in general, alliances and particularly collaboration is seen as positive by both EMOs and MNEs with the former slightly leaning towards more integrated alliance levels than MNEs. In more detail, for both EMO and MNE populations the findings from this research indicate an inverse “U” across the entry mode continuum with medium integration in partnerships outweighing the extremes of less integrated (“programme by programme”) and highly integrated (internalised/ownership). In general this reflects the observations of Ang (2008) presenting a stronger “inverted U” shaped relationship between competitive intensity and collaboration in more technology intensive industries (p.1057), which would be appropriate for the technology intensive defence industry.

#### 6.2.4 Research Question 4

*Does the eclectic paradigm offer a useful basis for a research framework in understanding international defence business relationships?*

The defence context has unique attributes, as it is ultimately governments that make procurement decisions and thus provide market capital. It is also a competitive, high technology market, which demands constant research and development to maintain suitable operational and therefore competitive differentiation. It has become clearer that the complexity of internal and external factors begs the need for a framework to assist organisations in understanding and making investment decisions. Although not initially designed to achieve such, the eclectic paradigm as described by Dunning (e.g. 1973, 1975, 1998) arguably offers the basis of a robust framework for providing a clear understanding of motivations, advantages and preferred business relationships through a structured and systematic way of gathering data from both EMOs and MNEs and its subsequent analysis. The differences between the protagonists have been exposed not only by the parties’ relative ownership/location/internalisation advantages, but further in terms of the environmental forces at play. These will inevitably dictate entry modes and more directly in alliances, the detail of entry mode negotiation.

#### 6.3 Research Contribution: Evolution of the Framework

This research provides a unique contribution to both theory and practice in offering an evolved model extended from Dunning’s eclectic paradigm to understand the



complexity of relationships between the elements involved in alliances in the international defence industry.

Dunning’s eclectic paradigm as shown in Figure 6-3 has been extended in this thesis to provide a suitable research framework as represented earlier in Figure 4-46 and in Figure 6-4 below.

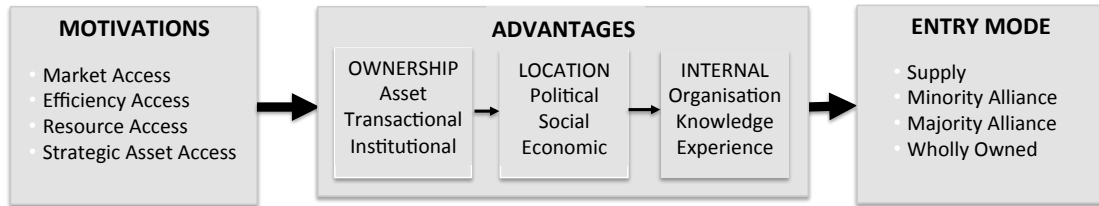


Figure 6-3 The Eclectic Paradigm graphically represented

This extension provides a theoretical focus on the interaction of motivations, advantages and environmental factors and their importance to entry mode decision making.

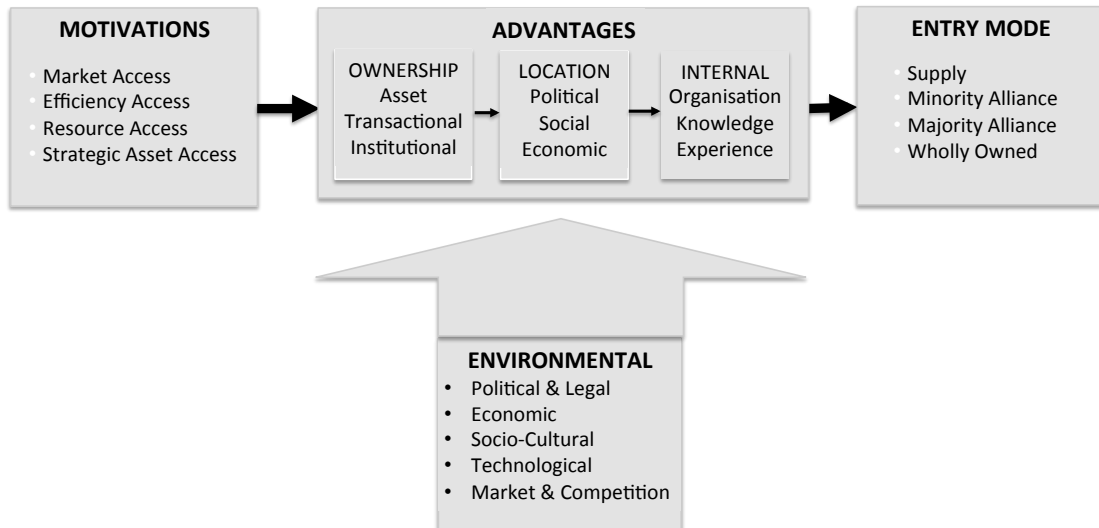


Figure 6-4 The Research Framework extended from the eclectic paradigm

A structure describing the dyadic between MNEs and EMOs can be drawn from this research deriving an extended eclectic paradigm model evolved through the abductive process of moving between the initial framework extended from Dunning and the data as described in the Findings chapter of this study. This structure comes from the analysis of the research data within the context of the overall body of knowledge.

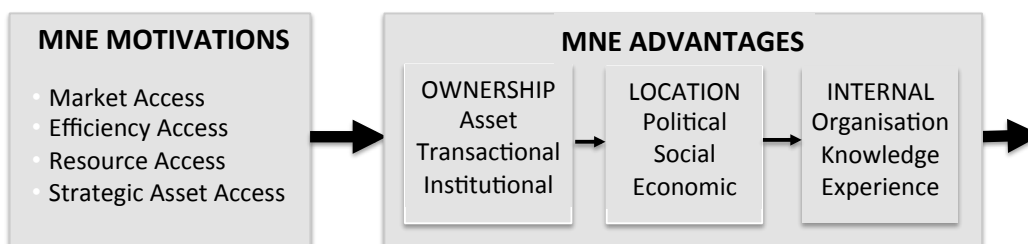


Figure 6-5 MNE Motivation and Advantage Types

It is clear that both MNE and EMO have different motivations and advantages and that these are ultimately responsible for determining the balance of power in the relationship and therefore the entry mode type finally negotiated.

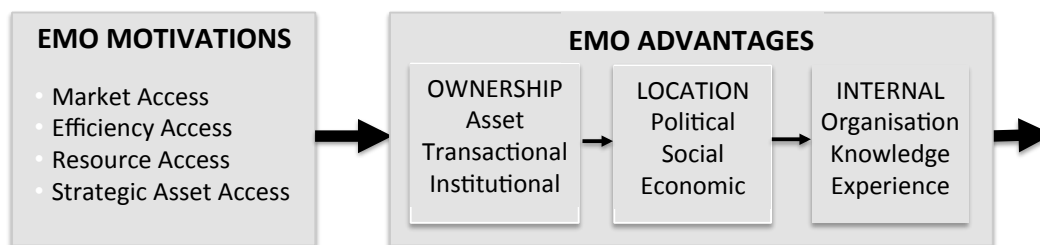


Figure 6-6 EMO Motivation and Advantage Types

As presented in Figure 6-5 and Figure 6-6, each alliance engagement involves the same independent variables although the relative amplitude of each is driven by the particular circumstances that the protagonists bring to the relationship. The findings show the differences in strength of the motivation and advantage elements between the countries researched and how, for example, relative industrial development will determine perceptions of advantage and therefore power in the dyadic. The graphic in Figure 6-7 provides a graphical description of the revised Emergent Alliance Adaptation Framework, which was developed during this research. This importantly shows feedback of alliance experience providing organisational learning, which will in turn schedule future motivations and change capability and subsequently develop advantage. This has theoretical importance as well as applied value in practice.

From direct, transactional sales through loose partnerships to more integrated relationships, entry modes cover the alliance continuum and reflect the types of routes to market encountered in practice. This framework is of practical benefit when for

example differentiating between individual sectors of business within the same geographical market. As comparative competitive advantage is understood against business priorities (motivations) regarding potential future value, then decisions on entry mode investment in each sector can be made. The understanding provided by overlaying this template on motivations, advantages and environmental factors in specific sectors can lead to clarity in deriving multiple route to market strategies in international markets.

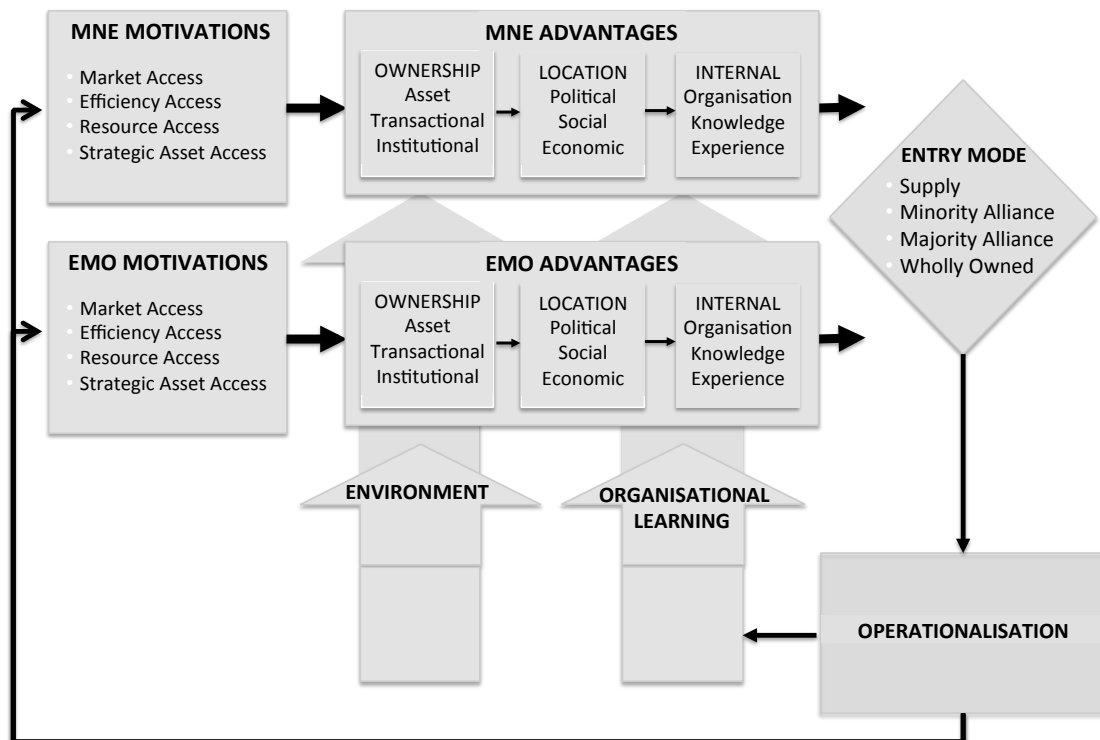


Figure 6-7 The Eclectic Paradigm extended to the Emergent Alliance Adaptation Framework

#### 6.4 Rigour and Relevance

The use of the research framework, based on the extended eclectic paradigm, provides a protocol of procedures that enable the better attainment of rigour and relevance. The structure of the interviews provided a path to consistency in questioning and a relevance of response to the subject matter that importantly enabled benchmarked comparison and contrasting between country respondents. This in turn enabled a better understanding of any differences in perspective that were uncovered. Overall the use of a framework to provide a consistency in research offers the ability to explain the principles at work and therefore derive useable theory (Meredith et al,

1989, p.303). To review this research and its findings against the criteria taken from Shrivastava as presented earlier (Shrivastava, 1987, p.82) the following are presented:

1. Conceptual – the extension of the eclectic paradigm as the basis of a research framework is consistent with modern literature (e.g. Stoian and Filippaios, 2008, p.351; Cole et al, 2007, p.497; Li et al, 2005, p.481) as described in Figure 4-5, extending this work into the international defence industrial sector;
2. Methodological Rigour – the qualitative and quantitative data gathering and analysis within an action research methodology, provided data borne of the practice, sourced through an accepted, abductive, research approach (e.g. Anderson et al, 2015, p.36; Olsson and Olander, 2005, p.1);
3. Accumulated Empirical Evidence – using a broad research population within a notoriously reticent market sector, the breadth and depth of data sourced provides both quantity and quality of view. The data is sourced from 22 interviews which is within an acceptable range (Baker et al, 2012, p.10) and 145 returns to the quantitative survey was deemed acceptable using the following formula (Survey Monkey, 2013) which at 90% confidence level and 7% margin of error for a population estimated at 4.5m people in the defence industry in the USA, UK, Brazil, Turkey and Colombia combined:

$$Sample\ Size = \frac{\frac{z^2 \times p(1-p)}{e^2}}{1 + \left(\frac{z^2 \times p(1-p)}{e^2 N}\right)}$$

4. Meaningfulness – the framework used, facilitating the understanding of differences within the dyadic, articulates an environment within which decisions on collaboration are made. The results stemming from research made within the structure of this framework are comprehensible as well as useful and relevant to the realities experienced in practice (Shrivastava, 1987, p.79);
5. Goal Relevance – the clear, present need to be better informed in markets where the new paradigm of alliance primacy is increasing, makes this research particularly relevant to defence industrial practice. The use of this research in action within my practice reinforces this offering’s insight into the prime motivations of both EMO’s and MNE’s when contemplating international defence industrial collaboration;

6. Operational Validity – the framework and associated criteria provide a practical structure for environmental audit and the understanding of decision-making. Pointing to the motivations that collaborators prefer and how advantages are seen from different perspectives, is useful to all involved in alliances in better understanding how best to approach collaboration;
7. Innovativeness – experience shows that trying to understand alliances and more specifically collaboration has to date been tackled in an ad hoc and non-systematic way. The taxonomy of criteria within the framework offered by the approach derived in this research is both new and applicable to practice;
8. Cost of Implementation – this is a high priority from the practice’s perspective relating to meaningfulness and goal relevance. The better understanding of motivations and how these together with embedded advantages drive entry mode preferences, informs investment decision-making. Further, the potential for spiral development of collaborative relationships along the entry mode continuum based on operationalised experience, can also drive investment optimisation. Any cost involved with the use of the research framework by organisations wishing to determine relevant factors in considering collaboration, will be minimal.

## 6.5 Research Limitations

Action research is a progressive process with iterative changes to the organisation being considered in terms of further change, with the analysis of the organisational situation and picking the correct changes within a practical context, the most appropriate approach (Burnes, 2004, p.983 citing Bennett, 1983). In this research the use of marked changes to the organisation within practice per se was not utilised, there was however incremental change overlaid into the organisation’s strategy providing tangible value to business development performance.

In research there are tensions between the problem owner and the action researcher (McKay & Marshall, 2001, p.47) which can hold its own issues of bias, therefore when assuming the role of scholar-practitioner the need for reflexivity in the qualitative phase of the research is clearly understood. The interaction with others in the interview pilot phase helped ensure reduction in personal bias. Further, the coding had a large propensity for bias with a reiterative review process of the data coding

increasing objectivity. Personal bias was understood as a research risk with efforts to minimise this well in mind. The advantage of applied research is the relationship, and tension, between practice and theory (Jenlink, 2009, 74) and although the ability to be critically reflexive was demanding, it was important in promoting suitable rigour.

The qualitative phase participants were primarily chosen for their relevance to the subject matter and the quality of data that could be gleaned (Sale et al, 2002, p.46), as well as the practicalities of geography and logistics in sourcing the data. The opportunity for rater bias (Alweis et al, 2015, p.52) was understood, with mitigation offered through interviewees being able to preview questions prior to interview. The breadth and depth of the population sample used was primarily dependant upon availability, with a judgement sourcing (Fricker, 2008, p.200) approach taken as earlier described. It would have been better to have had a larger and more balanced set of survey responses. However, due to the routes used for sourcing survey participants, for example through indirect email and via third parties, it was not possible to determine the origin of the recipients from within and without my organisation who participated in the survey. Considering the issues surrounding the sourcing of data from within an industry that is reticent to share information (Butler, 2010, p.703), particularly to someone who is working for a potential competitor, the response was actually encouraging.

The findings from this research clearly provide a tangible contribution to both theory and practice through the better understanding of perspectives within the alliance dyadic and how this drives entry modes. The mixed methods approach helps reveal the complexity of relationships and how motivations and advantages in conjunction with environmental factors affect business choices. Reflecting extant theory regarding power in alliances (e.g. Haeussler et al, 2012, p.222; Todeva & Knoke, 2010, p.127; Rugraff & Hansen, 2011, p.16), the power balance in the international defence industrial alliance dyadic is now better understood as comparative advantage imposes the will of the partner over the other in negotiation. When self determination in defence is a clear motivation then increased levels of industrial capability is a clear determinant of success.

Although not without challenges, the main strength of this research were that the primary data was sourced from individuals in the markets studied and offered a richness of views from which confidence in findings could be determined. It is relevant to those practicing in the defence industry and to those in academia. The data provides sufficient confidence to show relationships between factors in alliances however the correlations found cannot determine causality. Further, although the derived framework provides a clear model for understanding current and future decision making in alliances, it does not offer universal generalizability. This work is of specific value to the defence industry however future understanding of its application to other industries could be of value.

## 6.6 Suggestions for Further Work

This research generated many questions, for example can we say that MNEs see no particular bond to a national home market or is this only true from those coming from certain ethno-cultural backgrounds? It would be interesting to observe whether large US defence companies, for instance, would be more liable to retain an “American First” approach, rather than act as a truly functioning global organisation. Also another aspect to explore is whether government legislation would allow for such an aspiration if it at all exists. Is this the same for organisations originating in Sweden, France or the UK? Perhaps more interestingly, where do loyalties lie within emerging market organisations? Is being truly global, essentially “nationally agnostic”, an advantage or is it a natural consequence of environment, motivations and organisational advantages i.e. are organisations borne of their political environment? It will be important within future research to understand the relationship between political alliances and export market size and how this impacts upon market entry decisions.

From this initial work two potential areas of tension, observed in relationships between international industrial collaborative participants, are worth further study. The first tension is reasonably clear and relates to that between the market access demands of holders of IPR and the technology demands of the owners of market space. The second, which arguably demands more research, is a power tension between the holders of IPR and the holders of capital. Again, the past paradigm

involved MNE home governments providing the capital for IPR development. As defence budgets reduce at home there becomes a multi-faceted problem in that capital for technology/IPR development reduces, the purchase of equipment by home governments decreases, and the purchasing power of overseas customers increases (e.g. Kapstein, 1991; Chu et al, 2012).

Understanding the influence of motivations and advantages in the dyadic and how these form business relationships will also have potential relevance for future research. The lack of absolute balance between collaborative partners could point to the relevance of Leader Member Exchange (LMX) Theory, looking at the focus on the strength of relationships between leaders and members and how it impacts upon leadership effectiveness (Chen and Tjosvold, 2005) in better understanding the power dynamic. Research into distributed teams by Gajendran and Joshi (2012) indicate that LMX together with communication frequency has an impact on team behaviours, not least of which in decision-making (p.1252). How leadership emerges within the dyadic in the light of differing partner advantages and how this then schedules eventual entry mode decisions in collaboration I believe has value in future research.

Further to the potential implications of the relationship between leader and member, the relationship between partners in building alliance absorptive capacity such that commercial success can be optimised, is of interest related to this research. The position of the five country groups within the research framework parameters reflects the relative investment in R&D by country, cited as a factor in the ability to increase absorptive capacity (e.g. Kim and Inkpen, 2005, p.313; Badillo & Moreno, 2015, p.20; Muscio, 2007, p.654)

This paper therefore begs a number of questions to be addressed through future research. For example, can overseas customers (EMOs) provide the much-needed capital for MNEs to maintain their technical advantage and generate IPR of sufficient power to balance this tension? Further, can we see a time when MNE advantages, through the breadth of skills and capability needed to retain market leadership, diminish as prime responsibility becomes increasingly shared with EMOs as they increasingly become the providers of capital? Lastly, could this position precipitate



over time a host nation (EMO) advantage, and what impact would this have on the competitive landscape?

## 6.7 Summary

A description of the theory derived from the results of this research is as follows:

- MNEs will wish to maximise market access, and to realise this motivation they are willing to enter into alliances in new markets on the understanding that this can optimise profit. The extent of integration in entry modes demanded in the dyadic will be dependent upon a) the relative position of advantage held by the partner, and b) the level of motivation e.g. how badly market access is needed.
  - The primary advantage to trade held by MNEs is capability/technology.
- EMOs will wish to maximise indigenous independence through the creation of capability and are willing to enter into alliances to gain the technology and know how needed to achieve this. The extent of integration in entry modes demanded in the dyadic will be dependent upon a) the relative position of advantage held by the partner, and b) the level of motivation i.e. how badly technology is needed.
  - The primary advantage to trade held by EMOs is market access.

As experience and knowledge increases through operationalisation, emergent, adapting motivations and advantages will evolve, thus changing relative power positions in the dyadic and therefore subsequent decisions on the optimisation of entry mode. The experiences drawn from discussions with the three sets of EMO interviewees draw parallels with Regnér & Edman's (2013) arguments regarding arbitrage and institutional ambiguity. The clearer and stronger institutions in Turkey offered less opportunity for arbitrage opportunities for MNEs than those in Colombia or Brazil. Experience trends alliances towards adaptation to local conditions in the case of Turkey. The organisational learning resulting from alliance experience will enable a spiral development of capability in EMOs iteratively building their advantage within the alliance and subsequently balancing the power in the relationship. This would result in less arbitrated value for MNEs over time resulting ultimately in the higher cost of market access.

## 6.8 Final Reflections

Firstly, the emergence of Alliance Capitalism as offered by Dunning (1995) provides a glimpse into the new paradigm and how internalisation in host markets by MNEs becomes more difficult as EMOs become better developed and less susceptible to the power held by MNEs. Ultimately, therefore, the return on investment in internalisation becomes less attractive, and gathering value through alliance becomes more attractive. Turkish interviewees' growing interest in collaboration with developed industry reflects this.

- The relationship between investment in internalisation and the relative level of target market development, and therefore resultant value, becomes a crucial metric and needs to be suitably understood when entering international collaborative alliances.

Secondly, the spiral nature of an abductive research process, by definition, references an evolving body of knowledge. Evolved new knowledge, however small in quantum terms, will have a commensurate role in affecting future theory development. The development of business in the defence market, and more specifically the role of the development of the defence industry in that context, will remain emergent with any particular situation contingent upon the dyadic and the environment within which that sits.

- This spiral development of experience and knowledge will alter motivations and advantages over time and subsequently influence potential change in entry mode decisions within the dyadic and needs to be proactively considered in practice.

Thirdly, the continuous evolution of the eclectic paradigm is discussed in the Literature Review (Figure 3-6). It is impacted by different perspectives, informed by experiences and knowledge, which leads to the richer application of the framework. The experience and knowledge obtained during this research offers new ideas on the framework and how it is applied, specifically with respect to the defence industry. This research confirms that motivations and the use of advantage pre-supposes that entry modes are going to be optimised by one party or the other to their overall

benefit in what will be imperfect markets with the asymmetry of information (Dunning, 1995, p.476), and therefore advantage, exacerbating such differences.

- The “Emergent Alliance Adaptation Framework” (Figure 6-7) is a descriptive, applicable tool to understand the dynamics of international defence industrial alliances to use in practice.

During the writing of this thesis the author has successfully used the tenets of the thesis to set a strategy for collaboration in an emerging market. This led to the creation of a new joint venture taking a successful large local company into a new domain area. Further, this element of the strategy precipitated the pursuit of, and decisions to, collaborate on the design, development and production of that government’s first indigenous, and latest generation, high technology platform. A multi-billion dollar programme that will take all stakeholders on a collaborative journey for the next forty years.

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## 8 Appendices

### 8.1 Appendix 1 - Qualitative Phase Interview Questions

The interview protocol below guided the semi-structured interviews undertaken in both EMO and MNE focus countries.

Research Grouping	Questions	Probes	Discussion Prompts
Motivations	What do you see as the prime motivation behind defence industrial collaboration/partnerships?	What are the main elements of motivations? Technology and/or production independence? Human resource/Jobs? Economic benefits/cost? Operational benefits?	Thoughts from your perspective. Thoughts from the others' perspectives.
Advantages	Do you see international collaborative business relationships as positive for the defence industry?  If so, what advantages do international companies bring to the local defence industry? Of these advantages which would you place as most important? What do you see as the drivers behind international business collaboration by Multi-Nationals? How do these drivers differ to those held by Host Country organisations? Where do you see host nations' competitive advantages in a global context? Where do you see host nations' competitive advantages when pursuing international business partnerships?	Acquiring Capital? Production Independence? Building Capability? Absorbing Technology? Human Resource Development? Gain Market Access? Better Market Knowledge? Political Influences? Economic Influences? Local Market Power? Export Market Power?	What are your experiences?  Partners' perspectives? Reasons behind this? What is to their advantage? Difference in position strength? EMOs broader market advantages?  What do EMOs bring to MNEs?
Entry Modes	What do you see as the preferred business relationship of hosts with international companies? Do you view collaborative relationships as best enduring and sustainable or on a "programme by programme" based? What do you see as the biggest barriers to collaborative business relationships?	Supplier? Alliance partner? Joint Venture? Owner of local organisations?  Do you see alliances as strategic or more of a tactical necessity?  Where do you see the greatest risks lying?	Why?  Long term vision?  Experiences?

Figure 8-1 Qualitative Phase Interview Question

## 8.2 Appendix 2 - Interviewee Details

Type	Country	Affiliation	Country	When	Transcript Words	Notes	Source
EMO	Colombia	Ex-Mod. Foreign Government Liaison. Industry - Foreign Owned	Colombia	October 2014	3150		C1
EMO	Colombia	Civil Service Technocrat. Ministry of Defence	Colombia	October 2014	3383		C2
EMO	Colombia	Senior Official. Ministry of Defence	Colombia	October 2014	4381		C3
EMO	Colombia	Ex-Military Officer. Industry - State Owned	Colombia	October 2014	690	via translator	C4
EMO	Brazil	Company Owner. Industry - Private Owned	Brazil	November 2014	1849	via translator	B1
EMO	Brazil	Senior Official And Academic. Government Ministry	Brazil	June 2015	3653		B2
EMO	Brazil	Industrial Association. Ex-Military Officer. Government Ex-Military	Brazil	December 2014	1952		B3
EMO	Brazil	Defence Infrastructure Investment. Government Ministry	Brazil	January 2015	3087		B4
EMO	Turkey	Senior Executive. Industry - Private Owned	Turkey	February 2015	4005		T1
EMO	Turkey	Experience In Local & Foreign Owned Industry. Industry - Private Owned	Turkey	February 2015	4598		T2
EMO	Turkey	Senior Official. Government Ministry	Turkey	February 2015	5457		T3
EMO	Turkey	Investment In Technology Infrastructure. Industrial Services	Turkey	February 2015	3674		T4
EMO	Turkey	Senior Manager With Engineering Background. Industry - State Owned	Turkey	February 2015	6356		T5
EMO	Turkey	Former Government Official. Industry - Private Owned	Turkey	February 2015	7121		T6
					<b>Total EMO Transcript Words</b>	<b>53356</b>	
Type	Country	Affiliation	Country	When	Transcript Words	Notes	Source
MNE	UK	Offset Specialist. Industry - Private Owned	UK	October 2015	2349		K1
MNE	UK	Ex-Government Official. Industry - Private Owned	UK	February 2016	3074		K2
MNE	UK	Commercial Background. Industry - Private Owned	UK	January 2016	4303		K3
MNE	UK	Engineering Background. Industry - Private Owned	UK	November 2015	3006		K4
MNE	USA	Offset Specialist. Industry - Private Owned	USA	October 2015	3984		U1
MNE	USA	Engineering Background. Industry - Private Owned	USA	October 2015	2243		U2
MNE	USA	Ex-Military Officer. Industry - Private Owned	USA	September 2015	3429		U3
MNE	USA	Commercial Background. Industry - Private Owned	USA	September 2015	5255		U4
					<b>Total MNE Transcript Words</b>	<b>27643</b>	

Figure 8-2 Interviewee Details

## 8.3 Appendix 3 - International Industrial Collaboration Survey Instrument

### Introduction

As part of my Doctorate of Business Administration I am undertaking thesis research into international industrial collaboration. I would be very grateful if you would complete this questionnaire with your personnel perspective on the subject matter very much in mind. As a contributor I will be happy to provide you with a copy of the resultant paper if requested. By taking this questionnaire you agree to participate in this research. Further information regarding the research can be obtained from myself or my supervisor Dr Roula Michaelides (Roula.Michaelides@liverpool.ac.uk). This is a part time course and I am a full time employee of BAE Systems plc. If you wish further information regarding your rights as a research participant, you may contact the University of Liverpool Research Participant Advocate (USA number 001-612-312-1210 or email address liverpoolethics@ohecampus.com). If you wish to understand more regarding the University's data storage and security policy please contact The University Data Controller, Mr Kevan Ryan (Director of Legal Services, Ext. 42110; Kevan.Ryan@liverpool.ac.uk) who is responsible for day-to-day data protection queries. If you would like to know the results of this research please contact me on mbennett@liverpool.ac.uk. Thank you for agreeing to take part in this survey. Your help is greatly appreciated.

### Survey Questions

1. What is your home country?
2. How would you best describe your role?
3. What is the overall annual revenue of your organisation?
4. How would you rate each of the following options as your motivation for pursuing international business? 1 = Not Important to 7 = Very Important
  - Market Access
  - Cost Efficiency
  - Resource Access (e.g. Human Resources)
  - Strategic Resource Access (e.g. Technology)

5. How would you rate each of the following options as routes to international business? 1 = Not Important 7 = Very Important
- Transactional e.g. import/export
  - Licenced Distribution
  - Licenced Manufacture
  - Minority Owned Alliance
  - Majority Owned Alliance
  - Wholly Owned Entity
6. When considering partnerships, how would you rate each of the following? 1 = Not Important to 7 = Very Important
- That a partner's home base is geographically close?
  - That a partner speaks your language?
  - That a partner is culturally similar?
  - The importance of a partner's financial strength?
7. When considering partnerships how would you rate the importance of the following criteria? 1 = Not Important 7 = Very Important
- The Size of a Partner's Organisation?
  - A Partner's Ability to Develop Differentiated Products?
  - The international business experience of a partner?
  - Number of countries a Partner operates in?
  - A Partner's Technological Capability?
  - A Partner's Managerial Capability?
  - A Partner's Financial Capability?
8. When considering partnerships how would you rate the importance of the following? 1 = Very Low to 7 = Very High
- The standards of product and service quality when working jointly with a foreign company?
  - The costs of making and enforcing contracts with foreign organisations?
  - The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?
  - The level of ethical risk involved in partnerships?
9. When making partnering decisions what level of importance do you attach to political risk? 1 = Not Important to 7 = Very Important
10. When making partnering decisions what level of importance do you attach to macro economic considerations? 1 = Not Important to 7 = Very Important
11. What level of changes to your business processes would you foresee when entering into an alliance? 1 = Very Small to 7 = Very Large
12. How would you rate the success of offset programmes you have been involved with? 1 = Not at all successful to 7 = Very Successful or Not Applicable

#### 8.4 Appendix 4 – Survey Question Codes and Descriptions

q4.1: MotMktA	Q4.1. Market Access
q4.2: MotEffic	Q4.2. Cost Efficiency
q4.3: MotResou	Q4.3. Resource Access (e.g. Human Resources)

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q4.4: MotTech	Q4.4. Strategic Resource Access (e.g. Technology)
q5.1: ModeTrans	Q5.1. Transactional e.g. import/export
q5.2: ModeDistr	Q5.2. Licenced Distribution
q5.3: ModeManuf	Q5.3. Licenced Manufacture
q5.4: ModeMinor	Q5.4. Minority Owned Alliance
q5.5: ModeMajor	Q5.5. Majority Owned Alliance
q5.6: ModeOwn	Q5.6. Wholly Owned Entity
q6.1: PartimpClose	Q6.1. That a partner's home base is geographically close?
q6.2: PartimpLang	Q6.2. That a partner speaks your langauge?
q6.3: PartimpCult	Q6.3. That a partner is culturally similar?
q6.4: PartimpFinStrngth	Q6.4. The importance of a partner's financial strength?
q7.1: PartimpSize	Q7.1. The Size of a Partner's Organisation?
q7.2: PartimpProd	Q7.2. A Partner's Ability to Develop Differentiated Products?
q7.3: PartimpExp	Q7.3. The international business experience of a partner?
q7.4: PartimpIntExp	Q7.4. Number of countries a Partner operates in?
q7.5: PartimpTechCap	Q7.5. A Partner's Technological Capability?
q7.6: PartimpManag	Q7.6. A Partner's Managerial Capability?
q7.7: PartimpFinCap	Q7.7. A Partner's Financial Capability?
q8.1: PartimpStndrds	Q8.1. The standards of product and service quality when working jointly with a foreign company?
q8.2: PartimpsCntCosts	Q8.2. The costs of making and enforcing contracts with foreign organisations?
q8.3: PartimpRiskIP	Q8.3. The level of risk of dissemination of your proprietary knowledge when operating jointly with a foreign company?
q8.4: PartimpEthRsk	Q8.4. The level of ethical risk involved in partnerships?
q9: PolRsk	Q9. When making partnering decisions what level of importance do you attach to political risk?
q10: MacEco	Q10. When making partnering decisions what level of importance do you attach to macro economic considerations?
q11: AllProc	Q11. What level of changes to your business processes would you foresee when entering into an alliance?
q12: SuccOffset	Q12. How would you rate the success of offset programmes you have been involved with?

Figure 8-3 Survey Question Codes and Descriptions

8.5 Appendix 5 - Quantitative Survey Results

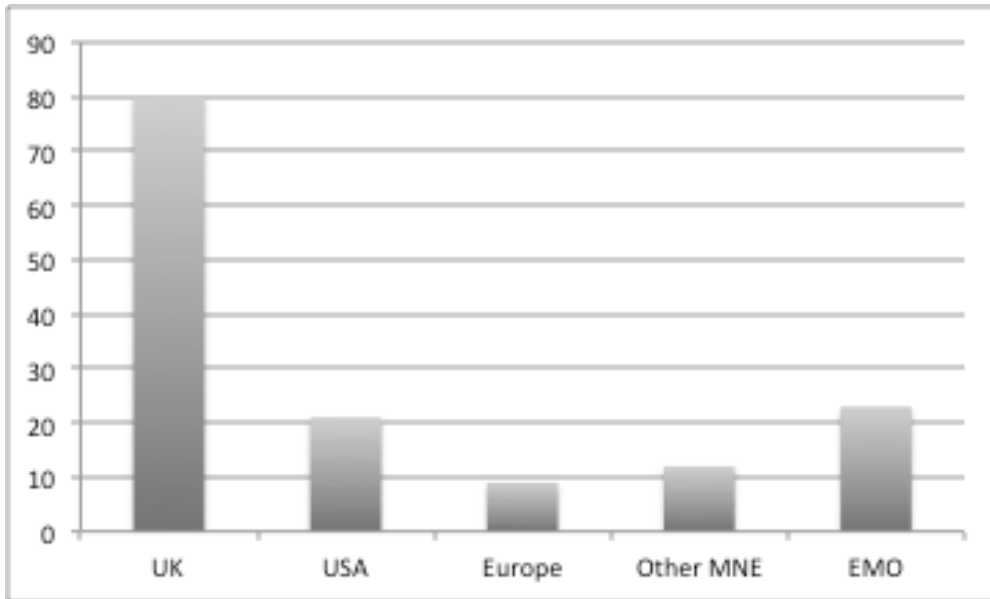


Figure 8-4 Survey Recipients by Group

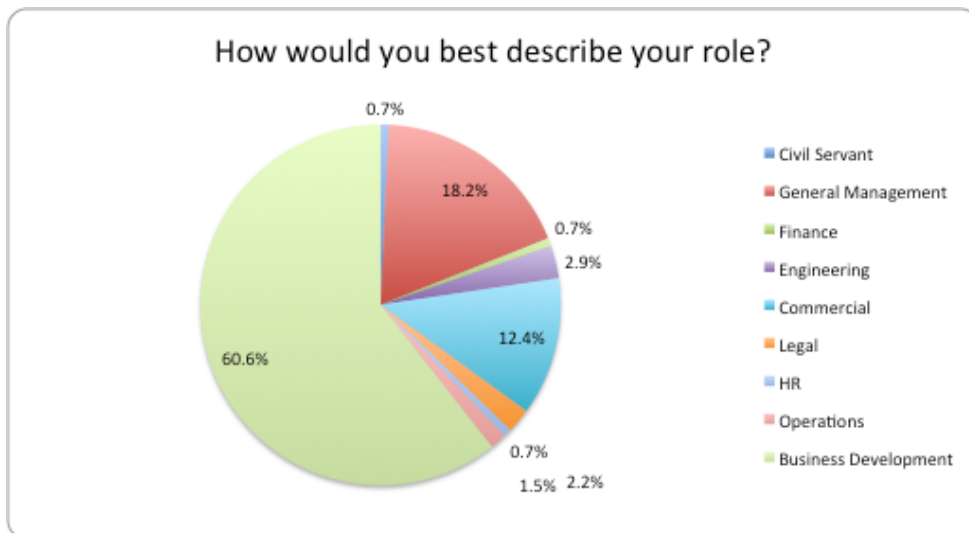


Figure 8-5 Survey Role Percentages





Figure 8-6 Quantitative Survey Results