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Impact of multinationality on the value creation of publicly listed companies

Abigail Felistus Tsitsi Chibafa

U14444543

A research project submitted to the Gordon's Institute of Business Science, University of Pretoria, in partial fulfilment of the requirements for the degree of Master's in Business Administration.

ABSTRACT

A company's main objective is creating shareholder value. International expansion is a strategy employed by companies in pursuit of growth and value creation. South Africa has been characterised by economic growth lower than the rest of Africa and developed countries. This trend is expected to continue into the foreseeable future. Internationalisation becomes imperative for companies seeking growth and value creation.

The objective was to investigate the impact of multinationality on value creation of multinational companies from South Africa. Geographic location and the degree of internationalisation were considered. Previous studies focussed on developed country multinationals, while this research study focused on South African multinationals to provide an emerging market perspective. Generalised linear models with fixed effects and t-tests were conducted to measure the effect multinationality, geographic location and degree of multinationality has on the return of shareholders' funds and market capitalisation.

Market capitalisation demonstrated statistically significant results when tested against multinationality, degree of internationalisation and geographic location. However the effect of geographic location on market capitalisation was negative. Return on shareholders' funds had statistically significant results with negative effects when tested against multinationality and exhibited no significance with geographic location of investment and degree of internationalisation. Multinationality, geographic location and the degree of internationalisation do affect company value creation.

KEY WORDS

Multinationality, Internalisation, Firm Value, Performance

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfilment of the requirements for the degree of Master of Business Administration at the Gordon Institute of Business Science, University of Pretoria. It has not been submitted before for any degree or examination in any other University. I further declare that I have obtained the necessary authorisation and consent to carry out this research.

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CHAPTER 1: INTRODUCTION OF PROBLEM

The Impact of Multinationality on the Value Creation of Publicly Listed Companies.

1.1 Research Problem and Purpose

The study sought to determine whether multinationality creates value for companies originating from South Africa. Companies operating in various industries were deliberated and the effect, if any, on the level of multinationality and location of investments on value creation was considered.

South Africa is classified as an emerging market economy (Human Development Report, 2013; UNCTAD, 2014). The continued high levels of economic development being experience by emerging economies and the increasing importance of multinational companies originating from these economies has resuscitated the curiosity about the nature of these companies (Ramachandran & Pant, 2010). The increased need for resources, modest growth and market saturation in advanced economies, has made developed multinational companies (DMNCs) examine new prospects to exploit growth opportunities and to acquire resources in emerging markets (Ramamurti, 2012). Simultaneously, emerging market multinational companies (EMNCs) are investigating methods to take advantage of opportunities and resources in the rest of the world. The aim of this research study was to investigate whether multinationality has any effect on the value creation of companies originating from South Africa.

Multinationality is defined as the extent to which a company invests beyond its own country's borders into foreign markets, through its operational activities that are value adding and results in economic benefits by satisfying customers' needs (Hennart, 2011; Hult, 2011). Multinationality has also been defined in terms of three categories, namely performance, structure and behaviour (Aggarwal, Berrill, Hutson, & Kearney, 2011). Performance criteria are based on foreign sales and earnings, foreign assets and the number of foreign employees. Structural definitions consider the number of countries in which the company operates, as well as the nationality of top management and the company's organisational structure. Behavioural definitions consider the focus and extent of management's outlook on international and other strategic opportunities.

This study focused on companies from South Africa. It assessed the impact of being

multinational on the value creation of the companies. This is relevant, as economic growth has declined in South Africa. A decline in economic growth generally results in companies having to rethink their strategies and South African companies are no exception (Ramamurti, 2012). Growth in developed economies was forecast to increase from 1.3% in 2013 to 2.2% and 2.4% in 2014 and 2016 respectively (UNCTAD, 2014; World Bank, 2014). This has been revised down to 2% in 2015 and 2.3% in 2016 (World Bank, 2015). The 2015 average economic growth rate to gross domestic product (GDP) of the African continent is now expected at 4.4% and increase to 5.3% by 2017. For South Africa the rate is now expected to be 1.5% in 2015 and 1.7% in 2016 (Ministry of Finance, 2015). This is a reduction as it was previously estimated to be 2% for 2015 and 2.6% for 2016 according to the October 2014 medium term budget (Nest, 2015). South Africa's growth rate is lower than that of the African continent and other developed economies. Assuming improvements in the world economy and stability in political and social environments of African countries currently experiencing conflicts, the economic growth is projected to be more than 5% for the African continent (Gokool, 2015). This prompts companies that are seeking growth to look outwards. Developing and emerging markets are increasingly accounting for a higher degree of worldwide inward and outward foreign direct investments (FDI) and trade (UNCTAD, 2014). South African companies are already seeking growth in the rest of Africa and globally as shown by their increase in outward FDI (Labour Research Service, 2014). Re-thinking their global strategies and expanding outside their borders to higher growth areas becomes imperative in the current climate of decreasing economic growth in South Africa.

The continuing deterioration of South Africa's electricity supply has contributed to the decreased economic growth forecast (World Bank, 2015). It has affected all sectors including the mining and manufacturing sectors which high energy consumers and the main contributors to GDP. Production expenses are on the rise as costs of resuming production after load-shedding are high. Furthermore, the mining industry had been operating at lower capacity as it had already decreased its electricity consumption by 10%, in a bid to assist the power utility (Cavvada, 2015). If this persists the economic growth could decline to as low as 1% of GDP in 2015 (Gokool, 2015).

Being an emerging market economy South Africa is strongly reliant on income from mineral exports to fund its current account. The electricity constraints, falling commodity prices, extended labour strikes across all industries (World Bank, 2014) and policy uncertainty have all contributed to the depreciation of the currency and low economic growth forecasts (Nest, 2015). These factors have led to constraint in the business,

consumer and investor confidence, offsetting the benefits of improved external events such as the declining of oil prices (Donnelly, 2015; Gokool, 2015; World Bank, 2014).

Companies expand into foreign markets for various reasons (Ajami, Cool, Goddard, & Khambata, 2014). For some a saturated domestic market presents limited prospects to acquire new customers. This pushes companies to look abroad for new customers and markets to increase sales and profits. Different locations present different geographic advantages and disadvantages. Some companies have expanded into new markets to access new talent pools; examples include expansion into Asian markets to leverage on technological expertise of the population (Hennart, 2012). Some locations provide companies with opportunities to reduce costs due to availability of resources for production and manufacturing at lower costs (Nicholson & Salaber, 2013). This motivates companies to invest in foreign countries to take advantage of lower labour costs, proximity to resources and favourable tax structures and innovations (Zaheer & Nachum, 2011). For companies that source supplies globally, distribution efficiency can be enhanced by creating global systems (Gubbi, Aulakh, Ray, Sarkar, & Chittoor, 2010). Operating in several countries can offer greater protection from economic recessions in one or more locations to ensure that the company is not dependent on the economy of one country. A recession in one country will not have a huge effect on the business if it is doing well in other locations.

Therefore South African companies that have expanded to become multinational could have done so for various reasons. Their multinational footprints will have an effect on the companies' value creation. This is dependent though on the success of the locations chosen in relation to the company's products and company-specific advantages. Some companies benefit more from venturing into international markets than others and some countries have a comparative advantage over other countries.

The research therefore sought to determine whether investments in foreign countries create value for companies from South Africa. In addition, the research sought to determine the extent/degree of internationalisation and whether the selection of geographic location has an impact on the value creation of these companies.

1.2 Research Motivation

During periods of economic downturn, as is currently being experienced by South Africa, the pertinent questions posed by managers and investors is how can companies tap into

higher growth markets outside their own boundaries (Oh, Sohl, & Rugman, 2015). Slow domestic growth makes companies resort to international expansion to benefit from global growth opportunities and production efficiencies (Purdy & Wei, 2014). When making these strategic decisions on international expansion managers are also concerned about the performance implications of geographic diversification (UNCTAD, 2014). This research sought to determine the impact of international diversification on firm value and performance of companies on the Johannesburg Stock Exchange (JSE) over a period of 14 years, from 2001 to 2014. This information will be beneficial to managers when making strategic decisions to compete, in their own emerging and developed markets as they seek to expand beyond their own borders (Aggarwal et al., 2011; Ramamurti, 2012). It also provides managers with direction regarding whether and in which way they should grow their business operations beyond their home country borders (Eckert, Dittfeld, Muehe, & Rässler, 2010). This is relevant for South African companies considering their low growth forecasts and the increasing trend in outward foreign direct investments (UNCTAD, 2014) into higher growth markets. The narrow size of South African home market also makes outward FDI an imperative part of any expansion plan (Strauss, 2015).

Emerging markets have peculiar characteristics when compared to developed markets. The multinational companies from emerging markets are subject to different environments including unstable regulatory environments, less developed capital markets, unskilled labour and less developed infrastructure (K. Lee, Hooy, & Hooy, 2012). In addition emerging markets are characterised by large populations providing a large talent pool for labour (at low cost), high growth rates and income increases, thereby providing the perfect market for goods and services (Berrill & Mannella, 2013). Emerging markets are supplying more goods and services to the world than in the past, thereby becoming the growth drivers of the global economy (UNCTAD, 2014). Despite these differences and the importance of emerging markets in today's economy, few studies have analysed the relationship between international diversification and firm value for companies in emerging markets (Berrill & Mannella, 2013; Kuzey, Uyar, & Delen, 2014; Madhok & Keyhani, 2012). The differences and peculiarities could provide a different view of the relationship between firm value and multinationality. This research therefore fills this research gap and endeavours to ascertain the effect of multinationality on multinational companies from South Africa expanding into foreign markets.

Oh et al. (2015) in their research paper on regional and product diversification and performance of multinational retail companies, advocated that future research should

develop datasets consisting of multiple industry sectors and multiple regions, and that comparative studies should be conducted to find the source of differences present in their findings. Therefore this research study sought to contribute towards this.

The research also assisted in providing information to financial analysts and investors about factors that impact on the company value of South African multinational companies expanding into foreign markets, thereby enabling them to make the best investments decisions (Eckert et al., 2010). Multinational companies offer shareholders global diversification opportunities through their direct investments in a foreign country (Morck & Yeung, 1991). There are limitations on capital movements, including institutional constraints and information asymmetries that prevent investors from spreading their portfolios directly on the international platform and domestic MNCs offer investors an opportunity of overcoming these constraints. Furthermore, international diversification has been said to be associated with higher share value compared to the share value of mono-national companies (Kuzey et al., 2014; Morck & Yeung, 1991). Shareholders have the option to invest in either multinational enterprises or in companies in diverse locations and industries to enhance their investment portfolios. The analysis over a 14 year period allows shareholders to determine the effect that multinationality has on company value.

In addition, the research adds to prior work by contributing to literature with a focus on emerging market multinational companies from South Africa. Multinationality, firm performance and value creation insights were gained by the degree of multinationality and the geography of the investment. Explanations and reasons were proposed to explain why differences exist. Furthermore, this research provided insights regarding the international spread of emerging market companies from South Africa (Oh et al., 2015).

1.3 Research Objectives

There are significant differences and idiosyncrasies between companies from emerging markets when compared to developed markets as noted above. Given these differences the objective of the research is to determine whether multinationality of South African companies provides value enhancement of the companies under study. The research also sought to ascertain whether the value of multinational companies is enhanced by their choice of geographic location and the degree of internationalisation.

CHAPTER 2: THEORY AND LITERATURE REVIEW

2.1 Introduction to Multinational Companies

A multinational company in international business has been defined in multiple ways. Some scholars have defined it as a company that has value adding activities that crosses its national or domestic borders (Ajami et al., 2014). Dunning and Lundan (2008b) defined it as a company that owns or controls production or service facilities outside the country in which they are based. Johnson and Turner (2010) defined a multinational company as one that controls activities that add value in more than one country or one that is involved in foreign direct investments (FDI).

Foreign direct investment are the net inflows of investment to acquire a lasting management interest of 10% or more in an enterprise operating in an economy other than that of the investor (UNCTAD, 2014). The entities involved in the business can either be government, private entities or a combination of both (Ajami et al., 2014). Traditionally multinational corporations were defined as successful companies that have grown over many years into large corporations that are global in the way they run their operations and formulate their visions and strategies (Aggarwal et al., 2011). These limitations have been removed through technological innovations and the dawn of the internet. These new technologies enable companies to operate across national borders through exporting, importing of goods, and utilising foreign capital, people, processes and organising, coordinating and controlling resources globally.

For the purpose of this research, multinational companies are organisations that carry value adding activities outside their domestic market. The firm must own or have the power to control and coordinate the value adding activities that are taking place in the foreign countries. While the size of the firm does not matter, the research concentrated on the companies listed on the Johannesburg stock exchange (JSE). Specifically for this research study, companies that are based in one country and produce and sell their goods in their domestic markets and those that produce goods in the same country and export some of their produce are considered to be domestic and not multinational corporations (D. Johnson & Turner, 2010).

The terms multinationality, internationalisation, foreign investments, geographical diversification, international diversification, foreign expansion, transnationality and

international expansion have been used interchangeably in the literature reviewed and these terms generally refer to similar meanings in this research study. The literature on multinationality spans four decades and is vast (Rugman, Verbeke, & Nguyen, 2011). The studies have focussed on effects of multinationality on company value and performance in developed countries and have excluded some sectors, such as financial industries (Kim & Mathur, 2008). Previous studies have generally analysed companies in developed countries expanding into other developed nations (Eckert et al., 2010; Hennart, 2011). A study on the impact of multinationality on firm value has been carried out in Turkey, which is classified as a developing country, although the study excluded financial sector companies (Kuzey et al., 2014). Some studies have examined the reasons and motives for international expansion, the various paths taken and the synergies achieved, if any (Dunning & Lundan, 2008b; Rugman et al., 2011). The evidence from these numerous studies has been described as conflicting, inconclusive, contradictory, mixed and disappointing (Hult, 2011; Kirca et al., 2011; Yang & Driffield, 2012). The reasons given for the inconclusive results have been attributed to shortcomings in the methods used to identify samples and the samples selected. The samples have largely been based on various companies from the United States, Japan and Europe which are in developed markets and little is known in relation to emerging markets (Eckert et al., 2010; Hennart, 2011; Kuzey et al., 2014).

If the results from the studies carried out on developed MNCs are inconclusive despite their many similarities, these results cannot be assumed to be the same for emerging MNCs that have more differences than similarities.

2.2 What Motivates Companies to Become Multinational?

MNCs are involved in FDI for the following four main activities.

Market seeking: The enterprises investment is designed as a platform to supply goods and services to a particular foreign market, increasing its market size (Kim & Mathur, 2008). It affords the enterprise greater proximity to the consumer and therefore ability to adapt products to consumer tastes. Government policies also influence market seekers (Rugman et al., 2011). Restrictive legislation in the domestic market can make companies seek locations in foreign markets where laws are less strict (Witt & Lewin, 2007). By maintaining a physical presence in foreign markets, market seeking

companies gain credibility with the consumers (Dunning, 1994; Guillén & Garcia-Canal, 2009; D. Johnson & Turner, 2010).

Resource seeking: These enterprises invest in foreign markets to access resources that are either not available in their home country or are available at a much higher cost (Wiersema & Bowen, 2011). These resources are typically natural resources like minerals, agricultural products, and cheap unskilled and semi-skilled labour (Dunning & Lundan, 2008b). Enterprises use these resources for inputs for their downstream activities located outside from where the resources are located (D. Johnson & Turner, 2010; Rugman et al., 2011). Resource seeking has been the main reason for companies to internationalise (Nicholson & Salaber, 2013). Acquiring a secure and continuous flow of natural resources has been the main intention for foreign expansion (Gaur, Kumar, & Singh, 2014). China has used outward foreign direct investment (OFDI) to procure resources that are limited in their home country (Kang & Jiang, 2012).

Efficiency seeking: Designed to promote a more efficient division of labour or specialisation of an existing portfolio of foreign and domestic assets by MNCs (D. Johnson & Turner, 2010). Efficiency can be a result of international specialisation where companies seek to benefit from differences in product and factor prices and to diversify risk (Contractor, 2012). Improved efficiency in global sourcing of supplies due to restructuring of the operations worldwide often results in cost savings (Rugman et al., 2011).

Strategic asset seeking: Designed to protect and achieve long-term strategic intentions (D. Johnson & Turner, 2010). The strategic intentions vary and could include (i) reducing competition from a competitor, (ii) spreading risk across different markets and geographic locations, (iii) enhancing the existing ownership specific advantages and reducing those of their competitors to remain competitive globally and (iv) anticipating competitors' entrance into the market and any acquisitions by the competitors. This is achieved through the acquisition of significant domestic companies, capabilities that include human capital and knowledge as well as research and development (Contractor, 2012).

Other reasons: EMNCs expand internationally to seek better institutional environments in host countries avoiding home environments (Luo & Wang, 2012). This is to pursue better and efficient institutions away from their home country. They reason that previous disadvantages suffered in home countries become a benefit when they expand internationally as these companies are used to operating in difficult environments. Other

companies invest abroad as a result of success in home market in an attempt to overcome limited growth options if they do not expand internationally (Dunning & Lundan, 2008b).

Bearing this classification in mind, developing countries' MNCs are inclined to invest to seek markets and/or for strategic reasons in pursuit of skills, better institutional environments, capabilities, knowledge and innovations in which they have a comparative disadvantage (Guillén & Garcia-Canal, 2009). This contrasts MNCs from developed countries who expand to seek tangible resources and markets by using their knowledge of technology, products and processes. Due to relatively low wages in developing countries, their MNCs are less likely to invest outside their borders for efficiency reasons. MNCs without abundant natural resources are unlikely to invest outward for natural resources. Change in policy factors in relation to trade, investment, and privatisation influence outward FDI.

2.3 Benefits and Disadvantages of Being Multinational

2.3.1 Benefits

2.3.1.1 Economic benefits

The existence of multinational companies today is proof that there are benefits to be gained from expansion into foreign countries (Contractor, 2012). This geographic diversification is considered important as it brings in certain advantages that are associated with increased economic benefits through economies of scale, location specific advantages and collaboration effects (Kim & Mathur, 2008). The large sizes of most MNCs result in high volume production that lowers the costs per unit of products that are reflected in lower prices that make smaller competitors unable to compete, especially in capital demanding industries (Ajami et al., 2014).

2.3.1.2 Market imperfections

Geographic diversification is based on taking advantage of opportunities in foreign markets due to market imperfections that result in greater returns through the exploitation of these specific advantages (Yang, Martins, & Driffield, 2013).

2.3.1.3 *Exploitation of synergies*

Through geographic diversification companies can exploit tangible synergies such as sharing markets, production and technology-related activities as well as intangible synergies such as knowledge of foreign operations and expertise (Kim & Mathur, 2008; Yang et al., 2013).

2.3.1.4 *Managerial expertise*

Due to their operations in a large number of countries, MNCs generally have a valuable base of managerial experience gained from dealing with different situations internationally. This experience and expertise can be transferred to different locations (Ajami et al., 2014).

2.3.1.5 *Access to technological expertise*

Very few companies can be self-reliant on their own internal knowledge due to the growing complexity of products, research and developments (Contractor, 2012). There is a need to acquire or gain access to foreign knowledge. MNCs have the advantage of patented technical know-how, either developed in-house or purchased, which gives them competitive advantage to compete in foreign markets. Being multinational allows companies to quickly access this knowledge in multiple locations enabling a monopoly on efficient hi-tech, low priced products attracting a large international market following (Ajami et al., 2014). This, together with the accumulated global business knowledge and experience in a multinational firm enables the company to be competitive in an environment where income, cultural and institutional differences between countries are high (Contractor, 2012).

2.3.1.6 *Operational efficiency & risk management*

Multinationality results in more operational flexibility and reduces risks across markets, creating value through the economies of scale and scope (Kim & Mathur, 2008). Multinationality also provides opportunities for companies to shift production to low cost locations, access to low cost raw materials from foreign countries by supplying technology to extract or refine raw materials or both in exchange for monopolistic control, thereby boosting profitability (Ajami et al., 2014). It also offers global amortisation scope as high research and development costs are amortised over a large pool of customers (Contractor, 2012).

2.3.1.7 *Tax planning*

Multinationality raises the value of a firm by providing more opportunities and possibilities for tax planning by taking advantage of different tax regulations in effect in various countries (Contractor, 2012; Kuzey et al., 2014; Morck & Yeung, 1991).

2.3.1.8 *Access to finance*

MNCs have the advantage of accessing various capital markets in different locations so they can access low cost financing and channel it to various locations using their internal channels (Luo & Wang, 2012). The ability to access varied financial markets enables them to borrow from the best source and the funds can be transferred internally to the different locations adding to their competitive advantage (Ajami et al., 2014).

2.3.2 Disadvantages

2.3.2.1 *Coordination*

Geographic diversification is also associated with costs to the firm which is well documented in literature. According to the literature that was reviewed, geographic diversification makes coordination complex across multiple markets, making companies unable to benefit from the economies of scale and scope (Yang et al., 2013). The more internationalised a company becomes the more challenging it is for its shareholders to monitor managements choices which can lead to management following their own goals to the disadvantage of the owners of the company (Oesterle, Richta, & Fisch, 2013).

2.3.2.2 *Host country regulations*

Multinationality is associated with multiple inherent risks. The foreign countries that the companies operate in are subject to different tariffs and regulatory requirements (Ajami et al., 2014). The MNCs have to be aware of these requirements and modify each of their operations to ensure compliance. This has cost implications than can have negative effects on the operations if there are changes to these regulations. Furthermore in developing countries government approvals are required for most business aspects making it difficult to conduct business.

2.3.2.3 *Political risk*

There is political risk in the form of government intervention in business activities. The risk of expropriation of investments by governments creates a significant risk as well as frequent changes of governments as it lead to policy changes and uncertainty (Yang et al., 2013).

2.3.2.4 *Exchange rate risk*

When companies become multinational they are open to currency risk as they become exposed to multiple currencies. The companies become exposed to exchange rate movements. In the short term measures can be taken to counteract these movements but major movements can wipe out all the profits (Ajami et al., 2014).

2.3.2.5 *Legal requirements*

The facts that MNCs operate in different countries means they are operate under different legal systems and different processes can be burdensome and difficult for non-locals to understand (Ajami et al., 2014).

2.3.2.6 *Human resources and Culture*

Multinational companies can be confronted with staffing challenges, as well as cultural differences when managing foreign operations. Expatriate workers are often unable to perform optimally due to their inability to adjust to local culture. There are communication barriers due to the inability of understanding local cultures, work ethics, and social norms that result in problems being experienced with employees, customers, government officials and other business partners (Ajami et al., 2014; Kim & Mathur, 2008).

2.3.2.7 *Organisational structure*

Any new market entry by a company results in increased costs due to organisational changes, duplication of work, extra coordination costs, complexity in the supplier chain management, monitoring costs of external providers and vulnerability to exchange rate fluctuations (Contractor, 2012).

2.3.2.8 *Marketing and advertising*

When entering new markets the brand and products are usually unknown. There is a

need to overcome this and build customer loyalty through marketing and advertising campaigns. This is associated with an increase in expenses. These costs could outweigh the benefits of global diversification, resulting in value being destroyed (Kim & Mathur, 2008).

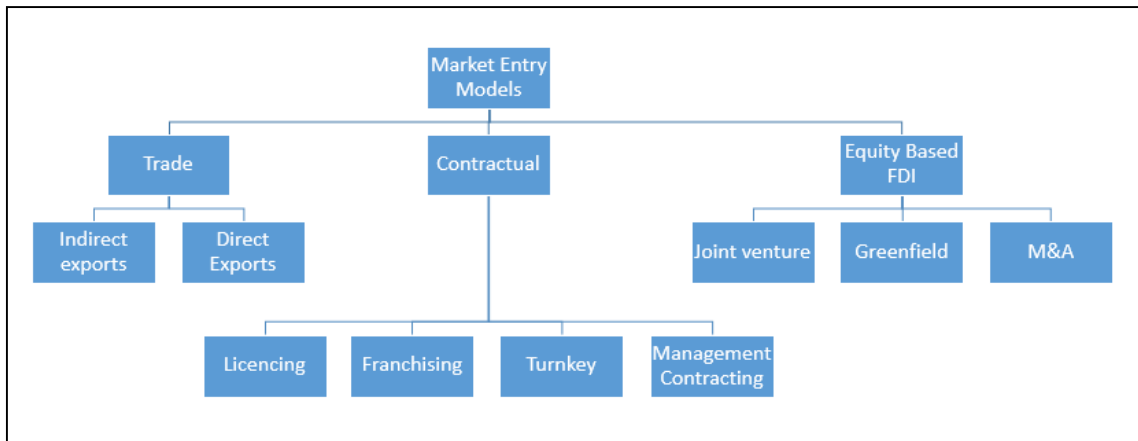
2.3.2.9 *Operational difficulties*

Operating in diverse environments can create operational difficulties due to unwritten business norms and market conventions that exist in the host country. The norms and conventions might be unwritten but business in that country cannot be conducted without complying with them. These could be contrary to the MNE business practices, making it difficult to operate in the host country (Ajami et al., 2014).

2.4 **How Companies Become Multinational**

Companies can take various forms of entry into foreign countries resulting in different levels of control (D. Johnson & Turner, 2010). Entry strategies into foreign markets vary in the risks they present, the levels of resources required, organisational control and expected future profits (Twarowska & Kakol, 2013). Factors that determine the mode of entry are ownership advantages of a firm, location advantages of the market and internalisation advantages of integrating transactions (Agarwal & Ramaswami, 1992). These modes of entry can be divided into equity and non-equity. Non-equity modes of entry are achieved through trade (imports & exports) and contractual agreements in the form of licensing and franchising. Equity modes are acquired through mergers and acquisitions (Brownfield investments), establishing joint ventures and wholly owned subsidiaries (Greenfield investments) (Twarowska & Kakol, 2013). Brownfield investments entail the purchasing of existing facilities while Greenfield investments involve setting up new facilities.

Figure 1: Modes of Entry into Foreign Markets



(Source - D Johnson & Turner, 2010 pg. 116).

Companies expand to become multinational by taking any or a combination of the following; foreign trade, trade in services, portfolio investments or direct investments, as listed below (Ajami et al., 2014; Human Development Report, 2013; J. Johnson & Tellis, 2008).

Foreign Trade: Involves the movement of physical goods between countries either as exports or as imports (Ajami et al., 2014). Exports consist of goods that leave a country to be traded in another country whilst imports are goods that are brought into a country from another country. With exports a firm uses its current domestic facilities for production, distribution and administration for a foreign market (J. Johnson & Tellis, 2008). The company can export directly to the foreign market or use an agent who will facilitate the exports (Twarowska & Kakol, 2013). Foreign trade presents less risk and limited control and commitment to the investor. Furthermore it allows for identification of markets, market potential and establishes name brands without capital investments. Major drawbacks of exporting are high transactions costs and lack of understanding the differences between the local and foreign markets (J. Johnson & Tellis, 2008).

Trade in services: Countries do not only trade in physical goods but also in services. Trade in services includes but not limited to consulting services, travel, and transportation, banking and insurance (J. Johnson & Tellis, 2008). These services generate income in the form of either fees or royalties. A company can earn royalties from allowing another entity to use its processes, name, trademark, patent or licensing the use of its technology. License and franchise agreements are between a firm and agent located in a foreign country for the right to use the home country's tangible and

intangible assets. This presents low commitment investments with limited risk (Twarowska & Kakol, 2013).

Portfolio investments: These are financial investments made by purchasing stocks, bonds and money market instruments in a foreign country to earn a financial profit without resulting in foreign management, ownership or legal control (J. Johnson & Tellis, 2008).

Direct Investments: These can be in the form of joint ventures or wholly owned subsidiaries (J. Johnson & Tellis, 2008). Joint ventures are formed by the pooling of assets into a separate entity by two or more firms (Nielsen & Nielsen, 2011). The result is lower commitment, shared ownership, control and risk. For maximum control, commitment and risk, wholly owned subsidiaries are selected. Full ownership is associated with potentially higher profits but these are accompanied with greater risk unlike in joint ventures where the risks and profits are shared by each partner (Agarwal & Ramaswami, 1992).

Conclusion

Most companies from developed countries have entered foreign markets organically through direct investment. They have expanded gradually either by starting new operations from the ground up (Greenfield investments) or by utilising trading options before embarking on Greenfield investments (Bhagat, Malhotra, & Zhu, 2011). In contrast companies from developing markets that are operating in foreign markets have largely entered through mergers and acquisitions to gain quick access to new markets, overcome the liability of foreignness and upgrade resources and capabilities (Bhagat et al., 2011; Guillén & Garcia-Canal, 2009; Hoskisson, Wright, Filatotchev, & Peng, 2013; Madhok & Keyhani, 2012). On average companies from emerging markets overpay when acquiring assets from overseas markets (Hoskisson et al., 2013). This has been credited to national pride, agency costs or managerial objectives (Denis, Denis, & Sarin, 1999) that are not aligned to shareholders' interests and access to low cost capital or capital provided through government support (Hope, Thomas, & Vyas, 2011). Furthermore, the lack of international management experience and expertise also presents integration challenges post-acquisition, thereby destroying firm value (Hoskisson et al., 2013).

Therefore the different forms of entry do not create value similarly due to the levels of control, commitment and risks involved resulting in different returns (K. Lee et al., 2012). This is expected to have an impact on the value creation of the companies resulting in

further differences between multinational companies from developing and developed countries.

2.5 Theories of Multinationality

2.5.1 Evolution of multinationality theories

There have been numerous theories over the years on the multinationality of companies (Rugman et al., 2011). These range from explaining the investments strategy motives, the different foreign entry mode and ownership structures and listing the reasons for why companies become multinational. Some of the theories advocated that FDI is determined by interest rates, multinational companies' long-term strategies, country regulations and political stability, geographic locations, as well as similarities to country economic development and culture. Further theories advocated that FDI is used as an instrument to hedge against risks affecting investment value (Ajami et al., 2014).

The theories' unit of analysis started at a country level and then over the years shifted to the multinational parent, and then changed their focus to the MNC subsidiary level and then to clusters of independent companies (Rugman et al., 2011). At the country level unit of analysis FDI was explained as a country level portfolio investment decision determined by the interest rate differences across national borders. The focus was on national competitiveness at a country level using the national statistics on trade and foreign investments.

Hymer (1976) was one of the pioneers in international business research and his work focused on shifting from a country level unit of analysis to a firm level unit of analysis when he explained why companies are involved in international business (Hymer, 1976). The presence of international business was due to foreign companies having a competitive advantage over domestic companies and the presence of an imperfect market to sell this advantage to, made the investment in FDI viable (Rugman et al., 2011). These monopolistic advantages are firm specific assets (FSA), which typically include better marketing and distribution capabilities, product diversity, brand names, capital availability and some other intangible assets like management skills, technology and patents. The ability to offset the disadvantages of operating in a foreign market with these FSA's made companies succeed.

There are three main theories of internationalisation processes which include the OLI

paradigm, the PTI or Uppsala Model and the New International Venture. The agency theory has also been used extensively to explain why foreign investments are made.

2.5.2 OLI: Eclectic foreign direct investment theory

The emergence of multinational companies (MNCs) has been explained using the eclectic paradigm for FDI. The eclectic paradigm is the Ownership, Location and Internalisation (OLI) framework from the combination of macroeconomic and micro-economic theory (Dunning & Lundan, 2008a). According to the paradigm, foreign companies need to possess ownership, location and internalisation advantages that differentiate them from domestic companies. It implies that internationalisation takes place in a sequential process where companies expand first into countries that are geographically, culturally and psychically close at shallow levels of entry. This enables the companies to limit additional costs incurred in acquiring local knowledge required when operating in a foreign market.

According to the OLI paradigm, if a firm possesses abundant ownership (O) advantages of tangible and intangible assets not possessed by local companies, more benefits are derived from the foreign activities engaged in (Agarwal & Ramaswami, 1992). The ownership advantages a firm owns, are specific capital which can be in the form of managerial skill, brands, patents, technologies and reputation (Dunning & Lundan, 2008a). The firm is then able to replicate and utilise the tangible and intangible assets in different foreign countries in which they operate (Rugman & Oh, 2010). The transfer of these resources within the multinational company is at a minimal cost, thereby enhancing operations and creating value to the firm.

Location (L) advantages arise from the firm being able to fully benefit from its activities in the value chain across different foreign markets (Zaheer & Nachum, 2011). The reason why a firm invests in one country and not in the other is because of location advantages (Agarwal & Ramaswami, 1992). These advantages can include production plants located close to its customers resulting in transport costs savings (Dunning & Lundan, 2008a). Location advantages could also result in access to cheap inputs including labour for production. If the production is located in a foreign country it could result in avoidance of trade barriers in the form of tax and import duties that the company would be subjected to if production was not domestic.

Internalisation (I) is a process whereby managerial coordination takes over from agents contracted to perform tasks that are unique to a company and gives it competitive

advantages. These advantages can be in the processes, systems or assets unique to organisation (Dunning & Lundan, 2008a; Dunning, 2000). These internalisation advantages enable multinational companies to set up operations and adopt customers and business contacts directly rather than outsourcing activities and this results in a deeper level of engagement. A firm can increase its value by internalising markets of some of its intangible assets or firm specific assets (FSAs) like production skills, patents, marketing expertise, managerial skills, or consumer goodwill (Rugman et al., 2011). The corporation's value is enhanced if the FSAs are adequate in compensating for the costs of operating in a foreign market.

This implies that multinational companies possess useful intangible assets which in value terms are proportional to the companies' degrees of multinationality. The intangible assets are largely part of the firm and thus cannot be exchanged at arm's length (Dunning & Lundan, 2008a). The transfer of these firm specific intangible assets within the multinational company in foreign markets enables them to increase operational profits (Kuzey et al., 2014; Morck & Yeung, 1991). Companies are hesitant to outsource activities to an external agent in a foreign country due to the risk of transferring firm specific advantages to an external party as they can be used to their disadvantage (Agarwal & Ramaswami, 1992).

2.5.2.1 Concluding remarks on OLI/Eclectic paradigm

In conclusion, the OLI/eclectic paradigm suggests that the more the ownership and internalisation advantages a firm possesses together with location advantages of creating, acquiring and exploiting these advantages outside its home country, the more the companies will invest in FDI (Dunning & Lundan, 2008a). If companies possess more ownership and internalisation advantages but have limited location advantages, the companies will prefer to invest domestically than internationally (Rugman & Oh, 2013).

EMNCs do not conform to the OLI paradigm as these companies do not possess the traditional ownership, location and internalisation advantages (Hennart, 2012). The MNCs from emerging markets come from underdeveloped economies with technologies that lag behind those developed markets (Ramamurti, 2012). They also lack brand and management advantages when compared to DMNCs (Guillén & Garcia-Canal, 2009). Due to these shortcomings, emerging market MNCs are expected to import capital including foreign direct investment rather than export it through FDI (Ramamurti, 2012). They are also expected to go through years of inward FDI before creating MNCs. Despite

these shortcomings, emerging markets have created MNCs whilst still poor with no ownership, location and internalisation advantages (Madhok & Keyhani, 2012).

2.5.3 The Uppsala Internationalisation model

The model proposed by Johanson and Vahlne (1977) suggests that companies first expand to or internationalise to locations that are similar to them in terms of culture, geography and physical location to minimise risk (Aggarwal et al., 2011; Johanson & Vahlne, 1977). The model suggests that as companies go further afield from the home country, the psychic distance increases resulting in limited understanding of the environment, thereby increasing risk (Johanson & Vahlne, 2009). Gradual progression into new markets after gaining experience increases the levels of engagement and minimises risks as the company expands further afield.

The selection of the mode of entry into a foreign country can also be explained by the model through an internationalisation pattern called an establishment chain (Rugman et al., 2011). The process of internationalisation commences with a company exporting, then entering into contractual agreements with intermediaries representing it in a foreign country (Johanson & Vahlne, 2009). As the business grows the company establishes sales offices for direct selling and these are eventually replaced with partly owned foreign production or wholly owned foreign production entities. These develop and are amplified into value-added networks, and finally develop into regional and global integration. The model emphasises organisational learning with internationalisation, starting at shallow engagements and as knowledge increases it spreads out to more diverse locations at deeper levels of integration (Aggarwal et al., 2011).

2.5.3.1 Conclusion of Uppsala model

EMNCs have internationalised rapidly into foreign countries without following the Uppsala model of expanding to locations that are similar to them in terms of culture, geography and physical location and then moving far afield (Guillén & Garcia-Canal, 2009). MNCs from emerging markets operate in foreign markets using multiple entry modes which range from forming alliances, operating joint ventures, mergers and acquisitions and wholly owned subsidiaries (Madhok & Keyhani, 2012). DMNCs largely invested in wholly or majority owned subsidiaries that enabled them to transfer skills, technology and products in foreign countries that are located far from the main head office.

2.5.4 The International New Venture (INV)

International new ventures are companies that from that start seek competitive advantages from using resources and selling products in as many countries as possible (Oviatt & McDougall, 2005). This is in direct conflict with the traditional multinational company's theory with stages in the internationalisation starting from the domestic market and then gradually becoming international as these companies' origins are international (Aggarwal et al., 2011). These companies start with an active international plan and they do not own foreign assets and may have strategic alliances to access use of foreign resources. The international new venture is concerned with value adding, not asset owning (Oviatt & McDougall, 2005).

2.5.4.1 Conclusion on International New Venture theory

Current theories do not adequately explain the international new venture companies. New venture theory integrates the traditional MNE concepts of internationalisation and location advantages with entrepreneurship and innovation and governance structures (Oviatt & McDougall, 2005). The main benefits are a better concentration of limited resources on core sources of competitive advantage. Furthermore cost, quality, and flexibility benefits may result from using outside experts to supply all minor resources. However, the risks of wasting competitive advantages, losing prospects for learning, and becoming an empty MNC are substantial. This also does not fit the EMNC process of internationalisation. Though the speed of internationalisation is fast these companies do not start with an international outlook and neither do they mostly form alliances.

2.5.5 Agency Theory/Managerial objectives

The agency view is that managers are motivated with private benefits such as status, power and compensation from multinationality that does not necessarily relate to firm value (Kim & Mathur, 2008). Therefore managers' objectives can differ from those of shareholders, which is primarily the maximisation of share price or value of the firm (Hoskisson et al., 2013). (Denis et al., 1999) supported this view, citing that on average diversified companies' trade at a discount in comparison to domestic companies. Kim and Mathur (2008) concluded that the more diverse or complex a firm is the less the shareholders are knowledgeable of activities, making it difficult to control and monitor managements' decisions (Oesterle et al., 2013). This results in managers acting in their own self-interest to the detriment of the shareholders as shown by the evidence

displaying less diversification in entities where management has ownership (Denis et al., 1999). Geographic diversification results in less transparency than is evident in single location companies, making it more difficult for the board and system of internal controls to prevent decisions by managers that are not optimal (Dunning & Lundan, 2008b). Foreign operations are even more challenging to monitor than domestic operations, and are also associated with information asymmetry increasing the challenges related to agency issues (Hennart, 2010).

Furthermore, it is advocated by the agency theory that top managers may support international diversification to reduce firm-specific risk, granting managers more power and status (B. S. Lee & Li, 2012; Morck & Yeung, 1991). The EMNCs tend to overpay when purchasing assets from overseas markets (Hoskisson et al., 2013). This divergence of interests and goals can result in reduced values of multinationals relative to companies operating in single nations (Hennart, 2010; Kim & Mathur, 2008) .

2.5.5.1 Conclusion on agency theory

Companies' expansion into foreign markets can be motivated by personal gains of management according to the agency theory as described above. This can destroy value as the reasons for expanding are for personal gain and do not benefit the company.

2.5.6 Concluding remarks on theories

Emerging market multinationals do not possess the traditional firm specific assets and have internationalised rapidly into both developing and developed markets by using multiple entry modes to form multinational companies (Guillén & Garcia-Canal, 2009; Hennart, 2012). This is contrary to the DMNCs expansion mode and motives (Madhok & Keyhani, 2012). This gives rise to the question whether EMNCs are creating or destroying value by expanding into foreign markets against conventional theories such as the eclectic model and Uppsala model.

All these issues noted above support the notion that there are differences in EMNCs and DMNCs which could affect the value creation of the multinational companies as the development of EMNCs cannot be explained by existing theories.

2.6 Multinationality in International Business

Literature on multinationality and international business spans over many years, from the works of Hymer and Vernon in the 1970s (Hymer, 1976; Vernon, 1971). In the early studies on multinationality emphasis was placed on the benefits that companies can attain from geographic diversification (Dunning & Lundan, 2008b). Other studies concentrated on the costs that are associated with multinationality (Hitt, Hoskisson, & Kim, 1997). The empirical studies and theoretical debates on multinationality and performance have proved to be inconclusive. The shapes of the relationship varied as follows:

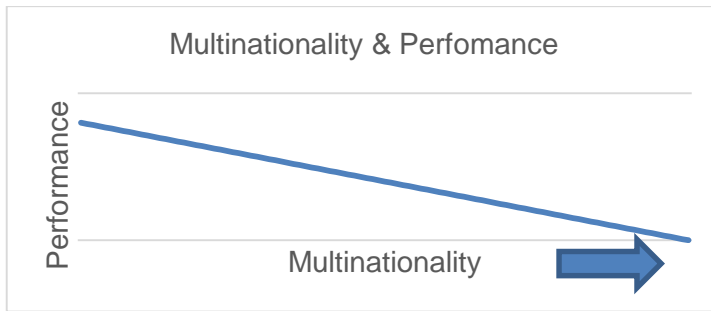
Positive Linear Shaped: Earlier studies showed a positive linear relationship between multinationality and firm performance (MP) and the links to theories of business have concentrated on the linearity of this relationship (Yang & Driffield, 2012). This is consistent with the theory that companies achieve greater returns by internalising their intangible assets, leveraging on their market power, achieving economies of scale and utilising cheaper inputs from foreign markets (Purdy & Wei, 2014; Yang et al., 2013).

Figure 2: Multinationality & Performance Linear Relationship



Negative Linear Shaped: Other scholars have revealed a negative correlation between multinationality and firm performance consistent with the theory that these organisations face liabilities of foreignness, and increased costs of management and coordination (Hennart, 2011).

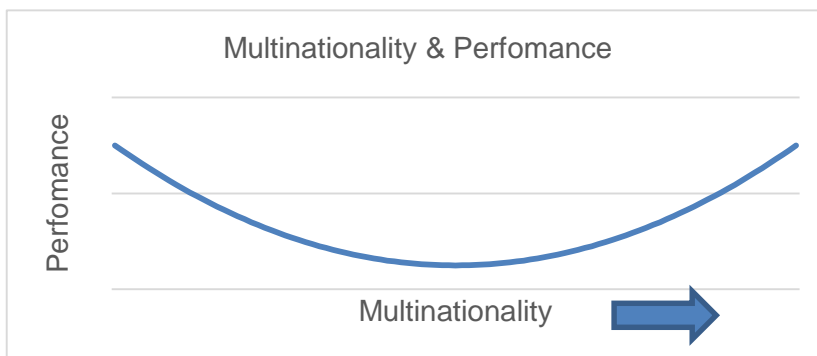
Figure 3: Multinationality & Performance Negative Linear Relationship



This was challenged as later studies proved a non-linearity relationship and advocated for a curvilinear shaped relationship (Hitt et al., 1997). The curvilinear shapes advocated were U and inverted U-Shaped relationships between multinationality of companies and firm performance.

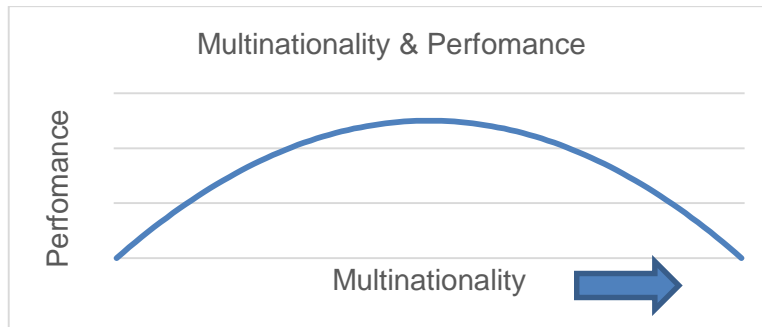
U-Shape: Relationship suggesting that companies initially incur organisational costs associated with foreign market expansion before realising the benefits of foreign investments (Gomes & Ramaswamy, 1999). It places emphasis on the learning and effects of experience which outweigh the liability of being foreign in initial internationalisation (Rugman & Oh, 2010). In a study of 16 000 companies over the period between 1997 and 2007, it was found that investment in developing countries is related to a larger effect on performance than in developed countries and their return tends to be U-shaped (Yang et al., 2013).

Figure 4: Multinationality & Performance U Shape Relationship



Inverted U-Shape: Illustrates the initial positive returns to the multinationality and performance (MP) relationship but beyond a certain desirable level this becomes negative, and is attributed to costs related to increases in foreign market expansion, including the cost of management and coordination (Hitt et al., 1997).

Figure 5: Multinationality & Performance Inverted U Shape Relationship



Other studies found a horizontal S-shaped relationship also referred to as the three-stage paradigm (Bobillo, López-Iturriaga, & Tejerina-Gaite, 2010; Oh & Contractor, 2014; Yang & Driffield, 2012; Yang et al., 2013).

Horizontal S-Shape:

Stage 1: Performance declines in the early stages of internationalisation due to initial costs exceeding incremental benefits. The costs are incurred from adapting to a new culture and communication, overcoming industry technology and distribution barriers, lack of experience, diseconomies of scale, insufficient international experience, transaction costs and high investments in equipment.

Stage 2: Increased geographical coverage and experience result in the MNC likely to enjoy the net positive effects on performance. The economies of scale and scope results in barriers from Stage 1 being inhibited. The firm also implements specific capabilities developed in research and development (R&D) and advertising. Transaction costs are kept at a minimum due to governance and coordination controls that efficiently controls environmental and behavioural ambiguity. This results in companies performing at optimal levels.

Stage 3: Excessive international expansion again reduces performance due to reappearance of diseconomies of scale as a result of large company size and high geographic diversification. Transaction costs increase as governance and coordination controls are no longer efficient in controlling environmental and behavioural ambiguity decreasing company performance.

Still other recent studies have yielded contradicting results. In Malaysia multinationality had no effect on firm value (K. Lee et al., 2012). In a sample of US listed companies a study demonstrated that the impact of multinationality on firm value was different across varied types of companies (B. S. Lee & Li, 2012; Purdy & Wei, 2014). The mixed results have been attributed to different and inconsistent measurements of multinationality being

employed in the studies (Aggarwal et al., 2011). This has been attributed to the lack of comprehensive developed theory regarding multinationality and performance and the studies being undertaken at a high level of aggregation (Hennart, 2007). It was encouraged that research be focused on key dimensions of multinationality such as foreign sales versus their dispersion (Aggarwal et al., 2011; Hennart, 2007). The unclear picture from the numerous studies has also been attributed to sampling and methodological differences across the studies that have resulted in meta-analysis being undertaken to gain a clearer picture (Yang & Driffield, 2012). Furthermore, the definitions of multinationality are wide ranging, general and unable to capture the diversity in the ownership, structures, geographical and organisational forms making it difficult to develop a single all-encompassing theory (D. Johnson & Turner, 2010).

From the literature review, the conclusion that can be drawn is that there are numerous ways in which multinationality can affect the performance of the firm impacting on its value creation. In addition, the studies that were conducted were based on specific industries and specific countries, making it difficult to generalise the findings to all companies. While many studies find that there is an impact of multinationality on firm performance and value, there is little consensus on what this looks like in terms of profile and formula of the impact (Purdy & Wei, 2014). The links to the location of multinational companies and their performance has also been largely ignored (Yang et al., 2013). This research seeks to find the impact that multinationality has on the value creation of South African companies. The effect of degree of internationalisation and geography of foreign investment will be considered.

2.7 Multinational Companies' Distinctions

2.7.1 Stage of internationalisation

The multinational theories of business have been based on companies in developed countries that have been in existence for decades, therefore theory is heavily influenced by Western experience and the study of mature companies (K. Lee et al., 2012; Ramamurti, 2012). The theories of international business commenced in 1959 and were published in the Journal of International Business studies, which was first published in 1970 (Ramamurti, 2012). By that time Western European and US companies had already experienced decades of internationalisation and were in the mature phase of growth. This is a distinct difference with multinational companies from emerging markets

as these are still in the early phase of internationalisation.

2.7.2 Internationalisation approach

This is not the only factor contributing to the vast differences in multinational companies from emerging markets and those from developed markets (Madhok & Keyhani, 2012). The way that the multinational companies from emerging and developing markets start-up are different and these companies have demonstrated distinct patterns and paths of internationalisation (Guillén & Garcia-Canal, 2009; Ramamurti, 2012).

The approach to international expansion taken by emerging market companies in terms of speed, scope and the means has been different. They have internationalised rapidly, as evidenced by accounting for 25% of global foreign direct investment (FDI) in 2010, compared to only 15% in 2007 and 6% in 2001 (Madhok & Keyhani, 2012; Ramamurti, 2012). These companies have aggressively entered advanced economies through global alliances and acquisitions as part of their international strategy (Gubbi et al., 2010; Guillén & Garcia-Canal, 2009). Indian companies were the most active acquirers in the recent years, up until 2012 in developing nations. They have conducted cross-border mergers and acquisition (M&A) deals worth \$22.5b, of which \$20b was in developed countries in 2007, a substantial increase from having negligible deals a mere 10 years earlier (Madhok & Keyhani, 2012). In comparison, DMNCs have expanded gradually following a simple path of moving from less distant to more distant countries, growing internally and organically through wholly owned subsidiaries (Guillén & Garcia-Canal, 2009).

The expansion through mergers and acquisitions by emerging market multinational companies is due to the urgent need to gain new markets coupled with the need to overcome the liabilities of being foreign (LOF). The need to overcome major flaws in their marketing ability and gain new capabilities to build empires has also been given (Hoskisson et al., 2013). It is also a strategic decision to exploit the potential that is presented due to information asymmetries (Morck & Yeung, 1991).

2.7.3 Capital markets

The size and concentrations of capital markets in the United States of America (USA) and other developed markets vary when comparing to emerging markets (K. Lee et al., 2012). Capital markets are platforms where securities such as shares and bonds are traded and issued to raise medium to long-term financing (General manager, n.d).

Companies make use of these capital markets to raise capital for different activities including innovation and growth. The capital markets tend to be larger and more concentrated in developed markets while in emerging countries they are smaller by comparison (Ramachandran & Pant, 2010). This limits access to capital for growth and expansion which is essential to ensure global competitiveness (Eckert et al., 2010; Hoskisson et al., 2013). Therefore companies from the USA and other developed countries cannot be evaluated similarly to multinational companies from emerging countries.

2.7.4 Home and host environments

Furthermore, EMNCs are largely based in countries that have income levels that are classified as low to medium (Madhok & Keyhani, 2012). They also tend to operate in environments that have weak institutions, lack infrastructure and factor market development (Hoskisson et al., 2013). A country's factor market is used to produce goods and services, while institutions are used for the exchange of inputs and outputs with other companies. This represents the essential elements that impact business activities.

2.7.5 Reasons for internationalisation

The reasons for expanding into foreign markets also present a further distinction. EMNCs invest in foreign markets as an exit option to enable them to use home country capabilities with limited factor market developments and utilise host countries with better institutional development lacking in their home countries (Hoskisson et al., 2013; Witt & Lewin, 2007). The expansion into developed markets gives them geographic reach and exposure to sophisticated customers enabling them to develop their capabilities (Guillén & Garcia-Canal, 2009). In comparison DMNCs, already possess competitive advantages in technology and brands and operate in countries that have better institutions.

EMNCs face operational difficulties when operating in countries with better institutional development, as these companies do not own exclusive brand advantages and advanced technology (Ramamurti, 2012). When entering into most developed markets, there are no first mover advantages to be gained by EMNCs as these are already dominated by DMNCs (Gubbi et al., 2010). Their disadvantages are further compounded by entering new markets as later comers, without competitive advantage in traditional firm specific capabilities and products in an already crowded market (Guillén & Garcia-

Canal, 2009; Madhok & Keyhani, 2012).

2.7.6 Liability of foreignness and emerging-ness

All multinational companies face the liability of being foreign (LOF) when they expand into foreign markets due to geographical, psychological, cultural and institutional distance between the home and host country (Madhok & Keyhani, 2012). The liability of foreignness is due to the lack of knowledge of the local environment limiting access to information and resources when compared to domestic companies who are more attuned to the local context (Ramachandran & Pant, 2010). These companies also face the added burden of establishing legitimacy as well as acceptance. Furthermore their company specific advantages need to be adjusted to fit a different social, cultural and institutional environment.

This liability of being foreign (LOF) distinguishes between home and host countries but there is a further distinction amongst the foreign companies. The multinational companies from emerging markets are confronted with a further liability especially when expanding into advanced economies because they are from emerging markets (Madhok & Keyhani, 2012; Ramachandran & Pant, 2010). This is referred to as a liability of emerging-ness (LOE), a disadvantage based on where the companies originate from, unlike the LOF which is a disadvantage of where the companies are not from. This is an extra liability with which the multinational companies from emerging markets like South Africa are confronted.

2.7.7 Conclusion

Due to these differences summarised in Table 1, the effect of multinationality on the value creation for companies from emerging markets cannot be assumed to be the same as companies from developed markets. Failure to take these differences into consideration can result in erroneous conclusions regarding the multinationality and performance that could have an effect on their value creation as opposed to developed multinational companies.

Table 1: Summary of differences between Emerging and Developed Multinational

Companies

Element	EMNCs	DMNCs
Stage of Internationalisation	Early growth phase	Mature growth phase
Development path	Dual path: Simultaneous entry into developed and developing countries	Simple path: From close proximity to more distant countries
Speed of Internationalisation	Rapid and Aggressive	Gradual
Method of Entry	External: Mergers and Acquisition, Alliances	Internal & Organic: wholly owned subsidiaries
Capital Markets	Weak: Underdeveloped and limited access	Strong: Developed and accessible
Home Environment	Weak: Low income, weak institutions and limited infrastructure	Strong: High Income, strong institutions and well developed infrastructure
Competitive Advantage	Weak: Upgrade of resources required (products, brand and technology)	Strong: Required resources available in house (products, brand and technology)
Obstacles in foreign countries	Double: Liability of being foreign and liability of emerging-ness	Single: Liability of being foreign

2.8 The Impact of Multinationality on Firm Value

There is no consensus on the effect of multinationality on firm value. Some studies have confirmed that multinationality increases firm value while other studies have proven that it decreases firm value (Eckert et al., 2010; Hennart, 2011; Kuzey et al., 2014). In the UK and Germany international diversification neither enhances nor reduces firm value. In German companies', multinationality on its own does not enhance firm value but by having intangible assets and/or economies of scale, value is created and multinational companies trading in the USA trade at a significant discount in comparison to companies operating domestically only (Eckert, Mucbe, & Rassler, 2010).

A comprehensive meta-analysis of 120 samples concluded that multinationality is beneficial overall but contingent factors such as the firm's age, home country location,

experience, size and product diversification can alter or negate the effect of multinationality on company performance (Contractor, 2012; Kirca et al., 2011).

2.8.1 The impact of multinationality and Geographic Diversification on Firm Value

(Yang et al., 2013) emphasized the importance of considering multinational performance with location decisions as a pertinent aspect. The destinations of new FDI in developing countries reveals a great deal of differences in indicators related to the likely success of inward FDI. These factors include infrastructure, political stability, transportation costs, labour quality and can explain how well companies perform in their expansion plans. These geographic elements can provide country-specific advantages (CSAs) (Rugman & Oh, 2010). These factors can include natural resources, human capital, technological resources, institutional factors, demand, and other potential strategic assets (Deng & Yang, 2015).

A company enters foreign markets to exploit its non-location-bound firm-specific advantages (FSAs) subject to the constraints of the liability of foreignness, and it needs to learn how to offset the risk of foreign activity (learning how to exploit CSAs) against the benefits of FSAs (Contractor, 2013). Therefore, a MNEs performance in the foreign market is the outcome of interaction between two types of factors, CSAs and FSAs. Foreign expansion may maximise a firm's performance and would thus create an optimum level of internationalisation. Some companies can perform better in the global market rather than in the home region market (Rugman & Oh, 2010).

As a result the developing and developed countries should be separated when assessing the effects of international expansion on company performance. An analysis was done covering 16000 multinational companies in 46 countries for a 10 year period (1997 to 2007). The results demonstrated a positive relationship between multinationality and firm performance. There were differences between the results of developing and developed countries as host countries. The developing countries were associated with higher performance when compared to developed countries. The return on investment in developing countries was U-shaped, indicating that multinational companies in developing countries are likely to experience losses in the early stages before they realise positive returns (Yang et al., 2013).

There is an emphasis on distinguishing between tangible firm-specific assets and intangible assets that is often ignored. This extends the OLI paradigm as noted earlier

by emphasising the importance of location and combining this with non-material assets. Multinationality provides companies with the opportunities to transfer intangible assets easily and turns these assets into activities such as innovation (Yang et al., 2013).

The value of a location can be a source of competitive advantage to firms. Location resources are generic and available to all firms operating in that location (Zaheer & Nachum, 2011). The ability to extract value from the location differs for each firm. A firm that is able to recognise the potential of a location and turn the location resources into firm specific assets will build location capabilities that will enable them to succeed in the location. If a firm operates in a large number of locations, the heterogeneity of the locations in terms of location resources creates opportunities for value creation that is not available to firms operating in domestic markets only.

Therefore companies that gain most from being multinational are those that are able to successfully work together in foreign countries' economic and institutional environments. Their gain comes from being able to create location capabilities into FSA and combining this with their other FSA when taking advantage of CSA.

2.8.2 The degree of internationalisation on company value and performance

The degree of internationalisation is defined as the company's extent and spread of value adding operations into foreign countries beyond its own borders (Aggarwal et al., 2011). To classify the multinationality of a company, breadth and depth dimensions are used. The breadth is the extent of the geographical spread of a company's operations (Pangarkar, 2008). Its operations can be all local in which case it is defined as a domestic company (Aggarwal et al., 2011). If the company has operations only in the same region of its origins it is classified as regional, if it has operations in more than one region it can be classified as transregional. A global company is one with operations in all regions or continents.

The depth is the extent of the company's market engagement and can be used as a classification of the degree of internationalisation (Aggarwal et al., 2011). The commitment and contractual agreement that companies engage in depicts the levels of control and risks faced (Pangarkar, 2008). The depth ranges from shallow to deep depending on the mode of entry into the foreign market. Either or both of the measures are used to classify the degree of internationalisation depending on availability of data.

Following the theories of OLI paradigm and Uppsala model the location has an effect on the value of companies. Not all locations possess advantages for companies therefore the investment location selected is important in creating value. Governments compete for FDI and this has led to the creation of clusters like Silicon Valley (Aggarwal et al., 2011). Physical distance associates with culture and the transregional and global firms are more distant from the home company than the domestic and regional companies (Zaheer & Nachum, 2011). A company's costs of adaptation will vary by country even though the costs generally show an increasing trend to the geography, cultural, institutional and economic distances from home (Contractor, 2013)

The question about whether the degree of internationalisation (DOI) leads to increased company performance and value creation has been a focus of study for many years but has mainly been on developed country multinationals (Contractor, 2013). There is no consensus that higher levels of DOI lead to better performance and value creation (Pangarkar, 2008). The dispersion of sales across different markets has an implication for performance. The breadth can have more effect on performance than depth (foreign sales to total sales) as a company that is more diversified will benefit from internationalising advantages such as smoothing of sales, learning different environments in terms of competitors' strategies and customer requirements. Higher dispersion also offers richer learning and leverages opportunities across markets. Conversely, due to uncorrelated cycles a less diverse firm may experience smoother sales and profits.

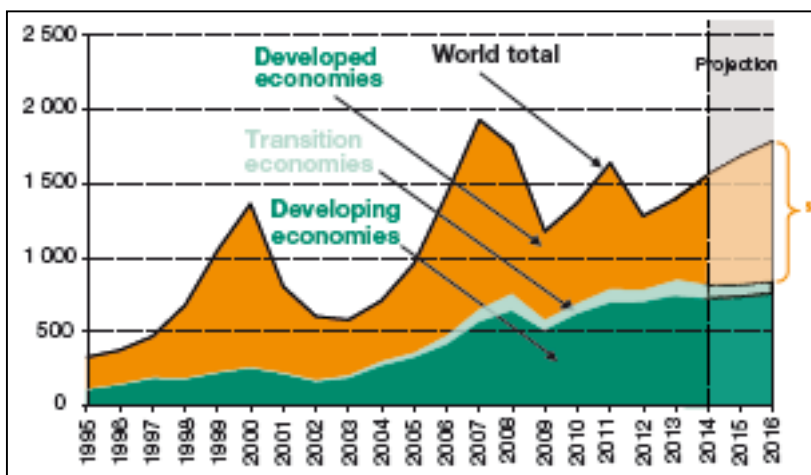
According to Yang et.al (2013), developing markets when investing in other developing countries are expected to benefit from being multinational when their foreign assets increase to 44% if investing in developed markets and drops to 25% if investing in other developing markets. This supports that the degree of internationalisation matters to the creation of value by multinational companies.

The research sought to ascertain whether the degree of internationalisation of South African multinational companies has any effect on company value. It sought to verify whether the theory of cultural and geographic distance applies to South African multinational companies and provided possible explanations and reasons for the differences.

2.9 Trends in Foreign Investments

FDI can be regarded as either inward or outward. Inward FDI is foreign investments into a country while outward FDI relates to investment to other countries. Global FDI has been on an upward trend with a 9% increase in 2014 from 2013 (UNCTAD, 2014). Developing economies are following the same upward trend and had reached their peak in 2013 as shown in Figure 6. Developing countries recorded increase in FDI at 54%, followed by transition economies at 28% and developed countries at 9%. FDI to Africa increased by 4%.

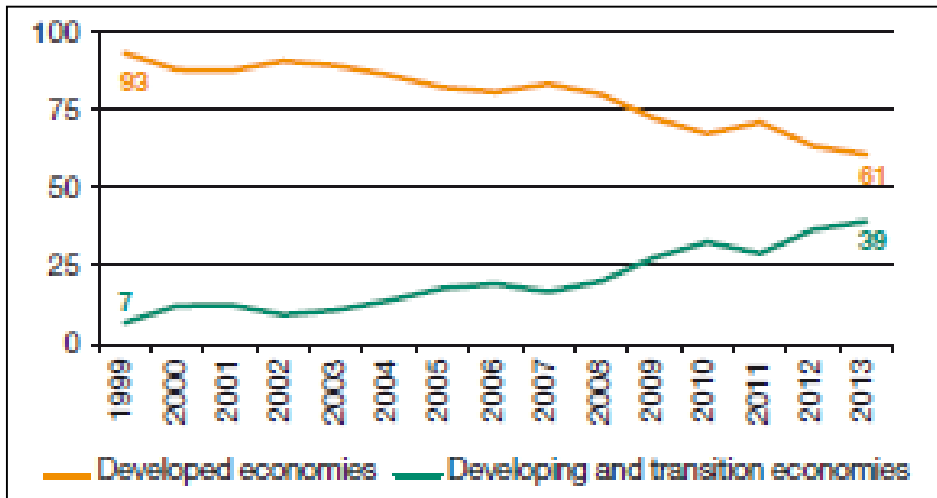
Figure 6: FDI Inflows 1995-2013 (Billions of Dollars)



Source UNCTAD Report 2014 Pg. 2

Global FDI outflows increased by 5% and stakeholders from developing and transition economies accounted for 39% of global outflows while developed countries FDI stayed the same from 2012 at 61% as per Figure 6. The increase is attributed to international expansion in response to fast economic growth, liberation of investments and emerging middle class continuing growth (UNCTAD, 2014).

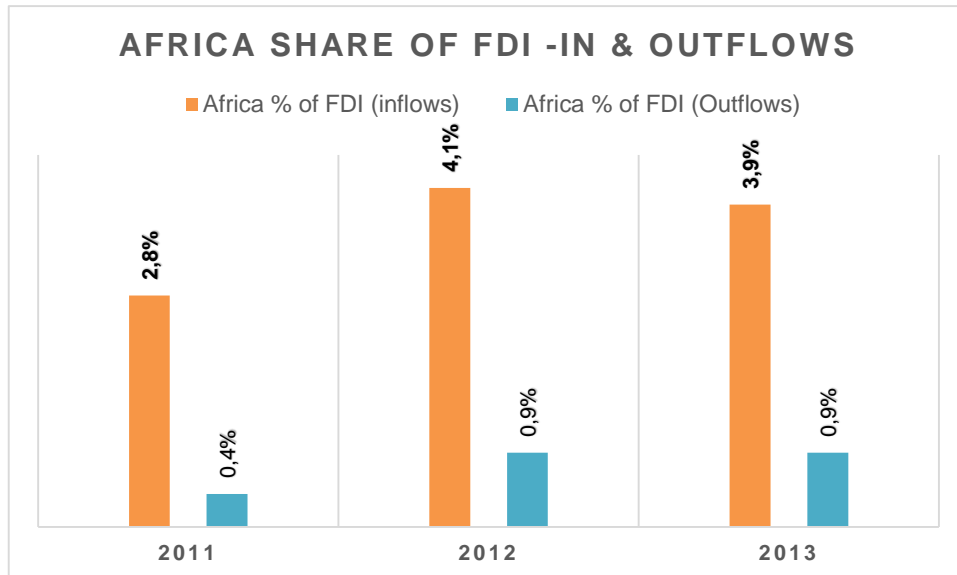
Figure 7: Share of FDI Outflows and inflows 1993- 2013



Source UNCTAD Report 2014 pg. 6

Figure 7 shows that FDI outflows from developed countries is on a decreasing trend while that of developing and transition economies is on an upward trend.. Africa share of FDI in and outflow from 2011.is increasing with a slight decrease in 2013 for FDI inflows as shown in Figure 8

Figure 8: Africa Share of Global FDI - In and Outflows

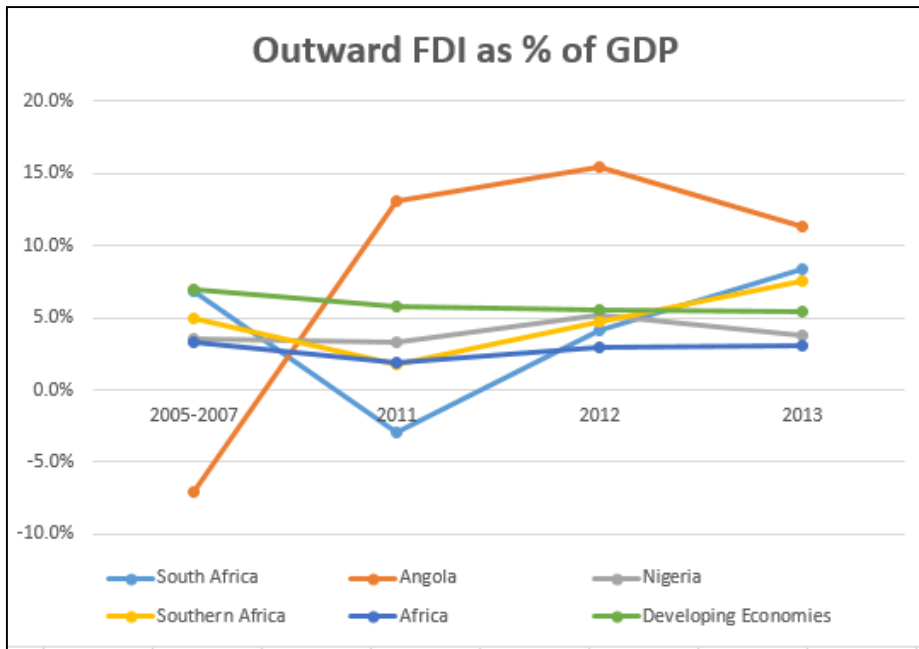


Source:World Investment Report 2014; <http://unctad.org/wir> or <http://unctad.org/fdistatistics>.

2.10 South African FDI Trends

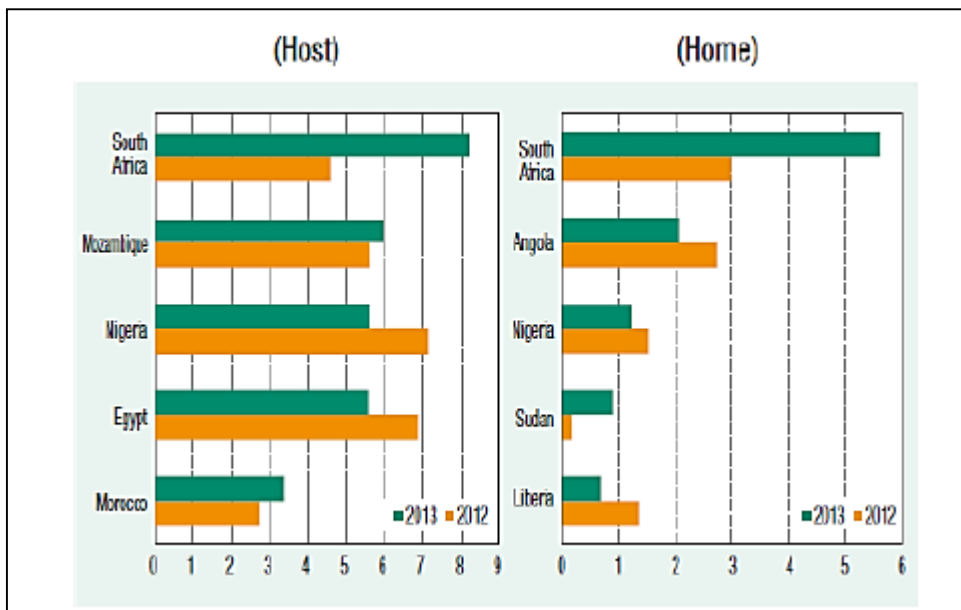
Intra-African investments are rising (+4%) led by multinational companies from South Africa, Kenya and Nigeria (UNCTAD, 2014; World Bank, 2014). Outward FDI for South Africa's increased from 6.8% of GDP for the period 2005-2007 to 8.4% in as shown in Figure 9. and Figure 10 Nigeria and Angola recorded a decrease in the same period. These investment are largely within the African continent in telecommunications, mining and retail industries.

Figure 9: Outward FDI as % of GDP



Source: World Investment Report (2014) <http://unctad.org/fdistatistics>

Figure 10: FDI In & Outflows in Africa 2012-2013

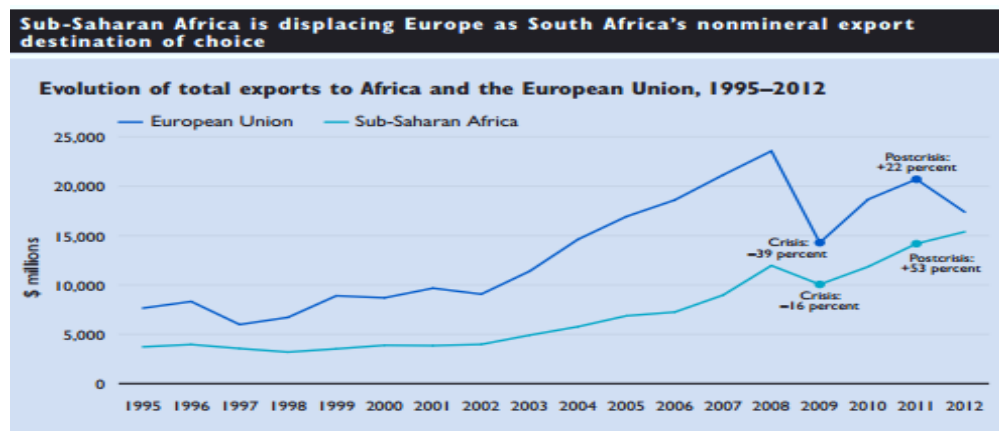


Source: UNCTAD 2014 pg. 37

South Africa has seen a decrease in merchandise exports to Organisation of Economic Cooperation and Development (OECD) countries, largely Europe from 60% to 21% by

2012 (UNCTAD, 2014). Brazil, Russia, India and China (BRIC) now classified as transitional economies saw an increase from less than 5% to 21% in the same period. Rapid industrialisation requiring these resources for growth led to the increase. Eliminating mineral ores exports, the highest growth area for South African exports has been to Sub-Saharan Africa as per Figure 11.

Figure 11: South Africa Export to Europe & Africa



Source: World Bank (2014) pg. 29

As shown in Figure 11, during the 2008-2009 financial crisis, Europe was more adversely affected than Africa. South Africa's exports to Europe plunged by 39% compared to a 16% decrease in Africa (UNCTAD, 2014). Africa also recovered more robustly with an increase of 53% compared to a 22% recovery for Europe. Africa provided a substitute and diverse market for South Africa during the financial crisis. Exports to Africa are for secondary goods (machinery and chemicals) and primary goods are exported to the European markets.

New firm entry into the European market decreased by 40% whilst entry into the African market has been strong (UNCTAD, 2014). The likelihood of a new firm starting in Africa is three times higher than a firm commencing operations in Europe, even though the European market is still 30 times larger than the African market. The growth opportunities for South Africa are limited in Africa as South Africa's market share is already high in Africa compared to its share across Europe as per Figure 12

Figure 12: New Exporter Entrance by Market



Source: World Bank (2014) pg. 29

There are eight South African companies in the top 100 non-financial MNCs from developing and transition economies ranked by foreign assets in 2012 compared to ten in 2005 (UNCTAD, 2014) as per Figure 13. This is a decrease in number but in terms of transnational index the ranking has gone up due to increase in foreign sales, assets and number of people employed as per Figure 14 and figure 15. The transnational Index was developed by United Nations Conference Trade and Development (UNCTAD) as a measure to determine the spread of MNCs beyond their own country's borders. It is an average of three ratios which include foreign assets to total assets (FATA), foreign sales to total sales (FSTS) and foreign employments to total employment. This research has utilised foreign sales to total sales as a measures of multinationality in line with many other studies (Aggarwal et al., 2011; Kuzey et al., 2014).. Asset and employment ratios have not been used due to unavailability of information for the period under review.

Certain industries that are consumer and infrastructure oriented present more growth opportunities due to the increasing population and the emergence of a middle class in Africa (Ramamurti, 2012). The lack of infrastructure in Africa provides opportunities for investments but can also be a major deterrent for growth to companies that are dependent on infrastructure. The reduction in OECD investments from South Africa and the increasing investment in the rest of Africa also supports the pursuit of high growth theory as Africa is predicted to have the highest growth trajectory (World Bank, 2014). This could also be a strategy by companies to diversify risk and create a buffer during periods of downturns in business in one location. Additionally, South African firms could

have developed competitive advantages that enable them to trade in secondary goods in countries that are geographically closer. Close proximity to the African market is an advantage facilitating investments from South Africa

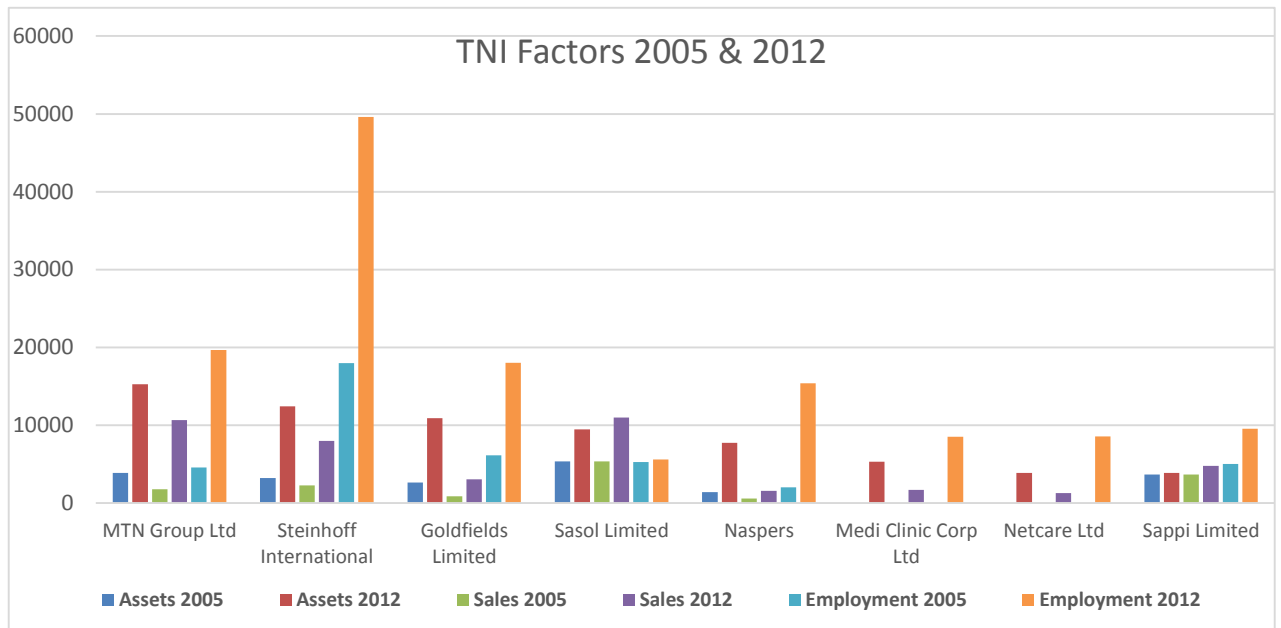
Figure 13: Transnational Index for South African Companies



Source: Adapted from UNCTAD Report 2014, UNCTAD Report 2007

Figure 14 and figure 15 shows the transnational index for South African companies in the top 100 excluding financial sector from developing countries. In figure 13 the companies are listed for 2005 and 2012. The companies have increase from 6 to 8. Figure 14 shows the companies ranked by foreign assets, foreign sales and foreign employment. The South African companies in the top 100 transnational companies have increased their spread to foreign countries as shown in Figure 14.

Figure 16: Transnational factors for South African Companies 2005 & 2012



Source Data compiled from UNCTAD Report 2014, UNCTAD Report 2007

2.11 Conclusion of SA FDI Trends

The increasing outward FDI into the rest of Africa from South Africa is evidence that South African companies are expanding internationally to take advantage of growth opportunities in the rest of Africa and globally (UNCTAD, 2014).

This current research becomes pertinent as South African multinational companies are showing an increase in their multinationality. The research sought to determine whether value is created with the expansion into foreign markets. The transnationality of the companies was measured by foreign sale, and foreign assets and the degree of internationality was also considered when measuring value creation of South African multinational companies when they expand internationally, considering their differences to companies from developed economies who are also expanding internationally.

CHAPTER 3: RESEARCH QUESTIONS & HYPOTHESES

3.1 Introduction

Articulating research questions is essential as it assists in clarifying the research problem. The research process seeks to answer the research questions (Saunders & Lewis, 2012). A research hypothesis is a proposal that can be tested stating that there is a statistically significant difference between two or more variables. This enables ideas and proposed thoughts to be investigated and tested about why they act in a particular way.

3.2 Research Questions

The purpose of this research is to investigate the impact that multinationality has on the value creation of South African companies which is classified as an emerging market. The hypothesis of this research sought to answer these hypotheses:

1. Does foreign expansion of companies to become multinational companies create value?
2. Does the location of international expansion have any effect in creating value for the company?
3. Does the degree of internationalisation of the company have any effect on the value creation?

The following hypotheses were modelled to answer these three research questions:

3.2.1 Hypothesis One

Null Hypothesis (H_0): Foreign expansion for multinational companies does not create value.

Alternative Hypothesis (H_a): Foreign expansion for multinational companies creates value.

3.2.2 Hypothesis Two

Null Hypothesis (Ho ii): The geography or location of foreign investment does not affect the value and performance of multinational companies.

Alternative Hypothesis (H_a ii): The geography or location of foreign investment affects the value and performance of multinational companies.

3.2.3 Hypothesis Three

Null Hypothesis (Ho iii): The degree of multinationality of companies has no effect on value and performance of multinational companies.

Alternative Hypothesis (H_a iii): The degree of multinationality of companies has an effect on the value and performance of multinational companies.

All hypotheses were tested at 5% significance level

CHAPTER 4: PROPOSED RESEARCH METHODOLOGY AND DESIGN

4.1 Introduction

The chapter explains how the research was planned and conducted to provide answers to the research hypotheses stated in Chapter 3. It discusses the population, sample size, sampling technique, data collection and the process of data analysis. It concludes by presenting the limitations of the research process.

In order to test the hypotheses financial data on the companies listed on the JSE from 2001 to 2014 was collected from the OSIRIS database.

4.2 Research Approach

The main objective of this research was to determine the impact of being a multinational company on the company's performance and value. Further objectives of the research included determining whether choice of location of investments and the spread of investments would also have an influence on the performance and hence value creation of the multinational company. Essentially, the effect of being multinational, the geography and spread of the investments were investigated to ascertain whether there are any connections between the three factors.

4.2.1 Research methodology

Qualitative and quantitative approaches are the two main key research methods used in academic research (Saunders & Lewis, 2012). A qualitative exploratory research is usually used when attempting to find general information about an area that is not clearly understood or a new phenomenon (Saunders & Lewis, 2012). Useful new insights and tentative solutions can be obtained before full scale research is conducted. A quantitative descriptive approach is used when seeking to provide an accurate description of persons, situations or events and involves the collection of measurable and countable data in answering the research questions (Saunders & Lewis, 2012). Secondary data reanalysis is one of the techniques used in the quantitative approach. A quantitative or a qualitative study can further be classified as being explanatory by conducting a study

of the problem or condition to explain the cause and effect relationships between variables.

In this particular research study, a quantitative study was conducted by analysing secondary data. The research took a quantitative approach as it is effective in discovering relationships and explains phenomena (Walliman, 2001), which was specifically pertinent to this research: The impact of being multinational on value creation, the effect of geography and degree of internationalisation on value creation of companies was sought. The research commenced with the collection of secondary data of all JSE listed companies for the period from 2001 to 2014. The data was obtained from OSIRIS database. OSIRIS is a database containing information including financial results of publicly listed companies worldwide.

The use of secondary data is associated with some disadvantages. The major disadvantage noted by Saunders and Lewis (2012) is the unsuitability of data previously collected for a specific use as it would only be appropriate for that particular purpose. The data collected for this research process had not been gathered for a specific purpose. All companies listed on the JSE have statutory financial reporting requirements and are required to meet specific minimum standards. The other shortcomings of using secondary data are that information could be outdated, have variation in definition terms and different units of measurement (Zikmund, Babin, Carr, & Griffin, 2012). Therefore, the JSE financial data collected from OSIRIS could be relied on, as it was recent, and was publicly available and not collected for a particular research purpose.

4.2.2 Population and sampling frame

The population is defined as a complete assembly of group members (Saunders & Lewis, 2012). A sampling frame consist of a list from which a sample maybe drawn. The population in this research consisted of all listed, unlisted, domestic or multinational companies registered in South Africa irrespective of size or any other attribute. Due to practical reasons that make it impossible to collect data from the whole population for study purposes, researchers usually collect a sample of data. This is usually because the complete population is unknown therefore it is impossible to collect all the data. Financial and timing restrictions also make it impossible to collect data from the full population.

Probability and non-probability sampling techniques can be used when selecting a sample. The method selected is dependent on whether the complete population is known

or unknown. In instances where the population is known and listed, probability sampling techniques can be used to select a sample from the sampling frame (Saunders & Lewis, 2012). There are a variety of ways to select a sample randomly from a complete list such that the opportunities of each member being selected are known. If a complete list of the sample is unknown, non-probability sampling methods are used, as random selection from the population cannot be used because the probability of each member being selected is unknown (Zikmund, Babin, Carr, & Griffin, 2012) .

For this research non-probability purposive sampling technique was used because a complete list of all companies registered in South Africa was not readily available. The researcher selected all companies listed on the JSE as the sample that was tested. The accessibility and availability of financial data over a 14 year period was a major determining factor when selecting the sample. The JSE also consists of both multinational and domestic companies. In January 2014, 35% of the JSE market capitalisation was contributed by the five top shares which were all multinational companies (JSE does not reflect South Africa, 2014). Therefore the JSE provided a diverse selection of companies that are both domestic and multinational required to test the hypotheses raised in Chapter 3.

A comparison of foreign companies investing into South Africa and South African multinationals investing into foreign markets would have been done to determine whether there was a difference in value creation. The unavailability of financial data of investments into South Africa by the large multinational companies was a constraint. South African investments' contribution to the companies was insignificant and was not reported separately in the financial statements' segment data.

4.2.3 Unit of analysis

The unit of analysis used in this research to test the hypotheses raised in Chapter 3 was the JSE publicly listed companies. The impact of being multinational on the performance and value creation of South African companies was analysed. Literature has indicated that company performances and value realised vary at different levels of multinationality (Yang et al., 2013) so the degree of multinationality of the JSE listed company was also analysed. Depending on the countries of foreign investments there are different locational benefits that result in increased performance and value creation for multinational companies so the location or geography of foreign investments by JSE listed companies were also considered (Contractor, 2012).

4.3 Data Collection

The study investigated the impact of multinationality on company performance and value. This was achieved by collecting financial data providing measurements of both multinationality and company value. The data was collected for all JSE listed companies from the OSIRIS database which collects companies' data for all worldwide publicly listed companies. OSIRIS covers more than 80 000 companies internationally. It provides company information that includes various aspects like financial statements, ownership structures, performance and earnings estimates.

The first OSIRIS filter selection was all companies and it identified 81 211. The second selection filter used was region specifying South Africa and 736 companies from the original list were identified and the final filter was the stock exchange, specifically those listed on the JSE, and 318 companies were identified. The sample selection consisted of a total of 3004 data points. The financial data was collected for a period of 14 years from 2001 up to and including 2014. The database provided the financial information according to the financial statements, including financial and market ratios and market value for the years under review for the specific companies. The database also provided segmented data for each of the companies by business line and by geography.

Segment reporting came into effect on 1 July 1998 as prescribed by International Accounting Standard 14 (IAS14) (Deloitte Global Services Limited, 2015). It required among other things segment sales, as well as the profit and assets greater than 10% of the total earnings to be disclosed when reporting. The reporting was divided along geographic locations and business lines. IAS 14 was superseded by IFRS 8, which became effective on 1 January 2009. This allowed segments to be disclosed along operational lines and allowed aggregation of two or more segments at the manager's discretion.

4.4 Data Profiling and Analysis

The following raw data was extracted from the OSIRIS Database for each year from 2001 to 2014 for each company listed on the JSE.

Figure 17: Company raw data

Raw Data Extracted from Osris Per Company Per Year 2001 to 2014	
Company name	Geographic - PPEth USD
Countrycode(incorp)	Geographic - R&Dth USD
GICS code	Geographic - Capital expenditureth USD
Latest account date	Geographic - Gross Premiumth USD
Template	Geographic - Gross Premium (%)
Cons.code	Geographic - Net Premiumth USD
Indep.Ind.	Geographic - Net Premium (%)
Indep.Ind.	Geographic - Unit
ISIN Number	Geographic - Currency
Indep.Ind.	Sales
ISIN Number	Profit
Geographic - Date	Assets
Geographic - Label	Depreciation
Geographic - Salesth USD	PPE
Geographic - Profitth USD	R&D
Geographic - Assetsth USD	Cap. Exp.
Geographic - Depreciationth USD	Insurance

Source: OSIRIS database

4.4.1 Data coding and editing

There are four stages undertaken before data analysis is performed and these include editing, coding, data entry and data analysis (Zikmund, Babin, Carr, & Griffin, 2012)).

Zikmund, Babin, Carr and Griffin (2012) stated that data conversion/transformation is necessary when secondary data is reported in a way that does not meet the researcher's need to answer the hypotheses. Data conversion/transformation is a process of changing the original form of data to a more suitable format that enables the research question to be answered.

The secondary data obtained according to Figure 17 was converted to a more suitable form that enabled the research questions to be answered. Each company was given its own identification (ID) number. The ID numbers ranged from 1 to 318. Geographic dates which were the year end dates including date, month and year were changed to show only the year and reclassified to geographic year. All geographic label sales (foreign sales by geography) were reclassified to reflect the following five continents: South Africa was independent for domestic sales, then the remainder of Africa, Europe, North America and the remainder of the international market. The sales that could not be categorised into the four continental geographic areas that were mentioned were then classified as international including those that were aggregated across two or more continents as presented in the Figure 18. This enabled the performance of companies to be assessed based on the geographical location of the sales.

Figure 18: Reclassification of Geographic label

Geographic - Label	Continent
South Africa	South Africa
Europe	Europe
Rest of Africa	Rest of Africa
Australia	Australia
International	International
North America	North America
Other	International
Africa	Rest of Africa
Southern Africa	Rest of Africa
United Kingdom	Europe
Asia	International
United States	North America
Namibia	Rest of Africa
Zambia	Rest of Africa
South America	International
Botswana	Rest of Africa

The data was then subjected to editing and this normally occurs across three levels i.e. searching for missing data, legibility and consistency of the data. Legibility was not an issue as all data extracted was electronic. Consistency of the data was also checked using number of data points and company ID. After the editing and coding of the data further statistical analysis using the SAS statistical package was conducted to test the levels of missing data. Where a company had more than 20% missing data in periods of activity it was discarded. Most of the statistical analyses done in business research use Microsoft Excel, SAS and SPSS (Zikmund et al., 2012).

4.4.1.1 *Variables in the data*

Figure 19 below presents the list of variables from the data that was extracted. To enable the hypotheses to be answered other variables had to be derived. The list of derived variables and their formulas are listed in **Error! Reference source not found.** further elow.(Hillier, Clacher, Ross, Westerfield, & Jordan, 2014)

Figure 19: List of variables selected from OSRIS

Variables	
Operating Rev / Turnover	Sales South Africa
Assets South Africa	Sales Europe
Assets Europe	Sales International
Assets International	Sales North America
Assets North America	Sales Rest Of Africa

Assets Rest Of Africa	Sales Australia
Assets Australia	Total Sales
Total Assets	Shareholders Funds
Net Income	Profit Margin
Market Capitalisation	Return On Total Assets
Return On Shareholder Funds	

Figure 20: Derived Variables

Derived Variables	
Profit South Africa	= South Africa (Sales - Expenses)
Profit Europe	= Europe (Sales - Expenses)
Profit International	= International (Sales - Expenses)
Profit North America	= North America (Sales - Expenses)
Profit Rest Of Africa	= Rest Of Africa (Sales - Expenses)
Profit Australia	= Australia (Sales - Expenses)
Total Profit	= Total (Sales - Expenses)
Local Sales Ratio	= Local Sales/Total Sales
Foreign Sales Ratio	= Foreign Sales/Total Sales
MNC	= Foreign sales > 0
ROS - Return on Sales	= Total Sales / Net Profit
ROS - Return on Sales SA	= Sales South Africa / South Africa Profit
ROS - Return on Sales International	= International Sales/ International Profit
Relative Exposure	= # of continents where sales > 0 / Total # of continents
Log Market cap	= log of mkt cap + 1
DOI_1	= Proportion of foreign sales / [(% sales SA) ² + (% sales rest of Africa) ² + (% sales Europe) ² + (% sales America) ² + (% sales international) ²]
DOI_2	= (1 × % sales from SA) + (2 × % sales from rest of Africa) + (3 × % (1 × % sales from SA) + (2 × % sales from rest of Africa) + (3 × % sales from Europe) + (4 × % sales from America) + (5 × % sales from international)]

Source: Firer, Ross, Westerfield & Jordan, 2012 p.g 789-803

4.5 Analysis Approach

Evaluating data makes it possible to attain the correct meaning of the data objectively. This section explains how the gathered data was analysed and describes the tests that were performed to answer the research questions and hypotheses raised in Chapter 3 (Saunders & Lewis, 2012).

4.5.1.1 *Descriptive statistics*

Descriptive statistics summarise characteristics of data. When using a sample, the descriptive statistics can be used to make inferences about the entire population (Saunders & Lewis, 2012). Descriptive statistics are provided from descriptive analyses and they include the mean, median, range, variance, skewness, kurtosis and standard deviation. Univariate analysis was performed on each variable in the data to assess the descriptive statistics. These descriptive statistics provided a summary describing the basic properties of a variable. Output data sets containing summary statistics, histogram intervals, and parameters of fitted curves were created for variables.

4.5.1.2 *Variable transformations*

Financial variables with high levels of skewness were log transformed using natural logs. This was done to correct distributional problems of outliers, unequal variances and the lack of linearity (Field, 2013). All the scores are changed when transformation is done. Therefore the form of relationships between variables changes but the relative difference between the variables stays the same so the relationships can still be quantified. Log transformations and square root transformations can correct for positive skew and kurtosis, unequal variances and lack of linearity. Square root transformations were not used as negative numbers are not corrected as these do not have a square root.

Variable reduction was conducted through correlation tests and highly correlated variables were removed from the variables (Zikmund et al., 2012). Pearson product of correlation tests were conducted to attain coefficient correlations that provided valuable information on the relationships between the variables (Field, 2013).

4.6 **Analytical Objectives**

The objective was to answer the research questions raised in Chapter 3.

4.6.1.1 *Analytical approach*

The dependent variables used to answer the research questions were divided into accounting ratios and market ratios. These were obtained from the OSIRIS database.

4.6.1.2 *Dependant variable: Accounting ratios*

Firm performance is measured using financial ratios and has traditionally been used as a powerful tool by decision makers to obtain meaningful results. Ratio analysis help stakeholders to analyse the financial health of the company as comparisons can be made across companies within an industry, between industries, and within the company. To measure financial performance four ratios are alternatively used (Hatem, 2014)

Return on assets (ROA)	: Net income over total assets
Return on Equity (ROE)	: Net income over equity
Return on Sales (ROS)	: Net Income over total sales
Gross Profit Margin	: Gross Profit over total sales

For this research the return on equity (shareholder funds) was selected and used to measure financial performance. Gross profit margin was also considered but as it drives return on shareholder funds it was deleted from the tests. This was also done in previous studies as variables that behave in a similar way are taken out of the model to remove effect of multicollinearity (Ousama, Abdul, & Abdul Rashid, 2011). Multicollinearity is the degree to which independent variables in a multiple regression analysis are associated with each other. High association makes interpretation of parameter estimates problematic (Zikmund et al., 2012).

4.6.1.3 *Dependant variable: Market ratio*

In addition to the financial ratios measuring firm performance, company value was measured by market capitalisation calculated as:

Market Capitalisation : Share price X number of shares outstanding and

Market values are forward looking and are subject to fluctuations as they are dependent on the share price determined in the market place. This is in line with other studies that have used market value as a dependent variable. Ahmed and Duellman (2011) argued that the focus should be on firm value not financial performance, as the multinational corporation consist of valuable options and create arbitrage profits that increases its value. The arbitrage benefits are as a result of taking advantages of imperfections in institutions, timing opportunities, technology options, better financing options and capital availability (Ahmed & Duellman, 2011). Investors recognise multinationality as evidenced by international companies showing lower systematic and unsystematic risk. The market

value also reflects the prices that investors are willing to pay (Kuzey, Uyar, & Delen, 2014).

Market capitalisation is dependent on a company's share price reflecting the investor's confidence in the company's future prospects. Share prices are subject to great volatility which affects the company's market capitalisation.

Conversely, return on shareholders' equity is based on the company's historical performance and is thus stable between reporting periods. Differences in accounting treatment, such as the basis of valuing the company's assets (fair value vs historic cost) affect the company's depreciation charge (net profit) and shareholders' equity. ROE is also subject to the accounting policy chosen by the company that affects net profit, like depreciation and asset write-offs which can lead to changes in net profit, affecting ROE. Furthermore the level of debt is not taken into account and can result in a company having a high ROE whilst it has high levels of debt. Companies' share buy-backs (a company buying back its shares from shareholders) increase ROE without any fundamental changes. ROE is also affected by the stage in the lifecycle of a company. In the start-up phase a company might have negative or no income in the first years even though there might be significant investments by shareholders. This results in a zero or negative return on shareholders' equity.

4.7 Selection of Test Procedure

Two test procedures were selected:

- Generalised linear model (GLM) with Ordinary least square (OLS)
- Generalised linear model with fixed effects.

The generalised linear model (GLM) using the SAS statistical package was used to model the data and test the hypotheses. GLM was selected as it works well with repeated measures data and specifically with Ordinary Least Square Regression (OLS). OLS is commonly used to test hypotheses of differences among factor-level means in repeated measures data. It examines the association between a dependant variable and one or more predictor variables. OLS is a technique that minimises the least squared error for all the observations. GLM OLS procedures assume all the data points are independent of each other and the model is run based on the conventional OLS models.

GLM procedures approximate parameters in the model so the fit is optimised by obtaining maximum possible estimates of the parameters using an iterative-reweighted least squares algorithm.

The GLM with fixed effects model is also run based on the OLS models but with the fixed effect to cater for time invariability. Fixed time effects analyse the relationship between the independent and dependent variables. Assumptions of fixed effects are used when only the effects of variables that change over time are the focus. The fixed effects are controlled as there is the assumption that there will be a bias from the predictor variable or the outcome variable (Gunasekara, Richardson, Carter, & Blakely, 2014).

Taking a fixed effect method can decrease the confusing effect of time-invariant factors, such as the unmeasured characteristics of the variables (Zikmund et al., 2012). Fixed effects estimators rely only on variation within attributes and hence are not affected by confusion from unmeasured time-invariant factors.

Fixed effects models are valuable as an investigative instrument when applied to data because they control for all time-invariant confounding, both measured and unmeasured, by using only the changes occurring within independent variables to approximate the outcome (Zikmund et al., 2012). The main disadvantage of fixed effects models is the incapability to control for other biases which could be significant in longitudinal data analysis and these biases include reverse causation and time-varying confusion.

A generalised linear model with fixed time effects was used to determine the variables that influenced the dependent variables (ROE and market capitalisation) over a period of time. For each dependent variable GLM procedures using OLS and fixed effects was carried out at 5% significance level. The R-Squared value for both OLS and fixed effect was generated and compared. The procedure with the higher R-Squared value explained the more variation in the dependent variable being tested which was either return on shareholder equity or market capitalisation. The model with the higher R-Squared value was then selected. The overall F-statistic was then considered to check its significance by considering the F-value and probability ($P > F$). If results were significant it meant the model as a whole was accounting for a considerable amount of variance in the dependent variable and was suitable to continue to test the effects of the independent variables on the dependent variables.

An analysis of parameter estimates was then carried out on the best selected model selected. Type I and type III sequential sum of squares tests were run. Type I tests are

also known as the sequential sum of squares. With Type I tests, independent variables are placed into the model sequentially and tested against the dependent variable for significance (Zikmund et al., 2012). With Type III tests all variables are added and then one variable is taken out and then put back into the model. This is to check for the effect of the last variable added to the model for significance.

Then t-tests were also conducted as these provide parameter estimates, i.e.: give direction of the effect, which is either negative or positive. The result of the Type III tests were all similar to the t-tests so only the t-test results were shown as these gave the direction of the effect, i.e.: negative or positive. All significance parameters were tested at 5% significance level.

4.8 Data Analysis

4.8.1.1 *Hypothesis 1:– Foreign expansion for multinational companies does not create value.*

To answer hypothesis 1 the independent variable for multinationality or foreign expansion was the ratio of foreign sales to total sales (FSTS). Companies selected from the JSE were classified as multinational or domestic based on foreign sales. Companies with no recorded foreign sales were classified as domestic MNC=0. Companies with foreign sales greater than zero were classified as multinational companies (MNC=1) for this study. In line with segment reporting, companies are required to disclose segment sales once the foreign sales are 10% of total sales. The assumption therefore was that all companies with foreign sales recorded under segment meet this requirement. Using FSTS as a measure of multinationality has been used in numerous studies and a firm is classified as international if its foreign sales are greater than 10% of its total sales (K. Lee et al., 2012; Purdy & Wei, 2014). This is in line with numerous studies that used FSTS as a measure of multinationality and advocated that it is a good proxy for multinationality (Aggarwal et al., 2011; Kuzey et al., 2014).

The degree of multinationality of a firm has been traditionally measured by two metrics. Scale metric uses the degree of multinationality as the ratio of foreign sales to total sales (FSTS) or foreign assets to total assets (FATA) (Rugman & Chang, 2011). Scope metric counts the number of countries in which a firm has a foreign subsidiary or number of subsidiaries in each foreign country.

Research from 2000 to 2007 of 246 of the largest US companies listed on the Fortune Global 500 found that the scope metric was inappropriate to use as it provides misleading results. The scope metric assumes countries to be of equivalent size with no country size metric adjustment (Rugman & Chang, 2011). A firm operating in more countries would seem to be more multinational than one operating in a huge market like the USA, Japan or China. Selling in a large number of small countries where each country has a low ratio of foreign sales when compared to total sales does not indicate the existence of a multinational firm (Rugman & Chang, 2011).

Therefore to answer hypothesis 1 the ratio of foreign sales to total sales was used as a measure of multinationality (Contractor, 2013).

4.8.1.2 *Hypothesis 2: The geography or location of foreign investment does not affect the value and performance of multinational companies.*

The lack of a standard reporting of geographic segments by companies regarding the grouping of geographic areas presented a challenge. Purdy and Wei (2014) stated that measuring diversification variables is plagued by data limitations and inconsistent reporting of revenues across geographic regions. Many companies' revenues are not disclosed at country level but at regional levels and definitions of regional vary widely (Purdy & Wei, 2014). This lack of consistency in reporting can result in companies with operations in the same country reporting these operations differently (Pangarkar, 2008). To overcome this all companies from the JSE list were given an identity range from 1 to 318 before modelling. Following Purdy and Wei (2014), to seek consistency across different reporting styles of companies the world was segmented into five regions: South Africa was classified as an independent region, the remainder of Africa, Europe, North America and the fifth classification was the remainder of the international market. The sales that that could not be categorised into the first four regions were then classified as international. Therefore the performance of companies could be assessed based on the geographical location of the sales

4.8.1.3 *Hypotheses 3: The degree of multinationality has no effect on value and performance of multinational companies.*

To measure the degree of multinationality relative exposure, DOI_1 and DOI_2 variables were used. Relative exposure was calculated in proportion of the number of continents a company had foreign sales from to the total number of continents. This was calculated annually to give the degree of multinationality. This was only done for companies

classified as multinational.

$$\text{Relative Exposure} = \frac{\text{\# of Continents where sales} > 0}{\text{Total \# of Continents}} \times 100$$

Therefore it follows that where:

of continents contributing to sales is = 1 then relative exposure is 20%

of continents contributing to sales is = 2 then relative exposure is 40%

of continents contributing to sales is = 3 then relative exposure is 60%

of continents contributing to sales is = 4 then relative exposure is 80%

of continents contributing to sales is = 5 then relative exposure is 100%

This however does not take into account the size of the market so another measure, DOI₁, which takes the breadth and the dispersion of sales into account was also employed, and is calculated as:

$$\text{DOI}_1 = \frac{\text{Proportion of foreign sales}}{[(\% \text{ sales South Africa})^2 + (\% \text{ sales rest of Africa})^2 + (\% \text{ sales Europe})^2 + (\% \text{ sales America})^2 + (\% \text{ sales international})^2]}$$

This measure leads to different values of DOI₁ according to the spread of sales across different geographic regions. It also takes the depth and breadth of sales into account, so it is therefore more comprehensive than the simple count of the amount of countries or subsidiaries (Pangarkar, 2008).

Distance (both physical and psychic, as described in the Uppsala model) can affect performance; hence distance can affect the value creation of MNCs (Pangarkar, 2008). To calculate this measure the geographic regions were arranged according to increasing physical distance from South Africa. Other studies used psychic distance to arrange into geographic regions (Clark & Pugh, 2001). The foreign sales were then reclassified into the following continents relative to physical distance to South Africa: (1) The remainder of Africa, (2) Europe, (3) America and (4) international. Those sales that were aggregated across two or more continents was classified as international sales and calculated from DOI-2 as follows:

$$\text{DOI}_2 = (1 \times \% \text{ sales from SA}) + (2 \times \% \text{ sales from rest of Africa}) + (3 \times \% \text{ sales from}$$

Europe) + (4 × % sales from America) + (5 × % sales from international)]

The ratio of foreign sales to total sales (FSTS) has been consistently used in most studies as a measure of the degree of internationalisation of a firm (Rugman & Chang, 2011) . According to Pangakar (2008) it lacks validity since it is a rough proxy of the DOI of a firm. It ignores the spread of foreign sales across markets which impacts performance significantly. A firm with 50% foreign sales will have the same FSTS ratio whether the sales are all from one country or from more than one country. If the foreign sales are from more than one country there is a wider spread but the FSTS ratio does not capture that.

This research sought to address these shortcomings by using a measure of DOI that takes dispersion of foreign sales. DOI_1 is a combination of the traditional measure of foreign sales variable and the dispersion of foreign sales across geographic regions. The denominator of the measure is similar to the Herfindahl-Hirschman index which has been frequently used to measure concentration of markets in economics literature (Pangakar, 2008).

The selection of the methodology is appropriate as it analyses the different levels of multinationality by considering both the breadth (which is the geographical dispersion) and the depth (which is the ratio of foreign sales to total sales) (Aggarwal et al., 2011) and the impact on firm value using financial performance ratios and market ratios.

4.9 Test Results and Conclusions

The results obtained from the analysis of the data were interpreted objectively by analysing the R-squared value and the type I and III F statistics. R-Squared gives an approximation of the strength of the relationship between the independent variable and the dependent variable. It is the percentage of variance that is explained by the model but it is not a hypothesis test for the relationship. R-Squared values are within the range $0 \leq r^2 \leq 1$ where 0 denotes no relationship and 1 denotes a perfect relationship. The higher the R- squared value the better the fit that is explained by the models.

R squared was calculated for GLM ordinary least squares and GLM with fixed effects. The model with a better fit was selected and used for further tests. The F-Test determines whether the relationship is statistically significant. If the F statistic was < 0.05 then a statistically significant relationship between the dependent and independent variable was

confirmed at a 95% confidence level. If the F statistic was > 0.05 then no statistically significant relationship exists. Type I, Type III and t tests were then performed and the results provided the basis for accepting or rejecting the hypotheses as stated in Chapter 3.

4.10 Research Assumptions

The major assumption is the use of foreign sales as a proxy for the multinationality variable. The other assumption is in the degree of internationalisation which assumes all markets to be of equivalent size. The degree of internationalisation is calculated by the number of companies in a particular market assuming all markets to be of the same size. Relative exposure was calculated as the ratio of continents with foreign sales greater than zero to total continents and this was used as a proxy for the ratio foreign sales to total sales.

The ranking of the continents is classified by the degree and dispersion of foreign companies based on physical distance without taking into account cultural and psychic distance.

10% of reported segments have at least 10% foreign sales as required by IFRS 8.

4.11 Research Limitations

- I. This research was limited to JSE-listed companies as this allowed access to publically available data to allow for a fourteen year period study to be undertaken.
- II. The OSIRIS database is only for listed companies, therefore this study provided a view limited of publicly listed companies. Including non-listed/private companies could have resulted in different outcomes.
- III. The research did not consider other attributes such as management style and structures that have an effect on the company's performance and value creation.
- IV. The study did not take into account changes in reporting structures that could result in missing data depending on changes in classifications.
- V. The changes in segment reporting from IAS 14 to IFRS 8 could have resulted in reclassification of how segment data is reported which could affect the data.
- VI. Non-standardisation of segment data could have compromised the data integrity.

Some companies report segments based on continents, others report by countries and still others use a combination of countries or continents.

- VII. The use of a proxy to define multinationality. The use of foreign sales as a proxy for multinationality could result in errors.
- VIII. Changes in company structure were not considered.
- IX. Missing data as a result of entry and exit of firms during the period under review could have been as a result of exit of companies due to acquisition or changes in company structure, hence reporting requirements changed. It would have been preferred to have companies that had full data for the period under review but this would have resulted in a small sample that reduced the degrees of freedom, thereby limiting the use of results. Excluded firms would have been a potential source of bias. Similarly, by examining survivors important evidence could have been lost.

CHAPTER 5: RESEARCH RESULTS

5.1 Introduction

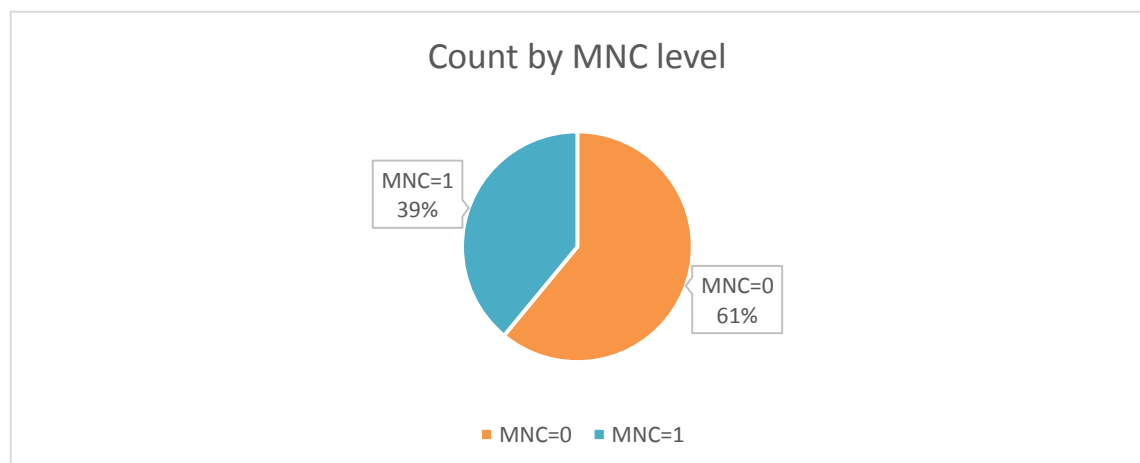
This chapter presents the results of the statistical analysis completed on the secondary data that was collected for the period from 2001 to 2014 for companies listed on the JSE in an attempt to answer the research questions/hypotheses stated in Chapter 3. Descriptive statistics were utilised to quantitatively describe the key attributes of the data collected. Finally the detailed results of the statistical tests performed are presented to answer the hypotheses.

5.2 Analysis of Data

5.2.1 Variables' descriptive statistics

The descriptive statistics for the sample are presented in Table 2. The sample comprised of 318 companies with a total of 3004 data points. Foreign sales greater than 0 (MNC=1) consisted of 1172 data points whilst those with no foreign sales (MNC=0) consisted of 1832 data points, as depicted in Figure 21 showing the count by MNC level.

Figure 21: Number of Companies by MNC level



Multinational companies on average are 39% of total sample and have on average foreign sales of 13%. The relative exposure is about 30% (median 20%) whilst profit margins of companies on average is 10% (median 6%). The average return on shareholders' equity is 18% (median 17%). The variables have large differences between

the median and the mean. This is also reflected by the high levels of skewness and kurtosis showing that the data is not normally distributed with the exception of MNC, relative exposure, local sales ratio and foreign sales ratio. This shows that the data has some outliers which necessitated the log transformations for the variable to remove the skewness and kurtosis.

Table 2: Descriptive Statistics of Variables

Variable	Mean	Median	Skewness	Kurtosis
Total Sales	8 765 292,23	1 141 578	6,32	55,13
Sales Europe	697 317,03	0	14,83	274,24
Sales International	673 448,72	0	8,29	81,52
Sales North America	118 014,02	0	13,76	233,6
Sales Rest of Africa	987 835,1	0	12,61	186,23
Sales South Africa	5 855 871,71	787 568,5	7,55	99,31
MNC	0,39	0	0,45	-1,8
Relative exposure	29,56	20	1,66	2,5
Profit margin	10	6,14	0,54	5,47
Return on shareholder's funds	18,25	17,13	-0,04	4,45
Market capitalisation	1 060 334,45	45 518	7,32	70,45
Log market capitalisation	8,84	10,73	-0,69	-1,03
Local sales ratio	0,82	1	-1,78	1,67
Foreign sales ratio	0,13	0	2,31	4,26
Europe sales ratio	0,02	0	5,48	37,05
International sales ratio	0,03	0	5,98	45,88
North America sales ratio	0,01	0	6,69	51,74
Rest Of Africa sales ratio	0,04	0	4,52	21,92
Degree of internationalisation DOI_1	19,76	0	44,28	2141,54
Degree of internationalisation DOI_2	0,23	0	3,6	16,57

5.2.2 Pearson's correlation coefficient

A Pearson Correlation test was run on all the variables to determine whether there was

correlation between the variables. The results of the analysis are shown in Figure 22. The Pearson correlation coefficients show the extent to which two variables are associated (Saunders & Lewis, 2012). This was used to provide insights about the variables that are associated with each other. The correlation coefficient values range from between -1 to +1, where -1 denotes a perfect negative correlation and +1 denotes a perfect positive relationship between the variables. The correlation strength can be interpreted according to Table 5.

Table 3: Correlation Strength Measure

Correlation Range		Strength of Correlation
0.0	to +/- 0.1	None
+/-0.1	to +/- 0.3	Weak
+/- 0.4	to +/- 0.5	Moderate
+/-0.6	to +/- 1.0	High

Source 1 (Saunders & Lewis, 2012)

Figure 22: Pearson's Correlations Coefficients

ID	Name	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26
1	MNC	1																									
2	total_sales	0,28	1																								
3	Sales_EUROPE	0,17	0,51	1																							
4	Sales_INTERNATIONAL	0,23	0,61	0,33	1																						
5	Sales_NORTH_AMERICA	0,16	0,44	0,17	0,24	1																					
6	Sales_REST_OF_AFRICA	0,17	0,57	0,46	0,38	0,09	1																				
7	Sales_SOUTH_AFRICA	0,19	0,83	0,13	0,35	0,39	0,1	1																			
8	total_profit	0,14	0,65	0,11	0,35	0,43	0,49	0,51	1																		
9	total_assets	0,14	0,66	0,25	0,34	0,6	0,26	0,61	0,6	1																	
10	ROS	0,02	0,01	0	0	0	0	0,01	0	0,01	1																
11	ROS_SA	0,02	0,01	0	0	0	0	0,01	0	0,01	1	1															
12	ROS_INT	0,04	0,02	0	0,01	0,01	0,04	0	0,04	0,01	-0,01	-0,02	1														
13	relative_exposure	0,56	0,35	0,22	0,29	0,35	0,18	0,27	0,19	0,24	0,02	0,02	0	1													
14	Profit_Margin	-0,02	0,04	0	0,07	0,04	0,02	0,02	0,1	0,09	0,06	0,06	0	0,04	1												
15	Price_Earning_Ratio	0,08	0,05	0,02	0,03	0,03	0,04	0,04	0,01	0,05	0,01	0,01	0	0,04	0,11	1											
16	Return_on_Shareh_Funds	0,08	0,14	0,01	0,13	0,01	0,03	0,15	0,1	0,05	0,05	0,05	0	0,11	0,47	0,05	1										
17	market_cap_usd	0,23	0,66	0,21	0,47	0,42	0,43	0,51	0,67	0,66	0,01	0,01	0,03	0,32	0,14	0,11	0,13	1									
18	log_market_cap_usd	0,24	0,31	0,12	0,2	0,14	0,14	0,29	0,18	0,24	0,01	0,01	-0,01	0,3	0,12	0,25	0,13	0,35	1								
19	local_sales_ratio	-0,68	-0,17	-0,24	-0,23	-0,17	-0,26	0,04	-0,09	-0,08	-0,01	-0,01	-0,07	-0,22	0,01	-0,09	0,01	-0,18	-0,12	1							
20	foreign_sales_ratio	0,6	0,28	0,31	0,31	0,23	0,34	0,02	0,14	0,13	0,01	0,01	0,09	0,54	0	0,05	0,05	0,26	0,22	-0,75	1						
21	EUROPE_sales_ratio	0,32	0,21	0,51	0,14	0,19	0,18	0,02	0,03	0,11	0,01	0,01	-0,02	-0,42	0,02	0,02	-0,01	0,11	0,15	-0,43	0,58	1					
22	INTERNATIONAL_sales_ratio	0,35	0,18	0,09	0,52	0,11	0,06	0,08	0,07	0,07	0,01	0,01	0	0,37	0,04	0,02	0,08	0,19	0,15	-0,36	0,49	0,18	1				
23	NORTH_AMERICA_sales_ratio	0,23	0,04	0,05	0,05	0,37	0,02	-0,01	0,03	0,05	0	0	0,01	0,45	0,02	0,02	-0,02	0,09	0,11	-0,33	0,43	0,38	0,17	1			
24	ROA_sales_ratio	0,36	0,18	0,16	0,09	0,08	0,44	-0,02	0,14	0,08	0,01	0,01	0,04	0,31	-0,01	0,05	0,03	0,17	0,13	-0,48	0,64	0,19	0,05	0,12	1		
25	DOI_1	0,06	0,02	0	0	0	0	0,03	0,01	0,02	0	0	0	0,03	0,01	0	0,02	0,02	0,03	0,01	0	-0,01	-0,01	-0,01	-0,01	1	
26	DOI_2	0,6	0,25	0,28	0,45	0,26	0,22	0,05	0,1	0,12	0,01	0,01	0,01	0,59	0,03	0,04	0,05	0,24	0,21	-0,6	0,8	0,6	0,82	0,53	0,37	-0,01	1

As detailed in Figure 22 **Error! Reference source not found.**, market capitalisation has moderate to high correlation with total profit, total assets, relative exposure, total sales and sales from all continents with the exception of Europe. Return on shareholders' equity shows moderate correlation with profit margin. Profit margin drives return on shareholders' funds. The variables that are associated were assessed during the modelling of the data. Where variables are correlated, only one variable was selected when modelling to remove multicollinearity (Zikmund et al., 2012).

5.2.3 Univariate analysis

Univariate analysis for both domestic (MNC=0) and multinational (MNC=1) companies with return on shareholders' funds, market capitalisation, profit margin and relative exposure are provided in the below sections.

5.2.3.1 Companies reviewed

Figure 23: Number of Companies by MNC label per year

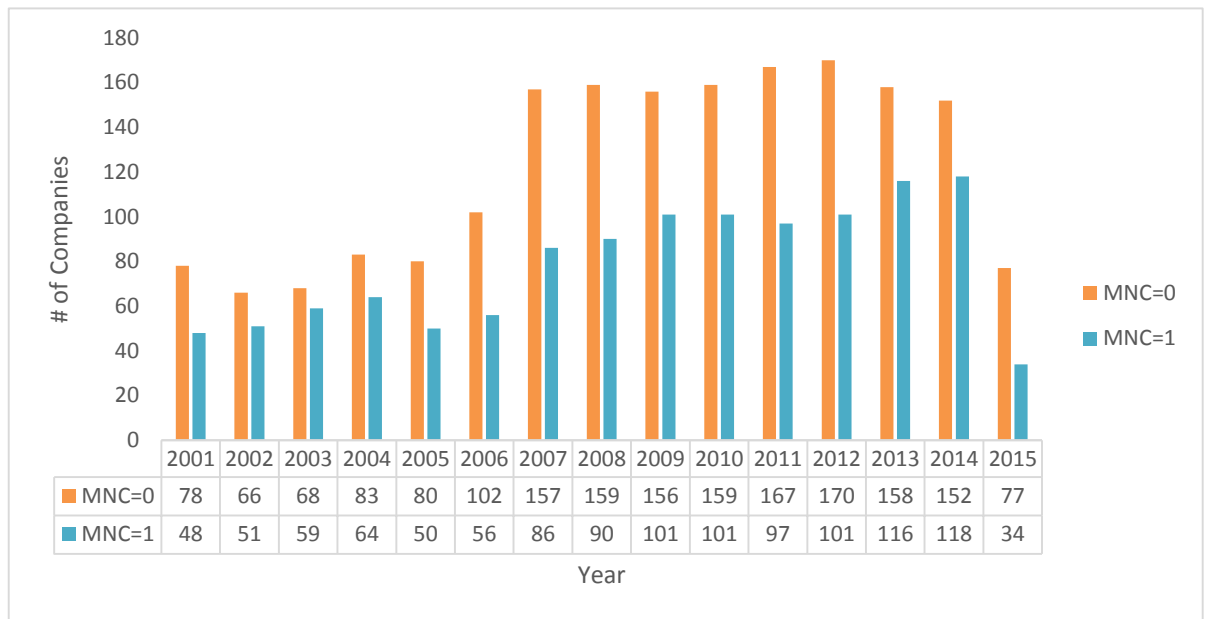


Figure 23 details the number of companies over the period under review. There were some entries and exits during the period under review due to merger and acquisition activities, delisting and new listings. This can be shown in the fluctuation of the number of companies per year.

Table 4: Univariate Procedure – Local & Foreign Sales Ratio

		Mean	Median	Standard Deviation	Skewness	Kurtosis
Local Ratio	Sales	0.5471485	0.698321	0.3775167	-0.450142	-1.449244
Foreign Ratio	Sales	0.328278	0.187627	0.3394556	0.9520143	-0.500829

The average local sales are 55% (median 69%) whilst that of foreign sales is 33% (median 18%). The standard deviations are low showing low variability. The kurtosis and skewness score falls within the ± 3 range confirming that the data is normally distributed with no significant outliers as per Table 4.

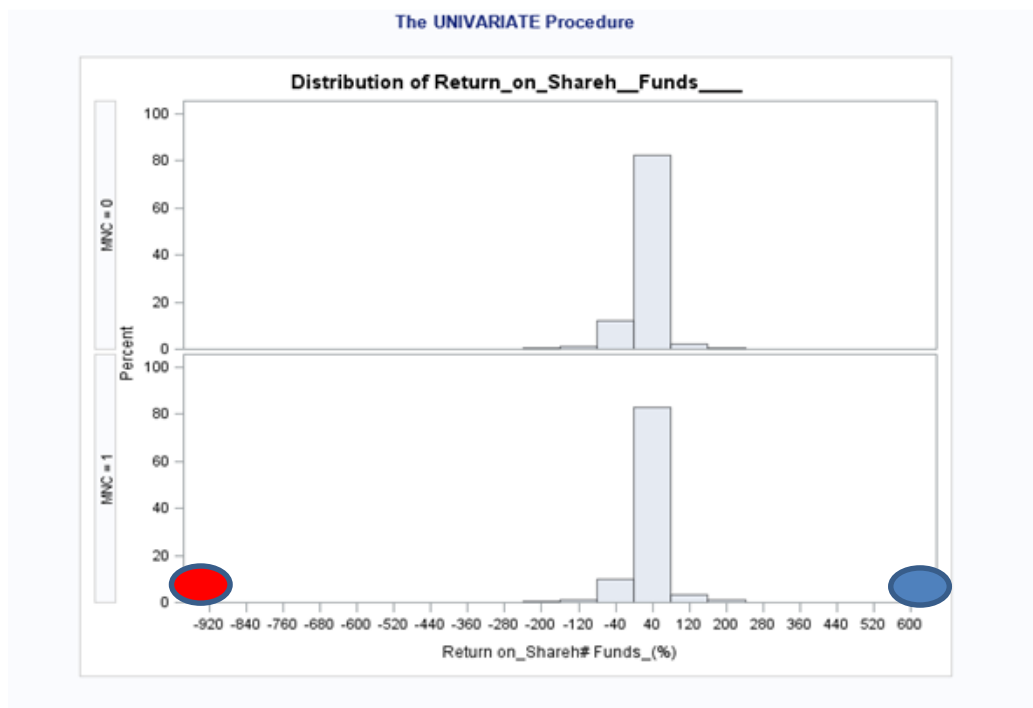
5.2.3.1.1 Return on shareholders' funds

Table 5: Univariate Procedure Multinationality with ROE

Return on shareholders Equity (funds)	Mean	Median	Std Deviation	Skewness	Kurtosis
MNC=0	12.147085	15.46000	71.0026074	-5.6480748	68.07358
MNC=1	18.682372	19.69000	66.3378565	-4.9965993	60.89833

Return on shareholders' funds is higher for multinational companies with an average of 18% compared to domestic companies with an average of approximately 12%. The kurtosis and skewness scores show high variability (does not fall within the ± 3) meaning the data is skewed as per Table 5. This is further proven by the distribution of return on shareholders' funds as per Figure 24 showing a range of about -920 to 600. This indicates the presence of outliers.

Figure 24: Distribution of Return on Shareholders' Funds



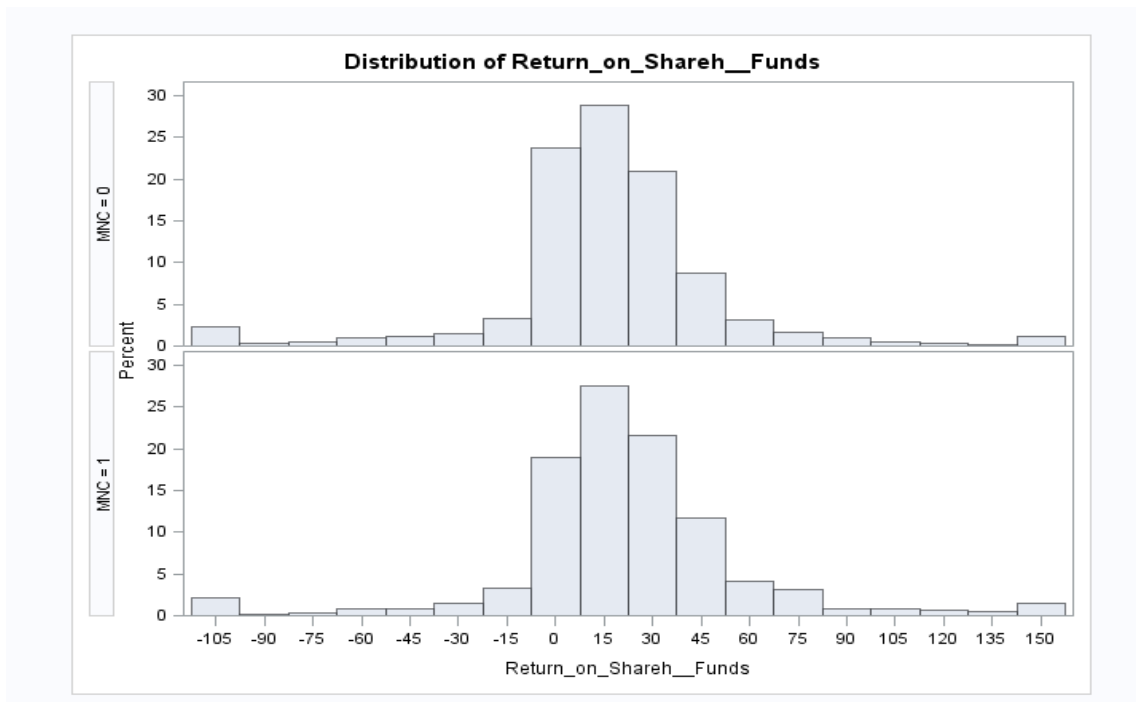
Due to the high levels of skewness, the extreme values were then truncated and censored to below -120 and values above 150 from -920 to 600 as displayed in Table 6.

Table 6: Univariate Procedure ROE – After outlier deletions

Return on shareholders' funds	N	Mean	Median	Standard Deviation	Skewness	Kurtosis
MNC=0	1832	16.111026	15.4600	34.2810518	-0.1498336	4.6970902
MNC=1	1172	21.598558	16.6900	36.0549488	0.06857829	4.1601033

After censoring (refer Table 6), the skewness and kurtosis were within an acceptable range and the data is now normally distributed as revealed in Figure 25. The multinational companies show a higher return on shareholder funds of about 21%, while domestic companies show a return on shareholder funds of 16%. The mean for multinational companies is higher than the median indicating that there are some companies with a higher return which are pulling the average higher.

Figure 25: Distribution of Return on Shareholders' Funds – After outlier deletions



5.2.3.1.2 Univariate analysis -Relative exposure of multinational companies

Table 7: Univariate Procedure for Relative Exposure of Multinational Companies

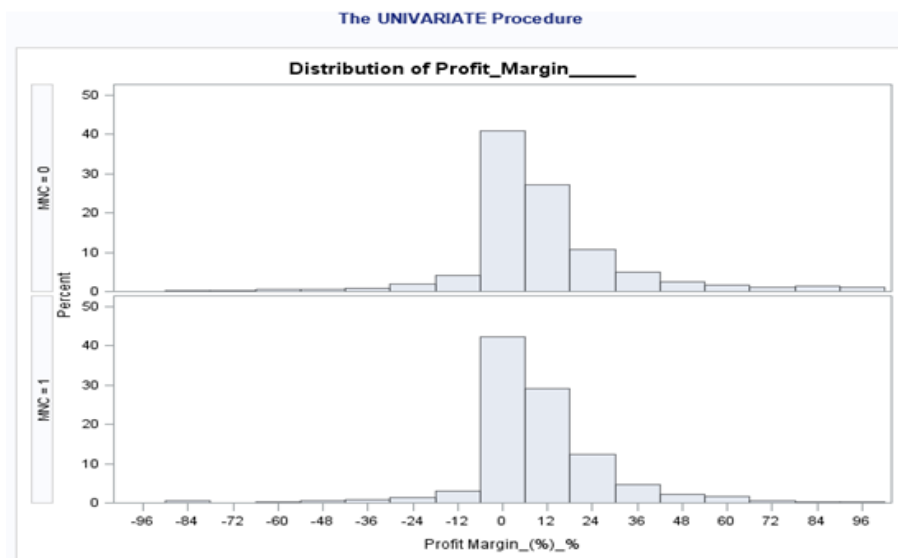
Relative Exposure	N	Mean	Median	Mode	Std Deviation	Skewness	Kurtosis
MNC=1	1172	44.06143	40.000	40.0000	27.223771	0.1866813	-0.49136

Relative exposure measures the spread of company's sales over the five continents as classified in Chapter 4. The average mean of 44% shows that on average 40% or more of the MNCs have representation in at least two continents (refer Table 7). The kurtosis and skewness falls within the ± 3 range showing that the data is normally distributed. The average is about 44% while the median is about 40% showing that there are some companies with relative exposure in more than two continents, concluding in a higher average.

5.2.3.1.3 Distribution of profit margin

The data shows high levels of skewness as per Figure 26. From Pearson's correlation, it is evident that profit margin has a moderate correlation of 0.47 with return on shareholders' funds. This is due to the fact that profit margin drives return on shareholders' funds. Therefore only return on shareholders' funds were used as a dependent variable with market capitalisation when modelling.

Figure 26: Distribution of Profit Margin



5.2.3.1.4 Univariate procedure – Multinationality and market capitalisation

The market capitalisation is higher for multinational companies with an average of \$2.1m (median \$25k) compared to domestic companies with \$360k (median \$18k). The difference between the average market capitalisation and the median is wide. The mean is higher showing that there are companies with very high market capitalisation, which increases the average. This is confirmed by the high levels of kurtosis and skewness as shown in

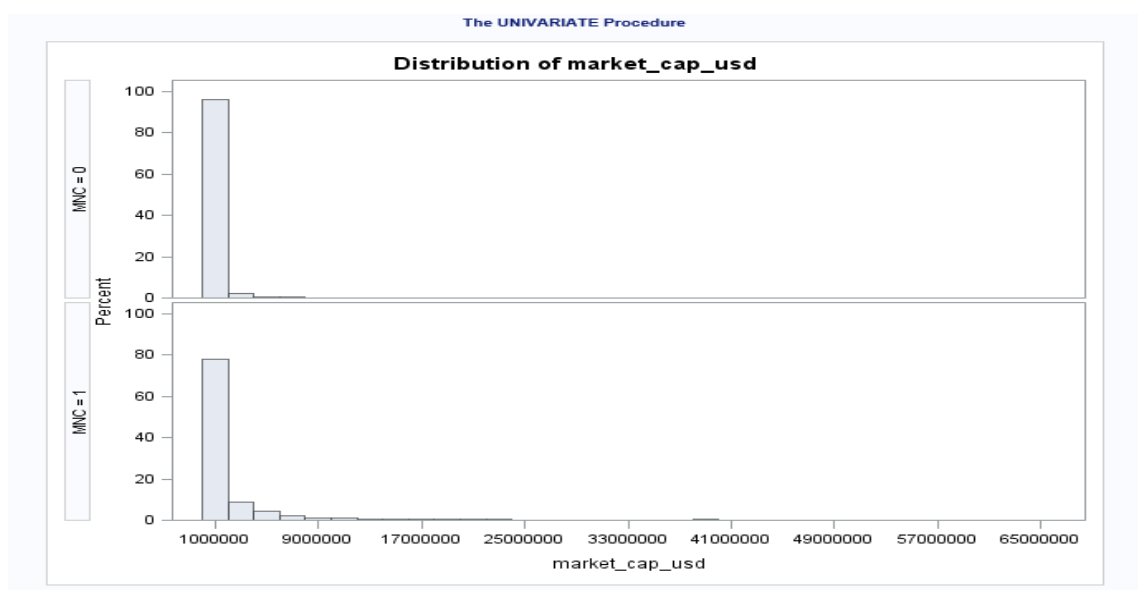
Table 8 and

Figure 27 showing the distribution of market capitalisation.

Table 8: Univariate Procedure Multinationality & Market Capitalisation

Market Capitalisation	Mean	Median	Standard Deviation	Skewness	Kurtosis
MNC=0	360 49.05	18445.5	1 602 908.02	12.31250	204.15710
MNC=1	215 384.32	253 012	5 509 318.24	4.968616	31.866678

Figure 27: Distribution of Market Capitalisation with Multinationality



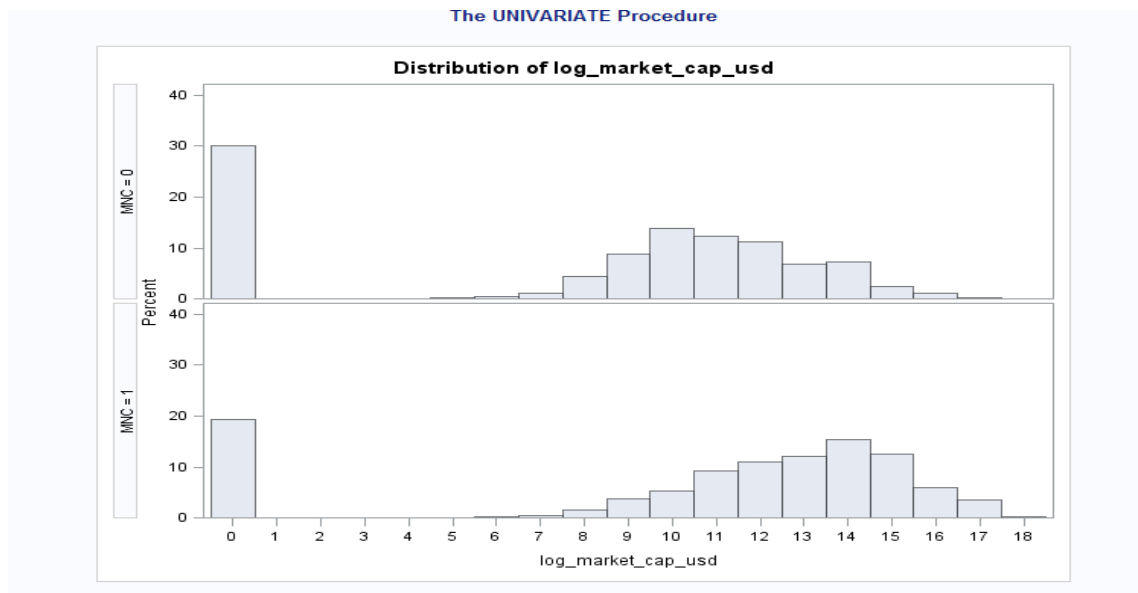
Due to the high levels of skewness and kurtosis the data on market capitalisation was log transformed, as presented in Table 9 below. The log transformed data is for comparative purposes not absolute and uses natural logs.

Table 9: Univariate Procedure Log Transformed Market Capitalisation

Log Market Capitalisation	Mean	Median	Standard Deviation	Skewness	Kurtosis
MNC=0	7.7796660	9.82258	5.38853	-0.5449016	-1.295671
MNC=1	10.495256	12.4412	5.51212559	-1.1034008	-0.225507

Multinational companies still show a higher market capitalisation when compared to domestic companies. The levels of kurtosis and skewness are within acceptable limits of ± 3 showing a normal distribution as per Figure 28. The data points with zero sales for domestic and multinational companies are as a result of entry and exit of firms during the period under review (refer to Figure 23).

Figure 28: Distribution of Log Market Cap with Multinationality



5.3 Hypothesis Testing

The section provides the answers to the hypotheses stated in Chapter 3.

5.3.1 Modelling and hypotheses testing

In order to conclude on the hypotheses presented in Chapter 3, generalised linear models (GLM) using ordinary least square (OLS) and GLM with fixed effects were used to enable inferences to be made regarding the variables influencing return on shareholder equity and market capitalisation over time. The independent variables were tested against return on shareholder funds and market capitalisation being the dependant variable. The model (GLM using OLS or GLM with fixed effects) with the best fit based on R-Squared values was selected. The higher the R-Squared value the better the fit of the model. Further tests such as Type I, Type III and t tests were conducted at the 5% significance level for the chosen model. The parameter estimates would show whether the variables are statistically significant at the 5% level. This would answer the hypotheses and a conclusion would be made regarding the hypotheses. This model or procedure was followed for hypothesis 1, 2 and 3. The results are shown below.

5.3.2 Hypothesis One

Null Hypothesis (H₀ I): Foreign expansion for multinational companies does not create value

Alternative Hypothesis (H_a I): Foreign expansion for multinational companies creates value

5.3.2.1 GLM Procedures and Test of effects and parameter estimates

Table 10: Results using return on shareholders' equity as dependant variable

Test	OLS	Fixed Effects			
P	0.0009	< 0.0001			
F value	2.4	4.95			
R Square	0.043545	0.360684			
Best Model	Fixed Effects - based on R Square value				
Source	DF	Type 1 SS	Mean Square	F Value	Pr > F
Relative Exposure	1	4280.664	4280.664	4.75	0.0293
Parameter	Estimate	Standard Error	t value	Pr > [t]	
Relative exposure	-0.10952003	0.05023599	-2.18	0.0293	

The fitted model is significant at 5% level using the F-tests. Using OLS, the R-squared

value is low at 4%. Return on shareholders' value accounts for 4% of the total variation. Therefore there are additional variables missing to properly explain return on shareholder funds using GLM with OLS.

The GLM with fixed effects model has an R-Squared value of about 36% making it a better fit than the GLM OLS with 4%. The models therefore accounts for 36% of the total variation in return on shareholders funds. Therefore GLM with fixed effect was selected and an analysis of parameter estimates was done on the selected mode GLM with fixed effects.

The overall F test is significant ($F=4.95$, $p < 0.001$) indicating that the model as a whole accounts for a significant amount of variable in return on shareholders equity. Therefore it was appropriate to proceed to test for effects.

Type I, Type III and t-tests were performed at the 5% significance level. All tests demonstrated relative exposure as statistically significant with an F-statistic of 0.0293 when tested against the return on shareholders' equity.

The t-test shows the direction of the parameter as negative. This indicates that as relative exposure increases the ROE decreases. Although it is negative, the value is very close to zero (-0.10952003). This deduction must be taken with caution, as the values could be affected by the transformation of the variables.

Multinational Corporations (MNCs) have a higher return on shareholder funds compared to domestic corporations from the univariate analysis. From the model above, it can be concluded that there is evidence that growing beyond borders has an effect on ROE, even though it is negative.

5.3.2.2 GLM Procedures and Test of effects and parameter estimates

Table 11: Results using return on market capitalisation as dependant variable

Test	OLS	Fixed effect			
P	< 0.0001	< 0.0001			
F Value	156.94	8.14			
R Square	0.09469	0.481347			
Best Model	Fixed Effects based on R square value				
Source	DF	Type I SS	Mean Square	F Value	Pr > F
Relative Exposure	1	944.30147	944.30147	55.60	<0.0001
Parameter	Estimate		Standard Error	t value	Pr > [t]
Relative exposure	0.05143909		0.00689858	7.46	<0.0001

Using OLS the R-Squared value is low at 9%. The model only accounts for 9% of the total variation. Therefore there is additional information missing to properly explain market capitalisation when using GLM with OLS.

The GLM with fixed effects model has an R Squared value of about 48% making it a better fit than the GLM OLS with 9%. The model therefore accounts for 48% of the total variation. Therefore GLM with fixed effect was selected

The overall F-statistic is significant ($F=55.60, p < 0.0001$), indicating that the model as a whole accounts for a significant amount of variable in market capitalisation. Therefore it was suitable to continue to test the effects.

An analysis of parameter estimates was conducted on the selected model. Type I, Type III and t-tests were performed at the 5% significance level. All tests showed relative exposure as statistically significant with an F-statistic of 0.0001 when tested against market capitalisation.

The parameter estimate is positive. This means that as relative exposure increases the market capitalisation of the company also increases.

5.3.2.3 Conclusion to hypothesis 1

In conclusion, relative exposure has statistically significant results when measured against market capitalisation and return on shareholders' equity. The parameter estimate is positive when market capitalisation is the dependent variable and negative with return

on shareholders' funds.

There H_0 i is rejected. Foreign expansion does create value for multinational companies as shown by the increase in market capitalisation.

5.3.3 Hypothesis Two

Null Hypothesis (H_0 ii):

The geography or location of foreign investment does not affect the value and performance of multinational companies.

Alternative Hypothesis (H_a ii):

The geography or location of foreign investment affects the value and performance of multinational companies.

5.3.3.1 GLM Procedures and Test of effects and parameter estimates

Table 12: Results: using return on shareholders' equity as dependant variable

Test	OLS		Fixed Effects		
P	<0.0001		< 0.0001		
F value	3.32		5.88		
R Square	0.025011		0.528331		
Best Model	Fixed Effects based on R Square value				
Source	DF	Type 1 SS	Mean Square	F Value	Pr>F
Europe sales ratio	1	2751.3500	2751.3500	3.70	0.0547*
ROA Sales Ratio	1	42.6309	42.6309	0.06	0.8108
International sales ratio	1	46.3328	46.3328	0.06	0.8030
North America Sales Ratio	1	1773.2475	1773.2475	2.38	0.1229
Parameter	Estimate		Standard Error	t value	Pr > [t]
Europe sales ratio	-26.08866798		14.99075894	-1.74	0.0821**
ROA Sales Ratio	-2.70330758		7.73706008	-0.35	0.7269
International sales ratio	-5.10304339		11.13803939	-0.46	0.6469
North America Sales Ratio	-38.86741709		25.17204403	-1.54	0.1229

*significant at 5% level ** significant at 10% level

The results presented in Table 12 show that the R-Squared model when using OLS accounts for 2% of the variation in return on shareholders' funds. Using fixed effects the model accounts for 53% of the variation in return on shareholders' equity. Therefore the GLM with fixed effects is selected as the best model as it accounts for 53% of the variation in return on shareholders' equity compared to 2% explained by GLM with OLS.

The overall F-statistic is significant ($F=5.88$, $p < 0.0001$), showing that the model as a whole accounts for a considerable amount of variance in return on shareholders' equity. Therefore it was suitable to continue to test the effects.

Parameter estimates are shown automatically when the model contains only continuous variables. The t-tests provided are the same as the Type III F-tests. The sales ratio for Europe, Remainder of Africa (ROA), International and North America are not significant at the 5% level. The Europe sales ratio is significant but only at a 10% level with a negative parameter estimate showing that an increase in Europe sales will result in a decrease in the return on shareholders' equity.

5.3.3.2 Hypothesis 2 – Dependant variable market capitalisation

Table 13: Dependant variable market capitalisation

Test	OLS		Fixed Effects		
P	< 0.0001		< 0.0001		
F value			7.36		
R Square	0.096		0.583747		
Best Model	Fixed Effects based R Square value				
Source	DF	Type 1 SS	Mean Square	F Value	Pr>F
Europe sales ratio	1	0.36069	0.36069	0.03	0.8717
ROA Sales Ratio	1	89.37729	89.37729	6.46	0.0112*
International sales ratio	1	52.62564	52.62564	3.81	0.0514*
North America Sales Ratio	1	124.03545	124.03545	8.97	0.0028*
Parameter	Estimate		Standard Error	t value	Pr > [t]
Europe sales ratio	-0.10818232		2.04392133	-0.05	0.9578
ROA Sales Ratio	-2.59511726		1.05491271	-2.46	0.0141*
International sales ratio	2.31364662		1.51862066	1.52	0.1280
North America Sales Ratio	-10.27954525		3.43209293	-3.00	0.0028*

Table 13 shows R-Squared values of the model when using OLS, accounting for 10% of the variation in market capitalisation. Using fixed effects the model accounts for 58% of the variation in market capitalisation. Therefore the GLM with fixed effects is selected as the best model as it accounts for 53% of the variation in market capitalisation compared to 10% explained by GLM with OLS.

The overall F-test is significant ($F=7.36$, $p < 0.0001$), showing that the model as a whole accounts for a considerable amount of variance in market capitalisation. Therefore it was suitable to continue to test the effects.

Parameter estimates are shown automatically when the model contains only continuous variables. The t-tests provided are the same as the Type III F-tests.

The sales ratios for Europe are not significant at the 5% level or the 10% levels. The Remainder of Africa sales ratio (ROA), international sales ratio and North America sales ratio is significant in explaining the model fit.

The parameters are statistically significant at the 5% level include the sales ratio for the Remainder of Africa (ROA) and North America. The parameter estimates are negative for both variables showing that as the sales ratios to these regions increase the market capitalisation of the companies' is negatively impacted. With North American sales showing the greatest impact than the Remainder of Africa Region (ROA) sales ratio. The international sales ratio is not significant.

5.3.3.3 *Conclusion to hypothesis II*

In conclusion, the Remainder of Africa (ROA) sales ratio and North America sales ratio is statistically significant at the 5% and impact market capitalisation negatively. There are no significant variables at the 5% level when measured against the return on shareholders' funds but the Europe Sales ratio is significant at the 10% level with a negative parameter.

Ho ii is rejected. The geography or location of foreign investments does affect the value and performance of multinational companies. Increasing sales into Rest of Africa and North America reduces market capitalisation

5.3.4 Hypothesis Three

Null Hypothesis (Ho iii): The degree of multinationality of companies has no effect on value and performance of multinational companies.

Alternative Hypothesis (H_a iii): The degree of multinationality of companies has an effect on the value and performance of multinational companies.

5.3.4.1 *Hypotheses Three – Dependent variable return on shareholders' funds*

The results per Table 14 show that R-Squared when using OLS accounts for 2% of the variation in return on shareholders' funds. Using fixed effects the model accounts for 53% of the variation in return on shareholders' equity. Therefore the GLM with fixed effects is selected as the best model as it accounts for 53% of the variation in return on shareholders' equity compared to 2% explained by GLM with OLS.

The overall F-test is significant ($F=5.93$, $p < 0.0001$), showing that the model as a whole accounts for a considerable amount of variance in return on shareholders' equity.

Therefore it was suitable to continue to test the effects.

Parameter estimates are shown automatically when the model contains only continuous variables. The t-tests provided are the same as the Type III F-tests. Therefore only T test results are shown as they include the direction of the effect.

The degree of internationalisation DOI_1 and DOI_2 are not significant at the 5% or the 10% levels. This means that the dependent variables return on shareholders' funds cannot be explained by relative exposure, DOI_1 and DOI_2 which measures the relative cultural and distance proximity of the regions the companies diversified into.

Table 14: Results: using return on shareholders' equity as dependant variable (MNC=1)

Test	OLS		Fixed Effects		
P	<0.0001		< 0.0001		
F Value			5.93		
R Square	0.022209		0.527120		
Best Model	Fixed Effects model - based on R Square value				
Source	DF	Type 1 SS	Mean Square	F Value	Pr>F
DOI_1	1	1231.2822	1231.2822	1.65	0.1986
DOI_2	1	1558.9455	1558.9455	2.10	0.1481
Parameter	Estimate		Standard Error	t value	Pr > t
DOI_1	0.001561395		0.00124468	1.25	0.2100
DOI_2	-3.537317200		2.44387196	-1.45	0.1481

5.3.4.2 Hypothesis three - Independent variable log transformed market capitalisation

The results in Table 15 show that R-Squared is about 10% when using OLS model, this means that the model accounts for 10% of the variation in market capitalisation. Using fixed effects the model accounts for 58% of the variation in market capitalisation.

Therefore the GLM with fixed effects was selected as the best model as it accounts for 58% of the variation market capitalisation compared to 10% explained by GLM with OLS.

The overall F-test is significant ($F=7.40$, $p < 0.0001$), showing that the model as a whole accounts for a considerable amount of variance in market capitalisation. Therefore it was suitable to continue to test the effects.

The parameter estimates and tests of effect are shown in Table 15. Parameter estimates are shown automatically when the model contains only continuous variables. The t-tests provided are the same as the Type III F-tests.

Table 15: Results: using market capitalisation as dependant variable

Test	OLS	Fixed Effects			
P	< 0.0001	< 0.0001			
F Value		7.40			
R Square	0.10507	0.583667			
Best Model	Fixed Effects model - based on R Square value				
Source	DF	Type 1 SS	Mean Square	F Value	Pr > F
Relative exposure	1	251.02476	251.02476	18.17	<0.0001
DOI_1	1	6.05782	6.05782	0.44	0.5080
DOI_2	1	6.77256	6.77256	0.49	0.4840
Parameter	Estimate		Standard Error	t value	Pr > [t]
Relative exposure	0.0478191681		0.01109414	4.31	<0.0001*
DOI_1	0.0001094575		0.00016961	0.65	0.5188
DOI_2	-0.2384432880		0.34055036	-0.70	0.4840

Relative exposure contributes to the model fitness. The parameter estimates show that relative exposure is positive and significant. An increase in relative exposure increases the market capitalisation of companies. DOI_1 and DOI_2 do not show a significance with market capitalisation.

5.3.4.3 Conclusion to hypothesis 3

DOI_1 and DOI_2 have shown no significance statistically when measured against the return on shareholder equity and market capitalisation as a dependent variable. Relative

exposure is statistically significant when measured with market capitalisation only taking multinational companies into account as a dependent variable.

Relative exposure leads to an increase in market capitalisation, therefore the null hypothesis was rejected. DOI_1 and DOI_2 had no effect on both the ROE and market capitalisation.

5.3.5 Conclusion on hypotheses tested

Table 16: Summary of hypothesis and conclusions

Hypotheses	Metric	Return on shareholders' Equity (ROE)	Market capitalisation
Ho i - Foreign expansion for multinational companies does not create value	Relative exposure	Statistically significant with negative parameter estimate	Statistically significant with Positive Parameter estimate
Conclusion Ho i	Reject the Ho i –Foreign expansion creates value		
Ho ii – The geography or location of foreign investment does not affect the value and performance of multinational companies	Rest of Africa (ROA)	Not Significant at 5% level	Statistically significant with negative parameter estimate
	North America	Not Significant at 5% level	Statistically significant with negative parameter estimate
Conclusion Ho i	Reject the Ho ii – Geography has an impact on value creation of companies when measured against market capitalisation		
Ho iii – The degree of multinationality of companies has no effect on value and performance of multinational companies	Relative expose	Not Significant at 5% level	Statistically significant with Positive Parameter estimate
	DOI_1	Not Significant at 5% level	Not Significant at 5% level
	DOI_2	Not Significant at 5% level	Not Significant at 5% level
Ho iii Conclusion	Reject the Ho iii - Relative exposure leads to an increase in market capitalisation		

In conclusion market capitalisation of a multinational company was higher than that of domestic companies showing an increase in value of multinational companies with multinationality. Return on shareholders' equity showed a negative impact with multinationality. This could be attributed to shortcomings including the stage of the phase of the company's internationalisation process. South African companies are beginning to increase outward FDI. Geographic location had a negative impact on multinationality and no significance at 5% level for return on shareholders equity. The selection of location is important when choosing investment location. The degree of

internationalisation was positive when measured against multinationality and no effect was found for return on shareholders fund.

CHAPTER 6: RESULTS DISCUSSION

6.1 Hypothesis/Question

The objective of this research was to evaluate the impact of being multinational on South African companies' value creation and performance. The impact of the geography of investments and the dispersion of these investments was also considered. A purposive sampling technique was used due to the availability of the data over the 14 year period that provided a good representation of multinational companies. The following chapter comprehensively discusses the results presented in Chapter 5. A comparison of the results obtained in this study by referring to the knowledge garnered from the literature review (Chapter 2) is presented.

6.1.1 Hypothesis One

Null Hypothesis (H₀ I): Foreign expansion for multinational companies does not create value.

Alternative Hypothesis (H_a I): Foreign expansion for multinational companies creates value.

Hypothesis one sought to answer the question:

Does expansion into foreign markets by multinational companies lead to value creation and increase in company performance?

6.1.1.1 *Pearson Correlation*

From the analysis of the Pearson's' correlation coefficients as presented in Figure 22 **Error! Reference source not found.** regarding the return on shareholders' funds had a moderate association with profit margin. Market capitalisation had a weak to moderate association with relative exposure, foreign sales ratio and DOI_2.

6.1.1.2 Univariate analysis

Univariate analysis of domestic and multinational companies using return on shareholders' funds as a dependant variable showed that on average the return on the shareholders' equity of multinational companies was higher at approximately 18% compared to 12% for domestic companies.

The hypothesis was then tested using the generalised linear model for the two dependent variables namely, return on shareholders' funds and market capitalisation.

The study established that there is statistically significant evidence that foreign expansion has an impact on value creation. Relative exposure used as a measure of foreign expansion is statistically significant with a positive parameter estimate when measured against market capitalisation as the dependent variable. With return on shareholders' funds as a dependent variable the estimate parameter was negative. This implies a decrease in return in shareholders' funds with increasing foreign expansion. Refer to summarised table below.

Table 17: Relative Exposure as Measured Against Dependent Variables

Parameter	Estimate	Standard Error	t value	Pr > t
Relative exposure				
Return on Shareholders Funds	-0.10952003	0.050235	-2.18	0.0293*
Market Capitalisation	0.05143909	0.00689858	7.46	<0.0001*

These findings support the literature that advocated that international diversification is associated with higher share values and offers investors global diversification opportunities (Morck & Yeung, 1991).

As the relative exposure (as measured by number of multinational companies across continents) of the companies increases, market capitalisation of companies also increases. This is consistent with the theory that companies achieve greater returns by expanding into foreign markets. Multinational companies have been said to be a collection of valuable options and generates arbitrage benefits from taking advantage of institutional imperfections, better financing options, capital availability, timing and technology options that increase firm value (Ahmed & Duellman, 2011).

The decrease in return on shareholders' funds with increase in foreign expansion is also advocated in literature stating the reasons for foreign expansion. B. Lee and Li advocated

that management interests are not aligned to shareholders' interests as management is motivated with private benefits such as status and power (B. S. Lee & Li, 2012) and compensation from foreign expansion without necessarily creating firm value (Hoskisson et al., 2013). In some instances management pursues international expansion at the expense of returns for shareholders, which can then result in a decrease in return on shareholder funds (Oesterle et al., 2013). There is evidence which shows that investors who recognise multinationality in the international firms show lower systematic and unsystematic risk compared to purely domestic companies (Ahmed & Duellman, 2011). Investors seem to reward this through an increase in share price as they view being international as an asset not recorded and they value it as they would other assets on the balance sheet. With this theory of the hidden asset, Ahmed and Duellman (2011) implied that the relationship between the value of equity and degree of foreign expansion is the same as the relationship between the value of equity and other assets in the financials.

In this research study although the parameter for ROE was negative the value was very close to zero (-0.10952003). This can be expected in the early stages of internationalisation when companies invest heavily, especially in some sectors like mining. There is a time lag between the initial investments and when the company reaps the benefits of internationalisation (Purdy & Wei, 2014). South African multinational companies have started investing heavily in foreign markets, especially African markets in the mining and telecommunications industries, and these are capital intensive as shown by the increase outward FDI (UNCTAD, 2014) (Figure 11).

The negative return on shareholders' funds could be a result of the time delay between investments and the return on investments. As the companies were not divided into industries it is difficult to attribute the negative parameter to certain industries, i.e.: mining companies invest a great deal of capital when building a mine but the rewards are only received at a much later period.

On the other hand the negative results could show that multinationality does not create value as advocated by Hennart (2011). Further test will need to be done to check if this is applicable for all companies or whether its industry dependent.

Using ROE as a measure, multinational companies do not create value but rather lead to the destruction of value. The negative response can be attributed (among other reasons) to the timing difference of time of investments and when the rewards are expected to be realised. The results are inconclusive and further tests are needed where

the analysis is broken down by industry to determine if time lags and stage of life cycle impact ROE. Other analysis have shown negative ROE but when the constituents of ROE are tested against the dependant variable, they have resulted in positive effects. Therefore further tests are required.

In conclusion relative exposure/foreign expansion has statistically significant and positive impacts when market capitalisation is the dependent variable. Foreign expansion also influences the return on shareholders' funds as a dependent variable, albeit with a slightly negative parameter. This means that foreign expansion will result in a decrease of the return in shareholders' funds but as discussed further analysis would be required to determine whether this decrease is industry specific and/or related to the phase of investment. Therefore the H_0 i was rejected and it is concluded that foreign expansion does lead to value creation as measured by market capitalisation. ROE results re inconclusive and need further testing.

6.1.2 Hypothesis two

Null Hypothesis (H_0 ii): The geography or location of foreign investment does not affect the value and performance of multinational companies.

Alternative Hypothesis (H_a ii): The geography or location of foreign investment affects the value and performance of multinational companies.

For this research study foreign sales were classified into five continents depending on the location of the foreign sales. The geography of these locations was divided into sales from South Africa, the Remainder of Africa (ROA), North America, Europe and International. Using Pearson correlation coefficients there was no correlation to any of these geographical locations when measured against return on shareholders' funds whilst there was an association ranging from moderate to high when measured against market capitalisation, as presented in Figure 22.

The hypothesis was then tested using the generalised linear model for the two dependent variables, namely return on shareholders' funds and market capitalisation.

When tested against the return on shareholders' funds the model fit was significant at the 5% level. The fixed effect models had R-Squared value of about 52%. From the model there was no variable that was significant when tested at the 5% level but sales for Europe were significant at the 10% level with a negative parameter estimate as shown below in Table 21. The negative parameter estimates indicated that as the Europe sales ratio increased the return on shareholders' funds decreased.

Table 18: Summary Results - Return on Shareholders' Funds

Fixed Effect Model				
Parameter	Estimate	Standard Error	t value	Pr > [t]
Europe sales ratio	-26.08866798	14.99075894	-1.74	0.0821
ROA Sales Ratio	-2.70330758	7.73706008	-0.35	0.7269
International sales ratio	-5.10304339	11.13803939	-0.46	0.6469
North America Sales Ratio	-38.86741709	25.17204403	-1.54	0.1229

When tested against market capitalisation as a dependent variable the model fit was significant at the 5% level. The fixed effect models had R-Squared value of approximately 58%. From the model sales from the Remainder of Africa (ROA) and North America were significant when tested at the 5% level with a negative parameter estimate as shown in Table 22 below. The negative parameter estimates indicated that as sales from Remainder of Africa and North America increased the return market capitalisation decreased. The rate of decrease was higher in North America than the Remainder of Africa as shown in Table 19: Summary Results - Market Capitalisation. The percentage of sales by geography are insignificant therefore the results are expected to show a negative parameter effect or to be insignificant.

Table 19: Summary Results - Market Capitalisation

Fixed Effect Model

Parameter	Estimate	Standard Error	t value	Pr > [t]
Europe sales ratio	-0.10818232	2.04392133	-0.05	0.9578
ROA Sales Ratio	-2.59511726	1.05491271	-2.46	0.0141 *
International sales ratio	2.31364662	1.51862066	1.52	0.1280
North America Sales Ratio	-10.27954525	3.43209293	-3.00	0.0028 *

Therefore the study established that the geographic location of foreign investment does affect company performance negatively and leads to value destruction. This supports the view that geographic diversification is associated with increased costs to the firms. It results in coordination complexities across multiple markets, making companies unable to benefit from the economies of scale and scope (Yang et al., 2013).

Another view advocating the value destruction is that when EMNCs enter foreign markets they face liabilities of being foreign as well as liabilities of emerging-ness due to geographical, psychological, cultural and institutional distance between the home and host country (Madhok & Keyhani, 2012). The liability of foreignness due to the lack of knowledge of the local environment limits access to information and resources and the added burden of establishing legitimacy and acceptance results in value destruction. Furthermore their company specific advantages need to be adjusted to fit a different social, cultural and institutional environment, which results in them increasing the costs of operations thereby reducing company performance and destroying value (Ramamurti, 2012).

According to the three stage paradigm, performance of multinational companies declines in the early stages of foreign expansion with the incremental costs exceeding the incremental benefits (Oh & Contractor, 2014; Yang & Driffield, 2012). The trends in outward FDI for South African companies has demonstrated an increased investment into Remainder of Africa and divestment from the European markets since the financial crisis of the 2008/2009 period (World Bank, 2014). This could be the reason why the companies experience negative market capitalisation as the companies are in the early stages of investing in the African market and the incremental benefits of investments have not been fully realised.

In conclusion, the Remainder of Africa (ROA) sales ratio and North America sales ratio is statistically significant but impacts market capitalisation negatively. There are no significant variables at the 5% level when measured against the return on shareholders'

funds but parameter estimates demonstrated a negative impact. Therefore the H_0 ii was rejected and it was concluded that the geography or location of foreign investment affects the value and performance of multinational companies as measured by market capitalisation.

6.1.3 Hypothesis Three

Null Hypothesis (H_0 iii): The degree of multinationality of companies has no effect on value and performance of multinational companies.

Alternative Hypothesis (H_a iii): The degree of multinationality of companies has an effect on the value and performance of multinational companies.

For this research study the degree of multinationality was tested against relative exposure, DOI_1 and DOI_2. Using Pearson correlation coefficients, there was no association between the variable DOI_1 and relative exposure with return on shareholders' equity and market capitalisation. DOI_2 showed no association with return on shareholders' funds but there was a weak association with market capitalisation as shown in Figure 22 **Error! Reference source not found.**

The hypothesis was then tested using the generalised linear model using the three independent variables by testing them against two dependent variables, namely return on shareholders' funds and market capitalisation.

When tested against the return on shareholders' funds the model fit was significant at the 5% level. The fixed effect models had a R-Squared value of about 52%. From the model there was no variable that was significant when tested at the 5% level as shown below in Table 23.

Table 20: Model Hypothesis 3

Return on Shareholders' Equity				
Parameter	Estimate	Standard Error	t value	Pr > [t]
DOI_1	0.001561395	0.00124468	1.25	0.2100

DOI_2	-3.537317200	2.44387196	-1.45	0.1481
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When tested against market capitalisation the model fit was significant at the 5% level. The fixed effect models had an R-Squared value of about 58%. From the model there was relative exposure that was statistically significant at 5%, as shown below in Table 24. Neither DOI_1 nor DOI_2 were significant at 5% level.

Table 21: Model for Log Transformed Market Capitalisation for MNE=1

Market Capitalisation				
Parameter	Estimate	Standard Error	t value	Pr > [t]
Relative exposure	0.0478191681	0.01109414	4.31	<.0001 *
DOI_1	0.0001094575	0.00016961	0.65	0.5188
DOI_2	-0.2384432880	0.34055036	-0.70	0.4840

* Significant at 5% level

When using market capitalisation as a dependent variable as relative exposure is significant. As relative exposure increases it results in increased market capitalisation. When using return on shareholders' funds the results are not significant. Ho iii can be rejected and the alternative hypothesis H1 iii is accepted, which states that the degree of multinationality of companies has an effect on value and performance of multinational companies using market capitalisation as a dependent variable. This is in support of previous research which advocated that firms with high degrees of internationalisation benefit from operating in diverse environments as they are likely to benefit from different aspects of the hosts environments (Zaheer & Nachum, 2011). This could be through reduced taxes (Contractor, 2012) through charging of appropriate transfer prices to sister units. Differences across nations can also be exploited dynamically by changing production volumes or locations due as a response due to changes in wages, exchange and tariff changes (Yang et al., 2013).. It also enables the firms to be able to protect themselves from geographically focused competitors and fend off rival attacks (Ajami et al., 2014). South African firms on average have a relative exposure of 40% meaning the companies on average operate in two continents so they are on average not fully experiencing the benefits of having a high degree of multinationality. This could also explain why the results for the other measures of internationalisation did not produce

statistically significant results.

CHAPTER 7: CONCLUSIONS AND RECOMMENDATIONS

7.1 Introduction

The purpose of this chapter is to emphasise the key findings of this research from the review of the results as presented in Chapter 6. Recommendations to the various stakeholders as identified in the opening chapters of the research are made. Limitations of the research are presented and suggestions for future research are shared.

The purpose of the research was to determine the impact of being multinational on the performance and value creation of companies in South Africa. The effect of the location of foreign investment and the degree of internationalisation were also sought.

As discussed the literature has been inconclusive on whether foreign expansion creates or destroys value for companies. This together with the fact that South Africa's economic growth is expected to be about 1.5% whilst the growth in the remainder of Africa is expected to be about 4.4% and in the developed markets approximately 2.4% prompted this study as companies seeking economic growth might have to look outside their own borders.

The research process started with an in-depth review of the literature available to ascertain the areas of review and to determine the reasons for contradictory results after decades of review. The literature review suggested that the differences are due to the samples selected and methodologies employed in the research processes. Differences between emerging market firms and those from developed countries have also been noted in Table 1.

These differences have an impact on the value creation as the speed, reasons and method of internationalisation are different. This suggested that the results of previous studies focusing on developed markets cannot be used for emerging market companies. There was therefore a need to assess the impact of foreign expansion on value creation of South African companies and to assess the effect that degree of multinationality and location of investments has on the value creation as measured by market capitalisation and return on shareholders' funds.

The research had three objectives. First it sought to determine the impact of being

multinational on value creation of companies. Second the impact, if any, that geography or location of foreign investment has on value creation was determined. Finally, the effect of the degree of internationalisation on the value creation of these companies was investigated. The following delineates the main findings of this research based on the research objectives as set out in Chapter 3.

Three hypotheses were formulated to address the research objectives as formulated from the literature analysis.

7.2 Principal Findings

7.2.1 Impact of multinationality on value creation

The research findings were that foreign expansion by companies does lead to value creation when it was tested using market capitalisation as a dependent variable. Investors reward foreign expansion as shown by the positive parameter estimate. This is in support of the literature that advocated for multinationality as it provides investors with a way of diversifying their investments portfolios internationally (Morck & Yeung, 1991).

What was interesting was that when return on shareholders' equity was used as a dependant or outcome variable the relationship was negative. The implication of this result is that multinationality leads to a reduction in the return on shareholders' funds. The expectation would have been, if investors' value multinationality as shown by the increase in market capitalisation with foreign expansion, the return on shareholders' equity would also have been positive. The current results imply that investor's value market capitalisation even though their return on shareholders' equity is negative. Possible reasons for this could be that investors take a long-term view of their investment with the expectation of attaining a higher return in the future.

Another view is that investments into developed markets are motivated by other reasons that may result in company growth but not necessarily profit growth resulting in a negative return on shareholders' funds as it is motivated by mergers and acquisitions therefore no gains from investing in developed countries are expected (Yang et al., 2013).

There are other factors affecting the value creation of multinationals such as the degree of spread of, the geographic dispersion, the host country attributes, the products and

their diversification, as well as the mode of entry into the foreign markets and the size of the nation and its markets (Contractor, 2012). Contractor (2012) argued that multinational companies would not exist and continue to grow if there were no benefits to be gained from being multinational. Therefore foreign expansion is beneficial to companies.

7.2.2 Impact of geographic location on the value and performance of multinational companies

The geographical location of the foreign investment was found to affect the value creation of companies. In particular all the locations were found to have a negative effect on the value creation of the companies but the rate or extent differed with location as shown by the parameter estimate. This was not expected as the similarities between host and home environments of emerging markets was expected to result in positive market capitalisation and return on shareholders' equity for South African multinationals investing in the Remainder of Africa. Emerging market multinationals are expected to benefit from investing in other developing countries but only when assets invested in other developing countries increase to 44% of total assets and this is decreased to 25% if investing in developed countries (Yang et al., 2013). A comparison of total assets for companies under review would have to be made but the level of multinationality using foreign sales indicated that South African firms are more invested domestically than internationally, which explains the negative returns when the ratio of foreign sales to local sales are compared and the number of companies that have foreign sales are considered, as shown in Figure 21.

The negative effect that locations have on values creation of companies also supports the view that multinationals are more often than not likely to experience losses in the early stages of their developments in developing countries before positive returns are realised. The negative impact of the results suggests that the gains to be realised from having greater geographic reach have not yet been realised as South African companies are gradually becoming multinational. A comparison of top 100 transnational companies from 2007 (UNCTAD, 2007) and 2012 (UNCTAD, 2014) has shown the increasing trends in FDI outflows and the number of transnational companies in the top 100 excluding financial sector for developing countries, which has improved from six to eight companies, showing an increasing trend in multinationality as illustrated in Figure 16.

The value of a location when entering a foreign market is critical. From the research

findings, there are differences in the value creation of firms that are dependent on the location of the foreign investments. The assumption that location advantages are generic to all firms and available to all firms and therefore not a source of competitive advantage (Zaheer & Nachum, 2011) can be challenged as location does not provide the same advantages to all firms as evidenced by the research results. Investing in North America by South African companies would result in different results if investment was rather made in Africa as evidenced by the parameter estimates.

The firm's ability to gain value from a specific location should be a major consideration when planning expansion into foreign markets. A firm needs to develop firm-specific location capabilities as these will determine the benefits that the firm can derive from their location of foreign expansion (Zaheer & Nachum, 2011).

The findings of the research study showed that value is destroyed by South African multinationals as their sales to Remainder of Africa and North America increases. Further research needs to be undertaken to determine the reasons for value being lost when expanding into those specific geographical locations, and whether this is applicable to all companies or whether it is industry specific.

In the last decade, South African firms have seen an increase in the investment into the Remainder of Africa. The value destruction could be as a result of the huge capital outlay before the advantages of the investments are realised (World Bank, 2014). Some industries are capital intensive like mining and there is a time lag before the return on the investment is realised. The value destruction could be attributable to the stages of foreign investment into the Remainder of Africa as well as the industries of investments.

Other studies have shown that value destruction could also be a result of barriers due to language, culture, government policies, infrastructure and human resources (Hennart, 2010; Kim & Mathur, 2008). There is therefore a need for further study regarding the benefits and disadvantages that certain geographic locations have on South African firms.

7.2.3 Degree of internationalisation

The degree of internationalisation was also found to affect the value creation in terms of the relative exposure. Relative exposure was found to be statistically significant in the value creation of companies. There are advantages to be gained from different locations. If the firm has capabilities to extract value from the locations, the more the locations the

greater the value that can be derived (Zaheer & Nachum, 2011). Having multiple locations can enable the firm to realise the economies of scale which increases firm value and return on shareholder value. Multiple locations could also result in the benefit of being international being altered due to firm specific and country specific disadvantages (Contractor, 2012). The more the locations, the more these disadvantages can be encountered and result in value being lost.

In a cross-sectional analysis the stages of internationalisation of the firms in the analysis determines the results. If the firms are in the early stages of internationalisation, which are associated with costs due to liabilities of being foreign and generally the costs outweigh the benefits, then the results of the study would be negative (Contractor, 2012). In contrast if a sample includes a fewer samples in the early stages of internationalisation with costs outweighing the benefits than companies experiencing positive effects of internationalisation, then the results would be positive.

7.3 Recommendations to Stakeholders

7.3.1 Executives

South African companies are largely dependent on domestic sales. With the decline in the growth forecast in South Africa and with higher growth expected in the Remainder of Africa and the world there is a need for domestic companies that are pursuing growth to expand into foreign markets.

A strategy on how the company can realise economies of scale or use its firm-specific intangible assets to have a competitive edge over other companies in the same market is important for a positive impact as all benefits of internationalisation can be lost. If the objective of the executives is to increase shareholder wealth there are some considerations that need to be made. The existence of firm-specific assets is important as these can be capitalised in the foreign markets.

Destination of the foreign investment should also be critically considered. The executives should assess whether value will be able to be extracted from the said location. If not, the executives need to build capabilities before undertaking the foreign expansion.

7.3.2 Investors

The study implied that investors value multinationality in pricing the equities of

multinational firms as an important and relevant variable. The degree of internationalisation appears as useful in the valuation of equities of multinational firms as published accounting information. The results are not only useful to investors but also to standard setters. If multinationality is a key variable in the market valuation of equity, it constitutes an unrecorded intangible asset of the firm and should be assigned a treatment of disclosure. This factor does not consider whether the disclosure of level of multinationality should be regulated or not. The fact that it is a key attribute in the valuation of companies means that there is therefore a need to identify the best form of disclosure. A further study on how the valuation of multinationality market value should be undertaken.

7.4 Research Limitations

- I. This research was limited to JSE listed companies as this allowed access to publically available data to allow 14 years of study to be undertaken.
- II. The OSIRIS database is only for listed companies, therefore this study provided a limited view of publicly listed companies. Including non-listed/private companies could have resulted in different outcomes.
- III. The research did not take into account other attributes like management style and structures that have an effect on the company's performance and value creation.
- IV. The study did not take into account changes in organisational reporting structures that could result in missing data depending on reclassifications.
- V. The changes in segment reporting from IAS 14 to IFRS 8 could have resulted in the reclassification of how segment data is reported which could have affected the data.
- VI. Non-standardisation of segment data could have compromised the data integrity. Some companies report segments based on continents, others by countries and still others as a combination of countries or continents.
- VII. A proxy was used to define multinationality. The use of foreign sales as a proxy for multinationality could have resulted in errors.
- VIII. Missing data as a result of entry and exit of firms during the period under review could have been a result of exit of companies due to acquisition or changes in company structure hence reporting requirement changes. It would have been preferred to have companies that had full data for period under review but this

would have resulted in a small sample, thereby reducing the degrees of freedom and limiting the use of results. Excluding firms would also have been a potential source of bias. Also, by only examining survivors, important evidence could have been lost.

- IX. No lag to see if capital intensive companies eventually become positive.

7.5 Future Research Recommendations

This section provides the recommendations regarding future research. The recommendations are based on the outcomes of the research and other areas that are related to the research topic.

- I. A limitation of this study that might have hampered the applicability of the results is the absence of an industry specific analysis. More value could be derived from an industry analysis than a general review of all companies without classifying them according to each sector. The nature and type the industry may affect the value creation as different industries may require different levels and types of capital investment. Service industries are reliant on human capital whilst those in the mining sector are capital intensive. The rate of return would also vary between industries. There is therefore an opportunity to explore whether being multinational will similarly benefit companies in diverse industrial sectors.
- II. There are other attributes that contribute to value creation other than multinationality; these could be internal factors such as the organisational culture, psychic distance, managerial styles and focus. Future research could add to these dimensions of multinationality study with a focus on emerging markets.
- III. There is a need for further study regarding the benefits and disadvantages that certain geographic locations have on South African firms.

7.6 Concluding remarks

In conclusion this research is beneficial to investors, managers and company executives to realise the potential of expansion into higher growth markets. This is important for South African companies as these organisations are currently confronted with low economic growth prospects. The research results have confirmed that being

multinational creates value. The extent of internationalisation is also important as the benefits of being multinational, such as realising economies of scale can only be attained at a certain levels of multinationality. Furthermore the investment destination needs to be considered in terms of benefits and potential disadvantages from host countries, because factors like distance (both physical, psychic and cultural) contribute to company's value creation. Finally, the mode of entry into the country should also be considered as it also affects the benefits that can be derived. Therefore company managers and executives need to consider these factors carefully when making strategic decisions regarding foreign market investment.

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