Foreign Direct Investment (FDI) Choice of Entry Mode by American Multinational Companies (MNCs) in Ireland

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ABSTRACT

The main aim of this study will be to empirically determine the effectiveness of using Dunning eclectic 'OLI' theoretical framework to explain the Chioce of Entry Mode made by American Multinational Companies (MNCs) into Ireland in the period 1999 to 2010.

This study will explore how Ownership Advantages, Location Advantages and Internalization advantages (‘OLI’) influence their Choice of Entry Mode made between greenfield investment (wholly Owned) and joint venture (JV) by American multinational companies. The most important factors among these three sets of advantages will also be identified and hopefully, this study will also provide suggestions and knowledge on different Chioce of Entry Modes for American MNCs that decide to invest in Ireland in the future.

Declaration

I, Timothy Omoruyi Ogiemwonyi, declare this dissertation in its entirety to be my own work. All quotes and work by others used within are referenced, details of which can be found in the Bibliography.

TIMOTHY OMORUYI OGIEMWONYI

Signed ……

25 / 08/ 2011

Date …….

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I. FDI	Foreign Direct Investment
II. MNCs	Multinational Corporations
III. MNEs	Multinational Enterprises
IV. EMC	Entry Mode Choice
V. FSIZE	Firm Size
VI. NEWPROD	New Products
VII. EXPERIEN	Experience
VIII. MARKPOT	Market Potential
IX. GOVEREG	Government Regulation
X. PROCOST	Production Cost
XI. AVALSKI	Availability of Skills
XII. POSOECST	Political, Social & Economical Stabilities
XIII. COTRISK	Country Risk
XIV. RDINTEN	Research & Development Intensity

XV. WOs	Wholly Owned Subsidiary
XVI. J.V	Joint Venture

CHAPTER 1

Foreign direct investment, Ireland and America

1.0 Introduction

Graham & Spaulding (2005) defined foreign direct investment as the act of a company from its country of origin, making investment in a foreign country

In the last three decades, there has been significant global growth in foreign direct investment (FDI) flows involving large number of multinational corporations (MNCs) and other small medium enterprises (SMEs), due to changes in the long-term structure of international economy.

Foreign direct investment (FDI) has continued to play an extraordinary and growing role in global business. The process has provided firms with such advantages as new markets, marketing channels, cheaper production facilities, access to new technology new, products, skills and financing. For a host country that receives the investment, it becomes a source of new technologies, revenues, products, jobs creation and management skills, and which finally act as a stimulus for a host country as economic development.

While the global investment pattern has encouraged these investment practices to include the acquisition of a lasting management interest in a company or enterprise outside the investing firm's home country, taking forms such as a direct acquisition of a foreign firm (M&A), greenfield investment (wholly owned), or

investment in a joint venture or licensing of intellectual property (Graham & Spaulding 2005).

In the last decade, Ireland has experienced a great increase in the flow of inward FDI, which was encouraged by the performance of international economies and the country changes in its comparative advantages, when compared to other countries (Gray, Swinand & Batt 2010, p.34).

Ireland as an open economy in relative to its size, was seen to have retained among its strengths, as a continuous location for foreign direct investment and also –which also include its track record as an established successful location for foreign investors, internationally modern trading enterprise base and with a high level of research and development activities (Forfas 2010, p14).

United States of America is a country known to have made a substantial investment into Ireland, strongly base on long-term economic relationships between both countries and the importance of foreign direct investment to Ireland. Lots of factors have attracted lots of multinational companies to establish or locate their activities to Ireland and American companies are known to have taken a larger share of this proportion. Other factors known to have attracted American Multinational companies also include factors such as the available workforce, cultural distance(English speaking population), and government regulation, hub to serving other continents base on the fact that it belongs to the European Union, R&D intensity , risk associated with misuse of propriety knowledge and corporation tax.

For Ireland economic success so far, investments by American companies have been seen as very crucial and in 2010, America accounted for 74% of Ireland inward investment of the total investment made by different countries. Foreign direct investment by US multinational companies are collectively seen to be in the tune of US$165bn, regarded to represent 8% of the entire US foreign investment in the European Union block, and approximately 4.6% worldwide (IDA Ireland 2011).

America companies in Ireland are spread throughout the whole sectors, but majority of them exist in the technology sector, which are sophisticated and known to have grown a webbing relationship with Ireland R&D infrastructure.

In Ireland exists American companies which are seen as some of the world leading corporations in the field of pharmaceutical & biological, medical technology and online information technology .Among these top multinational companies are Intel, Google, Pfizer, Facebook, EBay, and Boston Scientific (IDA Ireland 2011).

The question of foreign investment paying attention to entry mode determinants, specifically, has been extensively studied in many international business literatures (Buckley & Casson 1998). However, little or no study has been carried out with respect to American MNCs in Ireland, which makes this dissertation a novel one.

In Ireland, two major types of entry mode are common with most of the multinational firms in existence and it is either that they came in through greenfield (WOs) or Joint Venture (JV) entry mode.

1.1 Research Objectives

In order to reach a conclusion throughout my period of working on this dissertation, I intend to determine if Ownership Advantages, Location Advantages, and Internalization Advantages influence the chioce of entry mode made between greenfield investment (WOs) and joint venture (JV) by American multinational companies which have so far invested in Ireland.

My main objectives then will be to:

- To examine the effect of interrelationships among Ownership Advantages, Location Advantages and Internalization Advantages factors had on American Multinational Corporations' on their choice of foreign market entry mode.
- To ascertain if the eclectic 'OLI' theory can provide a good explanatory ability for entry mode choice made by American Multinational Corporations in Ireland.

1.2 Research Questions

Researching a conclusion, will involve providing answers to the following research questions:

- Will American multinational companies with high ownership advantages choose a greenfield entry mode over joint venture?
- Do Ireland's location advantages dictate the entry choice mode made between greenfield and joint venture (JV) by American multinational companies?
- Will American multinational companies' internationalization advantages play a role in their choice between greenfield investment and Joint venture entry mode?

The problems this dissertation will be addressing is to objectively investigate the entry mode choices and what influenced such decision by American multinationals companies In Ireland in the time period 2000-2010, using Dunning Eclectic “OLI” Theory.

1.3 Research Hypotheses

H1: The larger a firm size (number of employees) is, the more likely it is to establish a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

With regard to firm size, larger firms (number of employees) have more tangible and intangible resources, information and financial leverage, and therefore do not need a partner when investing in a foreign country.

H2: The more experience a firm has, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

This hypothesis takes into account of experience in general (number of years in international business), as well as years of international business experience and its global spread (i.e. the number of geographical regions where their other subsidiaries are present). It is known that firms that have much experience in international business, management and organization, will not require support in any form, from partners and therefore, such a firm will likely seek to establish a WO investment rather a JV.

H3: The stronger the specific assets are perceived to be by management, the more likely the firm is to set up a WOs, instead of a JV in a foreign country.

Specific assets possessed by firms might also include intangible ones, and ones which they might not like to share with any partner. Sharing assets such as technological knowhow with foreign partners might not be supported by management, and instead they will prefer to go it alone.

H4: The higher the risky, politically and economically a host country is, the less likely a firm set up a WOs instead of a JV.

A country that is not economically and politically stable will be regarded as one that has a high associated business risk, and this will encourage foreign investors to seek a joint venture in order to share associated risk, instead of setting up a greenfield investment.

H5: The more socio-culturally distant a country, the less likely a firm is to set up a greenfield investment instead of a joint venture (JV) in that country.

A wide gap between the business environments of a foreign firm and its host country will lead to a joint venture scheme being pursued by the foreign firm (Bell & Pennings 1996). This will create an avenue for the home partner to make use of its local knowledge in managing issues associated with customs, institutions, traditions and local workforce.

H6: The more attractive a host country market (Access to market) is, the more likely a firm is to set up a Greenfield investment instead of a joint venture (JV) in that country.

A country with a possible large market will attract firms that will make an entry through Greenfield investment, instead of entering through partnership. Abstaining from this, will provide it will the right to hold onto its revenue alone. In some other circumstances, a country also might be strategically located and this gives it access to a larger market (Gray et al 2010, p.6). In this case, the firm will likely set up a Greenfield investment instead of a joint venture (JV).

H7: The greater the availability of labour force skills (young population), education (Quality of education) in a country, the more likely a firm is to set up a JV partnership structure instead of a greenfield investment in that country.

A foreign firm that is interested in improving its resource base, learning new methods, tapping into new technology, will set up a JV partnership structure with the host firm as partner, instead of entering into the foreign market by greenfield investment mode.

H8: The less attractive the cost competitiveness (labour cost) of a host country, the more foreign firms seek to enter into a joint venture (JV) in a foreign country.

A host country with a higher labour cost is likely to have foreign firms entering into JVs partnership structure with host firms so as to share the associated cost.

H9: The higher a foreign country research & development (innovation and creativity) intensity is, the more likely foreign firms seek to enter into a JV partnership structure in that foreign country

Favourable government regulations have the potential of encouraging foreign firms to set up greenfield investment instead of joint venture, because of their

belief that their investments are safe, there is access to market, access to labour force skills and administrative ease of doing business.

H10: The more unfair a host government regulation, the more likely will a foreign firm prefer a JV partnership structure to a greenfield investment.

Foreign firms are not always comfortable with host governments that have strong policies and regulations which are seen as unfair to foreign investments, and they will guard against losing their investments by preferring to go into joint venture with host firms, in anticipation that the host government will not harm its own local businesses.

H11: The more the contractual risk (risk associated with transfer knowledge) associated with a host country, the less likely will a foreign firm set up a greenfield investment, but go for a joint venture (JV).

Many foreign firms prefer to integrate their activities within the firm, when they believe that there is high risk associated with sharing their assets and skills with partners in host countries. The greater the risk, the more they believe partners are not needed.

1.4 Expected Benefits of This Dissertation

At the end of this dissertation, I would hope that American MNCs and its other small and medium firms that would like to invest in Ireland know more about what particular choice of entry mode they would have to consider using to make there entry into Ireland.

With a thorough analysis of the important determinants that determine different types of entry mode, there decision making as regard making the right choice of entry mode will become easy.

I believe that, this dissertation will also be of relevance to others that might be interested in knowing more about FDI in Ireland.

1.5 Organization of Study

This study is divided into six (6) chapters. The first chapter contain the introduction; research objectives, research questions and research hypotheses. It also contains a brief description of expected benefits and the structural framework of the chapters to follow.

Chapter 2 shows the various different types of FDI theoretical views and approaches from different researchers.

Chapter 3 contain the theoretical overview of this study. It contain literatures studied in connection with FDI and choice of entry mode. It also contains a brief discussion on the motivation that promotes FDI and types of FDI entry mode. An in-depth explanation of the theoretical framework behind this study will be found in this chapter, where various view of different researchers can be found.

It laid the background for me to draw up my research questions and research hypotheses found in chapter 1.

Chapter 4, 'Research Methodology' explains the methods and technique used to obtain the required data needed to statistically test stated hypotheses, and to provide answers to my research questions.

Chapter 5, this chapter shows the different processes passed through to analyse obtained data. The right to accept or reject hypothesis was possible in this chapter through the application of results obtained from their corresponding data analysis.

Chapter 6 contains the discussion, limitation and conclusion parts of this study.

CHAPTER 2

THEORY AND HYPOTHESES

2.0 Foreign Direct Investment Theories

FDI has continued to receive more attentions in the last thirty years, attentions occurring at both national and international levels. So many theoretical papers are known to have examined the issue that surrounds FDI and the most important of this research done so far is those by J. Dunning, R. Vernon and S. Hymer (Denisia 2010).

The concept of FDI can be viewed from both the macroeconomic and microeconomic perspectives. While the microeconomic point of view as seen by the investor, is all about explaining the motivations that encourage investments across different national boundaries.

The macroeconomics point of view, recognise FDI as an act that encourages capital flow across borders, mainly from countries of origin to host countries, and which shown in the balance of payment, while he variable of flow is seen as the capital flows and stocks, revenues obtained from various investment undertaken (Denisia 2010).

Past studies done so far on FDI have helped to promote the idea that FDI promote the competitiveness of local firms, where positive evidence was found in Mexico and Indonesia by Blomstrom (1994). Cavet (1996) in his study, said that countries make efforts to attract FDI into their respective countries base on the fact that

such inward attraction of multinational companies will bring about an increase in productivity, technological transfer, improvement in managerial skills ,reduction in unemployment and access to universal market.

Many researchers in the past have explained the phenomenon surrounding the FDI with different theories, but still, no specific one have ever been agreed upon to be the right one. Ricardo's theory of comparative advantage was the first one that made attempt to explain FDI, but the deficiency of this particular theory was the fact that the theory only tries to explain this phenomenon as trade activities between two countries ,involving two products and a mobility of factors at just local level (Prasch 1996).

Apart from the Ricardo's theory, some others have also tried to give some meaning and explanation to FDI, among these Robert Mundell (1975), but the limitation of his study was the inability of its theory to explain international production through FDI, because of the fact that the incorporated foreign investments were portfolio investment or short-term investment.

An improvement on the Mundell model was done by Japanese researchers Kojima and Ozawa (1984). A model was created by them to help in explaining both international trade and foreign direct investment. The model will only become relevant if only a country has a comparative disadvantage in producing a product, while the model also explained international trade base on comparative advantage (Kojima & Ozawa 1984).

Below is the heading under which the theories of FDI may be classified.

- The Eclectic Paradigm of Dunning (OLI) model

- The Stage of Development (SD) model or Production cycle theory of Vernon
- Internationalization (economic) Theory
- The theory of Exchange Rates on Imperfect Capital Markets (ownership advantage)
- Location Specific Advantage Theory
- The Transaction Cost Analysis (TCA) model and extension
- Resource Base Theory
- The Organization Capacity (OC) model
- The Decision Making Process (DMP) model

2.1 Production Cycle Theory of Vernon

Vernon (1966) developed the production cycle theory , which was used by him to explain certain types of foreign direct investment that were made by U.S. manufacturing companies in Western Europe six decades ago. The model made by him contains four stages of production cycle, and these are innovation, growth, maturity and decline stages.

Vernon outlines the activities that were related to each stage and the most important aspect of this model was the technological advantage owned by U.S manufacturers. The first stage was consigned with innovative products produced by U.S multinational companies, where they initially produce for their own local

consumption and then exported the surplus overseas so as to serve foreign market.

Vernon theory was able to explain some kind of investments made by U.S MNCs in Western Europe 50 to 60 years ago, while making use of their technological advantages in places that such technologies were not available (Denisia 2010).

2.2 The Theory of Exchange Rates on Imperfect Markets

The purpose of this theory was also to explain the concept of FDI, were different country exchange risk were analysed from the perspective of international trade. Cushman (1985) in his empirical analysis showed that the effect of an increase in real exchange rate helped to stimulate FDI made by U.S multinational companies, while the opposite is a decline in U.S FDI investment if there is a foreign currency appreciation with respect to U.S currency. In this study, Cushman concluded that there was a reduction of at least 25% in U.S FDI due to dollar appreciation.

2.3 The internalization Theory

Coase (1937) and Hymer (1976) were the first originators of this theory. It was followed by Buckley and Casson (1976), Hennart (1982) and then after, further work was done on the theory by Casson (1983).

This theory explains what brought about the growth of multinational companies and also the motivation that encouraged them to achieve foreign direct investment. Hymer in his study identified two important determinants of FDI and which were. The first determinant was the removal of competition and the other was advantages which some firms possess and which others do not have in some activities (Hymer 1976).

Hymer been the author of the concept of firm-specific advantages, says that FDI will only take place if the benefits that comes from the exploitation of a fir-specific advantages is greater than the cost associated with establishing operations abroad.

Buckley and Casson (1976), explained in this theory that multinational companies always try to use their inner resources to develop technological capabilities and which they intend to exploit to their own advantage

2.4 The Eclectic Paradigm of Dunning

This eclectic theory developed by Dunning is a mix of three different theories of FDI i.e. the “O-L-I”

Firstly, the “O” comes from the Ownership advantages, which represents the intangibles and are solely owned by the multinationals. The transfer of these advantages within the corporations always occur at low cost, but these costs might be high for corporations that have operations in different countries and possessing these inert firm or ownership advantages will help to offset most of these costs.

Dunning (1973,1980,1988) said that these advantages were specific benefits of these corporations they do have monopoly over it and their ability to enhance its use in foreign countries can leads to higher profit margins and a reduction in marginal cost when compare with other competitors. Some of the identified specific advantages include; proprietary technology, brand name/image, scale economies in production, scale economies in purchasing, distribution high volume, advertising - global image, financial synergies and managerial skills.

Next is the “L”, from the word Location (country). Corporations that have specific advantages prefer to make use of these advantages themselves rather than giving out the right to its usages to other firms located in foreign countries. A country to become a location for inward FDI will have to own these locational advantages in order to attract these corporations. Among these advantages are; host country policies, host country cost factors, natural resources and unique supplier characteristics

Lastly, is the letter “I” from Internalisation. This third phase of the eclectic theory tend to be pursue once it is seen that the specific and locational advantages are owned and met by the different corporations and countries respectively. The Internalisation advantages offer the concerned corporation a framework to asses different ways in which it can weigh up its business relationship with foreign companies which it intends to relate with. It is worth noting that when a firm sees an increase in Internalisation advantages, the greater eagerness it has to opening a foreign production facility rather than licencing or franchising foreign firms.

CHAPTER 3

THEORETICAL OVERVIEW

3.0 Theoretical Overview Of Dunning Eclectic 'OLI' Framework

Dunning (1998), in the process of trying to solidify and to furthermore explain what necessitated the different entry mode choice made by foreign firms, pointed out that there were various determinants a firm should take into consideration in its business quest to access foreign country, listed the key determinants as ownership advantages, location advantages, and internalisation advantages. Dunning (1980) said that the firm ownership or specific advantages are seen as usually intangible and can be transferred at a low price within the multinational firm; these advantages include, international experience, technology, brand name and economies of scale. These are advantages that can improve earnings and contribute to reducing associated cost of the production of such goods and services in the foreign country.

The second determinant was the location advantages associated with the foreign country under consideration and these include; economic, political and socio-cultural advantages. The last determinant factor was called the internationalization advantages. Economic advantages (quantities and qualities of factors of production, transport and communications costs and size of market etc.), Political advantages (government policies concerning foreign direct investment inflows and international production), Socio-Cultural advantages (distance between home and host countries, language and cultural diversities etc.).

3.0.1 Ownership Advantages

Dunning (1980) said ownership advantages were seen as peculiar/special to specific firms and they can detect the type of entry mode decisions made by multinational firms when entering foreign countries. The advantages identified by researchers, included determinant factors such as: the size of the firm, the level of international experience and the ability to produce differentiated products and services (Agarwal & Ramaswami 1992; Brouthers, et al. 1999, Dunning 1993). Ownership-specific Advantages

Researches done on multinational firms showed that, the size of a firm can most often detect the choice of entry mode made by MNCs. It is believed that a correlation exists between the size (having resources such as financial, managerial and superior skills) of a multinational and the type of entry mode chosen, meaning that a firm that is large in size is more likely to choose an equity mode which involves Greenfield establishment - Wholly owned (Agarwal & Ramaswami 1992; Brouthers, et al. 1999).

Another support to this agreement came from the work of Agarwal & Ramaswami (1992), which research conclusion was that firms that have greater resources available to them are more often in a better position to provide both managerial and financial investments needed to establish an equity mode of entry, based on the fact that these resources are needed so as to deal with the impact of the cost associated with the associated goods and services.

The next important determinant factor found by researchers to have a positive lineage and which could influence the choice of entry mode choice was the amount of international experience of multinational firms. Companies with greater international experience were said to perform better in the international arena compared to those that had little such experience. In this regard, multinational firms with high international experience will prefer a Greenfield investment (Wholly owned) which is attached to a high control advantage as regards to a joint venture (Agarwal & Ramaswami 1992).

The importance of having international experience is that it will be needed to guide respective firms against underestimating the various tough risks associated with international expansion. Companies with less extensive international experience prefer non-equity mode of entry to prevent financial risk associated with such actions (Anderson & Gatignon 1986).

The ability of multinationals to provide unique differentiated products and services is another factor which plays a role in the choice of market entry mode. A firm that has the capability to produce highly rated differentiated goods will prefer to have a wholly-owned establishment compared to one which does not have this capability. These type of MNCs will prefer Greenfield investment in order to keep their technology far away from partners that do not have such advantages and thereby safeguarding it from potential competitors.

3.0.2 Location Advantages

Dunning (1980) measured location advantages as the second set of advantages that MNCs look for , before making their choice of destination or host country. Location advantages consideration is seen to guide multinational firms on the type of foreign market entry mode that could be used as they go into a foreign land. Among the factors said to make a country locational advantages include (1) How big is the market and the existence of future sales potential, (2) How stable are the host countries economic, political, and international trade policies (Dunning, 1988, 1993; Agarwal & Ramaswami, 1992).

Foreign multinational firms will always tend to guard against the negative effects of the above-listed determinants or factors, for they play a role in how these firms consider what type of entry mode choices are made. A country with an unstable political, economic and social environment will surely create problems. For instance, frequent changes in regulations, trade control, expropriation and unexpected changes in labour and tax laws can all contribute to the unattractiveness of a country in terms of inward FDI.

It is clear that firms going abroad always prefer countries with high growth potential and this has linked them to the wholly owned entry mode choices made. Firms become more certain in this case knowing full well that they will be able to recoup whatever financial resources they will be spending in their investments.

Generally, multinational firms prefer to enter a country with low investment risk with equity modes choice that could either be a Greenfield investment or joint

venture (JV) (Pan & Tse 2000; Shrader et al 2000; Erramilli & Rao, 1993; Kwon & Konopa, 1993), while they will shy away from such mode of entry from countries with high investment risks because of the cost attached to such risks (Anderson & Gatignon, 1986).

Cultural difference is another location advantage considered by multinationals ,because it can be a factor that can be negatively related to the level of control exercised by most multinational companies and which can lead them towards the type of entry choice chosen by them. And in some other cases, cultural distances can also serve to encourage more of ownership involvement in entry mode choice (Anad & Delios 1997).

Policies made by host governments also play a significant role, because they are seen by multinationals as advantages that can favour them in terms of establishing their businesses in such domains. When host government policies are seen as flexible, firms might decide to go into such a country using a Greenfield investment mode of entry and might decide against such a move in countries with hostile government policies, thereby choosing joint venture (JV) mode of entry (Rugman 1979; Stopford & Wells 1972).

Although location advantage can be available to most firms (Dunning 1988), but still not every firm can take the advantage inherent to it. This advantage become more useful,only when it goes hand in hand with the ownership advantage that firms possesses(Erramilli, Agarwal & Kim 1997).

3.0.3 Internalization Advantages

Internationalization advantages are the final set of advantages refer to by Dunning as the advantages of controlling, coordinating ownership and location-specific advantages within multinational firms rather than having to sell the right to use such advantages to domestic firms in the host country (Salih Kusluvan 1998, p. 175)

Internalization advantages examples include proprietary-products and production process and if for instance, due to tariffs and transportation costs, it might become advantageous to produce in a foreign country, rather than to export.

These processes always come into consideration most especially when a multinational decides to bring back into its structure, the activities done for it by external firms (Dunning, 1988, 1993; Erramilli & Rao 1993). Most often foreign entities try to integrate activities such as developing their own distribution system or re-integrating within their fold a previously outsourced activity.

The cost of integrating such activities as regards making use of internationalization advantages hinge squarely on the transaction costs involved. Multinationals avoid integrations that might involve high costs most especially when such activities are seen to be easily or readily available in the host government country. In this situation, they avoid internalizing such activities so as to capture the full advantages available in the market place and directly escape the high cost of integration (Klein et al 1990).

The understanding from above is that a firm will decide to choose a market entry that will provide for it, a low transaction cost which might be associated with its ownership advantages, locational advantages and the ability to obtain economies of scale in their host market expansion (Lee & Huang 2009)

Finally, it can be said that the eclectic 'OLI' theory stated above, believed that the advantages that a multinational owns go a long way in determining the choice of market entry mode it chooses and that these are the three key determinants a firm should look to in entering a foreign market. Dunning (1993) identified some shortcomings with regard to the eclectic 'OLI' theory, he stated that the framework cannot explain why two firms doing similar business and with similar ownership, internalization, and location advantages would not select the same entry mode in the same target market.

Furthermore, other sets of limitation seen to be associated with the eclectic 'OLI' theory was the inability of the framework to address factors associated with the multinational home country, boundary variables that include logistics, transportation cost and currency exchange rate between the host country and the foreign country and how these have impact on the entry mode of these multinationals.

Some other researchers also criticized the 'OLI' eclectic framework, among which was the research done by Ekeledo and Sivakumar (2004), in which they argued that, the eclectic model failed to explain and predict the entry mode choice in a unified view. While Goodnow (1985) in his work 'Development in International Mode of Entry Analysis',said that the eclectic theory only focused on industry

makeup, while not considering both the internal characteristics of the firm and the strategic alliance behind such entry decisions.

And finally, the OLI framework was said not to be as good as it has been claimed, as, notwithstanding its much improved measurability and explaining power, it remains a static one due to its shortcoming of not addressing strategic factors, factors affecting the decision-makers and competition (Zhao and Decker 2004).

3.1 Types of FDI Choice of Entry Mode

Andersen (1997),in his research argued that firm's entry mode choice involves many factors and that one single theoretical perspective alone cannot be suitable enough to provide a comprehensive explanation why firms chose a particular kind of entry mode as relation to another, led to others coming up with the combinations of existing theories.

The above list of approaches and their combination helped into bringing about different types of eclectic theories, where one of which was that done by Dunning and called Dunning's (1980, 1988) "eclectic paradigm", where he stated that the choice of entry mode choice made by multinationals depended and were influenced by three determinant factors that included ownership- specific factors of a firm, Location-specific factors of a market(Foreign market) and internalization advantages of integrating transaction within the firm.

A second of such eclectic theory of foreign entry mode choice that can be used by multinational companies was developed by Hill et al. (1990). Their framework was

from the combination of some of the above listed approaches, which included the combination of transaction cost theory, internalization and strategic behaviour approach .Making another eclectic theory, was Bell (1996). He did this by adding the resource based theory to that which was established by Hill et al.

These eclectic theories have been verified through the empirical studies and from it were sourced factors that lead to the choice made and measuring their corresponding effects. An example of such empirical studies done was that done by Brouthers et al. (1999),where they empirically examined German and Dutch firms that have invested in Central East European countries and also the research done by Agarwal & Ramaswami, 1992 (Zhao and Decker,2010,p.3).

The need for MNCs to make the right entry mode choice is of great importance / relevance and this also will affect how future decisions are made and also show the performance of foreign firms in foreign market (Root 1994).

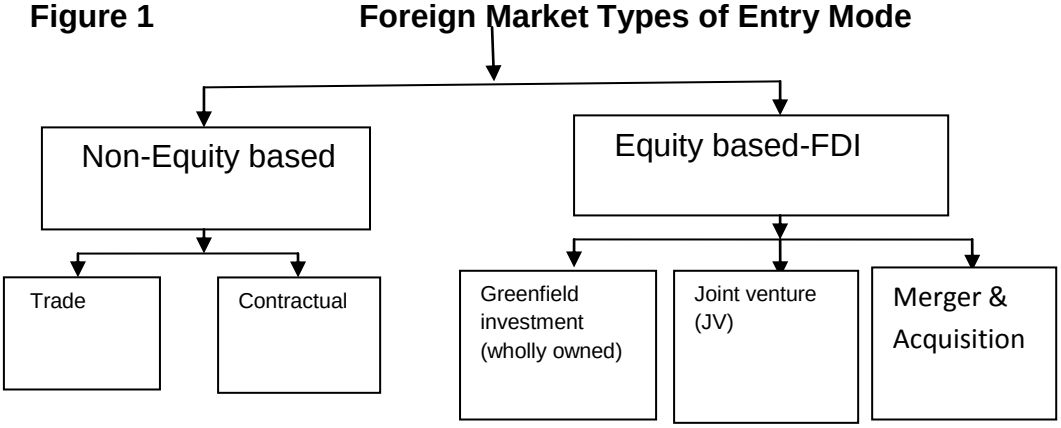
Both old and current literatures have written about how important it was for multinationals to select the right entry mode into foreign markets (Davidson 1982; Root 1987), because making a wrong decision choice can lead to loss of committed resources in both financial terms and other related resources.

From the past entry mode made by different multinational firms in different host country, it was clear that decisions on entry mode were made by choosing from available options that included exporting, licencing, joint venture and greenfield (Wholly Owned).

Table 1 - Previous Studies on Choice of Entry Mode

	VARIABLES	REFERENCE	PREVIOUS STUDIES
	Firm size	Leung et al (2003),Evans (2002),Nakos and Brouthers (2002)	+
	International Business Experience	Nakos and Brouthers (2002),Evans (2002),Reuber and Fisher (2003)	+
	Technology and Financial Capabilities e.t.c.	Hennart (2002),Lee & Huang (2009),Erramilli and Rao (1993)	+
	Cultural Distance	Leung et al.(2003), Evans (2002),Cristina and Esteban (2002)	+
	Host Government Regulation	Cui,Jaing and Stening (2007),Brouthers (2002)	-
	Production Cost	Jiang and Fuming (2002), Cui,Jaing and Stening (2007)	
	Country risk and Environmental Uncertainty	Tahir and Larimo (2006),Bouthers and Brouthers (2000)	+
	R&D	Larimo (2000),Tahir and Larimo (2006)	+

Figure 1 **Foreign Market Types of Entry Mode**



Source: adapted from Johnson & Turner, 2003

Greenfield (Wholly owned subsidiaries: This type of foreign investment is a direct investment by the parent body in foreign market. It can be done through acquisition

Joint Venture (JV): This partnership involves the participation of more than one party in contributing resources needed to own the business. These resources' comes in form of assets, risk & profit sharing. Equity Joint Ventures that involves multinational firms, are made up with an equity stake structure that have the parent body having the majority e.g. 95% equity by the parent body, while 5% to the other lesser partner.or through new establishment of plants .Here multinationals own approximately up to 100% of the equity stake of such investment.

CHAPTER 4

RESEARCH METHODOLOGY

4.0 Introduction

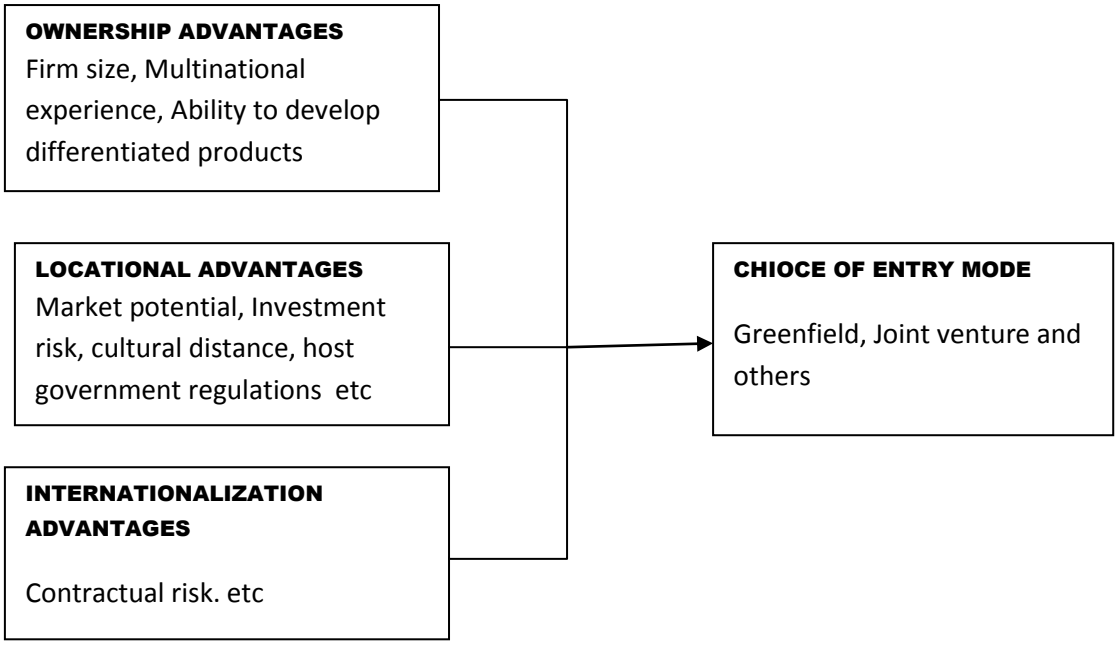
After knowing what my research objectives are, the next important thing to consider was what ways I would have to go through in other to collect the necessary data that will help me to answering my research questions and hypothesises.

This chapter therefore, will present the used conceptual framework, research design, population and sample size, questionnaire design, data collection and data analysis methods

4.1 Conceptual Framework

This study was conducted based on Dunning's Eclectic "OLI" paradigm conceptual framework which was thoroughly explained under the literature review chapter.in line with the objective of these study, this research study focused on determinants or factors that shaped the choice of entry mode made my American MNCs/companies in Ireland.

Figure 2- The OLI' Advantages



The above figure shows the three major Identified advantages, and each containing more than two factors that helped multinationals in choosing what best suit them in their entrance into a foreign market. It is worth knowing that all these factors were presented in the questionnaire under appendix 1.

4.2 Research Design

The research design in this study was done in two phases. The first phase was about collecting secondary data, and this process involved reviewing scholars and peer-reviewed literature journals, academic books and different corporate publication on FDI. The second phase was about collecting primary data from concerned subjects and this was done through the use of emailed self-administered survey questionnaires.

4.3 Population

Ireland has of today a total of over 762 multinational companies (MNC), while United States have up to 369 within this larger number of the total inward FDI investment and they tend to establish their presence in all sectors of the economy. (IDA Ireland 2011).

Base on the objectives of this research and the catalogue of IDA Ireland (FDI in Ireland is the responsibility of the IDA Ireland) stating the number of United States multinational corporation/companies in Ireland, these 369 multinational companies defined as making up the population for this research

4.4 Sample size

The sample size in this study was calculated using the a mathematical formula recommended by Yamane (1973), which put into consideration three important criteria that helps to determine the appropriate sample size: the level of precision, the level of confidence or risk, and the degree of variability in the attributes being measured (Miaoulis and Michener, 1976).

Using the recommended Yamane formula, gave a sample size of 192. The mathematical solution is given below:

$$n = N / (1+Ne2)$$

Where, “n” denote size of the sample, “N” denotes population of sample, and “e2” represent the probability of error.

For this study, N= 369, e2=5 % (95% confidence level is selected)

$$n = 369/(1+369[0.05]2) = 191.938$$

Hence, the sampling size is given by 192 respondents.

4.4.1 Sampling Method

The sampling method used in this study was in form of random selection and through a probability method known as systematic random sample (Trochim 2006).

The use of this sampling technique was meant to help in establishing a true reflection of the entire population by the choice and number of respondents that were chosen.

And secondly, this sampling method was more easier to do than other options and it involved just the selection of one single random number (K) ,which enable one to start things off. The steps followed to achieve this involved taking the following actions:

- The MNCs/ companies that made up the units in the population were numbered from 1 to N. In this case, it was from 1 to 369
- From the calculation that gave the amount of sampling size needed, n-the sampling size was given as 192.
- k (the interval size) = N/n = 369/192= 1.92, approximately= 2
- Since the k-th unit is 2 from above, a random selection of integral from 1 to 2 was made, where the 2^{nd} unit (because k=2) was randomly chosen.

In this study, an example of the sampling units that was used involved 2, 4, 6, 8, 10 12…….up to 192.This lead to an output of 96 units in this study sampler between 1 to192.

4.5 Questionnaire Design

The questionnaire used in this study was designed in accordance with the objectives of this study. The avoidance of complexity was of high importance and this was countered by the use of languages that were simple and conversational enough.

The issue of ambiguity was also tailored by being specific as much as possible with the kind of questions asked (Zikmund 2000) and it was pre-tested with four pre-texting respondents, that gave feedbacks of their understanding of the questionnaire. These feedbacks enabled more modifications to be carried out on it, before it was finally sent out to the respondents.

The questionnaire was divided into four parts. The first part consists of questions that relate to corporation/company information's available to the public. The second part consist of the various determining factors of FDI that help to determine or shape the choice of market entry mode chosen by these corporations/companies and they were measured on a five-point Likert scale ranging from 1 to 5, with "1" as least important and "5" as most important for the thirteen questions in this section. The third part was about questions that relate to general information about FDI in Ireland and lastly, the fourth section was about general demographic questions.

The Likert scale usage in the second section was all due to the fact that it has been used in previous studies that have to do with FDI entry mode and an example was the study done by Fuming (2003). To ensure accuracy in the design

of this questionnaire, attentions were paid to published research articles, academic literatures and other publications. Check appendix B for questionnaire sample

4.5.1 Response Rate

The method used in the distribution of these questionnaires depended on the preferred choice made between posting the questionnaire or by emailing it. By contacting each corporation by phone call, enabled me to know which of these two medium they preferred.

In total 96 units of questionnaires were distributed by post and email, out of which I received back 65 completed questionnaires sent back to me, while 57 among the returned questionnaires were valid responses. Thus, the overall response rate was 67.70%, while my useable response rate was 59.4%.The table below present the details.

Chapter 5

DATA ANALYSIS AND RESULT

5.0 Introduction

This chapter shows the analysis of the data which were obtained from the questionnaires used in this study, which was based on questions that reflect Dunning OLI' conceptual framework.

5.1 Data Analysis

The data analysis of this study progressed in two stages. First, I examined the relationship between the independent variables using the crosstabulation method. This method involved using SPSS to obtained important statistics needed to check the existence of a relationship or its significance. The statistical procedure that was use here to test the null hypotheses was based on comparing the observed count, in relation to the expected count in each different cell (Norusis p.357 2002)

Among the important statistics that were requested, included the actual frequency of cases in each cell or count, what the expected frequency value if there were no relationship between the consigned variables, frequency as a percentage of the total row, frequency as a percentage of the overall total, the corresponding pictorial bar chat and the chi-square, which help to state the significance of a relationship.

The chi-square test of independence involved testing my research hypotheses (Bereson,Levine & Krehbiel 2006) , where the dependent variable and independent variables will either have a relationship with one another or does not .

Secondly, in order to examine the usefulness of Dunning eclectic “OLI” framework model, I used the binary logistic regression analysis (SPSS 18), as the analysis tool to test for the relationship between the dependent variable (greenfield/joint venture) and the independent variables, and most especially, when the dependent variable consist of only two binary categories (0=greenfield, 1 for joint venture) and this is a technique can be said to be highly suitable for this purpose (Kinnear & Gray p.519, 2008).

This analysis method is known to be consistent with other previous studies done on the choice of foreign market entry mode by previous researchers (e.g. Agarwal & Ramaswami 1992, Kim & Hwang 1992, Lee & Huang 2009).

The probability of American MNCs in Ireland to choose a greenfield entry mode over a joint venture will be mathematically modeled as:

P (Yi =0) = 1/(1+ exp (-α-Xi βi) = α+ β □X□ + □ β2X2 + ……+ bnXn

- Here, P (Yi =0), will stand for the probability of choosing greenfield entry mode, while

- X1, X2…….. X13 represents the 13 independent variables considered in this study.
- β1, β2, β3…….. βn are coefficients of independent variables and α intercept parameter
- Yi will be the dependent variable, while “0” is assigned to greenfield mode, the joint venture mode will take the be assigned “1”.
- Xi-is the vector of the independent variable for the ith observation. Bi is the coefficients of independent variables and α- is an intercept parameter.

5.1.1 Dependent Variable

The dependent variables used in this study, are the most peculiar types used by American MNCs in Ireland .In steady alignment with past studies (e.g. Agarwal & Ramaswami 1992 ; Erramilli & Rao 1993, Kim & Hwang 1992),researchers that concentrated on the use of both the equity and non-equity mode, but the entry mode chioce considered in this study is based on only equity entry mode chioce and which comprises of greenfield investment (Wholly Owned) and joint venture (JV).

5.1.2 Independent Variable

The independent determinants listed by Dunning (1988, 1993) were used as the independent variables. These independent variables include factors or variables that made up the ownership advantages, location advantages and internalization advantages i.e. “OLI.”

The ownership advantages variables used in this study included firm size, potential to create new products and years of international business experience. Firm size and the potential to create new products were measured by a five-item Likert scale, while years of experience was measured in terms of the number of years of doing business outside U.S.

Under the location advantages, six independent variables were used, and they all were measured using a five-item Likert-type question. These questions examined the cultural distance between both countries (Hofstede's cultural indexes; similarity of language; social mobility), availability of market for goods and services, government regulation, production cost, availability of labour force skills, and quality of education. The last question was consigned with the degree of stability associated with political, social and economic arena.

Internalization advantages were measured using the contractual risk independent variable available in the study of Agarwal and Ramaswami's (1992) ,R&D intensity from study done by Tahir and Larimo (2006) and risk associated with the misuse of investors proprietary knowledge if they decide to operate in Ireland .

5.2 Data Analysis by Crosstabulation

5.2.1 Entry Mode Choice vs. Firm Size

Interpreting the table associated with the crosstabulation process in Table 4, shows that, along the first row, 87.7% of firms that came in through green field considered firm size to be an important variable. The same cannot be said of

those along the second row, firms here are those that have an entry mode of joint venture, and this might have to do with there firm size.

Along the column in the third cell, 31.6% of the total respondents agree that firm size was an important variable. But for joint venture firms, it showed that along the intercept column, it was just 1.8%.

Chat 1, shows an apparent clarity of firm size being selected by most of the respondents. It is worth noting that, most of these respondents were those that choose the greenfield investment entry mode type. It might be right to say that, based on this graphical display output, those firms that have made there entry by greenfield investment mode, might have also considered there respective firm size (number of employees).

Lastly, reference reference to Table 3, when the chi-square is used to test for the significant relationship between firm size and the entry mode chosen by these firms . The result from my SPSS analysis with respect to both variables, showed that the p-value is less than 0.05 and the chi-square value more than the critical value indicate the presence of a significant relationship between both variables

Stating H1:

The larger a firm size is, the more likely it is to establish a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

This hypothesis is accepted from the fact that there is a degree of significant relationship between entry mode chioce and firm size in this study.

5.2.2 Entry Mode Choice vs. Potential to Create New Products

Interpreting the data from the crosstabulation table, shows that while a total of 40.0 % of the respondents within the greenfield investment entry mode respond to this variable, its not surprising that they only believe that the availability of new products will contribute to the choice making a greenfield entry, only 8.8 % within the joint venture row see it as a contributor to choosing any of the entry market mode.

Chat 2 shows with clarity the importance of new products creation. The firms that are able to come out with new products or that have a range of products support this variable strongly, where as its not same with those joint venture respondents.

Lastly, with reference to the chi-square test, the use of chi-square to test for the significant relationship between potential to create new products and the entry mode chosen by these firms .The result from using SPSS with respect to both variables, showed that the p-value is greater than the chi-square value .This means that, there is not significant relationship between entry mode and potential to create new products.

Stating H2:

The more ability a firm have in creating differentiated products and services, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

This hypothesis is rejected because of the fact that, the chi-square text indicates that; there is no existence of a significance relationship between both variables.

5.2.3 Entry Mode Choice vs. International Business Experience

Table 6 shows the crosstabulation table of entry mode and international business experience. Along the total percentage row, it showed that, firms that have much international business experience prefer the greenfield choice of entry mode. While the greenfield firms have 87.7%, those in the joint venture have a mere 12.3 %.

The graphical representation of this, as shown by the bar chart, also show that, respondents firms that tick the importance of been able to come out with differentiated products, came into Ireland through the greenfield investment market entry.

Lastly, with reference to Table 6, the use of chi-square to test for the significant relationship between international business experience and the entry mode showed that the p-value was greater than the chi-square value. This signifies no significant relationship between entry mode and international business experience.

*Stating **H3**:*

The more experience a firm has, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

In this study, this hypothesis is rejected; the chi-square text indicates that; there is no existence of a significance relationship between both variables.

5.2.4 Entry Mode Choice vs. Technological / Financial Capabilities

Interpreting the data from the crosstabulation in Table 7, showed along the total row that 87.7% of firms that came in through greenfield investment mode, believe that both technology and financial capabilities were important variable or factors. While 12.3% of the respondents from the joint venture firm's show that they might have preferred this chioce maybe due, to their level of technology or their financial capabilities.

Chat 4, shows that firms that are into Ireland through greenfield investment entry mode, must have high technology and financial capabilities.

Lastly, with reference to the chi-square test table, to test for the significant relationship between years of international business and the entry mode chosen by these firms, showed the chi-square value greater than the critical value, which established that there is a significant relationship between entry mode and international business experience.

*Stating **H4**:*

The more experience a firm has, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

This hypothesis is supported because of the fact that, the chi-square test indicated that; there was indeed a significance relationship with its significance of 0.034 ($p<.05$) in this study or the critical or that the chi-value is greater than the critical value.

5.2.5 Entry Mode Choice vs. Cultural Distance

From the crosstabulation Table 8, there is an indication which showed that, firms that came in Ireland through the greenfield investment mode, see cultural distance as an important factor. While 87.7% of respondent firms along the greenfield investment mode role supported this notion, 12.3% of joint venture firms tends to be concerned with this variable. Being a joint venture firm, thus have that edge of erasing any hidden cultural distance that might be in existence or might show up in future, as this joint venture agreement might be with their Irish business partners.

The bar chat representation also showed the height at which firms with preference for greenfield investment hold onto the issue of cultural distance.

Lastly, with reference to Chi-square test, it showed the critical value to be higher than the chi-square value which established that there is no significant relationship between entry mode and cultural distance.

Stating H5:

The more culturally distant a country, the less likely a firm is to set up a greenfield investment instead of a joint venture (JV) in that country.

This hypothesis is not supported because; the chi-square test indicated that; there is no significance relationship between both variables in this study

5.2.6 Entry Mode Choice vs. Market Potential

The crosstabulation Table 9, showed that greenfield investment firms are driven by the presence of market for their goods and services. There seems to be that link considering the response from firms that are greenfield. The bar chat also showed the high response rate as regard as the importance of this factor by firms that are greenfield in practice.

Checking the significance of the relationship between entry mode choice and market potential from the chi-square test table in Table 2 ,it showed the critical value to be higher than the chi-square value. The meaning of this is that there is no significant relationship between both dependent and independent variable.

Stating **H6**

The more attractive a host country market (Access to market) is, the more likely a firm is to set up a Greenfield investment instead of a joint venture (JV) in that country.

This hypothesis is not supported base on the result from the chi-square test, which indicated no significant relationship between both dependent and independent variables in this study.

5.2.7 Entry Mode Choice vs. Host Government Regulation

Table 10, showed firms in the two different mode of entry class, along the row were concerned about the host government regulations. Response from firms that participated in this study in relation to government regulation was 58% by greenfield firms and 57.1% by joint venture firms.

Using the chi-square test to check the significant relationship between these two variables indicated that there was no relationship between both entry mode chioce and host government regulation. The chi-square in Table 2 , showed that a p-value of 0.632 existed, which is above my chosen alpha level of 0.05 (95%) or the critical value was greater than the chi-square value.

*Stating **H7***

The more unfair a host government regulation, the more likely will a foreign firm prefer a JV partnership structure to a greenfield investment.

This hypothesis is not supported base on the result from the chi-square test, which indicated no presence of any significance relationship between both dependent and independent variables in this study

5.2.8 Entry Mode Choice vs. Production Cost (Labour)

From Table 11,going through the row, showed that 57.1% of joint venture firms are concerned about production cost, which might have necessitated there chioce of these entry mode, as they might not be enjoying the advantage of economies of scale .Still on this row, 42 % of greenfield investment firms considered how important this variable was.

The chi-square test showed that the critical value was greater than the chi-square value

Stating ***H8***

The less attractive the cost competitiveness (labour cost) of a host country, the more foreign firms seek to enter into a joint venture (JV) in a foreign country.

This hypothesis is not supported based on the result from the chi-square test, which indicated no presence of any significance relationship between both dependent and independent variables in this study.

5.2.9 Entry Mode Choice vs. Availability of Labour Force Skills/Quality of Education

Table 12 showed along the rows for firms in either of the market entry mode, that they were concern about Ireland Labour force skills and quality of education. A percentage level above the 50% was recorded for firms in either of the market entry mode is 58% for greenfield investment firms and 71.4% for the joint venture firms.

*Stating **H9***

The greater the availability of labour force skills (young population), education (Quality of education) in a country, the more likely a firm is to set up a JV partnership structure instead of a greenfield investment in that country.

This hypothesis is supported base on the result from the chi-square test, which indicated the presence of any significance relationship between both dependent and independent variables in this study. Both the chi-square value and the critical value are approximately the same.

5.2.10 Entry Mode Chioce vs. Political, Social /Economic Stabilities

The crosstabulation Table 13 show's along the row that, firms also put into consideration the political, social and economic issues in considering the best possible entry mode. Along the row, 54.4 % respondent firms associated with greenfield investment considers this factor or variable as important to setting off their business, while 42% of the joint venture firms, also consider it to be important.

From the chi-square table in this Table 2, the chi-square value is less than the critical value.

*Stating **H10***

Firms will likely set up a greenfield investment rather than a joint venture, if a country political, socio-economical climate is stable.

This hypothesis is not supported based on the chi-square value and that of the critical value; the chi-square value (6.616) is less than the critical value (7.815). There is no significance relationship between both the dependent variable (entry mode) and the independent variable (political, social/ economic).

5.2.11 Entry Mode Chioce vs. Host Contractual Risk

Along the total row, 85.7% of joint venture firms consider the issue of a country contractual risk as a factor that might guide their entry mode, while 37% of greenfield investment firms, seem to be consigned with it.

Data from the chi-square table in Table 2, gave a chi-square value of 6.788, and this is less than the critical value (9.488).

Stating ***H11***

The more the contractual risk (risk associated with transfer knowledge) associated with a host country, the less likely will a foreign firm set up a greenfield investment, but go for a joint venture (JV).

Chi-square cheek for significance relationship, showed that no significance relationship exist between both variables.

5.2.12 Entry Mode Chioce vs. R&D Intensity

Figures along the row in Table 15, shows that approximately 40% of greenfield investment firms consider R&D intensity as necessary, compare to a higher percentage rate o 42% by joint venture firms.

The chi-square table along Table 2 also indicated that there was no significance relationship between the dependent and independent variables. The chi-square value of 3.470, is less than the critical value of 9.488

*Stating **H12***

The higher a foreign country research & development (innovation and creativity) intensity is, the more likely foreign firms seek to enter into a JV partnership structure in that foreign country.

In this study, using the chi-square test to check for significance relationship between both variable, indicate that the hypothesis should be rejected, that there is no significance relationship.

5.2.13 Entry Mode Chioce vs. Risk of Misuse of Proprietary Knowledge

In Table 16, the information given by the bar chat is such that firms might consider greenfield investment base on the safety of their capabilities, e.g. such as technology. While the bar chat showed how much attention that is paid to the variable, it cannot be said of those in the joint venture class.

Testing the hypothesis involved knowing and comparing the chi-square value against the critical value. From the chi-square tests (see Table 2), the chi-square value of 7.632 is more than the critical value, but has a significance value of 0.054 (i.e. significant at $p<0.05$, df 3). This shows the existence of a significance relationship between these variables in this study.

Table 2: Summary Result of Chi-square Test in the Crosstabulation Analysis by SPSS

	Variable and entry mode	Chi-square	df	Critical Value	p-value	Dependent	Not dependent
1	Entry Mode and Firm Size	10.117	4	9.488	0.039	✓	
2	Entry Mode and Potential to create differentiated products	2.348	4	9.488	0.672		✓
3	Entry mode and International Business Experience	25.615	16	26.296	0.060		✓
4	Entry Mode and Technological ,Financial Capabilities	8.652	3	7.815	0.034	✓	
5	Entry Mode and Cultural Distance	1.630	4	9.488	0.803		✓
6	Entry Mode and Market potential	0.548	4	9.488	0.969		✓
7	Entry Mode and Host government regulation	0.918	2	5.991	0.632		✓
8	Entry Mode and Cost Competitiveness or Production(Labour)	1.432	3	7.815	0.698		✓
9	Entry Mode and Availability of labour force skills and quality of education	5.560	2	5.991	0.062	✓	
10	Entry Mode and Political, social, and economic	6.616	3	7.815	0.085		✓

	conditions stability						
11	Entry Mode and Country contractual risk (Cost of enforcing contract)	6.788	4	9.488	0.148		✓
12	Entry Mode and R&D intensity	3.470	4	9.488	0.483		✓
13	Entry Mode and Risk associated with misuse of proprietary knowledge	7.632	3	7.815	0.054	✓	

NOTE:

- Significance is 0.05 (chosen alpha level)
- If chi-value is greater than critical value, then the variable is said to be dependent and it then means that there is an existence of a statistical relationship between the variable and chioce of entry mode considered. But there is a caveat here, and this is that the SPSS chi-statistical result also indicates what the expected count is in any of the cell of the specific table. As a rule, the chi-square text will not be used if more than 20% of the cells have expected values less than 5 or minimum expected frequency is less than 1(Norusis,p.367 2002).

5.3 Data Analysis By Binary Logistic Regression

This analysis was done through the use of SPSS tool. The output for this process is highly extensive and some of the most important items that will help to testing my hypotheses and providing clues to answering my researcher questions were selected from the lot.

The result of this binary logistic regression analysis on Table 19 showed how effective the logistic regression model was. It is important to assess the effectiveness of this model and this I did by carrying out an overall evaluation of the model, the statistical test of the independent variables, goodness –of –fit statistics and the validation of predicted probabilities (Peng, Lee & Ingersoll 2002).

In order to determine the overall evaluation of the model, assessing the data given in the model summary table **(**see Table 19**),** the Nagelkerke R Square (R*2) which have a size of 68.3% after step 3,indicates that the model contributes very well to the prediction of choice on entry mode between greenfield investment or joint venture.

Determining the model's goodness-of-fit by the use of Hosmer and Lemesshow Test (see Table 20), it is seen that the model fits the data well, base on the fact that the Chi-square value after step three was 0.890 and the p-value after this same step was 0.989,which is considered to be high. For a good fit, the value of the chi-square must be low and insignificant.

The application of the full model brought about a further improvement of the model. This difference in improvement can be identified, when the overall percentage (94%) in the Classification Table (see Table 21) is compared to the

intercept only prediction, which was 87% (see table 17). This led to an increment in the success rate of prediction.

5.3.1 Independent Variables Found To Be Significant From Logistic Regression Analysis

It is important to state that, the Iteration History (See Table 18), showed that only three independent variables were entered into the model and these independent variables were technology and financial capabilities (TECHFIN), risk associated with misuse of proprietary knowledge (PRPKNOW) and availability of labour force skills and quality of education (AVALSKI).

The Model if Term Removed (See Table 23) showed that if the interaction that involved these variables were to be removed, it is certain that it will have a significant effect on the model. This can be ascertained from the Table of Variables not in the Equation (See Table 24).It showed that TECHFIN, PRPKNOW and AVALSKI were not entered into the equation in the final third (3) steps.

From the Model if Term Removed Table (See Table 23), it can be said that only TECHFIN(Ownership Advantage), PRPKNOW(Internationalization Advantage) and AVALSKI(Location Advantage) are the only significant variables when SPSS was used in this study.

(1) The result of this logistic regression showed that there is a significance relationship between Ownership Advantages (Technology and Financial Capabilities) and the Entry Mode Chioce.

*Stating **H1***

The stronger the specific assets are perceived to be by management, the more likely the firm is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

TECHFIN has a positive sign, and it has a significant factor of $p < 0.05$,thus TECHFIN is highly supported in this study, base on this fact, and it is consistent with the findings from previous studies in Table 1. This shows there is a positive relationship between Ownership Advantage and Chioce of Entry Mode.

2. This study through the use of this binary logistic regression analysis process, also supported in this study, the relationship between Location Advantages (Availability of labour force skills and quality of education –AVALSKI)

*Stating **H2:***

The more ability a firm have in creating differentiated products and services, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

The greater the availability of labour force skills (young population), education (Quality of education) in a country, the more likely a firm is to set up a JV partnership structure instead of a greenfield investment in that country.

AVALSKI has a positive sign and significance factor of p< 0.5 (0.05) ,See Table 22.Thus Availability of labour Skills and Quality of Education is highly supported in this study, and consistent with previous studies. This establishes a positive relationship between this independent variable (Location Advantage) and the Choice of Entry Mode.

3. There was also support for Internalization Advantages and Chioce of Entry Mode (i.e. the relationship between Risks associated with Misuse of Proprietary knowledge and Choice of Entry Mode)

Stating **H3**

The more the contractual risk (Risk Associated with Transfer of Knowledge) associated with a host country, the less likely will a foreign firm set up a greenfield investment, but go for a joint venture (JV).

Risk Associated with Transfer of Knowledge has a positive sign (See Table 22) and a significance effort at p< 0.05 (0.04), which signals a significance relationship between it and the Choice of Entry Mode in this study.

5.3.2 Independent Variables Found Not Significant From Through The Use Of Binary Logistic Regression Analysis

Among the independent variables that were found not to be significant, but hypothesised and identified by Dunning (1980,1988) as important factors that contribute to the type of market entry mode choice, consider by foreign firms include the following in this study.

(1) Firm Size (Ownership Advantage)

*Stating **H4**:*

The larger a firm size is, the more likely it is to establish a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

“Firm size” is not significant at p> 0.05. Thus Firm Size is not supported in this study.

(2) Potential to Create New Products (Ownership Advantage)

*Stating **H5**:*

The more ability a firm have in creating differentiated products and services, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

“Potential to Create New Products” is not supported, because it is not statistically significant, meaning it has no effect on Entry Mode decisions in this study.

3. International Business Experience (Ownership Advantage)

*Stating **H6***

The more experience a firm has, the more likely it is to set up a greenfield investment (WOS), instead of a joint venture (JV) in a foreign country.

This independent variable has no significant relationship with Choice of Entry Mode in this study.

4. Cultural Distance (Location Advantage)

*Stating **H7***

The more socio-culturally distant a country, the less likely a firm is to set up a greenfield investment instead of a joint venture (JV) in that country.

Cultural distance did not show any statistical significance in the result, which means that “Cultural Distance” is not in any way a variable that American MNCs need to consider in choosing entry mode. Americans and the Irish have a long standing national relationship, they speak the same language (All the firms feel no cultural difference in communicating business with each other) and are both very close to each other cultural-wise.

5. Market Potential (Location Advantage)

Stating **H8**

The more attractive a host country market (Access to market) is, the more likely a firm is to set up a Greenfield investment instead of a joint venture (JV) in that country.

This variable does not show any statistical significant for the American MNCs chioce of entry It is a known fact that most American firms in Ireland are here, to use Ireland as a manufacturing base to serving other European countries and some parts of Asia and Northern Africa. Thus, “Market Potential” is not supported by this empirical study.

6. Host Government Regulation (Location Advantage)

Stating **H9**

The more unfair a host government regulation, the more likely will a foreign firm prefer a JV partnership structure to a greenfield investment.

In this study, there is no significant relationship between “Host Government Regulation” and “Mode of Entry” by American MNCs.

7. Production Cost –Labour (Location Advantage)

*Stating **H10***

The less attractive the cost competitiveness (Labour) of a host country, the more foreign firms seeks to enter into a joint venture (JV) in a foreign country.

Base on this study, this factor was seen not to have a significant effect on the mode of entry into Ireland by American MNCs. Thus, it does not support the hypothesis and it is not supported in this study

8. Political, Social, and Economical Condition Stabilities (Location Advantage)

*Stating **H11***

Firms will likely set up a greenfield investment rather than a joint venture, if a country political, socio-economical climate is stable.

This factor is not statistically significant in this study. So it does not support the above hypotheses.

9. Country Contractual Risk (Internalization Advantage)

*Stating **H12***

The more the contractual risk (risk associated with transfer knowledge) associated with a host country, the less likely will a foreign firm set up a greenfield investment, but go for a joint venture (JV).

This variable does not have an statistical significance effect on American entry mode according to this study. American MNCs do not have to care about this factor, because they knew that contract/ other business laws are well spelt out in Ireland.

10. Research & Development Intensity

*Stating **H13***

The higher a foreign country research & development (innovation and creativity) intensity is, the more likely foreign firms seek to enter into a JV partnership structure in that foreign country

R&D Intensity does not have a significant relationship with entry mode decisions made by American MNCs according to this study, so it does not support the above hypothesis at $p < 0.05$

Truly, on the positive side, Ireland is a country of high R&D status.

Table 3 : The summary of the hypotheses testing of 'OLI' in this study.

HYPOTHESES	INDEPENDENT VARIABLES	HYPOTHESIS TESTING
HI	TECHNOLOGY	NOT SUPPORTED
H2	AVAILABITLITY OF LABOUR FORCE SKILLS AND QUALITY OF EDUCATION	NOT SUPPORTED
H3	RISK ASSOCIATED WITH MISUSE OF PROPRIETARY KNOWLEDGE EXPERIENCE	NOT SUPPORTED
H4	FIRM SIZE	SUPPORTED
H5	POTENTIAL TO CREATE NEW PRODUCTS	NOT SUPPORTED
H6	INTERNATIONAL BUSINESS EXPERIENCE	NOT SUPPORTED
H7	CULTURAL DISTANCES	NOT SUPPORTED
H8	MARKET POTENTIAL	NOT SUPPORTED
H9	HOST GOVERNMENT REGULATION	NOT SUPPORTED
H10	PRODUCTION COST	NOT SUPPORTED
H11	POLITICAL ,SOCIAL,AND ECONOMIC CONDITIONS STABILITY	NOT SUPPORTED
H12	COUNTRY COUNTRACTUAL RISK	NOT SUPPORTED
H13	R&D INTENSITY	NOT SUPPORTED

CHAPTER 6

DISCUSSION AND CONCLUSION

6.0 Discussion

This study major objective was to examine the effect of interrelationships among Ownership Advantages (Firm Size, Potential to Create New Products, International Business Experience, Technology/Financial/Managerial Capabilities), Location Advantages (Culture Distance, Market Potential, Host Government Regulation, Production Cost, Political/social and Economic Stability, Availability of Labour Force Skills and Quality of Education), and Internalization Advantages(Country Contractual Risk, R&D Intensity, Risk Associated with Misuse of Proprietary Knowledge) factors had on American Multinational Corporations' on their choice of foreign market entry mode.

The result from my study provided support for some of my stated hypothesized effects of the interrelationships, while also confirming with previous studies done on the different independent variables or factors.

Firstly my findings from this study imply that American MNCs/ firms that have invested in Ireland so far, seems not to be constrain by their firm size, potential to create new products and their international business experience. While the result from this study give support to the fact that entry mode decisions into Ireland by American firms have been made with consideration for the level of there technological ,managerial and financial capabilities, which are needed for a long term success of every firm, even in countries that do not have high risks. In

addition to this, there were other interesting findings emerged from this study. One expect only American MNCs to invest in Ireland may be because they have gained with time lots of international experience, but what really seems to be happening its that some of these firms in Ireland have as little as one year international experience, which was garnered or gained from this country.

The firm size was not also a factor that determined their chioce of entry mode; most of American firms were noticed to have invested in Ireland through greenfield investment mode. Some of these firms really have as little as less than ten employees and this have not deter them to choosing the greenfield investment entry mode. These little American firms seems not to deter by the large multinational firms, they knew that a good percentage of their goods and services are made for the outside market.

Secondly, the result from this study showed that some of American MNCs/firms entry mode might have been determined the availability of labour force skills and quality of education in Ireland. This independent variable had a statistical significant relationship with their chioce of entry mode according to the analysis, but it is worth acknowledging the fact that Ireland has a wide pool of knowledgeable workforce to pull from, no matter what entry method.

The issue of cultural distance was identified not to be a determining entry mode factor. This is an understandable issue as both countries speak English, and it's a fact that Ireland is becoming a multicultural country .This means that non-English speaking foreigners crave to learn the English language. So language means of business transaction will be the same with no particular advantage in the chioce of entry mode made by any of American firm in Ireland.

Market potential was not also considered to determine choice of entry mode by American MNCs/ firms. This is understandable as most of these firms make use of Ireland as a gate way to serving the wider outside market in other parts of the world. The little number of firms identified in this study to serve the local market can be said to be firms that have small and medium enterprise status.

One determinant “Risk Associated with Misuse of Proprietary Knowledge” was one of the driver’s, why most American firms might have made their choice of entry mode that they believed to suit their operations most. Data from some of the firms showed they were in the information technology sector and where not ready to share their market secrets with others that might later become a competitor.

Thirdly, from an entry point of view, America MNCs seems to prefer the greenfield investment entry mode better than the joint venture entry mode. This is justified from the percentage of respondent firms .They may have preferred this due to various reasons that might include for instance, capabilities to produce differentiated new products. On the other hand the geographical location of Ireland, serves as a point to market goods and services to other countries as mentioned before. Another fact that would have encouraged most of these firms into greenfield investment can be said to be the friendly business atmosphere, good government, attractive investment regulations and a nation that is politically, socially and economically stable.

Very few American MNC chose the path of joint venture entry. My studies showed less than 10 firms from respondents made there entry mode through this very way. It might have been due to some of the above listed advantages in Dunning’s “OLI” eclectic framework. Ireland is a nation known to be one of the great centres of

R&D, and as expected, spillover's of technologies and skills will surely flow from one firms that has a relationship with one another. The issue of contractual risks or investment risks in Ireland is laid out in ways that there is no reason from this angle to necessitate firms considering the chioce of a joint venture partnership, so as to share cost of risks in future time.

6.1 Conclusions and Limitations

The main objectives of this study were to explore how the Ownership Advantages Location Advantages and Internalization Advantages shape the choice of market entry made by American Multinational MNCs/firms in Ireland. And also verifying the suitability's of Dunning's (OLI) Eclectic market entry framework to explaining the choices made by these corporations/firms in Ireland.

Based on the results, this study provided support for three of the thirteen hypothesized relationships, showing that these three independent advantages were statistically significant. These three are; Technology and Financial capabilities (Ownership Advantages), Availability of Labour Force Skills and Quality of Education (Location Advantage) .They have helped these MNCs/firms , their chioce of entry mode, particularly preferring the chioce of greenfield investment over joint venture from an entry point of view.

This study in the end, found out that American MNCs and its other smaller companies prefer greenfield mode of entry into Ireland and that determinants

ascribed to Ownership Advantages, Location Advantages and Internalization Advantages have a role to play in there respective choice.

It is highly important to state that, the final results and conclusion reached at the end of this result should be considered within the scope of this study research method that I employed. Some inconsistencies would above) of statistically significance among the thirteen stated independent variables. Apart from authenticating and supporting Dunning “OLI” framework, this framework helped in providing a perfect explanatory ability for the choice of entry mode made by American MNCs/firms and they are seen to prefer greenfield investment entry mode choice as their “OLI” advantages increase.

Having just three amounts of significant independent variables, must have being because of he low amount of the usable questionnaires I go in return. The number of my valid usable questionnaires were only 57.If compared to those of other studies seems very little and this might have contributed to having a small amount (Just three determinants)

For example, Lee& Huang (p.79, 2009) in there studies, had access to a total of 283 firms in year 2005 and that of Sanjeev & Sridhar (p.12, 1992), had useable questionnaires of 97 firms. The summer season period in which one has to send out and wait to collect returned mail, is also an unfriendly period for a study of this nature. I missed out on most surveys because of the fact that most people were leaving for their respective holidays within this period of time.

Finally, this study I believe will profit future American MNC or firms that might want to make an FDI entry into Ireland

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APPENDICES

APPENDIX 1

Questionnaire

July 25, 2011

Dear Sir / Madam,

I am conducting a study entitled, “Foreign direct investment (FDI) entry mode choices between greenfield (Wholly-owned) and joint venture (JV) by American Multinational Corporations (MNCs) in Ireland- Dunning’s (OLI) eclectic theory perspective” as a Master’s of Science (MSc) student in Management Program at National College of Ireland.

Therefore, I would greatly appreciate it if you could participate in this study; as the information provided by you will be helpful for the successful completion of my dissertation.Please take the time to answer the attached questionnaire. If there are any queries, please do not hesitate to contact the undersigned at uyikk@yahoo.com.

Finally, I would like to extend my sincere gratitude for your valuable time and cooperation extended in this regard.

Thanking you in anticipation.

Yours faithfully,

Timothy O. Ogiemwonyi

The questionnaire below contains 24 short questions (4 sections) that include general information about FDI in Ireland, and factors that shape the strategic choice of multinationals in choosing between Greenfield (Wholly owned) and joint venture (JV). All information that you provide will be used in the strictest confidence and your cooperation will be highly appreciated.

Name: _____ Date: _____

E-mail: _____ Contact No: _____

PART 1: CORPORATION / COMPANY INFORMATION

This section consists of questions which are related to general information about your corporation/company.

1. What was your corporation/ company choice of entry mode into Ireland?

a- Greenfield Investment (Wholly owned)

b- Joint Venture

c-Other (Please specify):-…..……

2. What sector of the economy does your corporation/company belong to? :-

……..……

…

……..……

…

PART 2: FACTORS RELATED TO FDI

In this section, please rate the listed factors below from question 3 to 5 , according to how they had an impact on your choice of foreign direct investment market entry mode into Ireland. Starting with (1) as Least Important and (5) as most important. Please tick (X) only one for each variable in the cell below.

1 = Least Important. 2 = Less Important. 3 = Important. 4 = More Important. 5 = Most Important.

	Ownership Advantages	**Least Important → Most important**				
		1	2	3	4	5
3	Firm size					
4	Potential to create new products					
5	Technology and financial capabilities					
5	International business experience (Number of years) ……. years					

SI.NO	**Locational Advantages**	**Least Important → Most important**				
		1	2	3	4	5
7	Socio-Cultural distance					
8	Market potential					
9	Host government regulation					
10	Cost					

	competitiveness Labour)					
11	Availability of labour force skills and quality of education					
12	Political, social, and economic conditions stability					

SI.NO	**Internalization Advantages**	**Least Important → Most important**				
		1	2	3	4	5
13	Country contractual risk (Cost of enforcing contract in Ireland)					
14	R&D intensity(					
15	Risk associated with misuse of proprietary knowledge					

PART C: FOERIGN DIRECT INVESTMENT IN IRELAND

This section consists of questions which are related to general information about FDI in Ireland.

16. What is your opinion of Ireland as an investment destination in Europe?-

……..……
…

……..……
…

……..……
…

17. Do you have any intention to setup further investment opportunities in Ireland?-

Yes …… No ……

18. If “Yes”, Please specify:-

……..……
…

……..……
…

……..……
…

19. If “No” please give reasons why :- (Please specify if any)

……..……
…

……..……
…

……..……
…

20. Are you satisfied with the current incentives and or concessions granted by the Irish government to attract FDI for all sectors:-

Yes …….. No……

21. If "No" please give reasons why:-

……..……
…

……..……
…

PART D: PERSONAL INFORMATION

The purpose of this section is to enable me to analyse whether age, gender and/or position influence responses to the questionnaire

22. Gender: □ Male □ Female

23. Which age bracket do you fall into? □ 18-25 □ 26-30 □ 31-35 □ 36-40 □ 41-45 □ 46-50 □ over 50

24 Your current position is …….....

Please return the completed survey using the

ENCLOSED FREEPOST ENVELOPE or EMAIL:
omoruyitimothy.ogiemwonyi@student.ncirl.ie

Thank you for your assistance in this project

If you have any questions and/or require further information about this project, please do not hesitate to contact:

Mr Timothy O. Ogiemwonyi, National College of Ireland, IFSC, Dublin1.

(Tel: 0862364620)

Table 4

ENTRY MODE CHOICE * FIRM SIZE Crosstabulation

		FIRM SIZE					Total
		1	2	3	4	5	
EMC GREENFIELD	Count	8	9	18	13	2	50
	Expected Count	7.9	12.3	16.7	11.4	1.8	50.0
	% within ENTRY MODE CHIOCE	16.0%	18.%	36.0 %	26.0 %	4.0%	100%
	% of Total	14%	15.8%	31.6 %	22.8 %	3.5%	87.7%
JOINT VENTURE	Count	1	5	1	0	0	7
	Expected Count	1.1	1.7	2.3	1.6	..2	7.0

	% within ENTRY MODE CHIOCE	14.3%	71.4%	14.3 %	.0%	.0%	100%
	% of Total	1.8%	8.8%	1.8%	.0%	.0%	12.3%
TOTAL	Count	9	14	19	13	2	57
	Expected Count	9.0	14.0	19.0	13.0	2.0	57.0
	% within ENTRY MODE CHIOCE	15.8%	24.6%	33.3 %	22.8 %	3.5%	100%
	% of Total	15.8%	24.6%	33.3 %	22.8 %	3.5%	100%

Chart 1

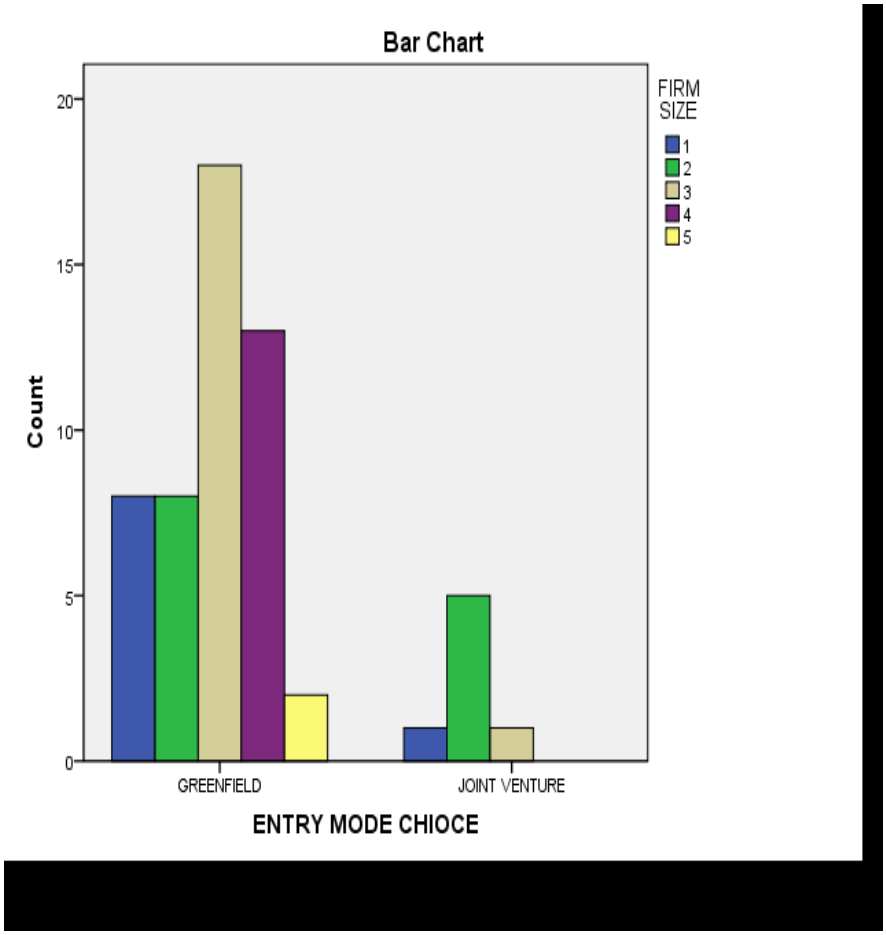

Bar Chart
FIRM SIZE
1
2
3
4
5
Count
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 5

ENTRY MODE CHOICE*NEW PRODUCTS CROSSTABULATION							
		NEW PRODUCTS					TOTAL
		1	2	3	4	5	
EMC GREENFIELD	Count	5	6	23	12	4	50
	Expected Count	4.4%	6.1	24.6	11.4	3.5	50.0
	% within EMC	10%	12.0%	46.0%	4.0%	8.0%	100.0%
	% OF TOTAL	8.8%	10.5%	40.4%	1.1%	7.0%	87.7%
Joint venture	Count	0	1	5	1	0	7
	Expected Count	.6	.9	3.4	1.6	0.5	7.0
	% within EMC	.0%	14.3%	71.4%	14.3%	.0%	100%
	% OF TOTAL	.0%	1.8%	8.8%	1.8%	.0%	12.3%
TOTAL	Count	5	7	28	13	4	57
	Expected count	5.0	7.0	28.0	13.0	4.0	57.0
	% within EMC	8.8%	12.3%	49.1%	22.8%	7.0%	100.0%
	% OF TOTAL	8.8%	12.3%	49.1%	22.8%	7.0%	100.0%

Chart 2

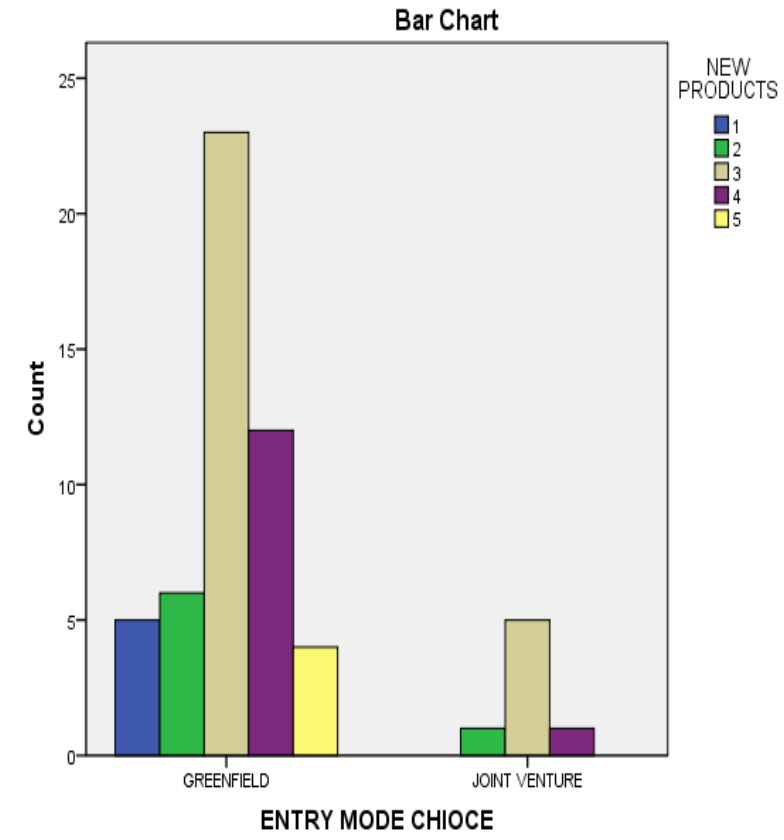
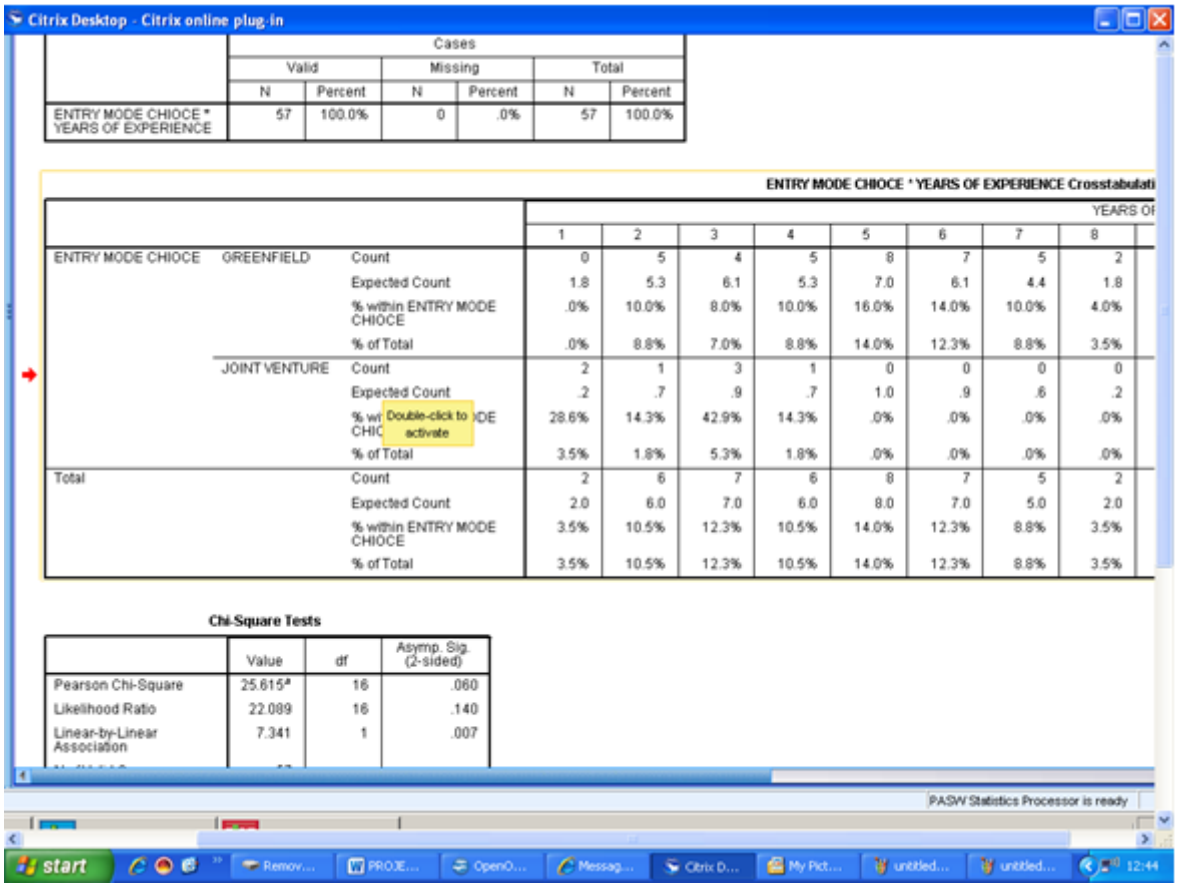
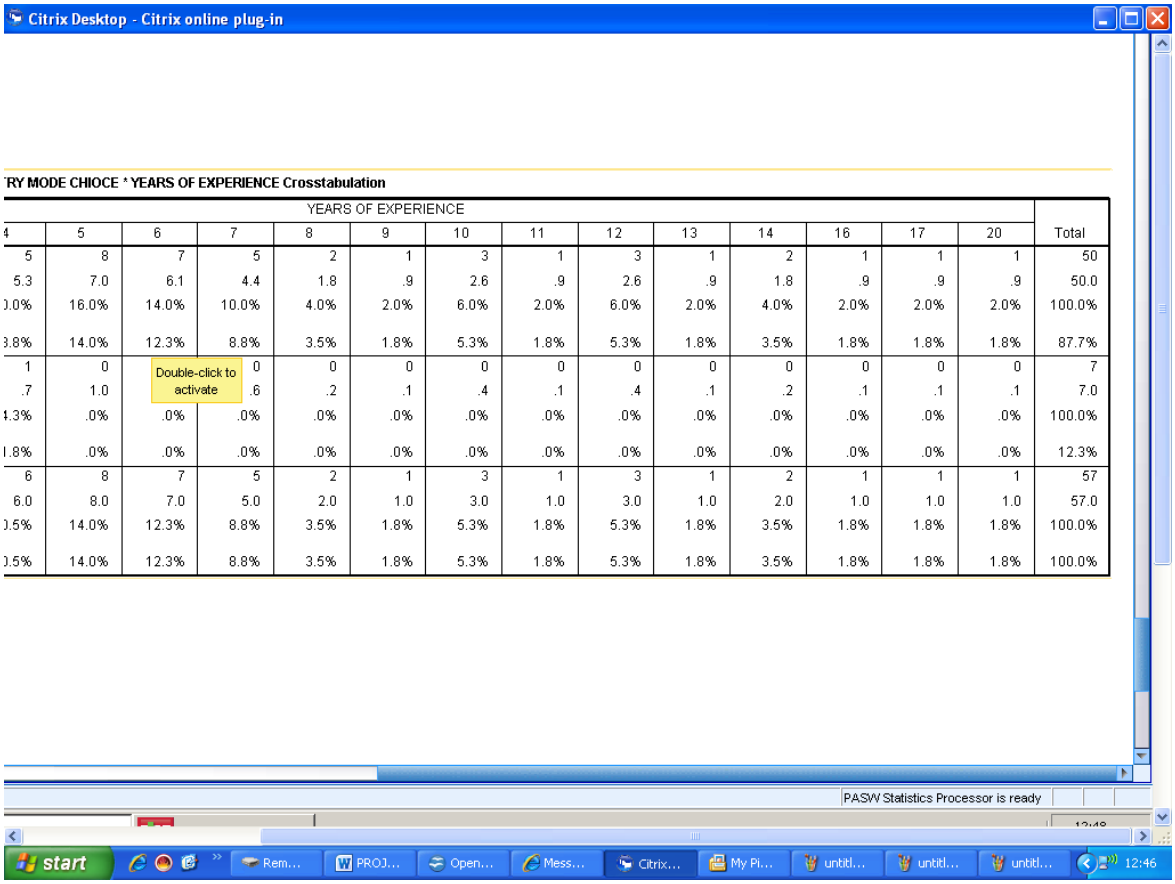

Bar Chart
NEW PRODUCTS
1
2
3
4
5
Count
25
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 6



Source from SPSS



Source from SPSS

Chart 3

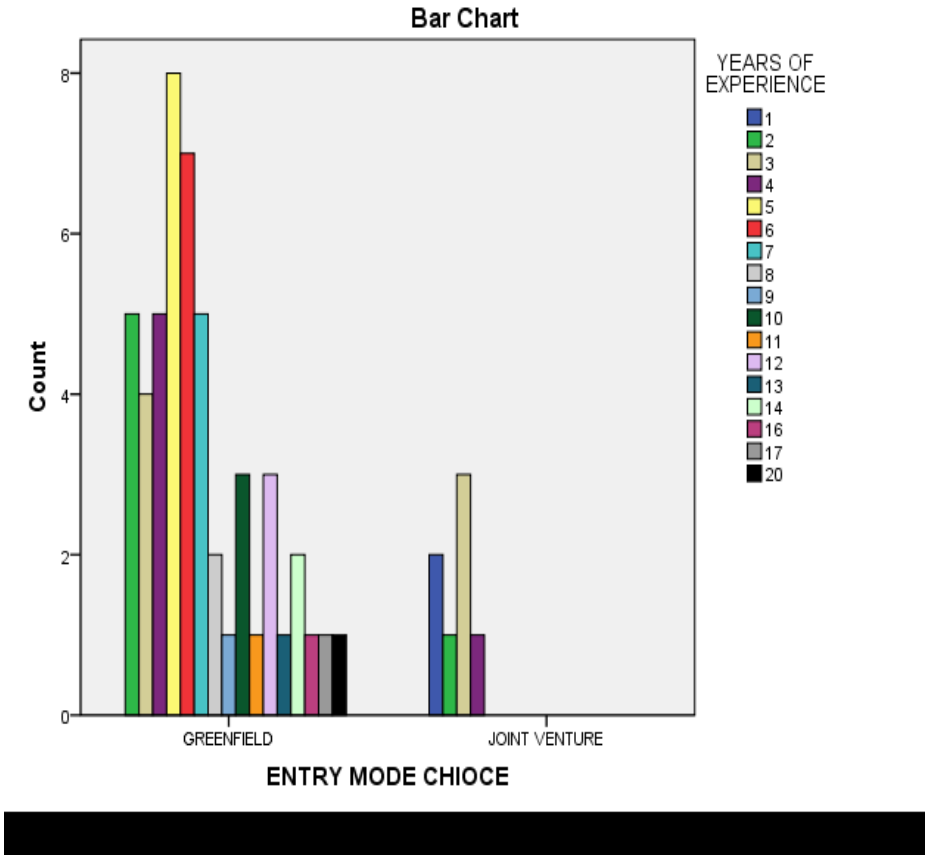

Bar Chart
YEARS OF EXPERIENCE
1
2
3
4
5
6
7
8
9
10
11
12
13
14
16
17
20
Count
0
2
4
6
8
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 7

ENTRY MODE CHOICE vs. TECH AND FINANCIAL CAPABILITIES						
		TECH AND FINANCIAL CAPABILITIES				TOTAL
		1	2	3	4	5	
EMC GREEFIELD	Count		5	20	23	2	50
	Expected Count		7.0	21.1	20.2	1.8	50.0
	% within ENTRY MODE CHIOCE		10.0%	40.0%	46.0%	4.0%	100.0%
	% of Total		8.8%	35.1%	40.4%	3.5%	87.7%
JOINT VENTURE	Count		3	4	0	0	7
	Expected Count		1.0	2.9	2.8	.2	7.0
	% within ENTRY MODE CHIOCE		42.9%	57.1%	.0%	.0%	100.0%
	% of Total		5.3%	7.0%	.0%	.0%	12.3%
Total	Count		8	24	23	2	57
	Expected Count		8.0	24.0	23.0	2.0	57.0
	% within ENTRY MODE CHIOCE		14.0%	42.1%	40.4%	3.5%	100.0%
	% of Total		14.0%	42.1%	40.4%	3.5%	100.0%

Chart 4

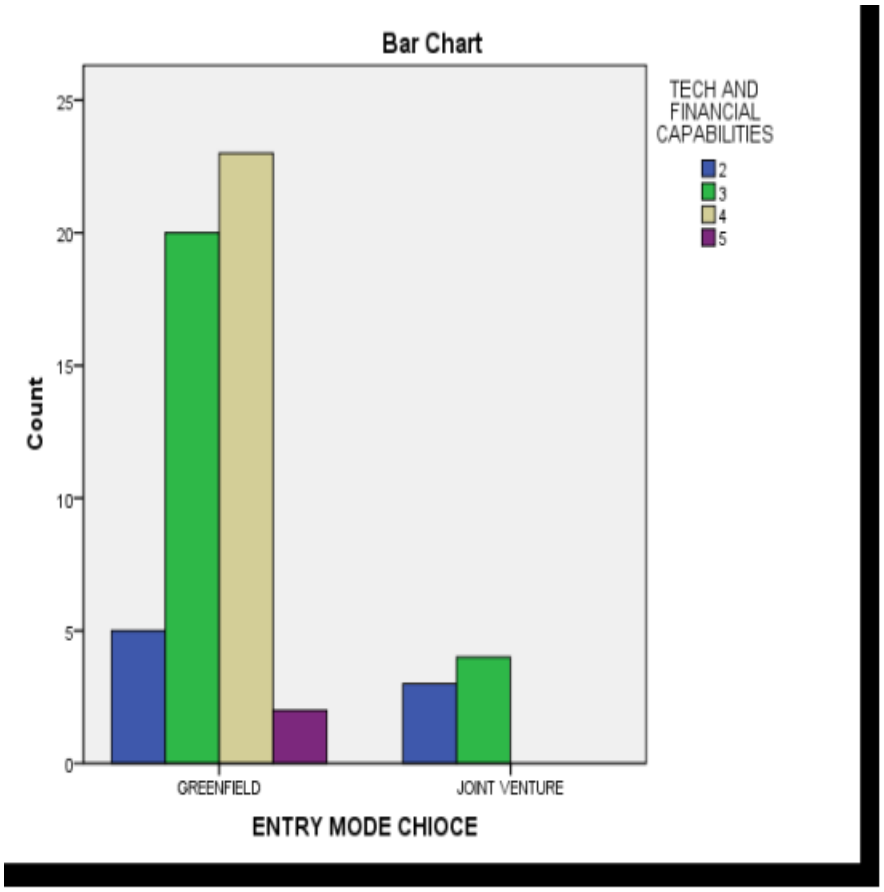

Bar Chart
TECH AND FINANCIAL CAPABILITIES
2
3
4
5
Count
25
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 8

ENTRY MODE CHOICE vs. CULTURAL DISTANCE CROSSTABULATION						
		CULTURAL DISTANCE				Total
		1	2	3	4	5	
EMC GREENFIELD	Count	3	15	12	18	2	50
	Expected Count						
	% within ENTRY MODE CHIOCE						
	% of Total						
JOINT VENTURE	Count						
	Expected Count						
	% within ENTRY MODE CHIOCE						
	% of Total						
Total	Count						
	Expected Count						
	% within ENTRY MODE CHIOCE						
	% of Total						

Chart 5

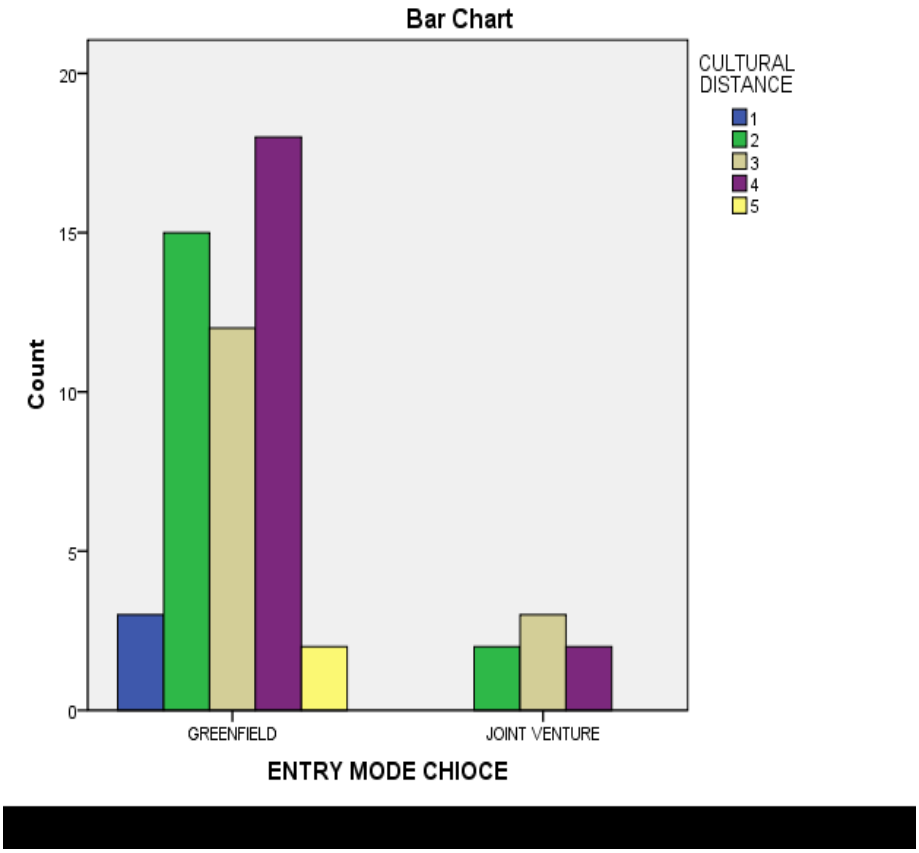

Bar Chart
CULTURAL DISTANCE
1
2
3
4
5
Count
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 9

ENTRY MODE CHOICE vs. MARKET POTENTIAL CROSSTABULATION						
	MARKET POTENTIAL					
	1	2	3	4	5	Total
EMC GREENFIELD Count			16	24	7	50
Expected Count			15.8	24.6	7.0	50.0
% within ENTRY MODE CHIOCE	2.0%	4.0%	32.0%	48.0%	14.0%	100.0%
% of Total	1.8%	3.5%	28.1%	42.1%	12.3%	87.7%
JOINT VENTURE Count	0	0	2	4	1	7
Expected Count	.1	.2	2.2	3.4	1.0	7.0
% within ENTRY MODE CHIOCE	.0%	.0%	28.6%	57.1%	14.3%	100.0%
% of Total	.0%	.0%	3.5%	7.0%	1.8%	12.3%
Total Count	1	2	18	28	8	57
Expected Count	1.0	2.0	18.0	28.0	8.0	57.0
% within ENTRY MODE CHOICE	1.8%	3.5%	31.6%	49.1%	14.0%	100%
% of Total	1.8%	3.5%	31.6%	49.1%	14.0%	100%

Chart 6

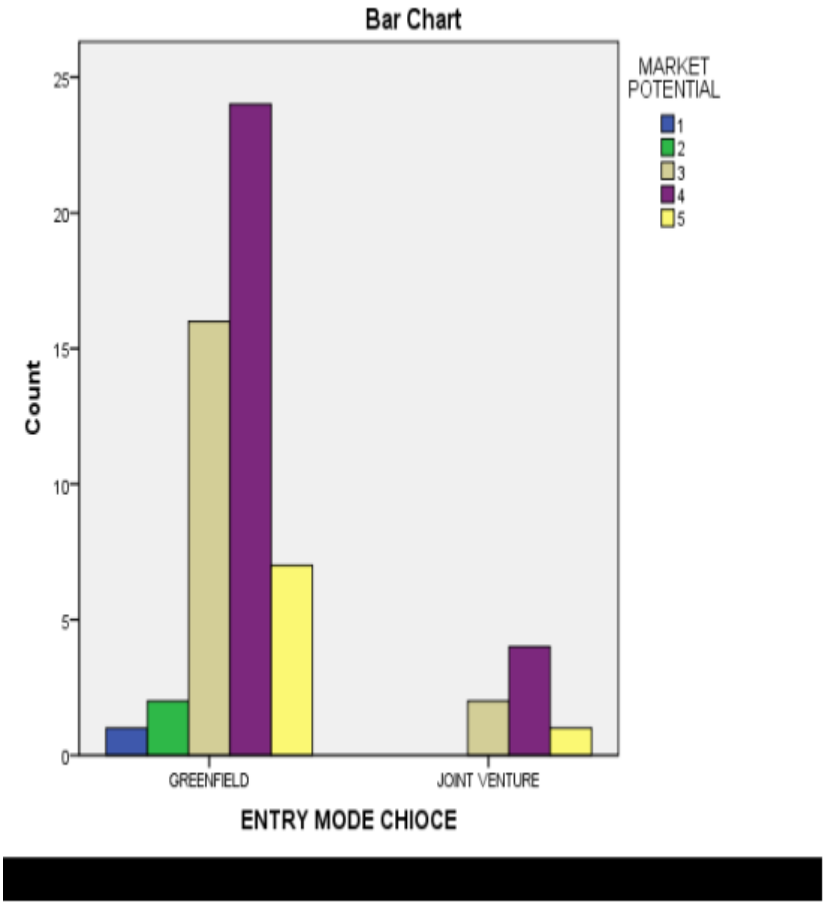

Bar Chart
MARKET POTENTIAL
1
2
3
4
5
Count
25
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 10

ENTRY MODE CHOICE vs. HOST GOVERNMENT REGULATION CROSSTABULATION						
	HOST GOVERNMENT REGULATION					
	1	2	3	4	5	Total
EMC GREENFIELD Count			3	4	0	7
Expected Count			2.3	4.1	.6	7.0
% within ENTRY MODE CHIOCE			42.9%	57.1%	.0%	100.0%
% of Total			5.3%	7.0%	.0%	12.3%
JOINT VENTURE Count			16	29	5	50
Expected Count			16.7	28.9	4.4	50.0
% within ENTRY MODE CHIOCE			32.0%	58.0%	10.0%	100.0%
% of Total			28.1%	50.9%	8.8%	87.7%
Total Count			19	33	5	57
Expected Count			19.0	33.0	5.0	57.0
% within ENTRY MODE CHIOCE			33.3%	57.9%	8.8%	100.0%
% of Total			33.3%	57.9%	8.8%	100.0%

Chart 7

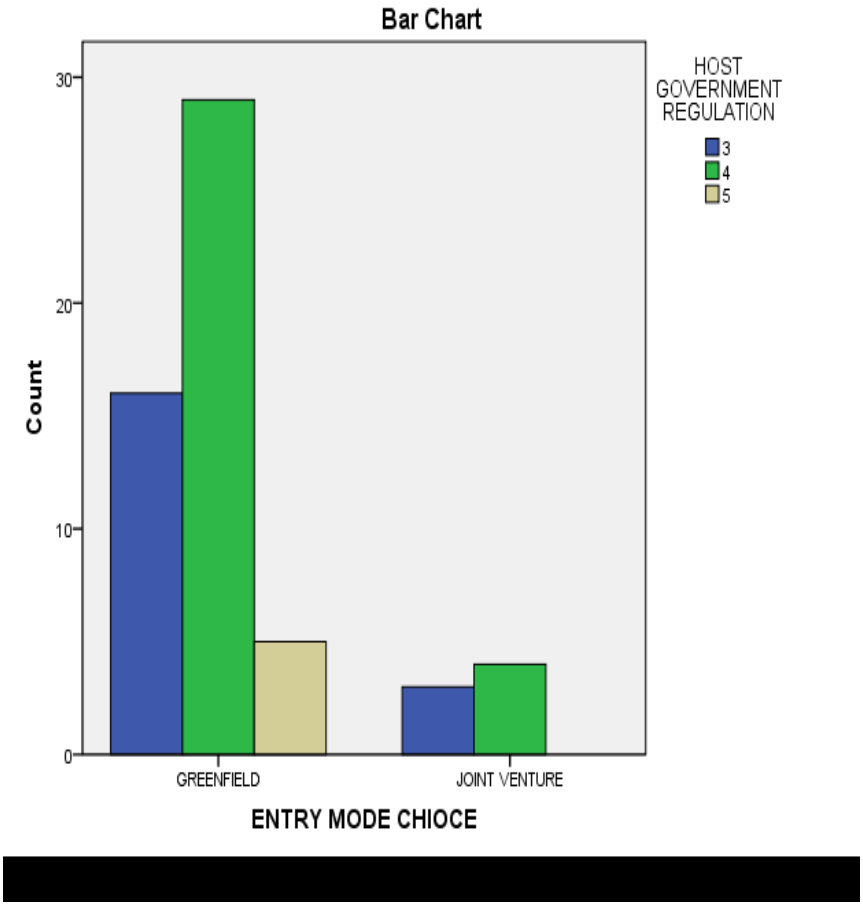

Bar Chart
HOST GOVERNMENT REGULATION
3
4
5
Count
30
20
10
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 11

ENTRY MODE CHOICE vs. PRODUCTION COST CROSSTABULATION					
	PRODUCTION COST-LABOUR				
	2	3	4	5	Total
EMC GREENFIELD Count	1	2	4	0	7
Expected Count	.6	2.8	3.1	.5	7.0
% within ENTRY MODE CHIOCE	14.3%	28.6%	57.1%	.0%	100.0%
% of Total	1.8%	3.5%	7.0%	.0%	12.3%
JOINT VENTURE Count	4	21	21	4	50
Expected Count	4.4	20.0	21.9	3.5	50.0
% within ENTRY MODE CHIOCE	8.0%	42.0%	42.0%	8.0%	100%
% of Total	7.0%	36.8%	36.8%	7.0%	87.7%
Total Count	**5**	**23**	**25**	**4**	**57**
Expected Count	**5.0**	**23.0**	**25.0**	**4.0**	**57.0**
% within ENTRY MODE CHIOCE	**8.8%**	**40.4%**	**43.9%**	**7.0%**	**100.0%**
% of Total	**8.8%**	**40.4%**	**43.9%**	**7.0%**	**100.0%**

Chart 8

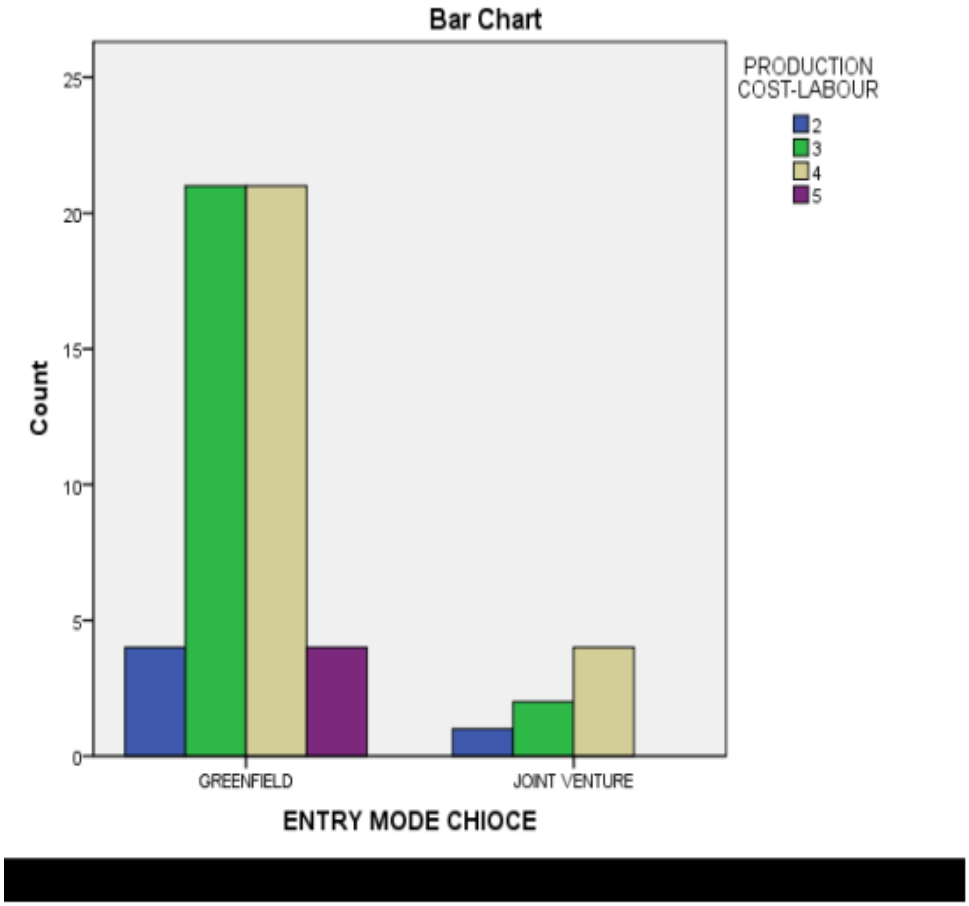

Bar Chart
PRODUCTION COST-LABOUR
2
3
4
5
Count
25
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 12

ENTRY MODE CHOICE vs. AVAIALABILITY OF LABOUR FORCE SKILLS AND QUALITY OF EDUCATION CROSSTABULATION						
	AVAIALABILITY OF LABOUR FORCE SKILLS AND QUALITY OF EDUCATION					
	1	2	3	4	5	Total
EMC GREENFIELD Count			5	2	0	7
Expected Count			2.3	3.4	1.2	7.0
% within ENTRY MODE CHIOCE			71.4%	28.6%	.0%	100%
% of Total			8.8%	3.5%	.0%	12.3%
JOINT VENTURE Count			14	26	10	50
Expected Count			16.7	24.6	8.8	50.0
% within ENTRY MODE CHIOCE			28%	52.0%	20.0%	100%
% of Total			24.6%	6%	17.5%	87.7%
Total Count			19	28	10	57
Expected Count			19.0	28%	10.0	57.0
% within ENTRY MODE CHIOCE			33.3%	49.1%	17.5%	100.0%
% of Total			33.3%	49.1%	17.5%	100.0%

Chart 9

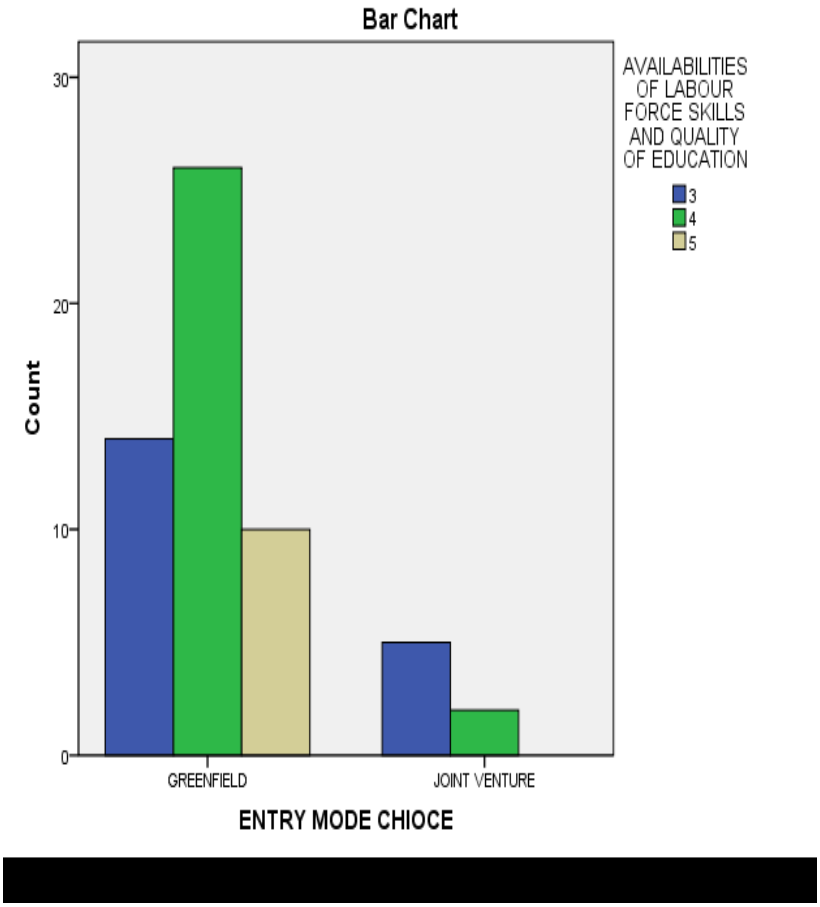

Bar Chart
AVAILABILITIES OF LABOUR FORCE SKILLS AND QUALITY OF EDUCATION
3
4
5
Count
30
20
10
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

TABLE 13

ENTRY MODE CHOICE vs. POLITICAL.SOCIAL & ECONOMICAL CONDITION STABILITIES CROSSTABULATION						
	POLITICAL.SOCIAL & ECONOMICAL CONDITION STABILITIES					
	1	2	3	4	5	Total
EMC GREENFIELD Count		2	2	3	0	7
Expected Count		.5	1.6	4.2	.7	7.0
% within ENTRY MODE CHIOCE		28.6%	28.6%	42.9%	0%	100.0%
% of Total		3.5%	3.5%	5.3%	.0%	12.3%
JOINT VENTURE Count		2	11	31	6	50
Expected Count		3.5	11.4	29.8	5.3	50.0
% within ENTRY MODE CHIOCE		4.0%	22.0%	62.0%	12.0%	100.0%
% of Total		3.5%	19.3%	54.4%	10.5%	87.7%
Total Count		4	13	34	6	57
Expected Count		4.0	13.0	34.0	6.0	57.0
% within ENTRY MODE CHIOCE		7.0%	22.8%	59.6%	10.5%	100.0%
% of Total		7.0%	22.8%	59.6%	10.5%	100.0%

Chart 10

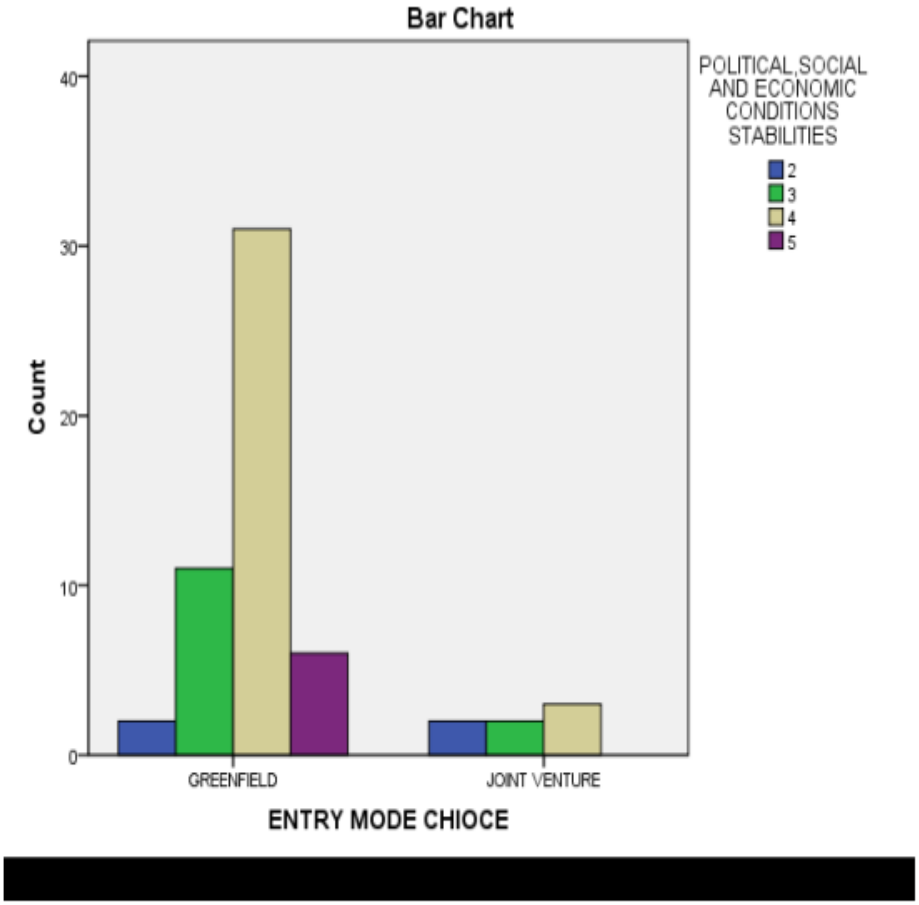

Bar Chart
POLITICAL,SOCIAL AND ECONOMIC CONDITIONS STABILITIES
2
3
4
5
Count
40
30
20
10
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 14

ENTRY MODE CHOICE vs. HOST CONTRACTUAL RISK CROSSTABULATION						
	HOST CONTRACTUAL RISK					
	1	2	3	4	5	Total
EMC GREENFIELD Count	0	0	6	1	0	7
Expected Count	.5	21	2.9	1.4	.1	7.0
% within ENTRY MODE CHIOCE	.0%	.0%	85.7%	14.3%	.0%	100.0%
% of Total	.0%	.0%	10.5%	1.8%	.0%	12.3%
JOINT VENTURE Count	4	17	18	10	1	50
Expected Count	3.5	14.9	21.1	9.6	.9	50.0
% within ENTRY MODE CHIOCE	8.0%	34.0%	36.0%	20.0%	2.0	100.0%
% of Total	7.0%	29.8%	31.6%	17.5%	1.8%	87.7%
Total Count	4	17	24	11	1	57
Expected Count	4.0	17.0	24.0	11.0	1.0	57.0
% within ENTRY MODE CHIOCE	7.0%	29.8%	42.1%	19.3%	1.8%	100%
% of Total	7.0%	29.8%	42.1%	19.3%	1.8%	100%

Chart 11

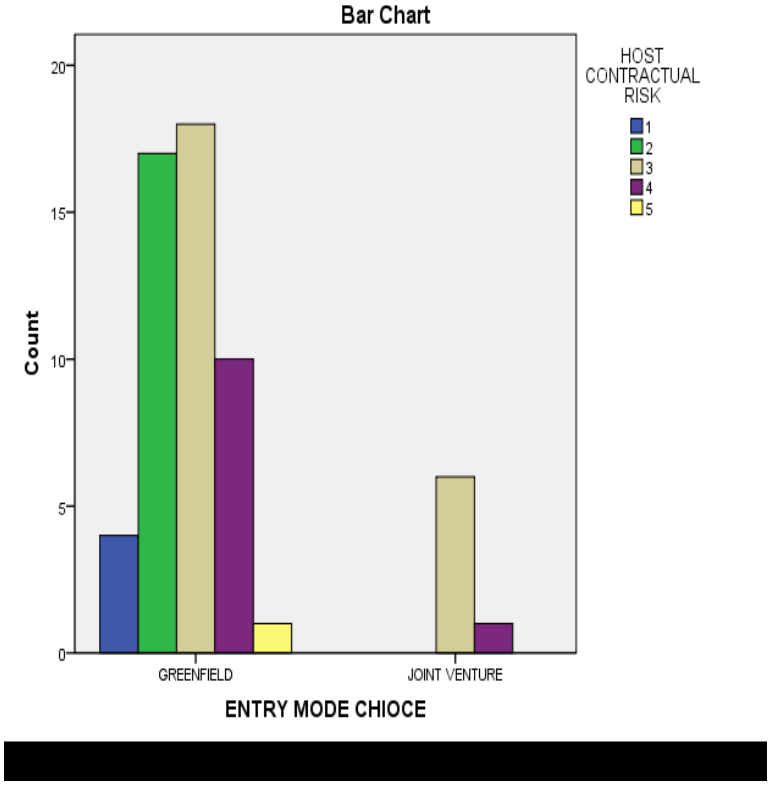

Bar Chart
HOST CONTRACTUAL RISK
1
2
3
4
5
Count
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 15

ENTRY MODE CHOICE vs. R&D INTENSITY CROSSTABULATION						
	R&D INTENSITY					
	1	2	3	4	5	Total
EMC GREENFIELD Count	.0	0	4	3	0	7
Expected Count	.2	1.0	2.3	2.8	.6	7.0
% within ENTRY MODE CHIOCE	.0%	.0%	57.1%	42.9%	.0%	100.0%
% of Total	.0%	.0%	7.0%	5.3%	.0%	12.3%
J OINT VENTURE Count	2	8	15	20	5	50
Expected Count	1.8	7.0	16.7	20.2	4.4	50.0
% within ENTRY MODE CHIOCE	4.0%	16.0%	30.0%	40.0%	10.0%	100.0%
% of Total	3.5%	14.0%	26.3%	35.1%	8.8%	87.7%
Total Count	2	8	19	23	5	57
Expected Count	2.0	8.0	19.0	23.0	5.0	57.0
% within ENTRY MODE CHIOCE	3.5%	14.0%	33.3%	40.4%	8.8%	100.0%
% of Total	3.5%	14.0%	33.3%	40.4%	8.8%	100.0%

Chart 12

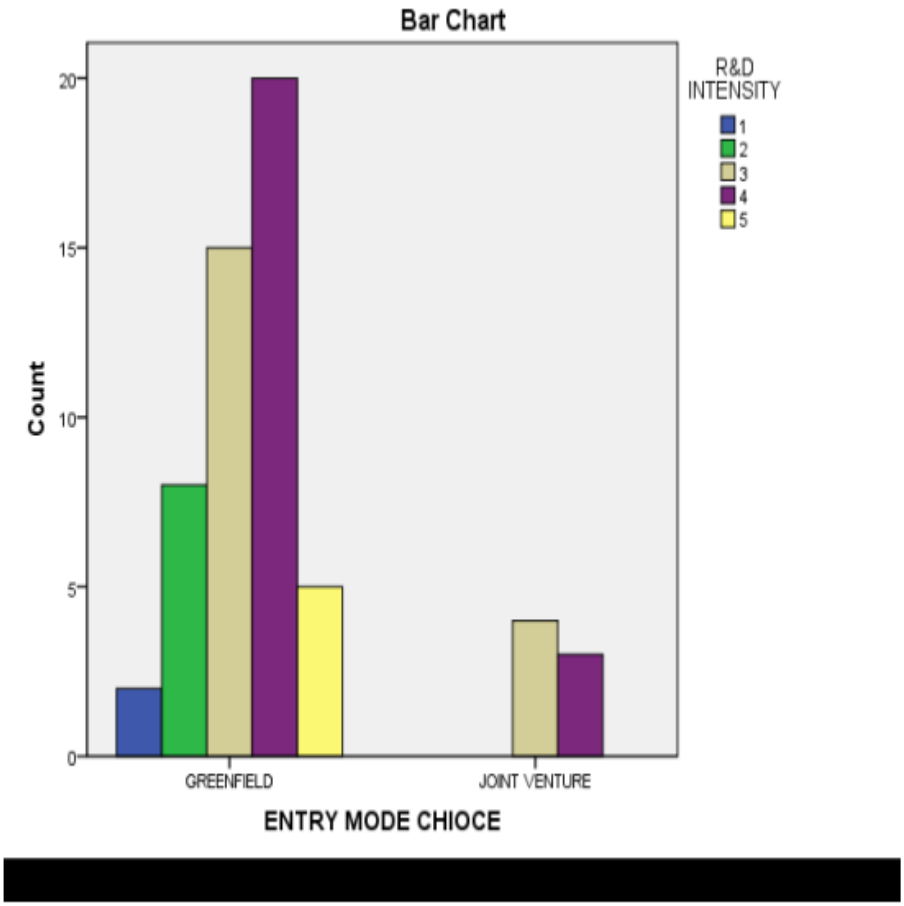

Bar Chart
R&D INTENSITY
1
2
3
4
5
Count
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 16

ENTRY MODE CHOICE vs. RISK OF MISUSE OF PROPRIETY KNOWLEDGE CROSSTABULATION						
	RISK OF MISUSE OF PROPRIETY KNWLEDGE					TOTAL
	1	2	3	4	5	Total
EMC GREENFIELD Count	0	0	1	6		7
Expected Count	.6	1.0	2.7	2.7		7.0
% within ENTRY MODE CHIOCE	.0%	.0%	14.3%	85.7%		100.0%
% of Total	.0%	.0%	1.8%	10.5%		12.3%
JOINT VENTURE Count	5	8	21	16		50
Expected Count	44	7.0	19.3	19.3		50.0
% within ENTRY MODE CHIOCE	10.0%	16.0%	42.0%	32.0%		100%
% of Total	8.8%	14.0%	36.8%	28.1%		87.7%
Total Count	5	8	22	22		57
Expected Count	5.0	8.0	22.0	22.0		57.0
% within ENTRY MODE CHIOCE	8.8%	14.0%	38.6%	38.6%		100%
% of Total	8.8%	14.0%	38.6%	38.6%		100%

Chart 13

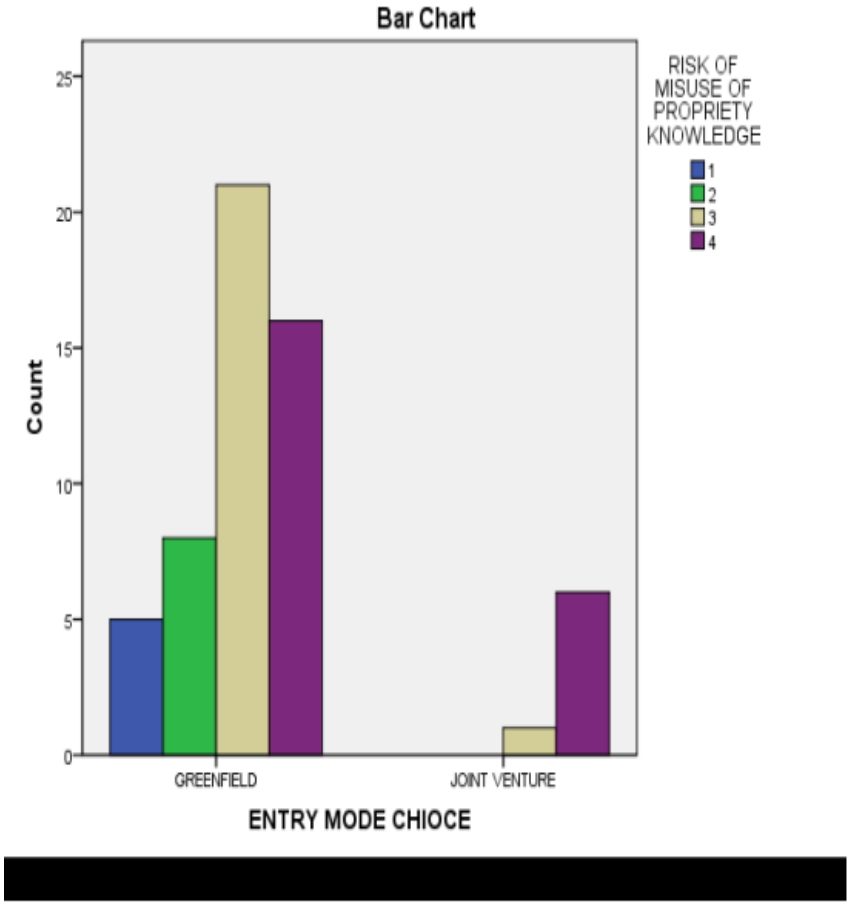

Bar Chart
RISK OF MISUSE OF PROPRIETY KNOWLEDGE
1
2
3
4
Count
25
20
15
10
5
0
GREENFIELD
JOINT VENTURE
ENTRY MODE CHIOCE

Table 17

Classification Table

Observed		Predicted	
			Percentage Correct
Step 0	ENTRY MODE CHIOCE	GREENFIELD	100.0
		JOINT VENTURE	.0
	Overall Percentage		87.7

a. Constant is included in the model

b. The cut value is .500

Table 18

Iteration History*a,b,c,d,e,f

Iteration		-2 log likelihood	Coefficients			
			constant	TECHFIN	PRPKNOW	AVALSKI
Step1	1	39.044	.668	.653		
	2	34.632	2.137	-1.274		
	3	33.923	3.049	-1.654		
	4	33.891	3.275	-1.751		
	5	33.891	3.287	-1.756		
	6	33.891	3.287	-1.756		
Step2	1	33.946	-.623	-.786	-564	
	2	26.782	-.752	-1.449	1.073	
	3	24.864	-1.233	-1.917	1.527	
	4	24.548	-1.967	-2.111	1.851	
	5	24.528	-2.358	-2.142	1.973	
	6	24.528	-2.402	-2.143	1.985	
	7	24.528	-2.402	-2.143	1.985	
Step3	1	31.877	.779	-.674	.603	-.493
	2	23.054	2.238	-1.213	1.133	-1.053
	3	19.362	3.587	-1.592	1.762	-1.820
	4	17.656	3.948	-1.812	2.662	-2.723
	5	17.183	3.737	-2.009	3.484	-3.390
	6	17.150	3.708	-2.110	3.762	-3.599

7	17.150	3.708	-2.119	3.785	-3.616
8	17.150	3.708	-2.119	3.785	-3.616

a. Method : Forward Stepwise (Likelihood)

b. Constant is included in the model.

c. Initial -2 Log Likelihood : 42.463

d. Estimation terminated at iteration number 6 because parameter estimates changed by less than .001

e. Estimation terminated at iteration number 7 because parameter estimates changed by less than .001

f. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001

Table 19

Model Summary Table

Step	-2 log Likelihood	Cox & Snell R Square	Nagelkerke R Square
1	33.891*a	.140	.266
2	24.528*b	.270	.514
3	17.150*c	.359	.683

a. Estimation terminated at iteration number because parameter estimates changed by less than .001

b. Estimation terminated at iteration number 7 because parameter etimates changed by less than .001

c. Estimation terminated at iteration number 8 because parameter estimates changed by less than .001

Table 20

Hosmer and Lemeshow Test

Step	Chi-Square	Df	Sig.
1	1.777	2	.555
2	1.610	7	.978
3	.890	6	.989

Table 21 Classification Table*a

Observed		Predicted		
		ENRY MODE CHIOCE		Percentage Correct
		GREENFIELD	JOINT VENTURE	
Step 1 ENTRY MODE CHIOCE	GREENFIELD	50	0	100.0
	JOINT VENTURE	7	0	.0
Overall Percentage				87.7
Step 2 ENTRY MODE CHIOCE	GREENFIELD	49	1	98.0
	JOINT VENTURE	4	3	42.9
Overall Percentage				91.2
Step 3 ENTRY MODE CHIOCE	GREENFIELD	49	1	98.0
	JOINT VENTURE	2	5	71.4
Overall Percentage				94.7

a. The cut value is .500

Table 22 **Variables in the Equation**

		B	S.E	Wald	df	Sig.	Exp(B)
Step 1	TECHFIN	-1.756	.687	6.546	1	.011	.173
	Constant	3.287	1.917	2.941	1	.086	26.773
Step 2	TECHFIN	-2.143	.871	6.052	1	.014	.117
	PRPKNOW	1.985	1.047	3.592	1	.058	7.278
	Constant	-2.402	4.506	.284	1	.594	.091
Step 3	TECHFIN	-2.119	1.040	4.150	1	.042	.120
	AVALSKI	-3.616	1.715	4.445	1	.035	.027
	PRPKNOW	3.785	1.844	4.212	1	.040	44.022
	Constant	3.708	6.236	.354	1	.552	40.765

a. Variable(s) entered on step 1 : TECHFIN

b. Variable(s) entered on step 2 : PRPKNOW

c. Variable(s) entered on step 3 : AVALSKI

Table 23 **Model if Term Removed**

Variable		Model Log Likelihood	Change in -2 Log Likelihood	df	Sig. of the Change
Step 1	TECHFIN	-21.231	8.572	1	0.03
Step 2	TECHFIN	-17.006	9.484	1	.002
	PRPKNOW	-16.946	9.364	1	.002
Step 3	TECHFIN	-11.399	5.649	1	.017
	AVALSKI	-12.264	7.378	1	.007
	PRPKNOW	-14.553	11.956	1	.001

Table 24 Variables not in the Equation

		Score	df	Sig.
Step 1	Variables FSIZE	2.126	1	.145
	NEWPROD	.918	1	.338
	EXPERIENCE	5.167	1	.023
	CULTURE	.660	1	.417
	MARKPOT	.205	1	.650
	GOVEREG	.976	1	.323
	PROCOST	.933	1	.334
	AVALSKI	4.164	1	.041
	POSOECST	3.445	1	.063
	COTRISK	3.325	1	.068
	RDINTEN	.135	1	.713
	PRPKNOW	7.161	1	.007
	Overall Statistics	19.368	12	.080
Step 2	Variables FSIZE	2.402	1	.121
	NEWPROD	.303	1	.582
	EXPERIENCE	3.377	1	.066
	CULTURE	.042	1	.838
	MARKPOT	.161	1	.689
	GOVEREG	.040	1	.842
	PROCOST	.529	1	.467
	AVALSKI	5.817	1	.016
	POSOECST	.471	1	.492
	COTRISK	1.321	1	.250

	RDINTEN	.907	1	.341
Overall Statistics		14.947	11	.185
Step 3 Variables	FSIZE	2.632	1	.105
	NEWPROD	.004	1	.948
	EXPERIENCE	1.720	1	.190
	CULTURE	.431	1	.512
	MARKPOT	.507	1	.476
	GOVEREG	.466	1	.495
	PROCOST	.470	1	.493
	POSOECST	.271	1	.602
	COTRISK	1.453	1	.228
	RDINTEN	2.571	1	.109
Overall Statistics		12.564	10	.249