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The macroeconomics of merger and acquisition attraction in the developing world.

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Abstract

Mergers and acquisitions form the majority of FDI deals in the developed world, but remain relatively scarce as a mode of entry in the developing world. The purpose of this research was to investigate the macroeconomic profile of developing countries which attract greater M&A activity in the developing world. The extant literature served as a guide in assembling a list of predictor variables as proxies for macroeconomic factors identified as being drivers of M&A as an entry mode of choice. In order to isolate the significant macroeconomic factors influencing M&A as a mode of entry, two statistical analyses were employed, namely cluster analysis and principal component analysis. These methodologies enabled first a meaningful separation of the country data in order to overcome the effects of high variance and clustering identified in exploratory scatterplots and second allowed for the identification of regional and country effects in M&A activity. The study distinguished several variables relating to the market potential, institutional, infrastructural and sectoral structure of an economy as being significant in M&A activity at a regional level. At the country level of M&A attraction the significant findings were more specific. The presence of a democracy proxied by the variable voice and accountability, a decreased dependency on mining resources as a percentage of GDP and the sectoral make-up and level of diversification of a country were found to influence the attraction of M&A's. The complex and broad nature of this paper has the intention of creating a platform from which several more specific studies on M&A attraction in developing economies may be launched.

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.

Tashmia Ismail

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Table of Contents

Declaration 3

Acknowledgements 4

1. Introduction 11

1.1. Definitions: merger & acquisition, greenfield and joint venture 12

1.2. Contribution to the literature 15

2. Literature Review 18

2.1 Introduction to the Literature 18

2.2 The distinction between developed and developing economies - Foreign Direct investment in developing regions 20

2.3 FDI Theory 21

2.4 Location factors 23

2.4.1 Privatisation, Infrastructural Upgrades And Acquisition Targets 25

2.5 Regional Country leader effect 27

2.6 Mergers and Acquisitions 31

2.6.1 M&A's And Capability Seeking Multinationals 31

2.6.2 Acquisition Drivers 33

2.6.3 Cultural Challenges and The 'Liability Of Foreignness' 34

2.6.4 M&A Failure 35

2.7 FDI Drivers in the Host Economy 36

2.7.1 Institutions 36

i. Institutions based view of international business 37

ii. Strength and types of institutions that matter to M&A's 37

iii. Importance of legal and financial frameworks to support MNE's 38

iv. Governance issues: regulatory quality and rule of law 39

v. MNE sensitivity to risk factors and democracy 40

vi. Uncertainty and regulations affect entry mode decisions 42

2.8 Infrastructure 44

2.8.1 Institutions and Infrastructure 44

2.8.2 Sectoral Structure And Transformation 45

i. Sectoral evolution, processes and outcomes 45

2.8.3 Structural Change in Developing Economies 46

2.8.4 Sectoral Efficiency And Institutions 47

2.8.5 Agricultural Productivity And Sectoral Growth As A Precursor For Improved Market Potential 49

2.8.6 Implications Of Human Development In Economic Growth 50

2.9 Resource Rich countries 52

2.9.1 Origins Of The Resource Curse Theory 52

2.9.2 'Point Source' And 'DIFFUSE' RESOURCES 53

2.9.3 Refuting The Resource Curse- Institutions And Development In Resource Rich Economies 54

2.9 Conclusion 55

3. Research Propositions 58

3.1 Hypothesis 1 58

3.2 Hypothesis 2 58

3.3 Hypothesis 3 59

3.4 Hypothesis 4 60

3.5 Hypothesis 5 60

3.6 Hypothesis 6 61

4. METHODOLOGY 61

4.1 Introduction to the methodology 61

4.2 Data Origins 62

Origins and rationalisation of assembled data 62

4.2.1 Excluded Data 63

4.3 The creation of the Outcome Variables 64
4.4 The creation of independent variables 71
4.4.1 Table of independent variables- sources and descriptions 72
4.4.2 Explanation of Institutional Variables 77
4.5 Statistical Analysis 78
4.5.1 Origin of the Methodology 78
4.6 Principal Component (PC) analysis 80
4.6.1The Outcome Variable Denominators 83
4.6.2 Understanding Principal Component Analysis 83
4.6.3 Extreme group analysis and Quartile split 85
4.6.4 Pooled versus Independent T-tests 86
4.6.5 Understanding the implications of a significant t-test result 87
4.7 Cluster Analysis 88
4.7.1 Introduction to cluster theory 88
4.7.2 The cluster method 89
4.7.3 CLUSTER ANOVAS 90
4.7.4 Understanding the Significant Cluster Analysis Results 90
4.8 Methodology summary 91
5 **Results** 92
5.1 Introduction to results 92
5.2 Factor Analysis Results 92
5.3 PC Analysis and Eigen Values: 94
6.4 Per country Attractiveness Values and Ranking: 96
5.4.1 Ranked Attractiveness Tables For Regional And Country Levels 97
5.4.2 Extreme groups Analysis: 103
5.4.3 Significant Predictor Variables and Means For The Extreme Groups 104

5.4.4 M&A regional level bar graphs 104

Mean Comparison Quartile 1 (Unattractive, regional) And Quartile 4 (Attractive, regional) 104

i. Regional level: market related variables 106

ii. Regional level: institutional variables 107

iii. Regional level: infrastructural variables 109

iv. Regional Level: foreign affiliates 110

v. Regional level: sectoral structure 111

vi. Regional level: Resource rich 112

5.4.5 M&A country level bar graphs for significant variables 113

Country level: Sectoral 114

5.5 Results for Cluster Analysis: 115

5.5.1The Clustering Variables 116

5.5.2 The four cluster solution 118

5.5.3 Naming The Clusters 119

5.5.4 Cluster Member countries 120

5.6 independent variable anova analysis of cluster countries: 122

6. Discussion 127

6.1 Introduction 127

6.2 Understanding the regional and country level results 127

6.3 Exploring the hypothesis 132

6.3.1 Hypothesis 1 132

6.3.2 Hypothesis 2 134

6.3.3 Hypothesis 3 137

6.3.4 Hypothesis 4 138

6.3.5 Hypothesis 5 139

6.3.6 Hypothesis 6 142

Distilling the findings 143

7. Conclusion 146

7.1 Introduction 146

7.2 The Results 147

7.3 Practical Implications of the findings 149

7.4 Future research directions 150

7.5 Contribution to the literature 155

8 References 157

Appendices 165

FIGURE 1 A COMPARISON OF MODES OF FDI ENTRY BETWEEN DEVELOPING & DEVELOPED REGIONS 11

FIGURE 2 REGIONAL AND COUNTRY ATTRACTIVENESS AXES 15

FIGURE 3 AN ORGANISATIONAL FRAMEWORK FOR FDI IMPACT IN EMERGING ECONOMIES (MEYER, 2004) 17

FIGURE 4: STRUCTURE OF THE LITERATURE REVIEW 19

Figure 5 : Country and Regional M&A Attractive Axes 66

Figure 6: M&A attractiveness axes plotting the economies of Libya & Egypt ... 68

Figure 7: Scatterplot of M&A as a % of GDP plotted against average political stability 78

Figure 8: Scatterplot of M&A deals per country as a % of total regional M&A's plotted against transport, storage & communications 79

Figure 9: Scree plot of Eigen values in PC analysis 84

Figure 10: SCREE PLOT OF EIGEN VALUES- A 2 FACTOR SOLUTION 94

Figure 11: REGIONAL LEVEL ATTRACTIVENESS COUNTRIES PLOTTED ON 'Y' AXIS; COUNTRY LEVEL M&A ATTRACTIVE COUNTRIES PLOTTED ON 'X' AXIS. 102

Figure 12: M&A attractiveness axes 116

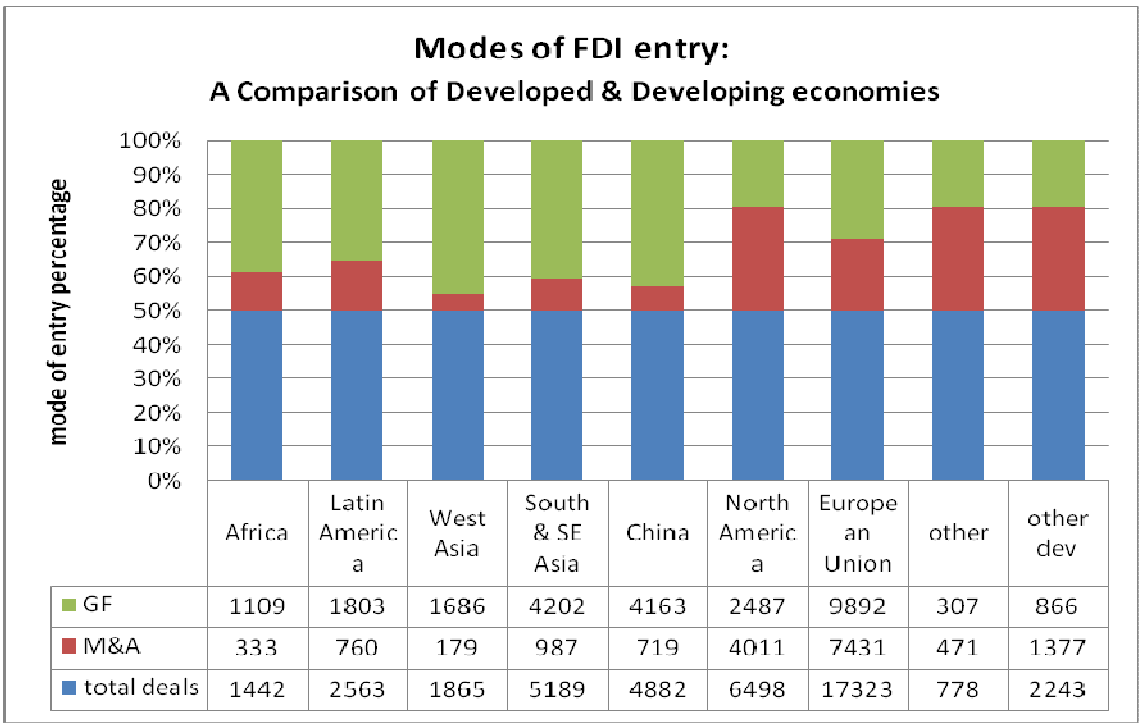
Figure 1: the mapped M&A attractiveness axes 147

FIGURE 2 REGIONAL AND COUNTRY ATTRACTIVENESS AXES 154

1. INTRODUCTION

Mergers and acquisitions are common as a mode of entry for foreign direct investment in developed economies but are rare in developing economies. The bar graph (figure 1) below highlights a simple tally of the number of cross-country mergers and acquisitions, compared against the number of greenfield investments in developing and transition economies. The clear trend toward greenfield investments in the developing regions of Africa, Latin America, West, South and South-South East Asia on the left of the bar chart is apparent. Illustrated on the right side of the graph are the developed regions of North America and the groups of 'other' developed economies where the majority of foreign investment deals are those of mergers and acquisitions.

FIGURE 1 A COMPARISON OF MODES OF FDI ENTRY BETWEEN DEVELOPING & DEVELOPED REGIONS



	Africa	Latin America	West Asia	South & SE Asia	China	North America	European Union	other	other dev
GF	1109	1803	1686	4202	4163	2487	9892	307	866
M&A	333	760	179	987	719	4011	7431	471	1377
total deals	1442	2563	1865	5189	4882	6498	17323	778	2243

Within the period 2002 to 2004, mergers and acquisitions made up a mere 19% of the total number foreign direct investment (FDI) deals concluded in developing economies. In contrast, cross- country mergers and acquisitions held far greater appeal in the developed world where M&A's outnumbered greenfield FDI deals by making up 51% of the total FDI deals concluded over the same period 2002 to 2004.

It is the infrequent use of M&A as a foreign direct investment (FDI) entry modality into developing regions which has motivated this study. Clearly there are relevant features of M&A's which make them a marker for higher levels of development. The purpose of this research is to create a macro-economic profile of economies which attract greater M&A activity in developing regions by establishing what these markers or predictors of higher levels of development are. The macro-economic factors significant in economies which attract greater M&A activity are deduced through statistical analysis. Aspects considered include market characteristics, infrastructure, institutions, economic sectoral make-up and the level of foreign economic activity.

1.1. DEFINITIONS: MERGER & ACQUISITION, GREENFIELD AND JOINT VENTURE

A firm may choose to serve a foreign market by exportation of their good, a joint venture, a greenfield investment or through a merger and acquisition of a local firm (Raff et al, Ryan & Stähler, 2008). The table below briefly offers descriptions on these modes of entry.

TABLE 1: MODE OF ENTRY DEFINITIONS

Mode of Entry	Definition
Acquisition	• Involves the purchase of a controlling share of stock in an existing host country firm with production capacity (Kogut and Singh, 1988; Raff et al, Ryan & Stähler, 2008).
Greenfield	• The foreign firm builds its own business, is entirely independent and sources all resources directly from the market (Nocke and Yeaple, 2007).
Joint Venture	• JV the foreign and local firms share joint ownership of a newly created entity from which both parties draw resources (Meyer, 2004). • JV and M&A involve the pooling of the resources of the foreign and local firm
Cross Border M&A	• Defined as a deal involving an acquirer firm and a target firm whose headquarters are each located in different home countries (Shimizu *et al,* 2004).

This study attempts to define an M&A attractive economy , but it is important to note that M&A attractiveness occurs at two levels which are explained as follows:

1. M&A attractiveness occurs at the country level; that is an economy where M&A (rather than greenfield) is the predominant choice of FDI entry and

2. M&A attractiveness occurs at a regional level; that is an economy which attracts the greatest number of M&A deals within its geographical region.

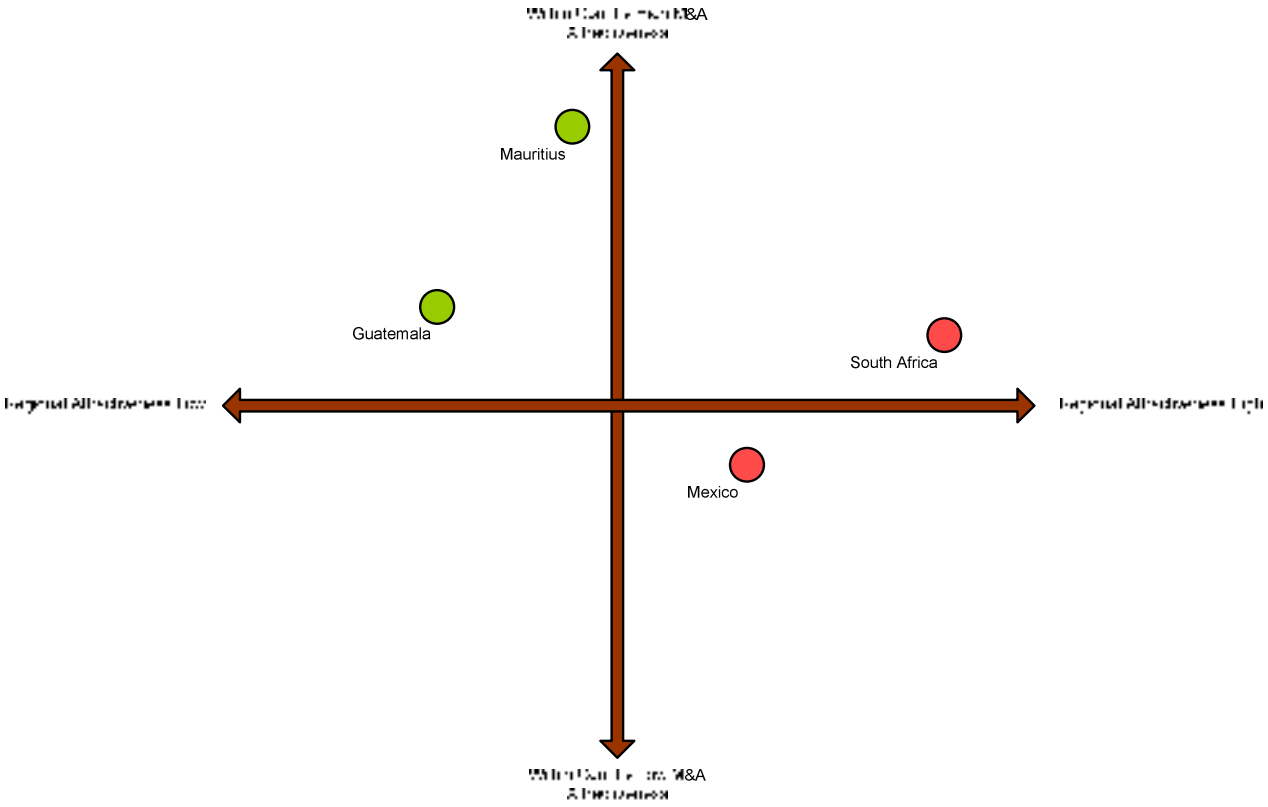
In order to clarify this distinction some examples of each are listed. The economies of Mauritius, and Guatemala belong to the first 'country attractive' group. Their country FDI deals consist of a greater number of M&A deals than greenfield deals. At a regional level however they do not attract the greatest number of M&A deals within their respective regions.

Found in the second 'regional attractiveness' group are South Africa and Mexico. These countries attract the greatest number of M&A deals within their respective regions. However, at a country level the number of greenfield deals far outweigh the number of M&A deals.

These examples highlight that economies displaying M&A attractiveness at the country level are not necessarily the same economies that attract the greatest number of M&A deals regionally. The axes in figure 2 below were created in order to graphically represent the two dimensions of attractiveness. The example countries listed above are positioned in terms of their relative M&A attractiveness in these dimensions.

The research was conducted on a sample of 117 developing economies. Variables representing market characteristics, infrastructure, institutions, economic sectoral make-up and level of foreign economic activity are tested for significance in order to deduce which are related to the within-country M&A attractiveness and which to the regional level M&A attractiveness of the developing economies being studied. The assembly of the significant macroeconomic variables will inform an understanding of which macroeconomic factors explain M&A's as an FDI choice and add to the understanding of why mergers and acquisitions are infrequently used as a mode of entry into developing economies.

FIGURE 2 REGIONAL AND COUNTRY ATTRACTIVENESS AXES



1.2. CONTRIBUTION TO THE LITERATURE

The FDI attractiveness of economies has been well explored in the literature. However, research on the role of FDI in economic development is dominated by a generalised view of FDI where the separation of entry mode strategies was not central. Several authors have commented on the underreporting of M&A as a process distinct from the FDI umbrella in the literature, these same authors have begun to explore in greater depth the M&A concept (Kogut & Singh, 1988; Raff et al, Ryan & Stähler, 2005; Nocke & Yeaple, 2007 & Haller, 2008).

The M&A literature is concentrated on the developed economies of the world as the greatest volume of M&A activity has historically occurred in developed regions. Much of the literature on M&A's describes the increasing number of

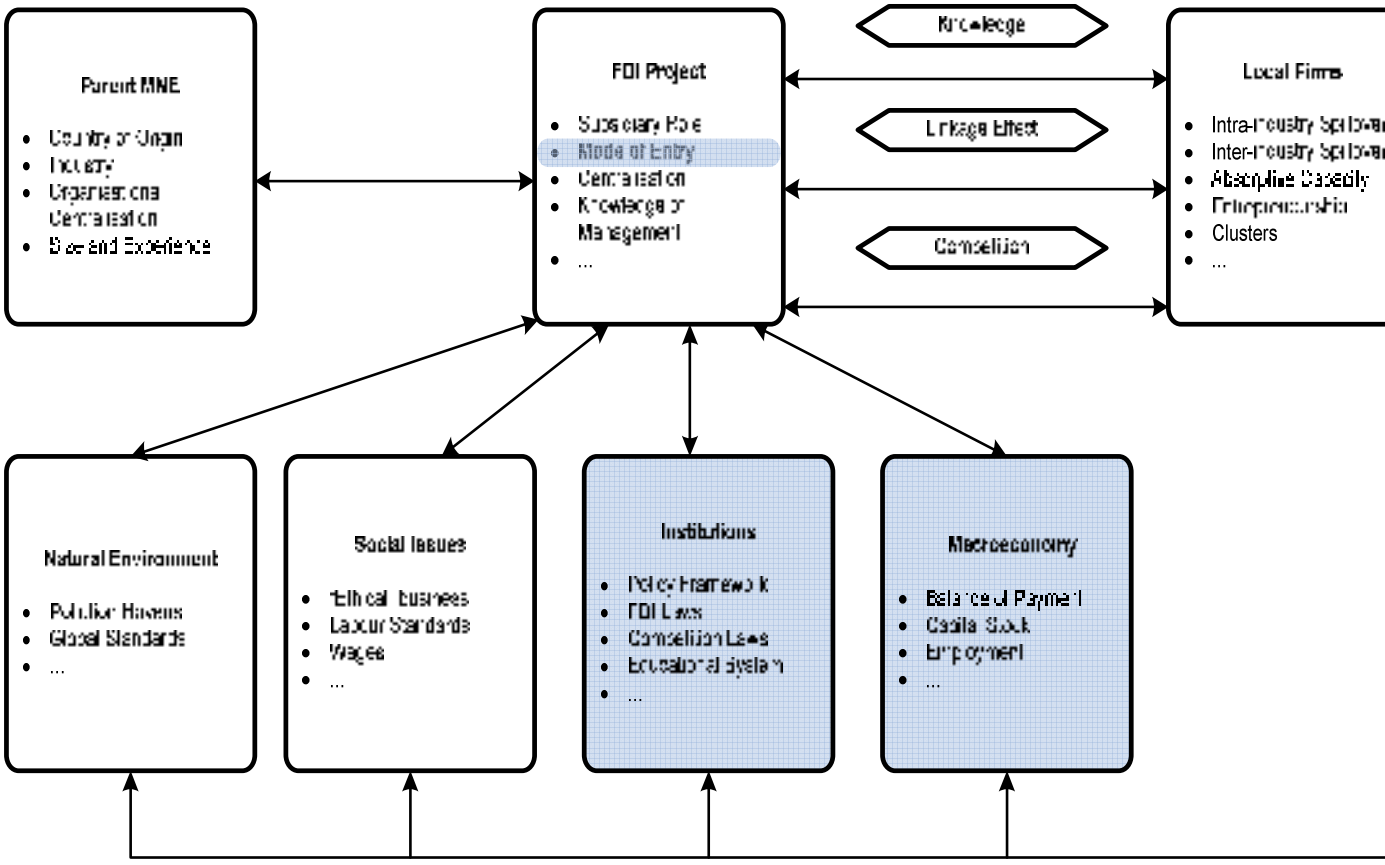
these deals and its importance in global FDI, often by referring to the global total (Haller, 2008; Bjorvatn, 2004; Horn & Persson, 2001, Shimizu, Hitt, Vaidyanath, Pisano, 2004). None of these studies have referred to the relative scarcity in utilisation of M&A's in the developing world relative to the developed regions of the globe. This paper aims to make a contribution not just to the emerging literature on M&A's but also to its particular developing economy paradigm.

Further this study explores M&A's in the context of several predictor variables which appear to be underrepresented in the literature to date. These variables include the sectoral make-up, including the resource wealth of an economy and the regional versus country attractiveness dimension of M&A attraction. Rugman and Verbeke (2008) comment that the exploration on the regional *versus* the global strategy of firms requires 'substantive extensions of extant international business theory'.

The study also contributes to the emerging literature on the importance of institutions in FDI and to one level deeper that is the interaction of M&A's and institutions. A strong call has been made by certain scholars for a far stronger exploration of an institution based view of international business strategy (Dunning, 2001; Peng *et al*, 2008).

The highlighted sections of Meyer's (2004) framework are the broad areas within which this research is based.

FIGURE 3 AN ORGANISATIONAL FRAMEWORK FOR FDI IMPACT IN EMERGING ECONOMIES (MEYER, 2004)



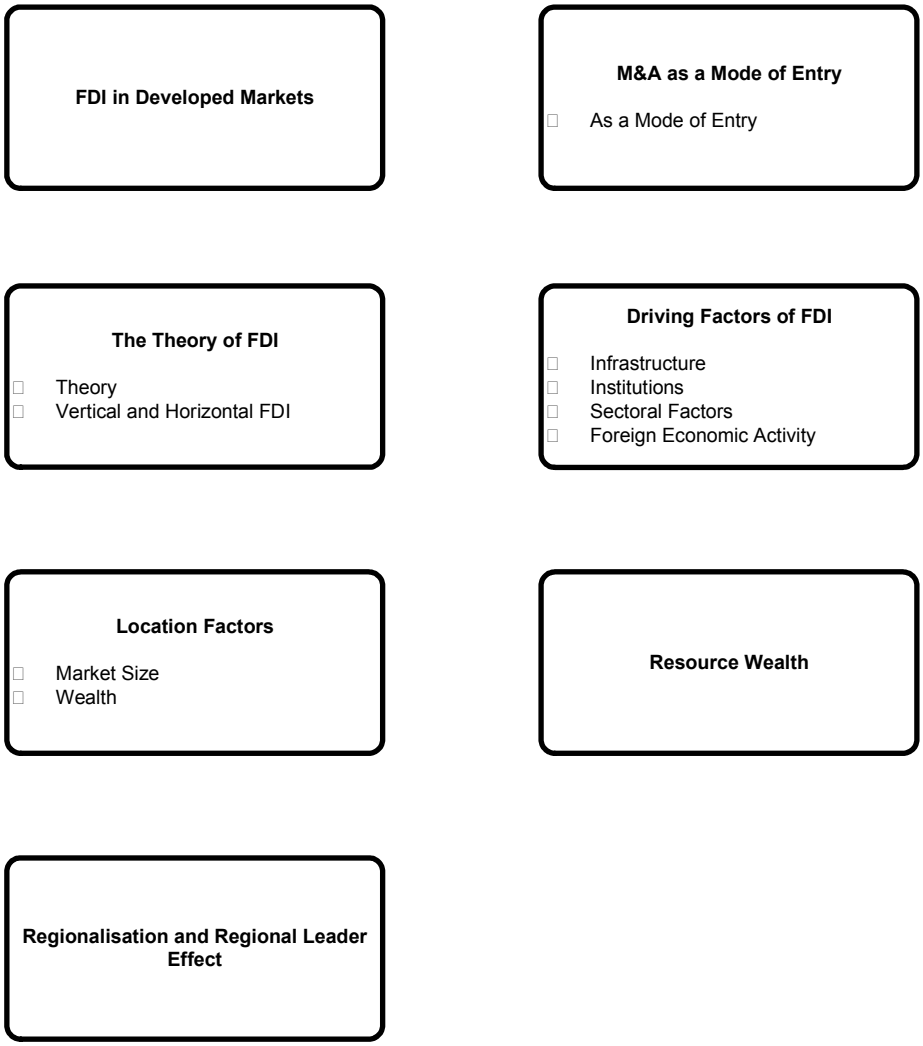
The chapter which follows covers and summarises much of the current literature on M&A deals, FDI and their relationship to the host location factors of market potential, institutions, infrastructure, sectoral make up, depth of economic activity and the resource wealth status of economies.

2. LITERATURE REVIEW

2.1 INTRODUCTION TO THE LITERATURE

In Chapter 1 a motivation for the study of M&A's as a choice for FDI entry in developing markets was offered. The purpose of this literature review is twofold. First it attempts to inform the reader of the academic work already carried out in the themes broached in this paper in order to foster a greater understanding and appreciation of the research findings. Second it aims to highlight a neglected area of focus in the literature pertaining to M&A deals in developing economies and how this FDI entry mode interacts with unique developing country contexts such as market characteristics, infrastructure, institutions, economic sectoral make-up and the level of foreign economic activity.

FIGURE 4: STRUCTURE OF THE LITERATURE REVIEW



Five broad themes were identified as relevant to this study. These themes include the developed/developing paradigm and foreign direct investment in these economies, regional leader effects, mergers and acquisitions as a mode of FDI entry and the drivers of FDI. The review of the literature will begin by examining the developing versus the developed paradigm.

Figure 4 is a representation of the literature review which explores various FDI themes in developing economies.

2.2 THE DISTINCTION BETWEEN DEVELOPED AND DEVELOPING ECONOMIES - FOREIGN DIRECT INVESTMENT IN DEVELOPING REGIONS

As this paper is concerned with the mode of entry of FDI into developing economies, the first section will address the distinction between developed and developing economies and foreign direct investment.

Per capita income, an indicator of the wealth and potential of a market, is an important manifestation of the differences between developing and developed economies. Multinationals enter developing markets to take advantage of consumer potentials, natural resources and labour cost advantages. Unfortunately however, these economies are subject to frequent policy regime switches and growth rate volatility when compared against the group of developed economies (Aguiar and Gopinath, 2007).

Many developing economies which are characterised by an accelerated pace of economic development and a liberalisation or opening of their economies by the application of free market principles are termed emerging economies (Hoskisson, Eden, Lau, Wright, 2000). Other rapid growth countries included in this group are the transition economies of Eastern Europe which were historically planned economies but have now adopted free market principles (Hoskisson *et al*, 2000).

Productivity in emerging markets is unstable, here the cycle of political and economic shocks have become trends (Aguiar and Gopinath, 2007). The income inequality, higher poverty levels, governance, institutional contexts (North, 1994; Peng and Heath, 1996) and the level of economic and human

development of developing economies is offset by the fact that since the early 1990's these countries have also been the fastest growing market in the world for products and services (Khanna and Palepu, 2005). The strategic choices made by multinationals engaging in developing markets must necessarily be considered with respect to the above mentioned host country factors.

The literature is dominated by developed economy FDI. However, FDI patterns observed in developed countries cannot be generalized to transitional or developing economies (Pan, 2003). Blonigen and Wang (2005) have established that the factors determining the location of FDI "vary systematically" between developing and developed countries (Blonigen and Wang, 2005). In their paper, Phylatakis and Xia (2006) investigate the dynamics of global, country and industry effects in firm level returns between developed and emerging, markets. Their findings show that especially for emerging markets, country effects are more important than industry effects in explaining return variation for firms (Phylatakis and Xia, 2006). Sethi, Guisinger, Phelan and Berg (2003) believe that FDI flow should not only be studied at a firm level but additionally at a country level as country level factors affect the decisions of all firms over time (Sethi *et al*, 2003). In addition, not all of the hypothesized relationships in the literature on FDI (e.g. exchange rates and source country size) were supported in a study on the transitional economy of China (Pan, 2003). This raises the need for further research to investigate the differences in FDI concepts which exist between the developed and developing regions.

2.3 FDI THEORY

This study is anchored in the OLI or 'eclectic paradigm', introduced by John Dunning. Briefly, the OLI theory explains a firm's choice for a particular FDI destination. First the home based firm must possess an ability which it is able to exploit abroad and which is portable. This is termed the ownership advantage (the O advantage) of the firm. The 'L', which is the focus of our research, refers to the location which must have desirable qualities and offer advantages to the firm. Examples of this would include large markets, production factors including cheap or skilled labour or natural resources. A locational advantage would enhance the profits of a firm. The 'I' refers to internalisation, which implies the firm has more to gain from the total control of the asset than by allowing control to rest with export agents or licensees (Dunning, 2001). The following section expands on the theory of host country location factors which play a pivotal role in resolving the research questions of this study.

2.4 LOCATION FACTORS

Encouraged by superior technology, faster and cheaper communications and motivated by intensifying competition, businesses are able to scour the globe in search of locations offering advantages which increase the competitiveness of the firm. Location advantages refer to the institutional and productive factors which are present in the particular geographic area chosen for FDI (Galan and Gonzalez-Benito, 2006).

Tong, Alessandri, Reur and Chintakananda (2008) find that country and industry effects and their interaction substantially influence firm performance. The authors advocate that industries with growth opportunities learn how to exploit country specific factors by locating operations there.

Even though low labour costs are used by many developing economies to attract FDI (e.g. China and Vietnam) studies show that it is of far less consequence to FDI attraction than host market size and distance. Total costs of production taken together are however largely influential in the direction of FDI flows. High labour costs may be mitigated by the infrastructural spend on health and education which would result in a healthy, skilled and more efficient workforce which in turn acts to lower costs (Bellak, Leibrecht and Riedl, 2008). It is then implied that a country with a higher Human Development Index will be more attractive to M&A deals as the labour force efficiency acts to lower the costs of transacting at the particular location.

According to Fontagne and Mayer (2005), firms will go to foreign locations if: there exists sufficient demand in the country or region, total production costs incurred at the location are low, intense competition is not a threat, public policies are advantageous and institutions create productive and efficient economies in which to operate.

The views of Rugman & Li (2007) and Rugman and Verbeke (2001) on why firms desire foreign locations may be summarised as follows: in order to leverage economies of scale, arbitrage opportunities involving factor costs, diversify and reduce risk, exploit distinctive advantages to gain market and to escape from increasing home market competition.

In light of the statements above, host country demand amongst other factors is responsible for the decisions of firms to choose foreign locations it leads us to believe that market size or the GDP of a country has an important role to play in M&A attraction. Therefore it may be expected that the larger a countries GDP the greater the M&A activity it will attract.

First documented by Knickerbocker (1973) is an idiosyncrasy in the movement of firms. Firms follow into locations where other firms from their industry have already entered despite the increase in competitive intensity this generates.

This agglomeration tendency may be linked to supply chain and input-output linkages. Further by locating affiliates close to other multinational affiliates they may be able to benefit from absorbing technological spillovers. The effect of this would be the lowering of R&D costs and raising the firm's competitiveness by enabling it to stay abreast of competitor strategy (Fontagne and Mayer, 2005).

In terms of M&A attraction, this phenomenon leads us to hypothesize that:
M&A attractiveness in a developing country is positively correlated with the number of foreign affiliates per sector.

2.4.1 Privatisation, Infrastructural Upgrades And Acquisition Targets

The privatisation process in the group of Central and Eastern European Transition (CEEC's) economies, which involved an improvement in production–related infrastructure, was an important signal to foreign investors interested in FDI in this region. Those economies which shifted to more sophisticated infrastructure faster attracted greater shares of the FDI flowing into their region (refer also to regional effects in the next section) (Bellak, Leibrecht and Riedl (2008).

Efficient infrastructure also reduces and partially overcomes the locational effect of distance. It is important to note in the case of the CEEC economies however that Bellak, Leibrecht and Riedl (2008) advise, that even though infrastructural, productivity upgrades are required to raise investment in those CEEC's lagging fellow regional economies, cost-related factors still remain important in FDI attraction (Bellak, Leibrecht and Riedl, 2008).

Institutional reform and privatisation in Latin America in the early 1990's allowed market seeking Spanish companies an opportunity for quick entry into those markets. The local companies offered excellent opportunities for acquisition. The privatised firms fundamentally covered the local markets and offered instant access to a large market. For Spanish MNE's the acquisition of product manufacturing bases close to their customers was ideal as proximity to customers is essential for service companies (e.g. telecommunications). Spanish firms were only able to take advantage of the attractive location because of the socio-political changes which triggered reform and due to the cultural and language affinities shared with this region. Therefore cultural distance is an important location factor to consider (Galan and Gonzalez-Benito, 2006). The fact that the privatisation and the institutional reform process make available firms that are ideal as acquisition targets to foreign MNE's adds to the understanding of the M&A attractiveness model.

Considered together, these factors lead us to hypothesize that the privatisation process raises the attractiveness of the country to M&A deals as it leads to the upgrading of production related and other infrastructure, the effect which is to lower the firms location costs and the negative effect of cultural distance.

Despite the fact that location-specific advantages have been described, alone they are insufficient for a firm to compete successfully in a foreign market. The importance of ownership and internalisation are necessary in order to take full advantage of locational factors (Petrou 2007). The following section describes the oft recognised phenomenon of a country or countries within a region which are able to attract the bulk of FDI flows into their region through a combination of factors.

2.5 Regional Country Leader Effect

FDI flows from transition or developing economies tend to be dominated by a few countries of origin. These are often the only source of income for some low income economies in these regions (EIU, 2007; UNCTAD, 2006).

Much of the literature on regional leadership effects concerns Japanese FDI into the Asia-Pacific region. The 'flying geese' model by Ozawa describes the trend where mature products and industries are shifted from one country to another more peripheral lower cost destination within the region (Ozawa, 2003 and Kojima, 2000). As the host country costs rise so it too moves toward higher value add products and the production of the good moves to the next low cost destination (Edgington and Hayter, 2000; Hart-Landsberg and Burkett, 1998). In this way advantages such as technology, employment, real incomes and innovation may cascade through a region (Clark, 1993). The following paragraph describes how a regional FDI leader may be created by the establishment and implementation of attractive policies.

Several studies have shown that when MNC's first plan to internationalise they choose geographically and culturally proximate regions, this is known as the 'market familiarity principle'. In this way home based skills, advantages, management and resources may be leveraged to minimize transaction costs (Gomes and Ramaswamy, 1999).

The working paper 'Regionalism and the Regionalisation of International Trade' explains the idea that regionalisation is a natural pattern and that the volume of inter-neighbour trade between countries is high due to the economic sense of trading over shorter distances (Gaulier, Sébastien and Ünal-Kesenci, 2004). Various studies find that countries have the bulk of their foreign trade concentrated within a particular triad region ((Gaulier, Sébastien and Ünal-Kesenci, 2004; Rugman and Verbeke, 2004). In their study on 64 Japanese multinationals Collinson and Rugman (2008) found that only three operated globally with the remainder concentrating 80 % of their operations (sales & assets) intra-regionally.

More importantly, with implications for this study and the attraction of M&A's, was the finding that region-specific regionalisation trends are linked to changes in infrastructure, information or cultural ties. Large regional trade agreements, especially when a custom union exists, were also shown to have positive effects on trade volume and created lucrative opportunities for foreign producers. The trade agreements allowed access to a large market from a single country, even if it was a smaller market than its neighbours (Gaulier, Sébastien and Ünal-Kesenci, 2004). This paper reinforces the importance of institutions in developing regional trade and mentions specifically that a positive "gravity"

factor of regionalisation could be the swift acceleration of GDP growth of other countries within a region.

Policy makers should take note that contractual relationships present significant risks to foreign MNE's in host countries which have linguistic, legal and economic institutions systems vastly different from the home country (Clark, 1993). Promoting and facilitating corporate governance would have a positive impact on inter-company linkages with the resultant promotion of regional development. The ability to access risk finance and instruments make it critical for a firm to operate in an advantageous national location within a region (Clark, 1993).

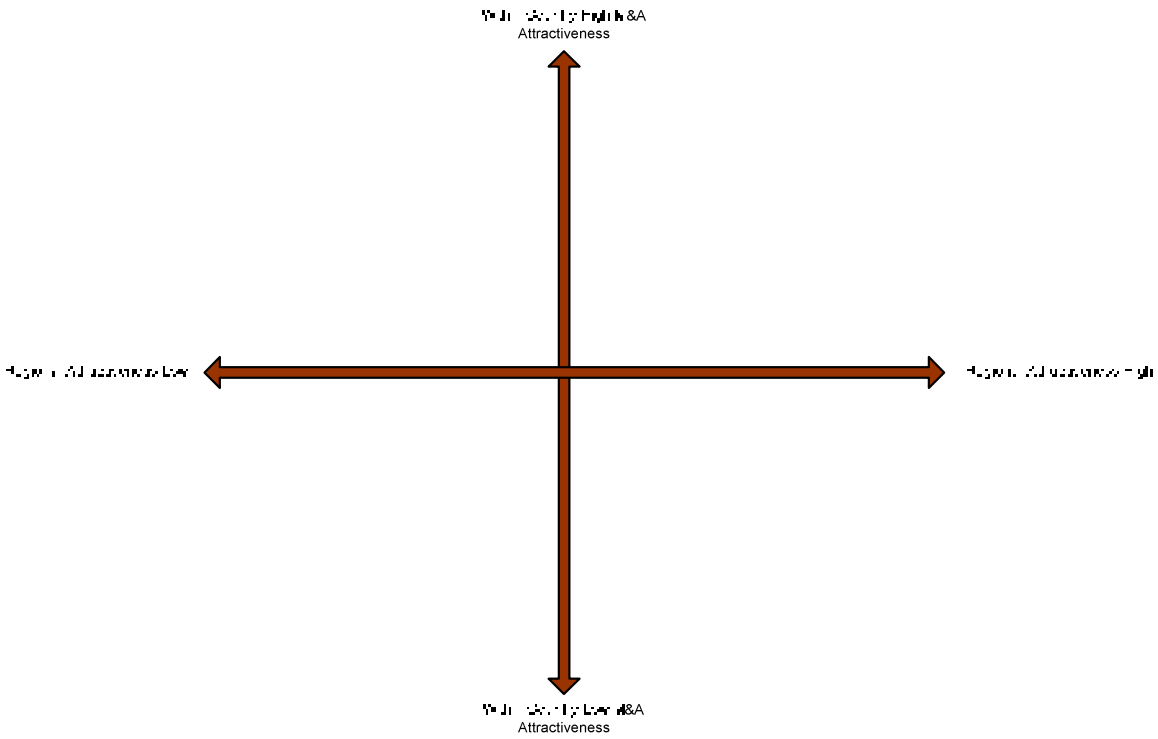
Pajunen (2008) reinforces the above idea of a MNE firm searching for the most advantageous location within a region. In order to access the rapidly expanding emerging economy market a firm may make a strategic decision to enter South America or South–East Asia and will then search for the most attractive location within that region to trade from (Pajunen, 2008). As we have seen in an earlier paragraph, the growing number of regional trade agreements allows the MNE to transact with minimal trade costs within a region. The regional leader attracts the most FDI in a region. This research asks the question who attracts the most M&A's and why? This question may be answered by the findings of Qian, Li, Li and Qian (2008).

Qian, Li, Li and Qian (2008) confirm that firms are regionally focused and also offer an explanation for the regional internationalisation of firms rather than a fully global expansion. They find that firms' costs are lower intra-regionally and hence performance is enhanced. They add however that a threshold to

performance is reached intra-regionally and that a developed country MNE may maximise performance by entering into a moderate number of developed country regions and a strictly limited number of developing regions as costs here are substantially different. They advocate the careful selection and allocation of resources in developing regions as over-diversification here will result in costs outweighing benefits (Qian *et al*, 2008). This reinforces the idea of a regional FDI leader in the developing country context that is a 'safer' haven for MNE resource allocation.

Taking into account this evidence, it is possible to hypothesize that as regional cooperation (governance) is enhanced so inter-regional trade (institutions) is encouraged which results in greater amounts of FDI and M&A's which will flow into a regional leader country with the safest reputation.

In chapter one the regional and country attractiveness axes were graphed in order to ascertain which countries attracted the most M&A's within a region, logically this is also likely to be the country which attracts the most FDI in the region. This study is also interested in a group of countries in the developing world which attract more M&A's than greenfield deals even though they may not be regional FDI or M&A leaders. These economies are expected to have a set of unique M&A attracting features. The next section explores the literature on the principles of M&A's.



2.6 MERGERS AND ACQUISITIONS

An imperative of a foreign investment entry strategy is to minimise the cost of entry in order to render the venture more profitable. Cultural barriers and socio-political differences between the entrant and host raise the cost of transacting and thus the entry mode chosen will attempt to reduce this.

2.6.1 M&A'S AND CAPABILITY SEEKING MULTINATIONALS

Acquisitions are largely driven by capability seeking firms. Firms have capabilities in their own markets which are not necessarily internationally mobile, may not be useful in a foreign market or the firm may require a set of additional competencies to operate successfully in the foreign market (Anand and Delios, 2002).

Anand and Delios (2002) offer a description of upstream capabilities which are described as fungible and portable, an example of this may be intangible technological know-how. By engaging in a cross-border M&A the firm is able to access the local knowledge and downstream capabilities of a local firm and use this to supplement its portable advantages in serving the new host market (Nocke and Yeaple, 2007). Examples of capabilities or advantages which the local firm may possess include brand, marketing and sales force knowledge, privileged access to distribution channels, a capability to manoeuvre through local 'institutional voids' and challenges (Khanna and Palepu, 2005), emission rights for environmental pollution, landing slots at airports, scarce land or oil/mineral extraction rights amongst others (Horn and Persson, 2001).

Fungible upstream capabilities are a stronger driver for acquisitions than downstream capabilities which are less fungible (Anand and Delios, 2002). Developing countries are unlikely to have superior technological capabilities than the potential developed country acquiring firm. The lower sophistication of the developing market would therefore limit the number of acquisition targets available for a developed country MNE. Acquisition targets for downstream capabilities (marketing, brand etc.) would hold greater appeal in countries with large target markets. The number of M&A deals can therefore be expected to relate to market size (GDP) and market sophistication (represented by aspects like the level of human development and infrastructure). The number of M&A deals will also be related to the number of local acquisition targets available which in turn is dependent on the level of development of the country.

2.6.2 Acquisition Drivers

The initial choice to engage in FDI over export is dependent on how profitable the firm expects the greenfield or M&A to be. The second strategic choice of greenfield over M&A is related to the firm's ownership of productive assets and varies both across and within industries (Raff, Ryan and Stähler, 2005).

A cross border-merger provides access to a foreign market whilst a national merger relieves domestic competitive pressure. When trade costs are low however national mergers do not reduce competitive pressure and firms will seek access to foreign markets through a cross-border merger. Economic integration results in lowered trade costs and therefore increased competition which is likely to increase the profitability of acquisitions (Bjorvatn, 2004).The lowering of trade costs which is dependent on host country regulations will therefore increase the level of cross-border M&A activity.

The literature describes one of the main advantages of cross-border M&A's to be the access which it provides to a foreign market (Horn and Persson, 2001) whilst within border mergers are generally attributed to relieving domestic competitive pressure (Bjorvatn, 2004).

Raff et al (2008) explains that firms entering a foreign market will approach local firms with a merger and acquisition or joint venture proposal in order to enjoy the synergies of such a relationship. Raff et al (2008) maintain that a merger & acquisition offer will be accepted by the local firm if the profitability and success of a greenfield investment by the multinational is likely and credible. Further, the greater the anticipated profitability of the greenfield investment the lower the merger & acquisition price offered to the local firm. Hence M& A would be

preferred over greenfield as the entry costs would be lowered. The choice of greenfield over M&A will depend on the number of competitors in the market and the market potential as this affects the anticipated profitability of the greenfield venture or the cost of the M&A (Raff et al, 2007).

This leads us to hypothesize that countries with greater market potential (GDP, GDP per capita and HDI) and fewer local competitors will result in a lowering of the cost of an M&A which in turn results in increased volumes of M&A.

2.6.3 Cultural Challenges and The 'Liability Of Foreignness'

Mergers and acquisitions and partially owned ventures offer the opportunity for a foreign MNE to access local assets such as brand, distribution networks and a client-base which is difficult to mobilise from home by working with local established companies (Petrou 2007). In instances where large cultural distances exist between home and host, Brouthers and Brouthers (2000) advocate the use of acquisitions in order to confer legitimacy and acceptance on the foreign MNE.

However, M&A's involve greater costs when the cultural distance is high and therefore Chang and Rosenzweig, (2001) assert that firms would be more likely to choose greenfield entry to avoid the costs of integrating diverse company cultures. Greenfield investments offer total affiliate control and avoid post merger cultural difficulties but take a far longer time period to establish market presence and require substantial experience and know-how of local conditions (Chang and Rosenzweig, 2001).

Most recently Slangen and Hennart (2008) have found that MNE's will prefer acquisitions in culturally distant locations if they have little international

experience or if they plan to grant the subsidiary autonomy in marketing. If they are internationally experienced or have no market related concerns then a greenfield is preferred in culturally distant locations.

The entry choice is also industry-specific depending on the resource requirements of the firm. Manufacturing operations tend to favour greenfield deals whereas in advertising where brand and product are tailored to local tastes acquisitions are preferred as FDI entry strategies (Kogut and Singh, 1988).

In light of the information above it may be assumed that a large number of M&A's occur in the services industry as this confers on the MNE an understanding of, acceptance within and access to a foreign market. Therefore if a large number of M&A's occur in the services industry then it is logical to hypothesise that a large services sector would encourage greater M&A activity.

The information examined above dealt with the cultural challenges of M&A's. The next section will broach the subject of institutional challenges in M&A deals especially in developing economies.

2.6.4 M&A FAILURE

Approximately 70%-80% of all mergers fail (Bretherton, 2003) and KPMG reports only 17 % of cross border M&A' s create value while 53% destroy value (Shimizu, Hitt, Vaidyanath, Pisano, 2004). These statistics may be part of the explanation for the lower volumes of M&A deals in developing economies where investor firms may be wary of entering into deals already known to have high failure rates and then compounding this in an environment fraught with challenges i.e. developing regions. Therefore many organisations choose to

enter into strategic alliances and joint ventures which allow them the benefits of searching for new market opportunities, sharing in innovation and technology, overcoming host regulatory requirements and developing new capabilities. Importantly however these alliances are easier and less costly for companies to enter and exit should the need arise.

The following section covers the literature on our final broad theme; that of the drivers to M&A activity.

2.7 FDI Drivers in the Host Economy

This section contains a review of the literature concerning several host country locational factors which influence FDI. Whether these variables are involved in attracting M&A's over greenfield deals in a developing market context is the question this paper seeks to answer. The variables covered in this section of the literature include institutions, infrastructure, market potentials, economic sectoral make-up, foreign economic activity and the resource wealth paradigm. The first variable to be covered is that of the institutions based view of business strategy called for by Peng, Wang and Jiang (2008).

2.7.1 Institutions

Delios and Henisz (2003) maintain that if geography and culture were the primary factors behind firm entry into foreign locations then firms would move with relative ease across large culturally similar but politically diverse regions, yet no evidence of this exists as it is the politics and related institutional difficulties of regions which make FDI decisions complex (Delios and Henisz, 2003).

i. INSTITUTIONS BASED VIEW OF INTERNATIONAL BUSINESS

Peng *et al* (2008) argue further on the importance of institutions by calling for a new theoretical FDI perspective. They request an institution-based view of international business strategy to accompany the existing industry and resource based views of strategy. The authors maintain that institutions differ across countries, are more than just background and set the context for the shape, strategy and performance of the firm. Further, they explain that as the literature delves deeper into the developing economy paradigm a greater appreciation of the institutional differences of these countries from the developed economy context emerges (Peng, Wang and Jiang, 2008). In order to reinforce the views of Peng *et al* the passages following this describe several studies which have found various forms of institutional variables as being significant in the attraction of growth and FDI.

ii. STRENGTH AND TYPES OF INSTITUTIONS THAT MATTER TO M&A'S

A firm which is capable of managing institutional idiosyncrasies may find this to be a source of competitive advantage in developing markets (Henisz, 2003). It is usually a combination of institutional conditions rather than a single variable which affects the attractiveness of an economy to FDI and this combination differs for developing and developed countries and importantly for regions within the developing world. Pajunen (2008) found that the lack of property rights and corruption were the foremost contributors to FDI unattractiveness, whilst a state guaranteeing political stability, political rights and civil liberties ensured FDI attractiveness (Pajunen, 2008).

Acquisitions are a means for a firm to access resources that are intangible and organizationally embedded in host economies with a stronger institutional framework (Meyer, Estrin, Bhaumik and Peng, 2008). In a host country with a weaker institutional framework Meyer *et al* (2008) inform that JVs are more commonly used as an entry mode to access the required resources. This implies that the volume of M&A's will be greater in countries with higher institutional values.

Where information costs are high banks merge to gain access to embedded 'knowledge capital' in local companies. Where information costs are low there is less motivation for M&A (Degryse and Ongena, 2004; Buch and De Long, 2001). Information costs will tend to be lower where strong institutions such as government effectiveness, voice and accountability and regulatory quality are stronger (Buch and De Long, 2001).

iii. IMPORTANCE OF LEGAL AND FINANCIAL FRAMEWORKS TO SUPPORT MNE'S

Market inefficiencies related to the resource profile and institutional profile of a host economy may be overcome by the entry strategy of the MNE. Chang and Rosenzweig (2001) assert that an acquisition is the quickest way for a firm to build a sizable presence in a foreign market. The challenges of this mode however involve the post acquisition cultural merge, the risk of overpaying and an inability to fully assess the value of the acquired assets (Chang and Rosenzweig, 2001).

In a developing market context additional challenges to M&A's include the scarcity or absence of legal, financial and institutional organisations and structures through which the deal could be investigated, formalised and protected and is further complicated by the existence of burdensome host country regulations relating to ownership (Khanna and Palepu, 2005).

iv. GOVERNANCE ISSUES: REGULATORY QUALITY AND RULE OF LAW

The significance of country risk as a determining factor for encouraging FDI in developing countries was highlighted by Rammal, and Zurbruegg, (2006). The same authors found the qualities of regulations in the host economy to be a significant factor in the attraction of FDI within the ASEAN region (Rammal, and Zurbruegg, (2006).

In countries where policymakers' discretion is high Delios and Henisz (2004) explain that managers face a higher likelihood that the status quo policies which affect their costs, revenues or asset values will change. This is especially so in industries such as power generation, finance, water and telecommunications as these are often areas where public interests are protected (Delios and Henisz, 2004). Institutions they believe offer a system of checks and balance which afford multinationals some form of protection against institutional challenges.

In a sample of 49 countries Rossi and Volpin (2004) show that a more active market for mergers and acquisitions is the outcome of a corporate governance regime with stronger investor protection. The lower the investor protection in a market the greater the number and magnitude of frictions and inefficiencies experienced by the acquiring company which raises the cost of conducting M&A deals. M&A targets are typically from countries with poorer investor protection

compared to their acquirers which has implications for the convergence of corporate governance standards (Rossi, and Volpin 2004).

v. MNE SENSITIVITY TO RISK FACTORS AND DEMOCRACY

In a study to identify the political risk variables which affect the investment decisions of multinationals the most Busse and Hefeker (2007) found three indicators for political risk and institutions to be closely associated with FDI. These included government stability, religious tensions, and democratic accountability The most important determinants of foreign investment flows were government stability, internal and external conflicts, law and order, ethnic tensions, bureaucratic quality and, to a lesser degree, corruption and democratic accountability (Busse and Hefeker, 2007) .

Schneider and Frey (1985) find a model which combines of political and economic determinants best explains the FDI flows to 80 less developed countries and importantly found that political instability significantly reduced FDI inflows to these economies.

Kolstad and Villanger (2008) find that institutional quality and the level of democracy appear more important for FDI in services in developing countries. The authors explain further that high income countries are more sensitive to general investment risk or political stability and that highly undemocratic countries deter foreign investors however above a certain threshold of democracy investors may be more concerned with the efficiency of public sector.

In his study of U.S. multinational firms and macroeconomic uncertainty, Desbordes (2007) draws our attention to the importance of understanding the vertical or horizontal strategy of the MNE within its host economies in a region. In vertical FDI, fragmentation of the supply chain increases the vulnerability of the MNE to international disruptions. The geographic diversification of MNE's with horizontal strategies (where several identical production facilities exist across countries), tend to be more operationally flexible and have reduced exposure to risk when exposed to economic or political upheaval in one location. This makes horizontal FDI less sensitive to political and macroeconomic instability in developing economies. The converse is true for MNE's engaging in vertical FDI and therefore more sensitive to instability. MNE's with vertical strategies will tend to locate operations in safer destinations within a region in order to minimise risk to their supply chains (Desbordes, 2007).

A similar study on the institutional sensitivity of horizontal versus vertical FDI strategy was conducted by Yothin (2007) who examined more specifically the effects of macro-level demand, supply, and sovereign risks on the FDI activities of US multinationals. He found MNE's in industries with higher share of vertical FDI respond disproportionately more to negative effects of macro-level demand, supply, and sovereign risks. However, Yothin (2007) continues, when institutional quality and total FDI share of the host country are sufficiently low the FDI activity of vertical and horizontal firms are equally vulnerable to macro risks with horizontal production modes sensitive to demand risk (Yothin, 2007). This information is relevant as it was discovered earlier in this review that horizontal FDI tends to take the form of an M&A.

vi. UNCERTAINTY AND REGULATIONS AFFECT ENTRY MODE DECISIONS

Delios and Henisz (2003) made some interesting findings with respect to the mode of entry of a firm in markets charecterised by uncertainty. The authors found that firms in host locations with low levels of policy uncertainty favour an initial distribution entry in order to build knowledge about and relationships with consumers. In this context uncertainties about culture and taste can be countered with a distribution strategy which averts the need for a joint venture. In host markets charecterised by high levels of policy uncertainty firms prefer to enter the market with a joint venture manufacturing plant. This enables the firm to create local relations with suppliers and partners in order to counter policy uncertainty. Therefore in high uncertainty contexts a firm places greater priority on managing institutional challenges and host knowledge than on managing consumer needs (Delios and Henisz, 2003). Mergers and acquisitions also allow a firm to access local knowledge through the host firm with which it merged. Therefore higher levels of uncertainty may favour the use of M&A's as an entry strategy.

Specific industries are often constrained in their entry mode of choice by local industry regulations or economic conditions (Horn and Persson, 2001). Such restrictions are common in banking where host countries attempt to maintain control of local banking institutions (Bevan, Estrin and Meyer, 2004, Petrou, 2007). Petrou (2007) describes how local regulation sometimes prohibits wholly owned entries, forcing the multinational bank (MNB) to forego control on the foreign venture. The unavailability of acquisitions in the foreign market may also force a firm to partner with a foreign bank.

Henisz (2000) mentions in his article 'The Institutional Environment for International Business', that few empirical studies have been conducted on the effect of institutional variables on market entry mode choice. In an earlier article Henisz (2000), addresses the complications surrounding market entry mode choice and whether majority or minority equity control relative to the domestic firm is preferable under conditions of political uncertainty. Firms hope that partnering with host country firms may be a way to safeguard against challenges of environment. The host country joint- venture partner may eventually manipulate the political systems to their own benefit. Therefore, eventually majority owned foreign plants become the preferred entry mode. Henisz does not make use of the words of the words merger and acquisition or greenfield but speaks of majority or minority owned joint ventures with local firms.

Fisch (2008) describes how uncertainty may have one of two effects on an MNE; 1) it may either discourage initial capital investment or alternatively, 2) spur an initial investment by offering the MNE the advantage of early entry over its competitors.

The evidence of the literature above allow for the hypothesis that the strength and quality of a host countries institutional framework and the legal, financial and regulatory system which it supports have a proportional effect on M&A activity in the host market. That is the stronger the various forms of the institutional framework (rule of law, regulatory quality, etc) the greater is the M&A activity which can be expected.

2.8 INFRASTRUCTURE

2.8.1 INSTITUTIONS AND INFRASTRUCTURE

Infrastructure is attracting an increasing share of global FDI including in developing countries. The value of cross-border M&A's in infrastructure (electricity, gas, water) rose from US$ 63 billion in 2006 to US$ 130 billion in 2007 (UNCTAD, 2008) . This has strong implications for M&A activity in developing countries with a higher infrastructure to GDP value.

The empirical findings of Norda (2008) are that that weak infrastructure, inefficient ports, poor governance and poor control of corruption, are obstacles in allowing a country to engage in FDI trade. The authors explain that red tape and logistical difficulties hamper the ability of host country enterprises to deliver their goods timeously and efficiently. Local companies are not incentivised to improve their productivity if factors outside their control, such as poor infrastructure, hamper their ability to meet contractual requirements. Further Norda (2008) finds that international firms in turn may not want to engage with firms and economies which show little improvement in productivity.

China is described as a 'glowing example' of the regional leader effect (Wu and Barnes, 2008). Specifically Wu and Barnes (2008) describe the success of the infrastructural makeover of Pudong in Shanghai which accounted for less than 4% of the nation's total FDI the 1980s. Urban planning and infrastructural projects resulted in an increase in FDI which by 2005 saw Shanghai attracting 2% of all FDI directed to developing countries. Pudong is used by the authors as a case study to explore the concept of competitive global urban planning. Cities compete in certain sectors depending on their local factor endowments by

creating large scale urban mega- projects (UMP's) to woo investors. Examples of these customized infrastructural projects are Asian World City in Manila, Pacific Place in Vancouver, and Pudong in Shanghai (Wu and Barnes, 2008).

Through this case study of Wu and Barnes (2008) it becomes clear that countries are able to compete for FDI by creating land areas with 'maximum rental appeal' by embarking on infrastructural spend. The success of Pudong in Shanghai as a global investment destination is a practical example of how efficient, tailored infrastructure is able to lure investment and can therefore be expected to attract a greater volume of FDI and M&A deals.

Also mentioned in Wu and Barnes (2008) as foreign investors became accustomed to Pudong as an investment destination so greater value add, higher technology production was moved there. However the number of wholly owned greenfield ventures increased proportionally as it became more important to protect intellectual property and patent rights from local companies. The preponderance of greenfield wholly owned ventures in the developing world may be related to the fear of MNE's who may feel that the weaker institutions in these countries do not guarantee protection of intellectual property rights, linking back to the importance of institutions.

2.8.2 Sectoral Structure And Transformation

i. Sectoral evolution, processes and outcomes

In 1870 the U.S. share of employment in agriculture was 40% and in services 20%. By 1970, agriculture accounted for only 4% of employment whilst services had absorbed 40% of the labour force (Kongsamut, Rebelo & Xie, 2001). This sectoral reallocation of labour from agriculture into manufacturing

and services is described by Kongsamut *et al* (2001) to be a phenomenon accompanying the growth process experienced by all expanding economies and is known as structural change or transformation.

Over time, as the consumer experiences a rise in per capita income within the expanding economy, their share of expenditure devoted to services increases and the share devoted to agricultural products is reduced (Kongsamut *et al*, 2001). The trend that growth in per capita income tends to be accompanied by a rise in services and a decline in the agricultural sector, both in terms of labour employment and relative weight in GDP has important implications for this study. These are the major role of the service sector in our modern economies, the consumer spend which services monopolise (Heshmati, 2003) and that more developed economies will tend to have smaller agricultural sectors relative to GDP.

Hence more developed economies have larger services as a percentage of GDP which is accompanied by a higher GDP per capita of the populace. The implications for M&A's in developing countries is that the expected volume of M&A's will be greater when the relative size of the agricultural sector is reduced, the services sector is large and GDP per capita rises concomitantly with the growth in services.

2.8.3 Structural Change in Developing Economies

The following two paragraphs are of interest as they involve studies on sectoral structure carried out in developing economies these being the Latin American region and China. They show that patterns of growth and sectoral transformation follow the same path as those of developed economies.

De Gregorio (1992) undertook an examination of sectoral growth in Latin American countries and found that growth has been higher in countries where the share of industry and exports have had the largest increase and where the change in the share of agriculture has been the lowest. Thus, growth in Latin America is correlated with industrialization, an increase in the share of exports and a diminishing role for agriculture, regardless the initial structure of production (De Gregorio, 1992).

China is a developing economy where dramatic structural changes have and continue to take place. The Chinese economy was largely agrarian in 1952, agriculture accounted for more than half of GDP. Despite the increase in agricultural productivity, by 1997 the share of agriculture had declined to about 20% of GDP. This was due to the rapid expansion of the manufacturing and services sectors. Growth in the Chinese economy over the period 1978-1995 can be attributed to the structural changes as resources were shifted from lower to higher productivity sectors (Fan, S., Zhang, X. and Robinson, S., 2003).

The implications of the two cases mentioned above is that even in developing economies, growth of higher productivity sectors result in the growth of the economy which is accompanied by an increase in the number of firms operating in the environment and a growth in the GDP per capita this theory is reinforced by the Investment Development Path theory (Dunning & Narula, 1996). This creates market conditions conducive to the attraction of M&A deals.

2.8.4 Sectoral Efficiency And Institutions

The importance of institutions was mentioned earlier in this review. In this section the interrelatedness of institutions with sectoral growth is dealt with.

Duarte and Restuccia (2007) explain that in the first stage of structural transformation the agricultural sector is replaced in importance by the manufacturing sector and then in a second stage by the service sector. Manufacturing goods they maintain are typically tradable while service goods (and, to a lesser extent, agricultural goods) are typically non-tradable. Therefore, foreign competitions brought about by growth policies that promote trade tend to have a bigger impact on the structure of the manufacturing sector. The authors continue however that the services sector cannot rely solely on foreign competition.

In their study of structural transformation Duarte and Restuccia (2007) explain that differences in the level of competition across sectors may be due to the degree of foreign competition in that sector. The institutional environment of a nation is able to promote productivity growth, especially within the services sector which is playing an increasingly important role within expanding economies (Duarte and Restuccia, 2007; Heshmati, 2003). The promotion of labour productivity in the service sector requires policies which lower product-market regulation and barriers to entry which the authors believe to be pervasive in this sector (Duarte and Restuccia, 2007). Therefore it can be expected that countries with stronger institutions will have better productivity and economic efficiency with a well developed services sector.

The interdependent relationship between strong institutions and an efficient and growing services sector is expected to exist in M&A attractive economies.

2.8.5 Agricultural Productivity And Sectoral Growth As A Precursor For Improved Market Potential

Poor countries are characterised by large fractions of employment and capital within the agricultural sector where resources are used in the production of basic foods in order to meet subsistence needs (Gollin, Parente, and Rogerson, 2002). Gollin *et al* (2002) *inform* us that few developing countries are net exporters of grain or root crops (Argentina, Guyana, India, Paraguay, Thailand, Uruguay, and Vietnam). However, the authors maintain, that those countries able to increase agricultural productivity experience sharp declines in agriculture's share of GDP as they are able to release labour and resources into other sectors.

Gollin et al (2002) go on to describe that the increase in economic productivity results in the growth of aggregate incomes and general economic development. Low agricultural productivity delays the industrialization process which results in a country's per capita income falling far behind the regional leaders. Therefore the size of the agricultural sector and the determinants of productivity in agriculture enhance the understanding of cross- country differences in income (Gollin *et al*, 2002).

Of interest to this paper is the implication that economies with large agricultural sectors may have lower per capita incomes, lower levels of economic activity and less lucrative markets for goods and services hence we may hypothesise less opportunity for mergers and acquisitions.

2.8.6 Implications Of Human Development In Economic Growth

The measure Human Development Index (HDI), is a composite measure of the health and educational status and sophistication of the populace. In light of the findings of Basu and Guariglia (2007) above, it can be extrapolated that in economies with higher HDI levels the populace is better able to 1) raise itself out of poverty toward diversified non-agricultural sector growth and 2) take advantage of foreign investments for growth by having the skills and levels of productivity required to absorb knowledge and technology spillovers The demise of agriculture and the growth of services. HDI may therefore be regarded as relevant to the attraction of M&A's as it is directly implicated in the creation of a host environment favourable to M&A deals.

The bulk of FDI deals involve services and a large proportion of M&A's are in the services sector (Kolstad and Villanger, 2008). In order for an M&A to happen existing companies need to be present within the host economy which implies a certain level of development beyond an agrarian based economy. It would therefore be expected that the higher the HDI of a host economy the more attractive it would be to M&A deals. Needless to say, this also implies that the size of the services sector relative to GDP is expected to be larger than the size of the agricultural sector relative to GDP in an M&A attractive economy.

The services industry accounted for 62% of global FDI stock in 2006 whilst the primary sector contributed 13 % of global FDI inflows with FDI increase in 2007 being more evident in greenfield deals; manufacturing accounted for one quarter of world FDI inflows which is lower than previous figures (UNCTAD, 2008); this has implications for the determinants of FDI flows.

Qian and Delios (2008) studied the internationalisation of Japanese banks and found that their strategy was to follow existing clients along their international trajectory and to gain economies of scale benefits on their intangible assets in these foreign markets.

Finance, business, and transport are referred to as producer services which have become vital in connecting, supplying and administering the vertically dispersed supply chains of multi-nationals by. Services tend to follow domestic clients into foreign markets in a bid to stave of foreign competitors from taking over their established clients in foreign markets and to prevent foreign competitors from finding a path back into their home countries (Buch and De Long, 2001). Thus the greater the numbers of foreign firms dispersing across locations the greater the need for supporting services to follow in order to maintain the activities of their multinational clients; these firms are a large source of M&A activity.

Thus we find a strong correlation exists between FDI in manufacturing and FDI in producers' services as services follow these industries into new locations. If services companies supply multinationals engaging in FDI and follow home country enterprises abroad we may hypothesise that the number of foreign affiliates in an economy should have an effect on the attractiveness of an economy to mergers and acquisitions.

In summary Kolstad and Villanger (2008) find that FDI in services to developing countries is determined by market size and FDI in other sectors especially manufacturing. Also stated is that FDI in services might be correlated with GDP/capita, since a greater proportion of income is spent on services when per capita income increases (Kolstad and Villanger, 2008).

Therefore an increase in services FDI results in an increase in the number of M&A deals. From the section on sectoral development it is clear that as the economy develops and the services sector grows an increase in GDP per capita accompanies the move toward greater productivity. It is therefore possible to predict a finding of GDP per capita as being significant in the attraction of M& A 's .

2.9 Resource Rich countries

2.9.1 Origins Of The Resource Curse Theory

The sections above have analysed the implications of a shrinking agricultural sector and the growth of the services. Another sector which warrants investigation is that of the resource sector as resource wealth in the context of developing economies is oft associated with poor governance and economic and political instability which affects the desirability of a country as an investment destination for MNE's especially those not directly involved in the extraction of the resource.

The origin of the resource curse theory can be found in the work of Sachs and Warner (1997, 2001). Their study shows that an increase of one standard deviation in natural resource intensity leads to a reduction of about 1 percent

per year in economic growth. Their explanation is that resource-abundant countries tended to be high-price economies due to currency appreciation from resource exports during commodity booms. As a consequence, they explain, the country's non-resource export sector does not develop. Losing out on export-led growth the country becomes increasingly dependent on resource revenue (Sachs and Warner, 1997, 2001).

2.9.2 'POINT SOURCE' AND 'DIFFUSE' RESOURCES

Isham, Pritchett, Woolcock and Busby (2004) studied the difference between 'point' and 'diffuse' resource wealth. 'Point source' resources, such as diamond and copper mines, are geographically localized and easier to control. Diffuse resources are spread thinly across wider geographical planes and are not conducive to control.

In order for an economy to sustain growth and rising incomes it must possess the ability to recover from economic shocks. Isham *et al* find that natural resource exporting countries which are dependent on 'point source' natural resources and plantation crops are impeded in their ability to respond effectively to shocks as they are predisposed to heightened social divisions and weakened institutional capacity. Natural resource exporting countries with 'diffuse' resource wealth however perform relatively better across a series of governance indicators and have more robust recoveries to economic shocks (Isham, Pritchett, Woolcock and Busby, 2004).

The word loot refers to the spoils of war or stolen goods. Snyder (2006) created a model to explain why the presence of lootable resources, a leading source of revenue for rulers and private economic actors is associated with disorder in some states and order in others. His model finds that leaders who are able to build institutions of joint extraction are able to create revenue streams with which to govern and build an orderly state. Should leaders fail to build such institutions, the risk of civil war is increased as insurgents organize and use the resource revenue stream to fund rebellion (Snyder, 2006) .

2.9.3 Refuting The Resource Curse- Institutions And Development In Resource Rich Economies

A criticism levelled at the resource curse hypothesis is that it fails to explain the 'context-dependent complexity' of why some resource rich economies such as Australia and Malaysia have been able to utilise their resource wealth to promote development whilst others have not.

Bulte and Damania (2004) claim no direct effect between resource wealth and economic performance appears to exist. Resources however tend to affect the level of corruption, which does affect growth. In societies where institutions are strong the negative effects of corruption are controlled and growth is not impeded (Bulte and Damania, 2004).

Rent seeking behaviour in some resource-abundant countries often results in a malfunctioning political state where government actions have distortionary effects on the economy (Auty, 2001). Auty (2001) finds however resource-poor countries are likely to engender a developmental political state and to pursue a favourable development trajectory.

The authors also explore the relationship between resource wealth and development and find that countries with low levels of institutional quality (or quality of governance) tend to score lower on various development indicators. The implication is made that the resource-curse occurs at a broader scale than just economic growth. Importantly the authors find no significant impact of resource abundance (point or diffuse) on development. It is the quality of the institutional channels that affects development. The effect of resource abundance on development is moderated indirectly through the institutional framework of the society (Bulte, Damania and Deacon, 2005).

Therefore the consequences in terms of M&A are that countries with large resource sectors which are not governed by adequate institutions will be unattractive destinations for M&A deals and can be expected to have a reduced number of M&A deals. However where institutional quality is adequate the presence of a strong resource sector may encourage M&A activity either with MNE's being involved in joint extraction with local firms who enjoy mining rights or as support services to mining multinationals and related industries.

2.9 CONCLUSION

This literature review has emphasised the fact that neither developing and developed economies nor FDI should be treated as homogenous entities. Developing economies were found to have distinctive contexts and interactions in terms of their institutional, social, infrastructural, political and economic profiles (Schneider & Frey, 1985; Delios & Henisz, 2003; Pajunen; 2008; Peng *et al,* 2008).

The literature also described the regional leader effect (Ozawa, 2003) and the concept of the regionalisation of FDI. Greater FDI volumes flow to the country displaying the most advantageous location within a region. By virtue of being a regional leader with greater economic activity it is anticipated that regional leaders should attract a greater volume of M&A deals. Although the country attracts the greatest number of deals regionally this may not necessarily translate to it being M&A attractive at the country level.

The following set of statements summarise a large portion of the literature on the association of M&A's with market demand, economic growth and services.

Economies of scale and scope were found to be important motives for international mergers (Buch and De Long, 2001). It was concluded therefore that large markets with spend potential encouraged M&A deals. FDI in services is likely to be market-seeking therefore physical presence is required in a market where the service MNE plans to tap into demand. The bulk of FDI deals involve services and a large proportion of M&A's are in the services sector (Kolstad and Villanger, 2008).

These statements have been listed in order to highlight a very strong interdependency which has emerged in the literature, that of increasing economic development being necessary to support increased M&A activity. If this relationship is unfolded through the literature it is found that economic development is accompanied by a shrinking agricultural sector, rising incomes, an increase in the number of foreign firms and the size of the services sector. This in turn is associated with market seeking companies wishing to merge and acquire in the lucrative foreign location as a means of establishing immediate

presence and market scale. By merging and acquiring they are also able to overcome the 'liability of foreignness, gain acceptance in and an understanding of the new market. This chain of events appears to be associated with M&A activity and will be tested in the chapters which lie ahead.

Importantly institutions act as a moderator of the process described above. Institutional strength in general, and more specifically risk (political or economic), the level of democracy, governance issues such as regulatory quality, rule of law and the control of corruption affect the decision of a multinational considering a merger and acquisition as risk, uncertainty and poor governance threaten the profitability of the foreign venture . It may be stated that stronger institutions encourage M&A activity.

The ultimate goal of this literature review is to be able to draw all the interrelated factors together into a list of hypotheses which can be tested to create a definitive model of M&A attractiveness at the regional and country level in developing economies.

The next chapter lists the hypotheses drawn from the literature and the chapter following that describes the statistical methodologies which are employed to test the hypotheses in order to create a profile of factors relevant specifically to the M&A deal in developing economies.

3. RESEARCH PROPOSITIONS

3.1 HYPOTHESIS 1

- The market size and level of economic development represented by GDP, GDP/cap and HDI values is greater in M&A attractive economies than in the economies of M&A unattractive countries.

3.2 HYPOTHESIS 2

It is expected that the higher the institutional strength of an economy the more likely it is to attract M&A deals, therefore:

- Voice and accountability is higher for M&A attractive economies than M&A unattractive economies.
- Political stability is higher for M&A attractive economies than M&A unattractive economies.
- Government effectiveness is higher for M&A attractive economies than M&A unattractive economies.
- Rule of law is higher for M&A attractive economies than M&A unattractive economies.
- The regulatory quality is higher for M&A attractive economies than M&A unattractive economies.
- The control of corruption is higher for M&A attractive economies than M&A unattractive economies.

- The ease with which the executive of a country is able to pass legislation and change regulations unhindered is smaller in M&A attractive economies than M&A unattractive economies.

3.3 HYPOTHESIS 3

It is predicted that the higher the infrastructural values the greater the attraction of M&A's into an economy.

Therefore we hypothesise that:

- The number of telephone connections per 1000 inhabitants is higher for M&A attractive economies than M&A unattractive economies.
- The number cellular subscribers per 1000 inhabitants are higher for M&A attractive economies than M&A unattractive economies.
- Construction as a percentage of GDP is the higher for M&A attractive than for M&A unattractive
- Transport storage and communications as a percentage of GDP is the same for M&A attractive and M&A unattractive economies.

3.4 HYPOTHESIS 4

Given the evidence in Qian and Delios (2008) who found that the strategy of services firms was to follow existing clients along their international trajectory and Fontagne and Mayer (2005) who note that firms exhibit an agglomeration tendency that is, firms follow firms into locations we can hypothesize that:

- The number of foreign affiliates in an M&A attractive economy is greater than the number of foreign affiliates in an M&A unattractive economy.

3.5 HYPOTHESIS 5

The bulk of FDI deals involve services and a large proportion of M&A's are in the services sector (Kolstad and Villanger, 2008). In order for an M&A to happen existing companies need to be present within the host economy which implies a certain level of development beyond an agrarian based economy. It would therefore be expected that the higher the HDI, the bigger the services sector and the smaller the size of the agricultural sector the greater the M&A attractiveness of the economy

- Average agriculture, hunting, forestry and fishing as a percentage of GDP is smaller for M&A attractive than M&A unattractive economies.
- Average mining, manufacturing and utilities as a % of GDP is greater for M&A attractive than M&A unattractive economies.
- Average services as a % of GDP is greater for M&A attractive than M&A unattractive economies.
- Average industry as a % of GDP is greater for M&A attractive than M&A unattractive economies.

3.6 HYPOTHESIS 6

It is expected that if the country is resource rich and a strong institutional framework exists the economy will attract M&A's. If however the country is resource rich and has a poor institutional framework, it is likely that the economy will be M&A unattractive. We can therefore hypothesize:

- The resource rich country with institutional controls will attract the greater M&A activity than a resource poor economy.

The following hypotheses will be tested empirically using the methodology described in the next chapter.

4. METHODOLOGY

4.1 INTRODUCTION TO THE METHODOLOGY

Chapter 3 listed six research propositions which formed the central focus of this paper. The methodology section contained in this chapter is a description of the data collection and statistical techniques employed in order to reach satisfactory answers to the research questions posed. The first section will describe the origins of the data used to carry out the analysis. The outcome variables will first be described followed by a table containing details on the predictor variables.

4.2 DATA ORIGINS

The sections following contain the sources and descriptions of the relevant secondary data required to answer the research questions by processing the data into information and knowledge through statistical analysis. The final sections of this chapter detail the statistical methods used to process the data.

ORIGINS AND RATIONALISATION OF ASSEMBLED DATA

The World Bank and UNCTAD, through the annual World Investment Report and World Investment directory, publish data on over 210 economies which are divided into developed and developing economies. In this study data were assembled for 117 developing and transition economies. A rationalisation for the choice of this data set is set out below.

Blonigen and Wang (2004) in their examination of the FDI experiences of developed and developing economies conclude that the variation of data across these groups makes it inappropriate to pool data on them in empirical analyses. In his 1994 article, 'Economic performance through time', North (1994) on the rational choice framework writes that the experiences of actors in highly developed modern economies may not be compared to that of individuals operating under conditions of uncertainty, political or economic.

For the purpose of this study the country data was divided into regional groupings (see table below) according to the United Nations Statistical Office as published in the UNCTAD World Investment Report classification for 2007. Only 26, 9 % of the 11059 FDI developing economy deals documented in this study and concluded between 2004 and 2006 were cross border merger and

acquisition deals, the remaining 73% of deals were all greenfield. In the developed economies M&A deals are more prolific with a relatively equal split occurring between greenfield and M&A deals, this further informed the decision to exclude developed economy data.

Table 2: Regional divisions of 117 economies

No.	Regional Divisions
1.	North Africa
2.	West Africa
3.	Central Africa
4.	East Africa
5.	Southern Africa
6.	South America
7.	Central America
8.	Middle East (West Asia)
9.	South Asia
10.	South-East Asia
11.	Southeast Europe
12.	CIS (Transition economies)

4.2.1 Excluded Data

In addition to the developed economy data as described above the following economies were also excluded from the study; an explanatory note accompanies the list of exclusions:

- The Caribbean and Oceania economies- many of these island economies were very small, atypical and had missing data.

- China: There were 4882 greenfield and M&A deals concluded in this economy between 2004 and 2006 which was over 48 % of the total number of deals for South and South- East Asian region. It was felt that the large proportion of Chinese FDI would skew the findings for the rest of the region hence the Chinese data was excluded.

- Hong Kong, Singapore, Taiwan and Korea: These economies exhibit higher levels of development and sophistication than the rest of the sample and exhibit FDI levels higher than the typical developing countries of the sample group of this study.

- St Helena, Guinea Bissau (West Africa), Mayotte, Reunion (East Africa), Falkland Islands, French Guiana (South America), Palestinian Territory (West Asia), Afghanistan, Bhutan, Maldives (South Asia) and Timor Leste (South East Asia): These economies were all excluded as data for these economies was incomplete

4.3 THE CREATION OF THE OUTCOME VARIABLES

The analysis aims to understand the host country macroeconomic context associated with the choice of mergers and acquisitions as a mode of FDI entry. The data for value and volume of M&A's in the sample of developing economies was taken from the latest available M&A and greenfield data published by UNCTAD (based on data from Thomson Financial) over the period 2004 to 2006. The outcome variables were calculated as percentages of other variables such as GDP or FDI in order to prevail over the distorting effect of relative economy size.

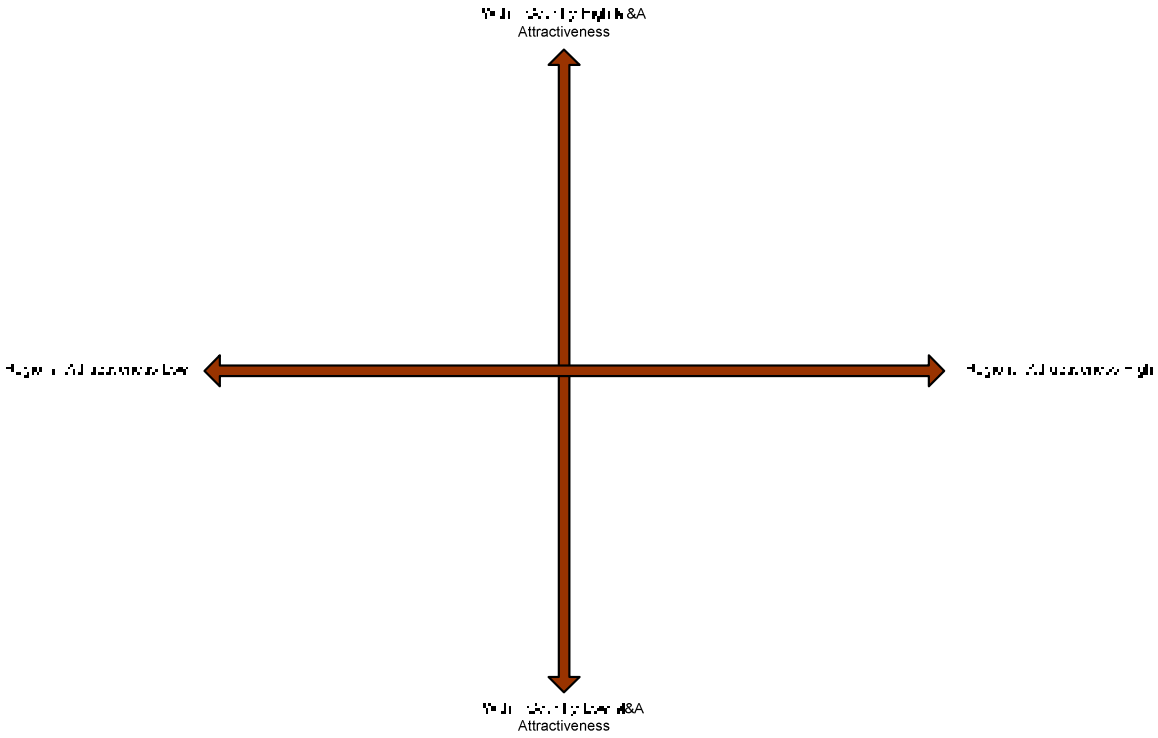
Six outcome variables were created. The table below describes, explains and shows the grouping of the variables into groups A, B and C. The relevance of grouping the variables into Group A-country attractiveness, Group B-regional attractiveness and Group C- FDI attractiveness will be explained in the section following the table where the M&A country and regional level attractiveness axes presented in chapters 1 and 2 will be reintroduced.

Table 3 : explanation of outcome variables

Outcome Variables for the Cluster Analysis	Value or Volume Based	Explanation of Outcome Variable Distinction
A - Country level attractiveness outcome variables		
1 - M&A deals per country as a % of total number of country deals	volume based	Examines the volume of per country M&A deals relative to the total number of FDI deals entering that country. The intra- country proportion of M&A to FDI in terms of volume.
2 - MA sales as % of GDP avg 2004-2006	value based in US $'s	Examines the value of per country M&A deals relative to the GDP of the same country. An intra-country measure of the proportion of M&A to GDP in terms of value.
B - Regional level attractiveness outcome variables		
1 - M&A deals per country as a % of total regional M&A's 2004-2006	volume	Examines the volume of per country M&A deals relative to the M&A deal volume of countries in the region. An inter-country but intra-regional measure.
2 - no of per country MA deals as a % of all regional deals 2004-2006	volume	Examines the volume of per country M&A deals relative to the volume of total FDI deals (greenfield & M&A) of countries in the region. An inter-country but intra-regional measure.
3 - M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006	value in US $'s	Examines the value in $'s of per country M&A sales relative to the value of all FDI inflows into the region showing the country's share or proportion of M&A sales value in the region.
C - Overall FDI attractiveness outcome variable		
no of deals per country as % of total regional deals 2004-2006	volume	Examines which country in a region attracts the most FDI deals in total (greenfield & M&A) to show regional FDI leader.

The figure below was presented in chapters 1 and 2. Once the statistical analysis is complete all the countries in the sample will be categorized into clusters which can be mapped onto the axes below based on their level of attractiveness to M&A activity at a country level and at a regional level.

Figure 5 : Country and Regional M&A Attractive Axes



The six variables are divided into 3 groups. An explanation of the relevance of these groups will follow:

Group A in table 4 above represents country M&A attractiveness. Two measures numbers 1 and 2 were used to measure attractiveness at the country level. One is volume based that is the number of deals in one country as a % of the country's total deals, whilst two is value based that is the dollar value of deals which flowed into the respective country as a % of GDP. Thus the measure for country level M&A activity has two dimensions in this way the variable carries richer information and is less likely to be skewed by a single, large dollar value deal. As this measure is computed using per country total deals and per country GDP as the denominator, it is an intra-country measure. A country with a high value for the Group A variables would be plotted high on the country attractiveness or 'y' axis in figure 6 above as it would have a high intra-country M&A attractiveness value.

Group B in table 4 above represents regional M&A attractiveness. Again both a volume and a dollar value were used to measure regional M&A activity for the same reasons listed above for country attractiveness. If for example a country attracted one very large dollar value deal, but no other deals, it may be read as an M&A attractive economy when in fact it only attracted a single deal. This regional group of variables is computed using the number of total regional M&A deals, the number of total regional FDI deals and the dollar value of the total regional FDI inflow as the denominators. Thus it measures the country's M&A volume and value respective to the regional total. It is an intra- regional value. This means that the country which attracts the highest volume and dollar value

of M&A deals in its respective region would be plotted on the far right of the 'x' axis or regional attractiveness axis of figure 6 above .

Group C in table 4 above is a measure of the FDI attractiveness of a country in a region. This measure includes all deals (greenfield and M&A) which a country attracts with respect to the total number of deals concluded in its geographic region.

Example 1 (see table 5 below): In North Africa Egypt attracts 35 % of all the regional deals It is a high regional FDI performer compared with Libya which only attracts 1% of the regional FDI volume. At the country level of Libya however, 60% of the intra-country deals are M&A. The ratio of M&A to greenfield deals is 3:2 which makes it attractive to M&A on the country level. It is therefore placed high on the 'y' country attractiveness axis in figure 7.

Table 4: Example -North Africa, Libya and Egypt

Region-North Africa	Total Regional Deals GF + M&A	No M&A Deals	No Of Greenfield Deals	Regional FDI Attraction
Egypt	470	36	130	35 %
Libya	470	3	2	1 %

Figure 6: M&A attractiveness axes plotting the economies of Libya & Egypt

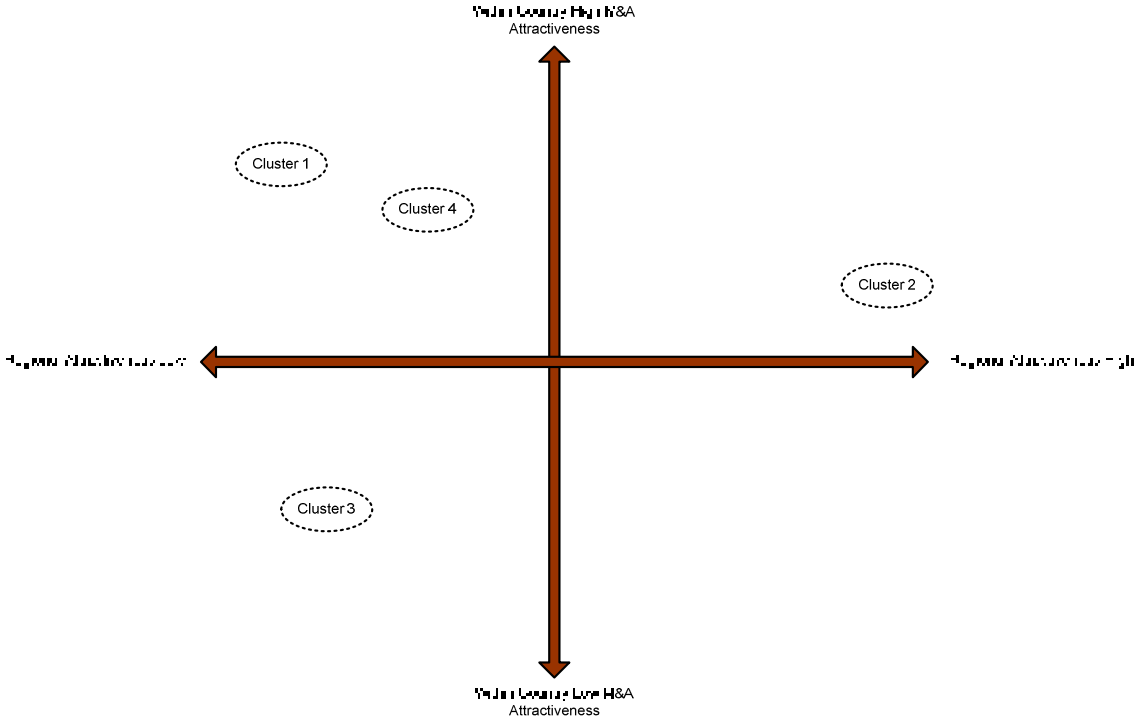


Table 6 below contains the descriptions, computations and sources of the outcome variable data.

No.	Outcome Variables	Variable	Sources Of Data
1	M&A deals per country as a% of the total number of per country deals	Total number of M&A deals per country (2004-2006) divided by the sum of all greenfield and M&A deals per country (2004-2006).	Computed from data sources as listed above
2	Average M&A sales per country (US $ millions) 2004-2006 as a % of FDI inward stock per country	Average M&A sales per country (US $ millions) (2004-2006) divided by the average FDI inward stock per country 2004-2006 expressed as a percentage.	M&A sales data: Mergers and acquisitions, by country and region (WIR 2007) Key Data from WIR Annex Tables available at http://www.unctad.org/Templates/Page.asp?intItemID=3277&lang=1 FDI inward stocks and flows: UNCTAD Handbook of Statistics 2008 available at http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1923
3	M&A sales as % of GDP average	Average M&A sales per country (US $ millions) (2004-2006) divided by the average GDP per country (2004-2006) expressed as a percentage.	M&A sales as above GDP data: UNCTAD Handbook of Statistics 2008 Development Indicators available at http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1928
4	M&A deals per country as a % of total regional M&A's	The sum of the total number of cross-border M&A sales by host region and economy (2004-2006) divided by the sum of all regional M&A deals (2004-2006)	Computed using M&A sales volume data from: Mergers and acquisitions, by country and region (WIR 2007) Key Data from WIR Annex Tables available at http://www.unctad.org/Templates/Page.asp?intItemID=3277&lang=1
5	M&A sales per country as a % of total regional FDI inflow	The sum of M&A $ sales per country from 2004-2006 divided by the sum of the FDI inflow of all the countries making up the respective region.	Sales source as in 1.1 FDI inflows sources as in 1.1

6	Number of M&A deals as a % of all regional deals	The sum of the total number of cross-border M&A sales by host region and economy (2004-2006) divided by the sum of all regional deals (i.e. the sum of M&A and greenfield deals 2004-2006).	Computed using M&A sales volume data from : Beyond 20/20 WDS-Report Folders, FDI Stat-Foreign Direct Investment folder – Mergers and Acquisitions report http://stats.unctad.org/FDI/ReportFolders/ReportFolders.aspx?CS_referer=&CS_ChosenLang=en http://www.unctad.org/Templates/Page.asp?intItemID=3199&lang=1 and Number of Greenfield FDI projects by investor /destination 2002-2006 available from World Investment Report 2007 Annex A/ Table A.I.1- P207-210 and http://www.unctadxii.org/en/Statistics/ Custom tables International finance/ Data
7	Number of deals per country as a % of total regional deals	The sum of the total number of greenfield and M&A deals (2004-2006) divided by the sum of all regional greenfield and M&A deals (2004-2006)	Computed from data sources as listed above

Table 5: Outcome Variables: sources of data

The paragraphs above along with tables 3 and 6 described the outcome variables. The table below summarises the predictor variable information.

4.4 THE CREATION OF INDEPENDENT VARIABLES

Independent variable data were collected for the three years preceding the deals as it was assumed that the pre –existing environmental conditions from 2002-2004 would affect the choice of entry of the multi-national enterprise from 2004-2006. Averages for the independent variables are therefore taken for the years 2002, 2003 and 2004. Averages are used in order to ensure that values are less compromised by once off events or any unusually high or low value in

any single year resulting in a significant deviation from the norm. The independent variable data collected was grouped into the factors outlined in the literature review, below is the list of theoretical factors and included are the variables which represent each:

- Market related: GDP, GDP per capita and HDI
- Institutional: voice and accountability, political stability, government effectiveness, rule of law, regulatory quality, control of corruption
- Infrastructural: telephone mainlines per 1000 inhabitants, cellular subscribers per 1000 inhabitants, construction as a % of GDP and transport, storage & communications as a % of GDP.
- Foreign economic activity: Number of foreign affiliates per sector
- Sectoral: agriculture, hunting, forestry and fishing as % of GDP, mining, manufacturing and utilities as a % of GDP, industry as a% of GDP and services as a % of GDP
- Resource Wealth: Resource rich or non-resource rich

The statistical analysis will allow each of these groups of variables (market related, institutional, infrastructural, foreign economic activity and sectoral make- up) to be run against the outcome variables in order to gauge which of them affect the M&A attractiveness at a country level and regionally.

4.4.1 TABLE OF INDEPENDENT VARIABLES- SOURCES AND DESCRIPTIONS

In order to test the hypotheses, data for the variables listed in the table below were assembled from the sources contained in the table. Each group of predictor variables represented below will be run against the outcome variables above to test which predictor groups best explain M&A activity.

Table 6: TABLE OF INDEPENDENT VARIABLES- SOURCES AND DESCRIPTIONS

Predictor/independent Variables		
Independent Variables	**Description Of The Variable**	**Data Sources**
1.1 GDP Annual Growth Rate	The average annual growth rate per country over period 2000-2005 in a percentage value.	Data sourced from UNCTAD Handbook of Statistics- All Reports-8. Development Indicators, -8.2 Annual Average Growth Rates of Real GDP http://stats.unctad.org/Handbook/ReportFolders/ReportFolders.aspx http://stats.unctad.org/Handbook/TableViewer/tableView.aspx
1.2 Average GDP 1.2.1 Average GDP per capita	The average annual GDP in US $ millions per country from 2002-2004 The average annual GDP per capita in, US $ per country, from 2002-2004.	Computed using data from UNCTAD Handbook of Statistics 2008 http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1923
1.3.1. HDI Average 2002-2004	Human Development Index is a composite index which measures life expectancy, adult literacy, primary, secondary and tertiary enrolment and purchasing power parity for 177 economies which are ranked. It is a social measure of the well-being of a nation and a more comprehensive measure of development than GDP per capita which is purely economically focussed. The average of the HDI value for 2002-2004 was calculated. Values extend between 0 and 1. Countries with values closer to 1 have high levels of social development and fare well on the measures listed above. Countries closer to 0 have lower levels of social development and fare badly when assessed against the criteria listed above.	Human Development Index is contained in the Human Development Report published by the United Nations. Data computed from the Human Development Reports HDI index HDR 2002-HDR 2006 , reports available at available at http://hdr.undp.org/en/reports/global/hdr2007-2008/

2. Indicators of the Institutional context within the host economy		
2.1 Average voice and accountability 2.2 Average political stability 2.3 Average government effectiveness 2.4 Average rule of law 2.5 Average regulatory quality 2.6 Average control of corruption	Values per indicator were measured at a range between -2.5 (poorest governance) and +2.5(best governance). A positive scale was preferred for calculation and statistical simplicity therefore a value of 2.5 was added to each country's score per indicator to create a scale out of 5 where the minimum score would be 0 and the maximum score 5. A 3 year average was then calculated for each indicator per country for the values for 2002-2004.	Computed from The World Bank, Governance indicators-All indicators for one country available from http://info.worldbank.org/governance/wgi/sc_country.asp http://info.worldbank.org/governance/wgi/mc_countries.asp http://info.worldbank.org/governance/wgi/sc_chart.asp Computed from The World Bank, Governance indicators-All indicators for one country available from http://info.worldbank.org/governance/wgi/sc_country.asp http://info.worldbank.org/governance/wgi/mc_countries.asp http://info.worldbank.org/governance/wgi/sc_chart.asp
2.7 Average Polcon 3	The average of Polcon 3 values from 2002-2004. Polcon values range between 0 and 1. A value of zero indicates the completely unconstrained power of the sovereign executive to institute a policy change. A value of 1 indicates the power of domestic structures and institutions to maintain the status quo and oppose policy changes initiated by the executive. A completely authoritarian government would score 0 whilst a completely democratic system would score 1 (Henisz W.J, 2000)	Computed from Political Constraints Index (Polcon 3) updated 2006 version, database created by Henisz, W. J.(2002) available at http://www-management.wharton.upenn.edu/henisz/POLCON/ContactInfo.html

3. Indicators of the level of development, infrastructure and service depth within the host economy.		
3.1 Telephone mainlines per 1000 people	Measures the density of telephone mainlines measured as the number of people per 1000 country inhabitants who possess telephone mainline access.	Data sourced from UNDP 2007/2008 Human Development Report , Indicator Tables 2007 available at http://hdrstats.undp.org/indicators/
3.2 Cellular subscribers per 1000 people	Measures the density of the population per 1000 inhabitants using mobile phone infrastructure and services.	
3.3 Average construction as a % of GDP 3.4 Average transport, storage and communication as a % of GDP		Computed from data in Gross domestic product by type of expenditure and by kind of economic activity published in UNCTAD Handbook of Statistics 2008 Development Indicators available at http://stats.unctad.org/handbook/ReportFolders/ReportFolders.aspx?IF_ActivepathName=P/VIII.%20Development%20indicators http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1930
4. Predictor/independent variables - number of foreign affiliates per country data sourced 4.1 Type of economy and economic depth		
Total number of foreign affiliates per country	Number of tertiary affiliates divided by the total number of foreign affiliates	Computed using data from : The World Investment Map http://www.investmentmap.org/invmap/en/TimeSeries_Industry_fdi.aspx?prg=1 All values at 2006

5. Indicators of the level of development, infrastructure, service depth and dominant industry within the host economy.		
5.1 Average agriculture, hunting, forestry and fishing as % of GDP 5.2 Average mining, manufacturing and utilities as a % of GDP 5.3 Average services as a % of GDP 5.4 Average industry as a% of GDP	Each value was a percentage contribution to GDP per sector for 2002-2004. The average was taken over this 3 year period.	Computed from data in Gross domestic product by type of expenditure and by kind of economic activity published in UNCTAD Handbook of Statistics 2008 Development Indicators available at http://stats.unctad.org/handbook/ReportFolders/ReportFolders.aspx?IF_ActivepathName=P/VIII.%20Development%20indicators http://stats.unctad.org/Handbook/TableViewer/tableView.aspx?ReportId=1930
6.1 Resource status Resource rich =1 Non-resource rich = 0	A country was coded 1 if the mining sector contributed a value of over 19% to the GDP of the economy. A country was coded 0 if the value which the mining sector contributed toward the GDP of the economy was less than 19%. The threshold value of 19% was set in order to include all developing economies listed in the World Investment Report 2007 as having the highest dependency on exports of minerals (Chapter 3, page 87). It also includes all developing economies listed as producers of aluminium, copper and bauxite which are point resources.	Computed from the percentage contribution of the mining sector to GDP, source as listed above. Sourced from the UNCTAD Digital Library, Handbook of Statistics 2008, Part 6 – Commodities, available at http://www.unctad.org/Templates/webflyer.asp?docid=10193&intItemID=1397&lang=1

4.4.2 Explanation of Institutional Variables

Several institutional measures are listed as independent variables in section 2.6. A brief description of these variables follows:

I. The ability of a populace to participate in the process of the selection of their leaders and government along with freedom of expression, freedom of association and a free media are measured by the variable voice and accountability.

II. The perceptions of the possibility of political destabilization and the unconstitutional or violent unseating of the ruling government are measured by the political stability variable. This measure includes the threat of domestic violence and terrorism.

III. The quality of public and civil and its independence from political interference along with the quality of policy formulation and implementation, and the credibility of the government's commitment to such policies are measured by the variable government effectiveness.

IV. The quality of the policies and regulations created and implemented by government to protect and promote private sector development are measured by the variable regulatory quality.

V. The effective functioning of societies rules, contract enforcement, the police and courts in addition to the likelihood of crime and violence are measured by the rule of law.

VI. The abuse of public power for private gain, “capture” of the state by elites and private interests and petty and grand forms of corruption are measured by the variable control of corruption.

4.5 Statistical Analysis

4.5.1 Origin of the Methodology

The statistical challenge in this study was to find a method which would allow for the separation of M&A attractive economies from M&A unattractive economies in order to determine the macroeconomic profile typical of an economy which attracts increased M&A activity.

As an initial exploratory step, scatterplots of the outcome variables against the predictors were graphed in order to graphically represent their relationship. Two of these scatterplots have been included below.

Figure 7: Scatterplot of M&A as a % of GDP plotted against average political stability

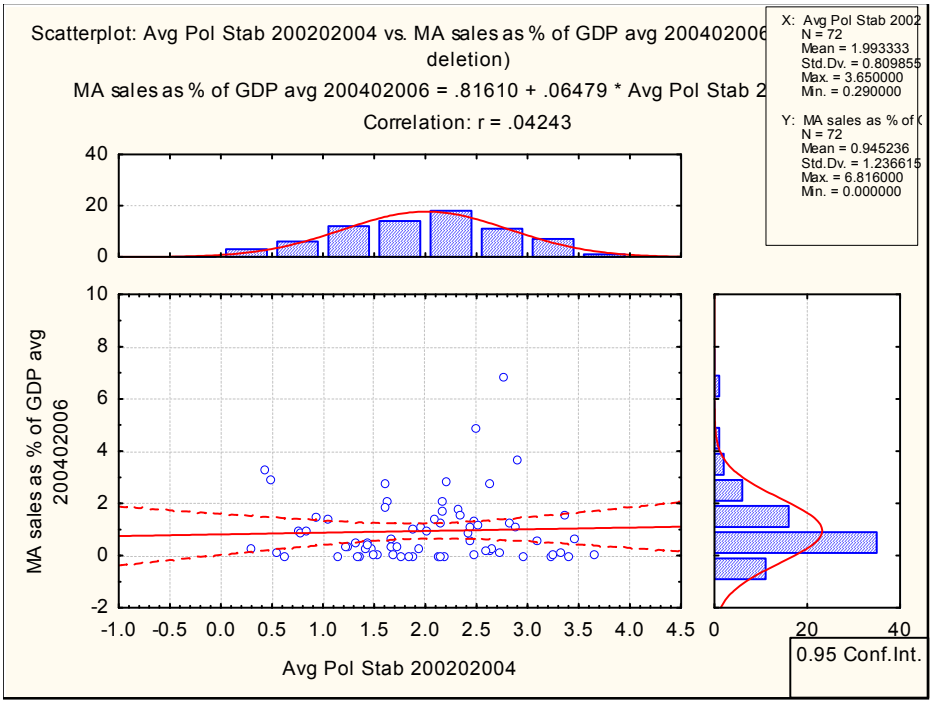
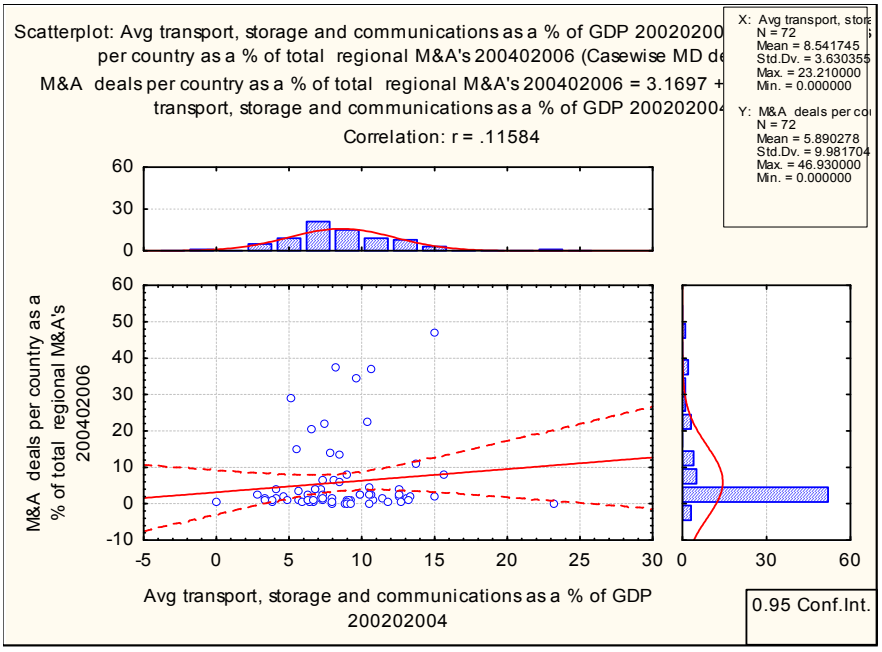


Figure 8: Scatterplot of M&A deals per country as a % of total regional M&A's plotted against transport, storage & communications



The scatters in figures 9 & 10 above clearly illustrate that no linear relationship is present. The graphs suggest a high variability in the data and the presence of clusters.

Siegel (2000) explains how data sets with unequal variability will exhibit unreliable inferences as greater importance will be assigned to the high variability parts of the data and less importance will be granted the low-variability part. Further the author describes how a regression analysis (which is based on a linear model) can be misleading if the population fails to hold a linear model (Siegel, 2000). Pajunen (2008) refers to the inadequacy of linear causation. This information in addition to the scatterplots discouraged the of use linear regression as a statistical technique.

The appearance of the scatterplots and the findings of the authors above, informed the decision to use a principal component analysis (Boudier-Bensebaa, 2008) and a cluster analysis. This allowed the data to be divided meaningfully in order to allow for t- tests and ANOVAs' to test the means of the groups, , in this case to test the predictor means of the M&A attractive economies against the predictor means of the unattractive M&A economies. Thus based on the outcome variables and depending on their levels of M&A attractiveness the countries were separated into groups (Pajunen, 2008).

The above paragraphs described the qualities of the data which necessitated the use of the PC and cluster analysis methods which were employed. Two statistical methods were utilised to test the same variables. The explanation for this is the failure of the PC analysis method which does not include all of the 117 economies in the final extreme groups analysis. The cluster analysis is a more refined method which clusters all the data. Further the results of the 2 methods will be overlapped in the results section (chapter 5) in the interests of robustness. The next section will lead with a description on the factor analysis method and proceeding from that will be an explanation of the cluster analysis method.

4.6 Principal Component (PC) analysis

In order to confirm the hypotheses and define the attraction of M&A's to a country/region a principal components analysis was performed. This technique allows for the identification of underlying factors in the outcome variables which account for the largest variance amongst the data set of 117 countries. This analysis is comprised of two stages the first of which is the principal component

analysis. The second stage of the analysis is the quartile spilt, extreme group variance test and ANOVA's on the extreme groups.

The table below shows the outcome variables used in the principal component analysis grouped at the country and regional level. This analysis is undertaken in order to create an M&A attractiveness value per country which allows the countries to be ranked.

Only five variables were used as the FDI attractiveness variable was not relevant to this analysis. The variable M&A sales per country as a % of FDI inward stock per country replaced the variable M&A deals per country as this variable did not load on either factor.

Table 7: factor analysis outcome variables

Level of attraction	Combined Country Level And Regional Level Variables In Order To Create Component Attractiveness Values At The Country Level And At The Regional Level
Country level	M&A sales per country as a % of FDI inward stock per country (US $millions) 2004 -2006
	MA sales as % of GDP average 2004-2006
Regional level	M&A deals per country as a % of total regional M&A's 2004-2006
	no of per country MA deals as a % of all regional deals 2004-2006
	M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006

In order to explain the division of the variables which allowed for the creation of an attractiveness score for both the country and regional level, the example described in Example 1and table 5 is repeated here. The region North Africa attracted 470 greenfield and M&A deals (total FDI) in 2004-2006 and 69 M&A deals in 2004-2006. The countries picked out of North Africa for this example are Libya and Egypt.

Region-North Africa	Total Regional Deals GF + M&A	Total No Of Regional M&A	No M&A Deals	No Of GF Deals	Regional M&A Attractive Country M&A / Regional M&A	M A Attractive Country Level
Egypt	470	69	36	130	36/69= **52%**	36/130= 27%
Libya	470	69	3	2	3/69= 4%	3/5= **60%**

Libya attracted 5 FDI deals in total, M&A to greenfield= ratio 3:2

Egypt attracted 166 FDI deals in total, M&A to130 greenfield= ratio 36:130

At a regional level Egypt is the most M&A attractive economy and most FDI attractive economy as it attracted the highest no of M&A deals and the highest number of total deals in North Africa.

Libya however is only attractive to M&A at the country level as 60% or 3 out of 5 of its intra-country deals were M&A. At a regional level it was the poorest performer within North Africa, attracting the least number of deals.

If the analysis had not made the distinction between attractiveness at the country level and regional level the interesting case of Libya where M&A deals predominate would have been lost as its total FDI is so small. By separating the outcome variables a richer result is obtained, the analysis is able to pick out regional leaders and interesting countries which may not be FDI attractive but nevertheless are M&A attractive may be studied.

4.6.1 The Outcome Variable Denominators

The country level outcome variables were expressed as percentages of per country GDP, per country FDI inward stock and total number of per country FDI deals. Therefore outcome values expressed are all calculated with respect to intra-country measures.

The regional level outcome variable denominators included the total FDI flows into a geographic region, the total number of M&A deals in a region and the total number of FDI deals in a region (e.g. Central America, North Africa etc) and are expressed as percentages. Therefore all outcome values are calculated with respect to regional totals.

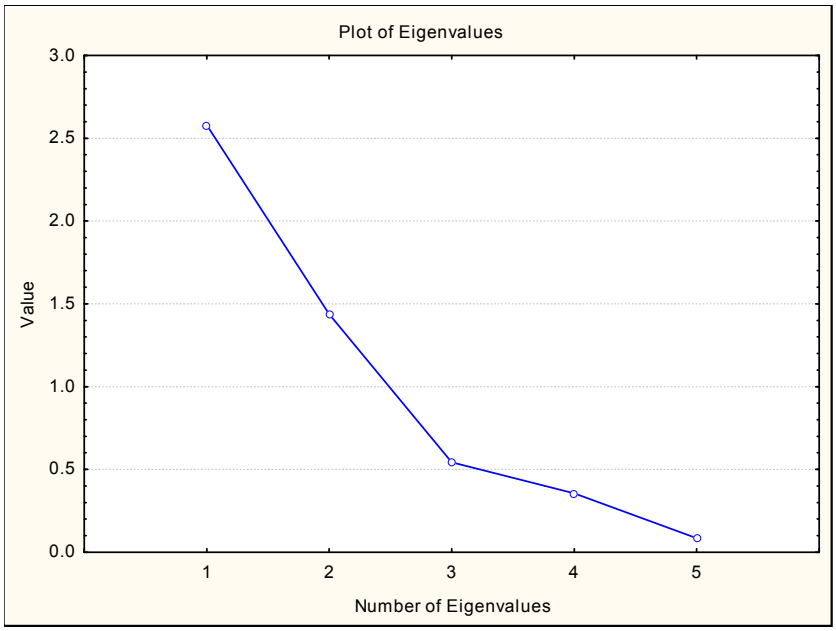
4.6.2 Understanding Principal Component Analysis

The principal component analysis (PCA) is a data reduction technique that distils the essence of several variables into a smaller number of components which explain the variance in the data. The regional and country variables listed above showed correlations but rather than discard them they are rolled into a two factor composite M&A attractiveness value one factor for regional attractiveness and one factor for country attractiveness. The principle of parsimony (simplicity and reduction) is followed by creating an attractiveness value out of the variables, in this way more meaningful and richer measure is created and the dimensions of the data set become more manageable (Siegel, 2000 p586; Berenson & Levine, 1986).

The Eigen analysis is the name of the mathematical technique used in PCA. Eigen values show the percentage of variance explained by each component, the largest Eigen value is the first principal component, the second largest Eigen value is the second principal component, and so on. (http://www.fon.hum.uva.nl/praat/manual/Principal_component_analysis.html).

The Eigen values for our study were determined; these values were then plotted on a scree plot to illustrate the importance of each of the components. Once the points on the graph or scree plot level out to the right and display an "elbow, the Eigen values there are usually close enough to zero that they can be ignored.

Figure 9: Scree plot of Eigen values in PC analysis



A factor analysis was performed on the all the outcome variables in table 6 above. The PC analysis will create factors by reducing the data into its underlying dimensions. These factors will allow an attractiveness score to be generated for each country.

4.6.3 EXTREME GROUP ANALYSIS AND QUARTILE SPLIT

As mentioned the principal component analysis generates an attractiveness score for each country. Scatter plots of the PC attractiveness score against the independent variables (e.g. rule of law and GDP) were drawn as an exploratory step. This revealed a violation of the assumption of equal variance. One of the assumptions of ANOVA is equal variance of the groups (Carlson & Thorne, 1997; Steyn, Smit, Du Toit & Strasheim 2007). Therefore prior to running the ANOVA's and t-tests it was necessary to rank the countries by their respective attractiveness scores and then perform quartile split for both the country level and the regional level data.

In order to avoid a violation of the assumption of equal variance the study focussed on the extreme groups only, these being the top and bottom quartiles of the data split. In this way it is ensured that the variance within the top and bottom quartiles is lower than the variance between the top and bottom quartiles. Quartile 4 represents the countries designated 'very M&A- attractive' and quartile 1 represents the countries labelled 'very M&A- unattractive' among developing countries. Countries which fell between the top and bottom quartile were not analysed. The quartile split was performed based on the attractiveness value and not by division of number.

Analysis of variance (ANOVA) is a method which allows the researcher to test for statistical differences in the means of several groups (Berenson & Levine, 1986; Keller & Warrack, 2000). Therefore in order to test for the statistically significant predictor variables, one way ANOVA's were run on the independent variable mean scores for the top and bottom quartile.

The purpose of the ANOVA's was to test whether the variance in the extreme groups was significant, this informed the decision to use either the pooled or independent t-tests of the quartile means.

4.6.4 POOLED VERSUS INDEPENDENT T-TESTS

In order to determine which of the means of the independent variables was significantly different in the attractive quartile group versus the unattractive quartile group, pooled and independent t-tests were run on the extreme quartile groups of the economies for the regional level and for the country level.

First the series of one way ANOVA's described in the previous section indicated whether the variance in the extreme groups was significant. If the variance in the extreme groups was significant, the independent t-test for the difference in means was used. However if the variance between the extreme groups was not significant then the pooled t-test result for the difference in means was read. Therefore if the difference in the means for the very attractive group was significantly different (< 0.05) to the means for the very unattractive group then the results for the separate t-tests were analysed.

4.6.5 UNDERSTANDING THE IMPLICATIONS OF A SIGNIFICANT T-TEST RESULT

The t-tests indicate which of the sample differences between the top and bottom quartiles were significant. A significant result will occur if the variance between the groups was greater than the variance within the groups and will indicate that the null hypothesis which states that no difference in the means exist, will be rejected (Carlson, & Thorne, 1997). The significant F test only informs that a difference in the means exists but not which sample averages are different from others, this is accomplished by running separate t-tests for the sample (Siegel, 2000 p626).

Thus if the difference in means is significant for the pooled or independent t-test (whichever is relevant) then it may be concluded that the M&A attractive economy differs from the M&A unattractive economy for that particular variable (Siegel, 2000 p626). An example: If in the attractive Q4 quartile the mean value for the variable rule law is significantly higher than the mean value for rule of law in the unattractive Q1 quartile then rule of law is a predictor for M&A attractiveness.

If no significant difference in the sample means of the t-test was apparent then that independent variable was ignored as a factor contributing to the attractiveness or unattractiveness of a country to M&A deals. The mean values of the significant independents were also tabulated in order to assess the actual independent variable means which were typical of the most and least M& A attractive economies.

As mentioned earlier the extreme groups' analysis does not test any of the countries which fall between the top and bottom quartile. Therefore in the interests of robustness the cluster analysis was performed as it allows for a finer investigation of the difference between M&A attractiveness and M&A unattractiveness. This also offers the opportunity to overlap and check the results in the analysis.

4.7 Cluster Analysis

The sections above described the collection and assembly of relevant data for use in this study and the PC analysis methodology. The last section of the methodology which follows below describes the statistical methods used to process the data by means of a cluster analysis. First an introduction to clustering will be offered. The second stage of the method includes ANOVA's to test for mean differences and finally post-hoc tests to identify the differences between the clusters.

4.7.1 Introduction to cluster theory

A cluster analysis is a statistical tool which allows for the discovery of meaningful structures within data without explaining why they exist, i.e. is an exploratory approach. This allows data to be sorted into groups or categories where the members of each group have a high degree of association with each other and a minimal association if they belong to another group. Thus this technique places the economies under study into clusters based on well defined similarity rules and finds the most significant groups of objects. (http://www.statsoft.com/textbook/stcluan.html) Clustering is the term used to describe the presence of separate and distinct groups in the data however if

clustering is not recognized by failing to visually inspect the data (scatterplots or another graphing technique), the correlation coefficient may suggest that no relationship exists even though within each cluster a clear relationship may indeed exist (Siegel, 2000). Under those conditions, Siegel (2000) suggests separating the data into two or more data sets one for each cluster.

4.7.2 THE CLUSTER METHOD

As an initial exploratory step and in order to determine which of the outcome variables listed in Table1 were most successful in dividing the economies a cluster analysis was performed.

The data for some variables such as GDP had a very different scale to the some of the smaller scale values e.g. Polcon 3 index. Thus the data was standardized to allow each variable equal opportunity to display significance in the cluster analysis and prevent any one variable dominating (Boudier-Bensebaa, 2008).

The cluster analysis was run on the outcome variables in table 8 below. These variables were introduced earlier in the chapter.

TABLE 8: OUTCOME VARIABLES FOR CLUSTER ANALYSIS

Column1	Outcome Variables For Cluster Analysis
country level	M&A deals per country as a % of total number of country deals
	MA sales as % of GDP average 2004-2006
regional level	M&A deals per country as a % of total regional M&A's 2004-2006
	no of per country MA deals as a % of all regional deals 2004-2006
	M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006
FDI attractiveness	no of deals per country as % of total regional deals 2004-2006

4.7.3 CLUSTER ANOVAS

The data above divided into three clusters first. An ANOVA run on the clustering variables showed one of the variables as not being significant therefore the three cluster solution was discarded. A four cluster solution was then accepted as all the clustering variables proved to be significant. The four clusters were then run against the predictor variables to test for significant differences amongst the clusters. Thus ANOVA's were run in order to determine which of the independent variable means differed significantly amongst the four clusters.

4.7.4 UNDERSTANDING THE SIGNIFICANT CLUSTER ANALYSIS RESULTS

As set out in the table 8 above, there are independent variables representing host country market, institutional, infrastructural, economic and sectoral and conditions. Testing for the significance of the mean differences between the clusters would enable the analysis and determination of which of the independent variables listed above were most significant in separating the Clusters 1 to 4.

The ANOVAS however only inform that a difference in the clusters exists but not specifically which cluster is different from the other. Post-hoc tests were therefore performed on the clusters for the significantly different predictor variables in order to table which specific clusters differed.

As an example, if the predictors for institutional variable means were significant in the ANOVA the post hoc would reveal that this difference existed most significantly for cluster 2 and cluster 4. This allows for a more rigorous examination of the data.

4.8 METHODOLOGY SUMMARY

The purpose of this chapter was to detail the process through which the research hypotheses in chapter 3 would be tested. Guidance from the literature in addition to the results of the scatter plots informed the statistical direction of the study. The origins of the analysed data and computations involved in the creation of the dependent and independent variables were discussed. Finally the statistical technique and method of the principal component analysis and cluster analysis was described along with an explanation of how the significant outcomes and results could be interpreted for the purpose of understanding the nature of M&A attractive developing economies. Chapter 5 which follows will offer the results of the analyses described above.

5 RESULTS

5.1 INTRODUCTION TO RESULTS

In the previous chapter a description of the methodology approach to test the hypotheses outlined in chapter 3 was offered. This chapter contains the results of the statistical analyses described in Chapter 4.

The exploratory phase of the methodology with random scatter plots of outcome variables against independent variables were graphed and made available in chapter 4 order to visually examine the pattern of these relationships. The appearance of the scatters directed the methodology used in the statistical analysis.

In the first section of this chapter the results of the principal components analysis, attractiveness scores and t-test results of the extreme groups' analysis can be found.

The second section of this chapter contains the list of the clustering variables, the cluster analysis, ANOVA's of the independent means, post hoc test results and a tabulation of the significant mean differences of the independent variables for the clusters. In chapter 6 the findings made available in this chapter will be discussed with reference to the hypotheses and literature.

5.2 FACTOR ANALYSIS RESULTS

The preceding chapter described the utilisation of two separate statistical techniques in order to create a macroeconomic profile of developing countries

which are more successful in attracting merger and acquisition activity. The first technique was the principal component analysis and the second, the cluster analysis. As mentioned in chapter 4, the PC analysis and extreme groups variance test involves independent tests of means on the extreme quartiles only. The effect is the omission of all countries between the 1st and 4th quartiles. For this reason the cluster analysis is also performed as it tests all the data and allows for a more rigorous analysis.

The results which follow immediately are drawn from the PC analysis and extreme group's analysis.

The first set of results in the next section relate to the principal component analysis performed on six outcome variables. Only five of the variables appear in the results as the variable 'M&A deals per country as a percentage of the total number of per country deals' did not load on either factor and was therefore removed from the analysis. It was replaced by the variable M&A sales per country as a % of FDI inward stock per country (US $millions). The variable number of deals as a % of total regional deals which appears as an outcome variable in chapter 4 was not included in the PC analysis as it refers to FDI attractiveness. This variable was computed for use in the cluster analysis for comparison purposes.

5.3 PC Analysis and Eigen Values:

The scree plot with the Eigen values is available in chapter 4 but is repeated here to display the elbow and that points after the elbow can be disregarded. The results of the PC analysis can be seen in table 9 below.

FIGURE 10: SCREE PLOT OF EIGEN VALUES- A 2 FACTOR SOLUTION

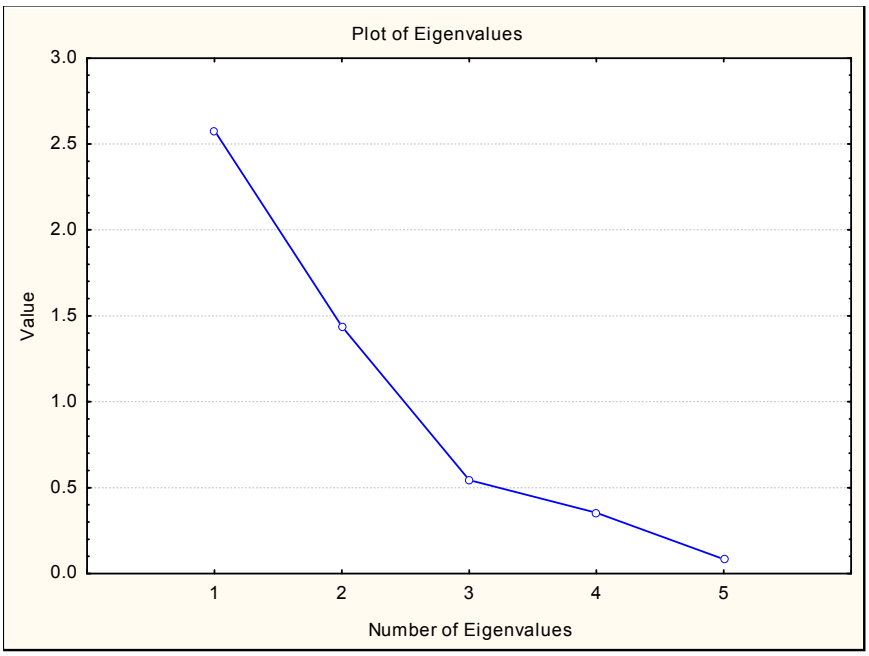


TABLE 8 : RESULTS OF PC ANALYSIS

Level Of Attraction	Combined Country Level And Regional Level Variables In Order To Create Component Attractiveness Values At The Country Level And At The Regional Level.	Regional Attractiveness Factor 1	Intra-Country Attractiveness Factor 2	%Variance Explained By Components
Country level	M&A sales per country as a % of FDI inward stock per country (US $millions) 2004 - 2006	-0.015066	0.857492	
	MA sales as % of GDP average 2004-2006	0.085347	0.847898	
Regional level	M&A deals per country as a % of total regional M&A's 2004-2006	0.936657	0.036875	
	no of per country MA deals as a % of all regional deals 2004-2006	0.962411	0.013174	
	M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006	0.864350	0.051764	
	Expl.Var	2.558174	1.458437	80.3 %

The PC analysis in table 9 shows the reduction of the five variables into a two factor solution which explains 80, 3% of the variance of the underlying variables. The Eigen value is the variance explained by each factor of the underlying variables.

The PC analysis confirmed the premise held of their being both a regional and a country effect in the data by loading all the regional outcome variables on factor 1 and the country outcome variables on factor 2. Factor 1 is a regional M&A attractiveness factor and factor 2 is an intra- country M&A attractiveness factor.

The 117 countries on the data table are run against these attractiveness values in order to obtain a regional and a country level attractiveness value for each. This is accomplished by multiplying each country's outcome variable score by the factors in the table.

The regional PC factor value allows for the generation of a regional attractiveness value for each country whilst the intra-country PC value allows for the generation of an intra-country attractiveness value for each country. Two lists are thus created, a list of the 117 developing countries with regional attractiveness values and another containing the same 117 developing countries with intra-country attractiveness values.

6.4 PER COUNTRY ATTRACTIVENESS VALUES AND RANKING:

As described above by reducing the number of variables to the two underlying dimensions the PC analysis has enabled the creation of two composite M& A attractiveness values for each country, one being a regional M&A attractiveness value and the other an intra-country M&A attractiveness value. This list can be found as Appendix 1.

In order to make sense of the country and regional attractiveness values each list was ranked and ordered so that the countries appear in order of attractiveness. The top quartile or quartile 1 (Q1) is the least attractive to M&A activity, the bottom quartile or quartile 4 (Q4) is the most attractive. Therefore the higher the ranking the more M&A attractive the country is.

5.4.1 Ranked Attractiveness Tables For Regional And Country Levels

Table 10 below contains the ranked regional level most M&A attractive economies with India, RSA and Brazil being ranked the most attractive.

Table 12 represents the M&A activity rankings at the country level. The most attractive have more M&A deals than greenfield deals.

Table 13 contains the most unattractive country level economies for M&A activity, UAE is the most unattractive followed by Tanzania and Saudi Arabia.

Table 14 lists the most M&A attractive countries at the country level. Attracting the most intra-country deals is Mauritius; following this are Burkina Faso and Bulgaria. Attached to table 14 is a list of countries for whom M&A activity is not relevant as their data was incomplete or no M&A activity took place between 2004-2006.

TABLE 9: REGIONAL LEVEL ATTRACTIVENESS- MOST ATTRACTIVE RANKING

Regional Level M&A Attractiveness Quartile 4 -Most Attractive	Rank Regional M&A Attractiveness	Attractiveness Value Above Average
India	87	4.47456
South Africa	86	3.59947
Brazil	85	3.11423
Russian Federation	84	2.70295
Turkey	83	2.18032
Mexico	82	2.10503
Indonesia	81	1.96844
Malaysia	80	1.83932
Thailand	79	1.50218
Romania	78	1.00295
Argentina	77	0.95504
U A E	76	0.71507
Egypt	75	0.58127
Bulgaria	74	0.49219
Ukraine	73	0.48130
Chile	72	0.41931
Colombia	71	0.40345
Peru	70	0.13893
Pakistan	69	0.12567
Philippines	68	0.10631

Table 11 below has the most M&A unattractive economies at the regional level, ranked here are Burkina Faso, Yemen and Albania as the most unattractive economies regionally

TABLE 10: REGIONAL LEVEL ATTRACTIVENESS- LEAST ATTRACTIVE

Regional Level M&A Attractiveness Quartile 1- Least Attractive	Rank Regional M&A Attractiveness	Attractiveness Value Below Average	Regional Level M&A Attractiveness Quartile 1- Least Attractive2	Rank Regional M&A Attractiveness 2	Attractiveness Value Below Average 2
Burkina Faso	1	-0.81391	Costa Rica	35	-0.46264
Yemen	2	-0.62301	El Salvador	36	-0.46137
Albania	3	-0.59695	Rwanda	37	-0.46100
Tajikistan	4	-0.58134	Madagascar	38	-0.45911
Belize	5	-0.56980	Syrian Arab Republic	39	-0.45391
Turkmenistan	6	-0.56586	Bangladesh	40	-0.45035
Lao PDR	7	-0.55855	Uzbekistan	41	-0.44220
Gabon	8	-0.54206	Georgia	42	-0.42553
Sri Lanka	9	-0.53908	Iraq	43	-0.42284
Botswana	10	-0.53824	Viet Nam	44	-0.41269
Guinea	11	-0.53655	Bosnia and Herzegovina	45	-0.41006
Kuwait	12	-0.53403	Tanzania	46	-0.40278
Côte d' Ivoire	13	-0.53331	Kenya	47	-0.37712
Kyrgyzstan	14	-0.52797	Mozambique	48	-0.37626
Iran	15	-0.52388	Namibia	49	-0.36841
Swaziland	16	-0.51088	Oman	50	-0.35828
Sierra Leone	17	-0.51028	Bahrain	51	-0.35541
Mali	18	-0.50993	Saudi Arabia	52	-0.35395
Libyan Arab Jamahiriya	19	-0.50966	Zimbabwe	53	-0.35140
Mauritania	20	-0.50856	Zambia	54	-0.34751
Armenia	21	-0.50707	Ecuador	55	-0.31359
Algeria	22	-0.50669	Uganda	56	-0.31281
Bolivia	23	-0.50637	Panama	57	-0.31113
Cambodia	24	-0.50389	Sudan	58	-0.30115
Moldova, Republic of	25	-0.50075	Venezuela	59	-0.25848
Belarus	26	-0.49762	Kazakhstan	60	-0.22807
Macedonia, TFYR	27	-0.49691	Mauritius	61	-0.21374
Lebanon	28	-0.49085	Ghana	62	-0.21133
Nicaragua	29	-0.48372	Tunisia	63	-0.17359
Congo, Democratic Republic of	30	-0.48345	Nigeria	64	-0.13017
Angola	31	-0.48291	Jordan	65	-0.12656
Congo	32	-0.48068	Croatia	66	-0.09001
Uruguay	33	-0.46757	Morocco	67	-0.07754

Guatemala	34	-0.46471			

TABLE 11: COUNTRY LEVEL M&A ATTRACTIVENESS- MOST ATTRACTIVE COUNTRIES

Country Level M&A Attractiveness Quartile 4 -Most Attractive	Rank	Attractiveness Value Above Average
Mauritius	87	5.44211
Burkina Faso	86	4.67217
Bulgaria	85	2.45823
Panama	84	2.04796
Ghana	83	1.89195
Kyrgyzstan	82	1.06603
Armenia	81	0.90303
Croatia	80	0.87151
Ukraine	79	0.82457
Colombia	78	0.81623
Yemen	77	0.78430
Romania	76	0.77845
Turkey	75	0.71227
Sudan	74	0.65421
Tunisia	73	0.42570
Uzbekistan	72	0.36499
Mauritania	71	0.32190
Peru	70	0.26612
Ecuador	69	0.24742
Indonesia	68	0.23859
Lao PDR	67	0.20139
South Africa	66	0.10116
Macedonia	65	0.04362
Pakistan	64	0.04359
Belize	63	0.03089
Kuwait	62	0.01879

Table 13: M&A ACTIVITY NOT RELEVANT- no M&A activity

M&A Activity Not Relevant
Azerbaijan
Brunei Darussalam
Cameroon
Equatorial Guinea
Eritrea
Ethiopia
Guyana
Honduras
Myanmar
Nepal
Paraguay
Qatar
Senegal
Suriname

TABLE 14: COUNTRY LEVEL ATTRACTIVENESS- LEAST ATTRACTIVE

Country level M&A attractive Q1- least attractive	Rank	Attractiveness value below average	Country level M&A attractive Q1- least attractive2	Rank2	Attractiveness value below average2
UA E	1	-0.69652	Rwanda	31	-0.46953
Tanzania	2	-0.68043	Russian Fed	32	-0.46579
Saudi Arabia	3	-0.68009	Guatemala	33	-0.46387
Angola	4	-0.67564	Philippines	34	-0.45862
Libya	5	-0.67419	Gabon	35	-0.43042
Belarus	6	-0.66567	Brazil	36	-0.40607
Sri Lanka	7	-0.66410	Bangladesh	37	-0.39852
Algeria	8	-0.66351	Uruguay	38	-0.38454
Guinea	9	-0.66076	Costa Rica	39	-0.38399
Iraq	10	-0.66060	Botswana	40	-0.33595
Iran	11	-0.64409	India	41	-0.31087
Sierra Leone	12	-0.63906	Moldova	42	-0.30362
Mali	13	-0.62707	Bolivia	43	-0.28460
Zimbabwe	14	-0.62270	Egypt	44	-0.28442
Côte d' Ivoire	15	-0.62038	Nigeria	45	-0.28428
Viet Nam	16	-0.61471	Argentina	46	-0.25341
Mozambique	17	-0.61461	Thailand	47	-0.23769
Bahrain	18	-0.59631	Namibia	48	-0.22207

Country level M&A attractive Q1- least attractive	Rank	Attractiveness value below average	Country level M&A attractive Q1- least attractive2	Rank2	Attractiveness value below average2
Madagascar	19	-0.58028	Albania	49	-0.22091
Oman	20	-0.57740	Bosnia & Herzeg	50	-0.22082
Tajikistan	21	-0.57596	Malaysia	51	-0.21129
Cambodia	22	-0.56811	Kazakhstan	52	-0.18592
Congo	23	-0.56112	Kenya	53	-0.18396
Turkmenistan	24	-0.55555	Georgia	54	-0.16633
Mexico	25	-0.55058	Morocco	55	-0.14784
Zambia	26	-0.54445	Chile	56	-0.09800
Lebanon	27	-0.53035	Uganda	57	-0.06308
Venezuela	28	-0.51967	Nicaragua	58	-0.03914
Congo	29	-0.50304	Jordan	59	-0.03806
Swaziland	30	-0.48027	Syria	60	-0.01932
			El Salvador	61	-0.00700

Figure 11: REGIONAL LEVEL ATTRACTIVENESS COUNTRIES PLOTTED ON 'Y' AXIS; COUNTRY LEVEL M&A ATTRACTIVE COUNTRIES PLOTTED ON 'X' AXIS.

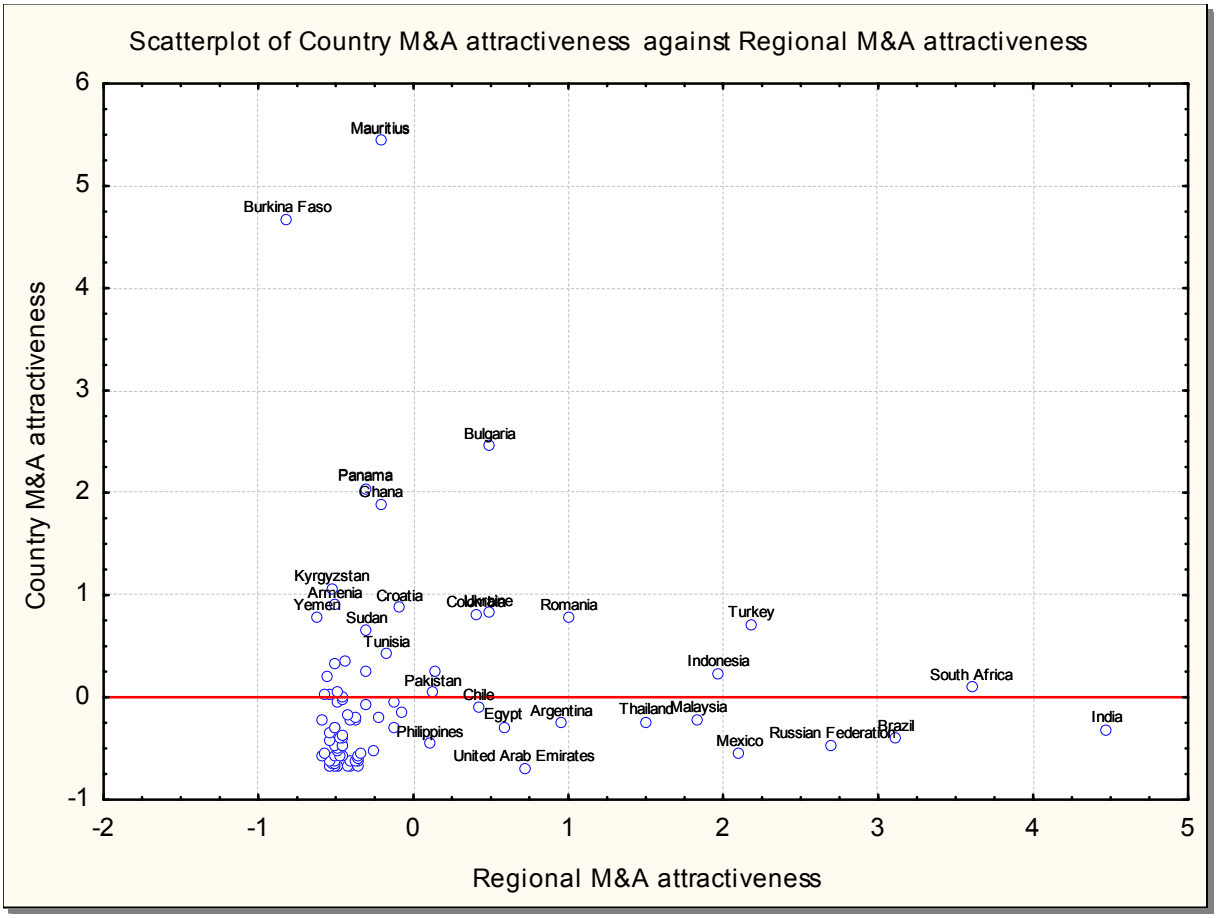
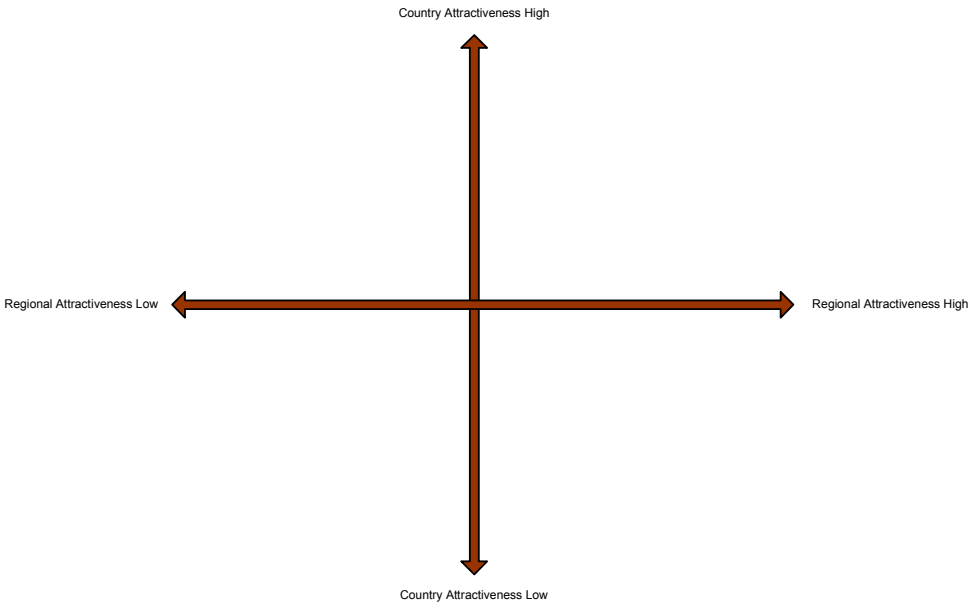


Figure 13 above is a scatter plot of the country level economies list on the 'y' axis and the regional level economies list on the 'x' axis. The most attractive country level economies (attract more M&A's than greenfield internally) can be seen on the upper left section. The most attractive M&A economies on the regional list can be seen on the lower right section of the plotted area. These economies attract the most M&A deals in their geographic regions. The line drawn through the origin recreates the M&A attractiveness axes which can be superimposed over this plot (see attractiveness axes below).



5.4.2 EXTREME GROUPS ANALYSIS:

A quartile split was performed on the data set containing the ranked attractiveness scores. This was based on the value of the scores and not by the number of countries. ANOVA's were then performed on the extreme groups in order to test for significant differences in the means of the independent variables for the extreme groups. This allowed for the determination of which

independent variable mean values were significantly different for the M&A attractive economies (quartile 4) versus the M&A unattractive economies (quartile 1). Where the p value for the ANOVA was significant the independent t-test result was used as this indicated a significant difference in the variances of the quartiles. The pooled t-test result was used if the p value for the ANOVA was not significant (significance was measured at the 5% level).

5.4.3 Significant Predictor Variables and Means For The Extreme Groups

The results of the extreme group attractive/unattractive t-tests for region and then for country are tabulated below (for original results see appendix 2 for regional level and appendix 3 for country level). Bar graphs have been created for the predictor variables which exhibited significant mean differences between quartile 1 and quartile 4.

5.4.4 M&A regional level bar graphs

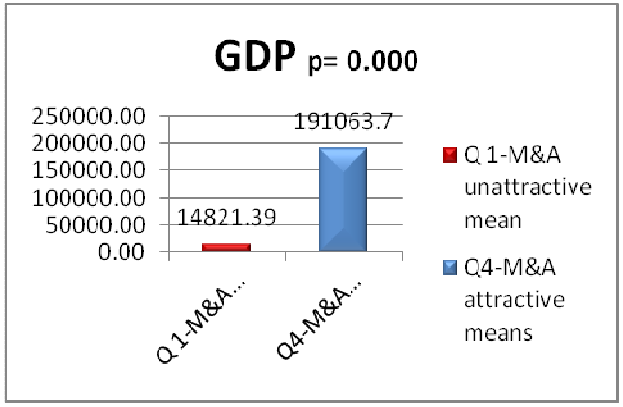
Mean Comparison Quartile 1 (Unattractive, regional) And Quartile 4 (Attractive, regional)

At the regional level of M&A attractiveness the following variables were found to be significantly different for the regional level attractive (Q4) quartile countries versus the regional level unattractive (Q1) quartile countries: GDP, HDI, voice and accountability, government effectiveness, regulatory quality, Polcon 3, cellular penetration, transport, storage and communications, number of foreign affiliates, agriculture, size of services sector, size of industrial sector and resource wealth.

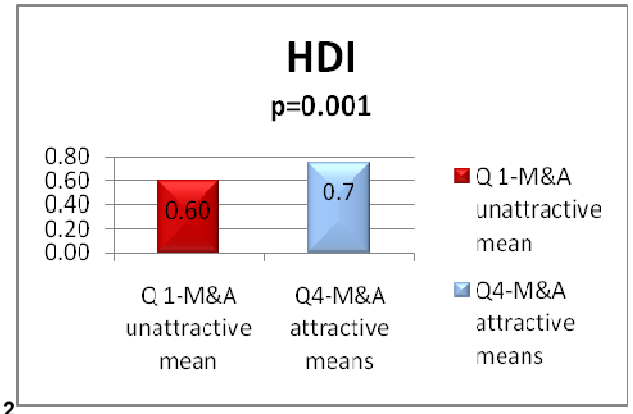
Each bar graph contains the mean value of the predictor for the countries in each quartile along with the p-value which is less than 0.05 for all the variables listed below.

i. REGIONAL LEVEL: MARKET RELATED VARIABLES

BAR GRAPH 1



BAR GRAPH 2

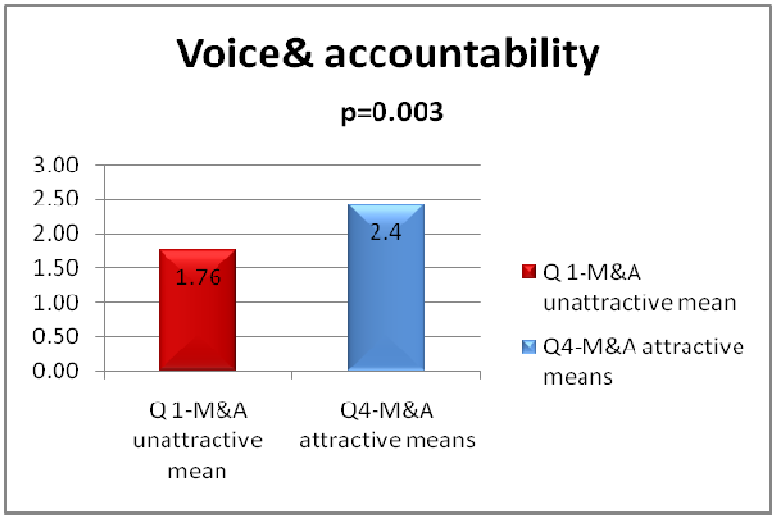


GDP for the Q4 regionally attractive group was significantly higher than the for the Q1 regionally unattractive group of countries.

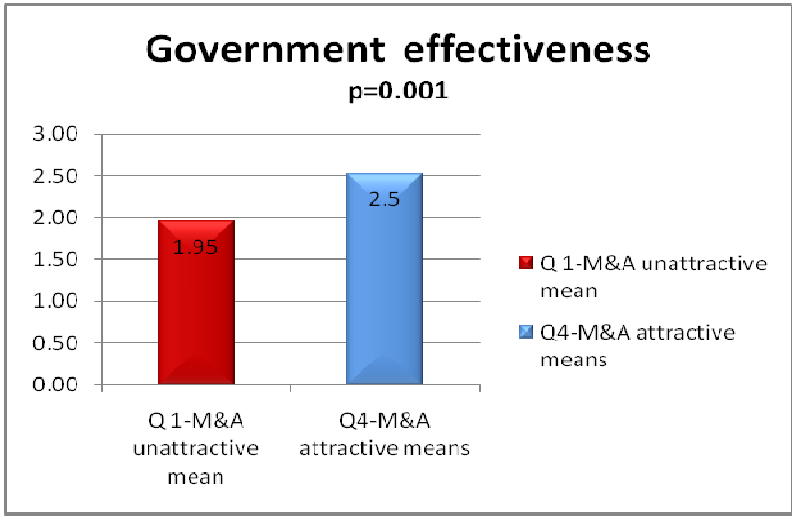
HDI for the Q4 regionally attractive group was significantly higher than the for the Q1 regionally unattractive group of countries

ii. REGIONAL LEVEL: INSTITUTIONAL VARIABLES

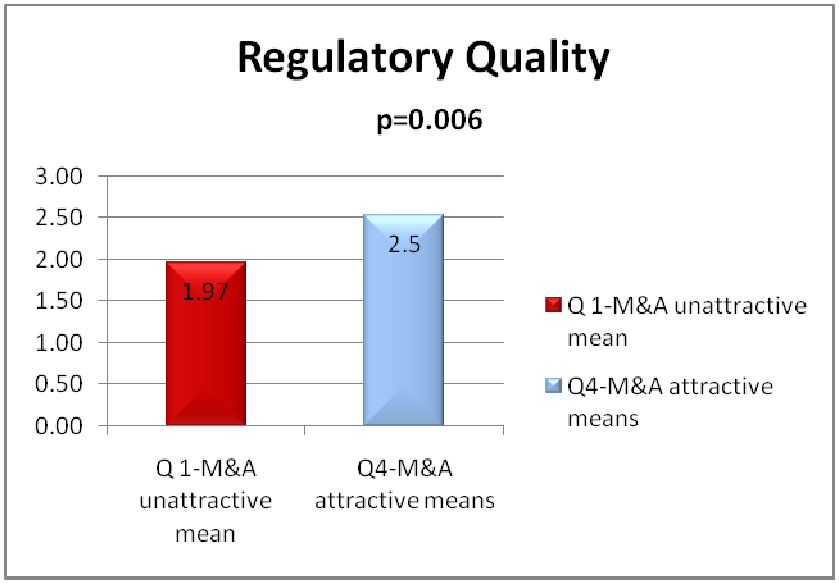
BAR GRAPH 3

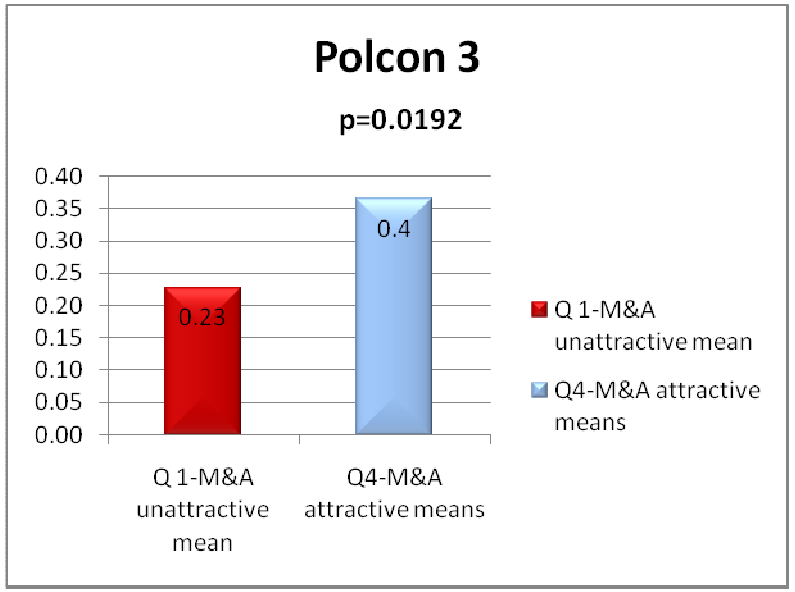


BAR GRAPH 4



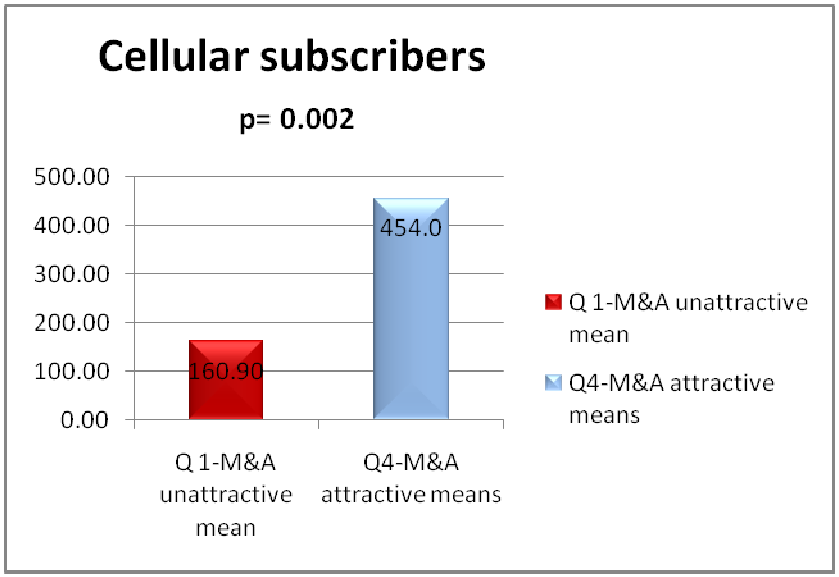
Voice & accountability for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries. Government effectiveness for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries.

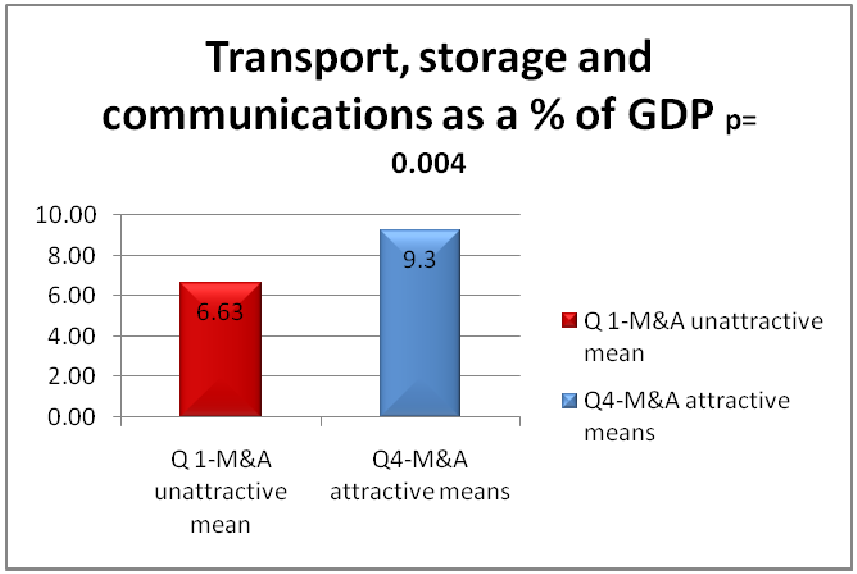




Regulatory quality for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries. Polcon 3 for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries.

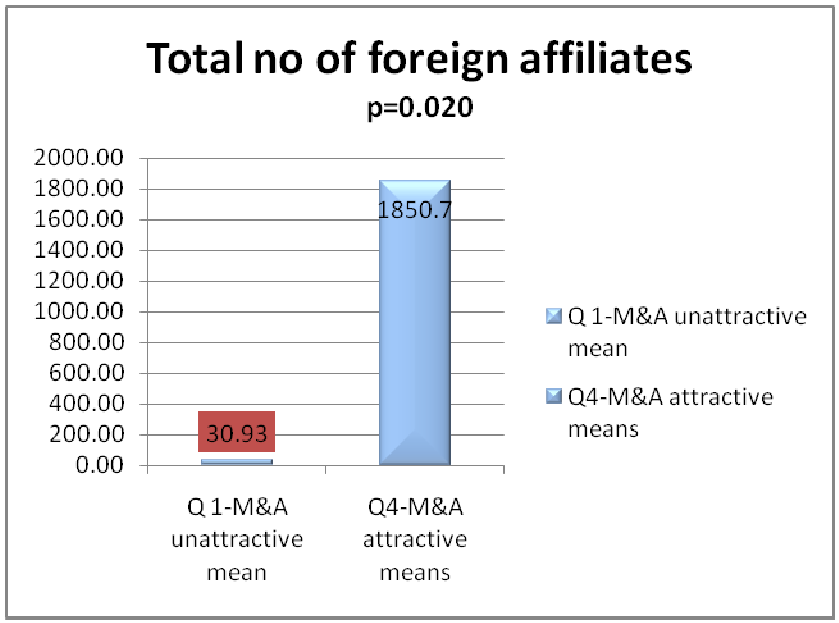
iii. REGIONAL LEVEL: INFRASTRUCTURAL VARIABLES





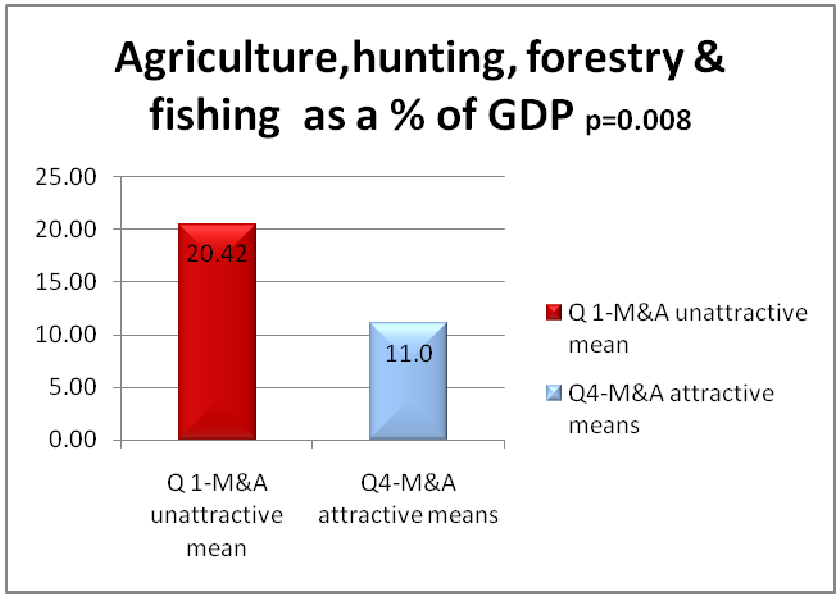
Number of cellular subscribers for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries. Transport, storage and communications for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries.

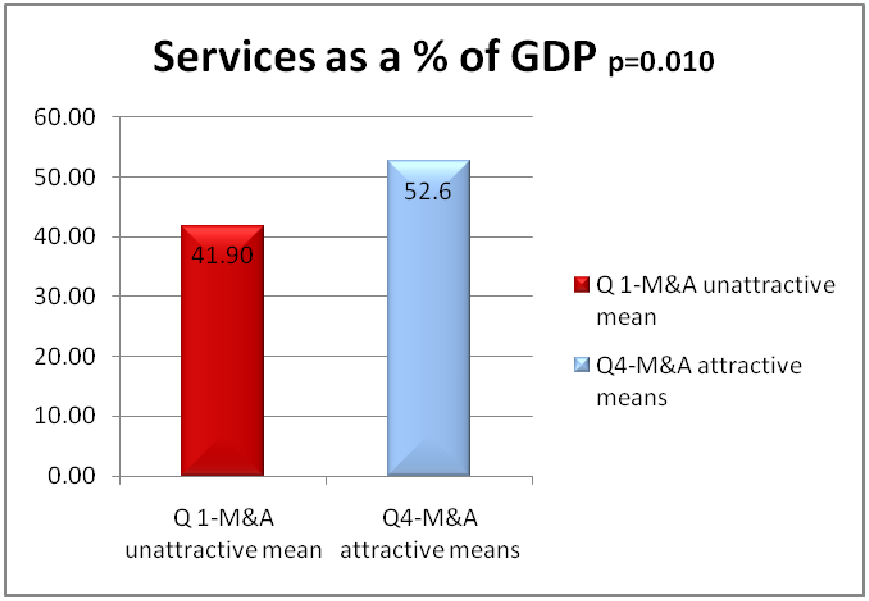
iv. REGIONAL LEVEL: FOREIGN AFFILIATES



Total number of foreign affiliates for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries.

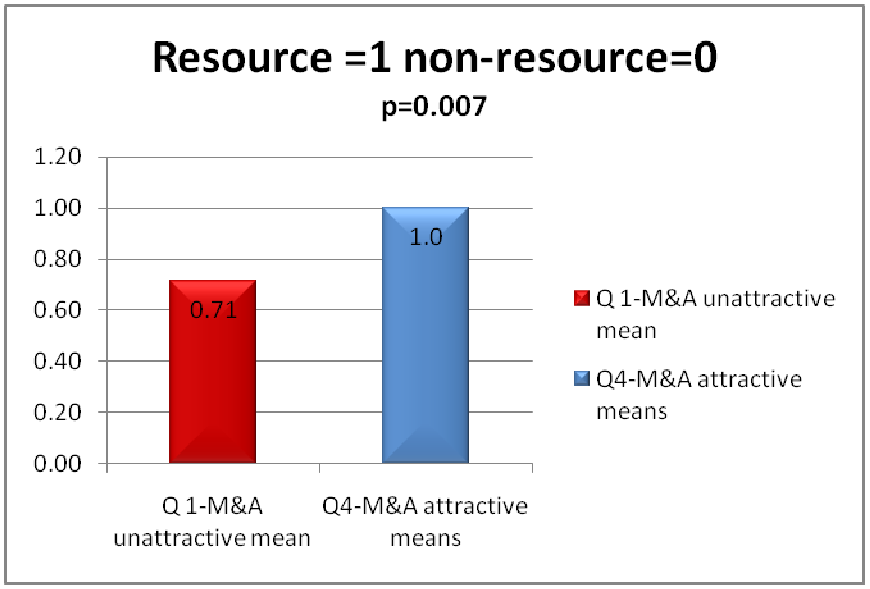
v. REGIONAL LEVEL: SECTORAL STRUCTURE





Agriculture, hunting, forestry and fishing for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries. Services sector for the Q4 regionally attractive group was significantly higher than that of the Q1 regionally unattractive group of countries.

vi. REGIONAL LEVEL: RESOURCE RICH



The Q4 regionally attractive group had significantly greater resource wealth than the Q1 regionally unattractive group of countries.

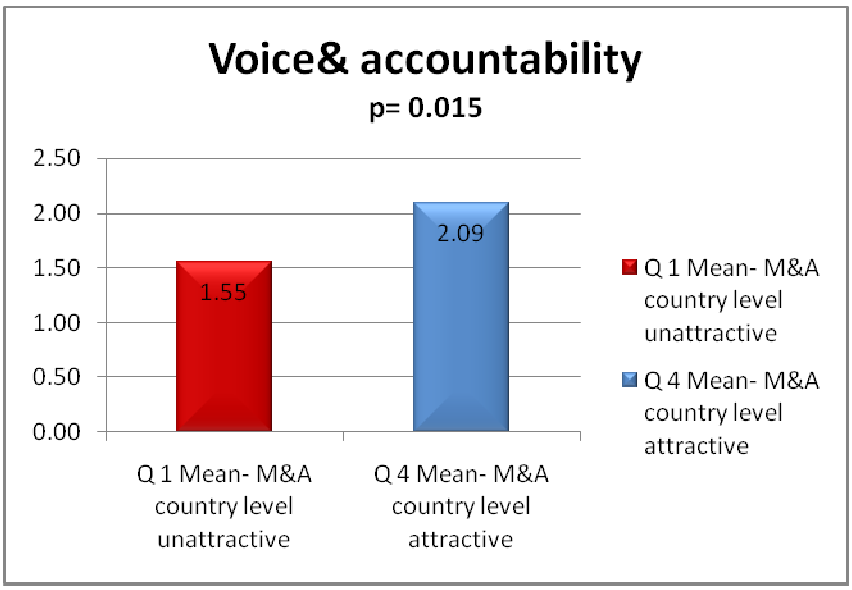
5.4.5 M&A COUNTRY LEVEL BAR GRAPHS FOR SIGNIFICANT VARIABLES

Mean Comparison country Quartile 1 (Unattractive) and country Quartile 4 (Attractive)

The M&A attractiveness the following variables were found to be significantly different for country level attractive (Q4) quartile versus the country level unattractive (Q1) quartile: voice and accountability, mining, manufacturing & utilities, size of services sector and the size of the industrial sector.

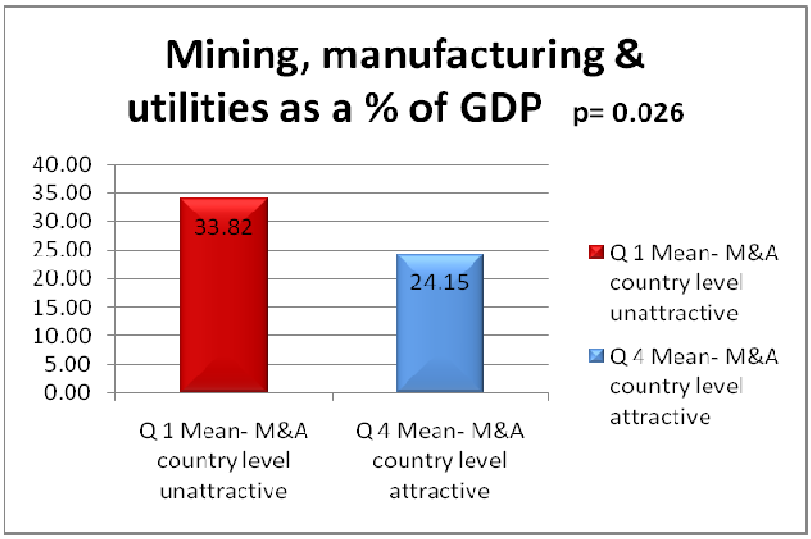
Each bar graph contains the mean value of the predictor for the countries in each quartile along with the p-value which is less than 0.05 for all the variables listed below.

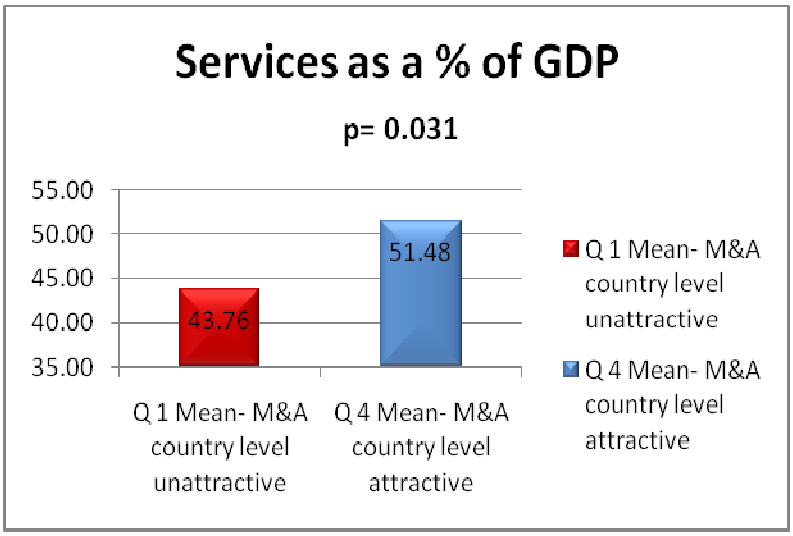
COUNTRY LEVEL: INSTITUTIONS



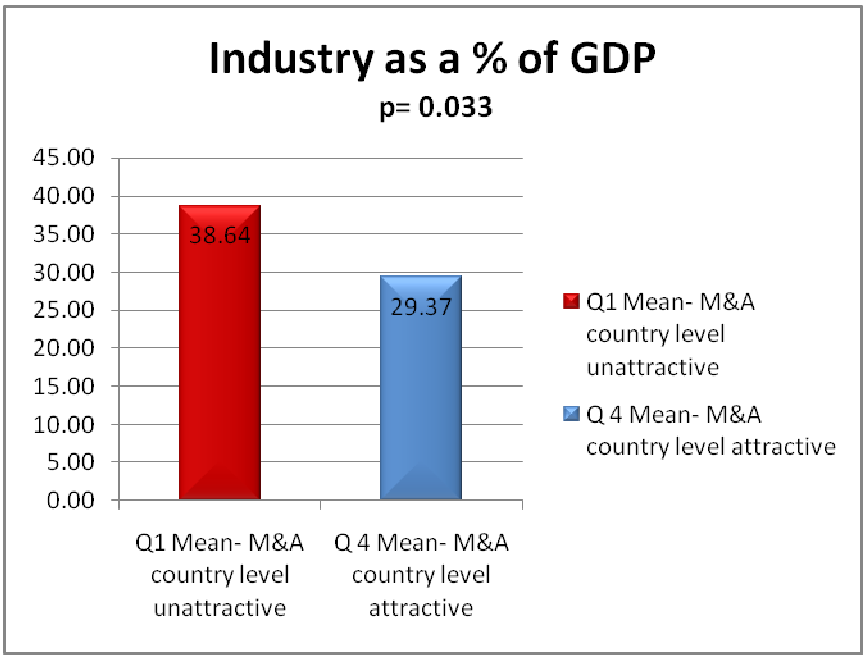
Voice and accountability is significantly higher for the Q4 country level attractive group than the Q1 country level unattractive group.

COUNTRY LEVEL: SECTORAL





Mining, nanufacturing and utilities for the Q4 country attractive group was significantly lower than that of the Q1 country level unattractive group of countries. Services sector for the Q4 country attractive group was significantly higher than that of the Q1 country level unattractive group of countries.



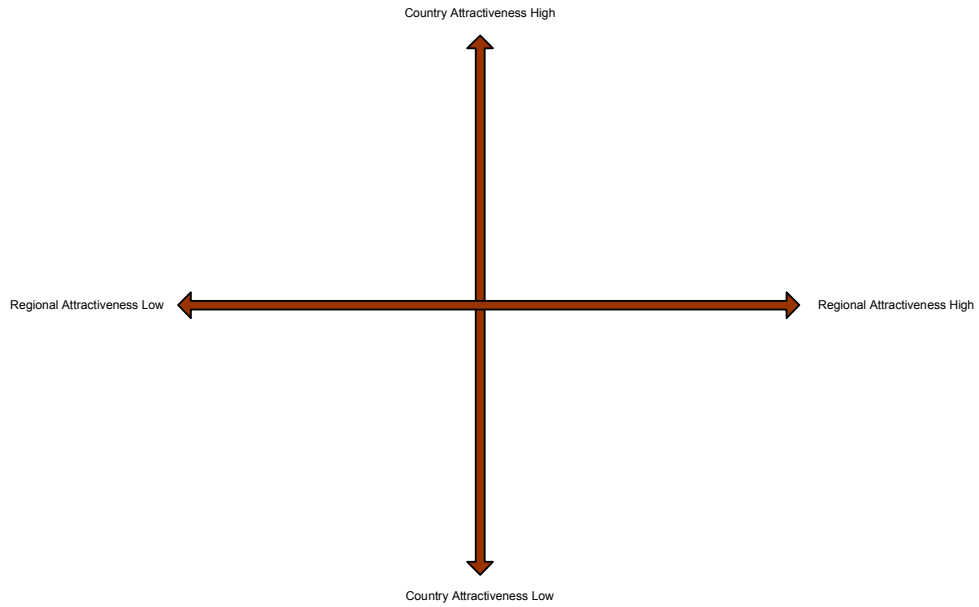
Industry for the Q4 country level attractive group was significantly higher than that of the Q1 country level unattractive group of countries.

5.5 Results for Cluster Analysis:

The results of the PC and extreme groups' analyses above confirmed the notion of distinct groups of countries which are first attractive to M&A's or not attractive to M&A's and second to a division separating countries who were strong M&A attractors regionally and those strong in M&A attraction at a country level. The concept of these distinctions was introduced in the model in chapter 1 and is now reintroduced in figure 14 'the M&A attractiveness axes'.

The PC and extreme groups have allowed for the plotting of some but not all of the economies under study onto the axes below as only the countries in the extreme quartiles were included in the t-tests of independent means. Therefore a cluster analysis was also run in order to process the full set of data and verify the results of each method by examining the results of the other.

FIGURE 12: M&A ATTRACTIVENESS AXES



5.5.1 THE CLUSTERING VARIABLES

In chapter 4 the outcome variables for the cluster analysis were listed and described. They are repeated in the table below. These outcome variables are grouped according to their regional and country distinction which was described in detail in chapter 4. The variables used in the PC analysis only differed from the outcome variables in the cluster analysis in two respects: 1) the variable for the number of deals at the country level was replaced with a dollar sales value also at the country level and 2) in the cluster analysis a variable which

measures total number of FDI deals (GF + M&A) per country as a % of total regional FDI (all GF and M&A's in the region). The latter is included in order to examine if the strong regional M&A cluster countries are also strong FDI performers. The reason for swopping the former was explained in the PC analysis section.

TABLE 12: THE CLUSTERING VARIABLES

Outcome Variables For The Cluster Analysis	Value Or Volume Based	Explanation Of Outcome Variable Distinction
A - Country level attractiveness outcome variables		
1 - M&A deals per country as a % of total number of country deals	volume based	Examines the volume of per country M&A deals relative to the total number of FDI deals entering that country. The intra- country proportion of M&A to FDI in terms of volume.
2 - MA sales as % of GDP avg 2004-2006	value based in US $'s	Examines the value of per country M&A deals relative to the GDP of the same country. An intra-country measure of the proportion of M&A to GDP in terms of value.
B - Regional level attractiveness outcome variables		
1 - M&A deals per country as a % of total regional M&A's 2004-2006	volume	Examines the volume of per country M&A deals relative to the M&A deal volume of countries in the region. An inter-country but intra-regional measure.
2 - no of per country MA deals as a % of all regional deals 2004-2006	volume	Examines the volume of per country M&A deals relative to the volume of total FDI deals (greenfield & M&A) of countries in the region. An inter-country but intra-regional measure.
3 - M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006	value in US $'s	Examines the value in $'s of per country M&A sales relative to the value of all FDI inflows into the region showing the country's share or proportion of M&A sales value in the region.
C- Overall FDI attractiveness outcome variable		
no of deals per country as % of total regional deals 2004-	volume	Examines which country in a region attracts the most FDI deals in total (greenfield & M&A) to show regional FDI leader.

2006		

Prior to running the cluster analysis, ANOVA's were run on the clustering outcome variables to test for significance. At this stage a three cluster solution was discarded as one of the outcome variables was not significant. The four cluster solution was then accepted. The table below (table 14) confirms that all the outcome variables were significant for the 4 cluster solution.

TABLE 13: ANOVA ON CLUSTERING VARIABLES

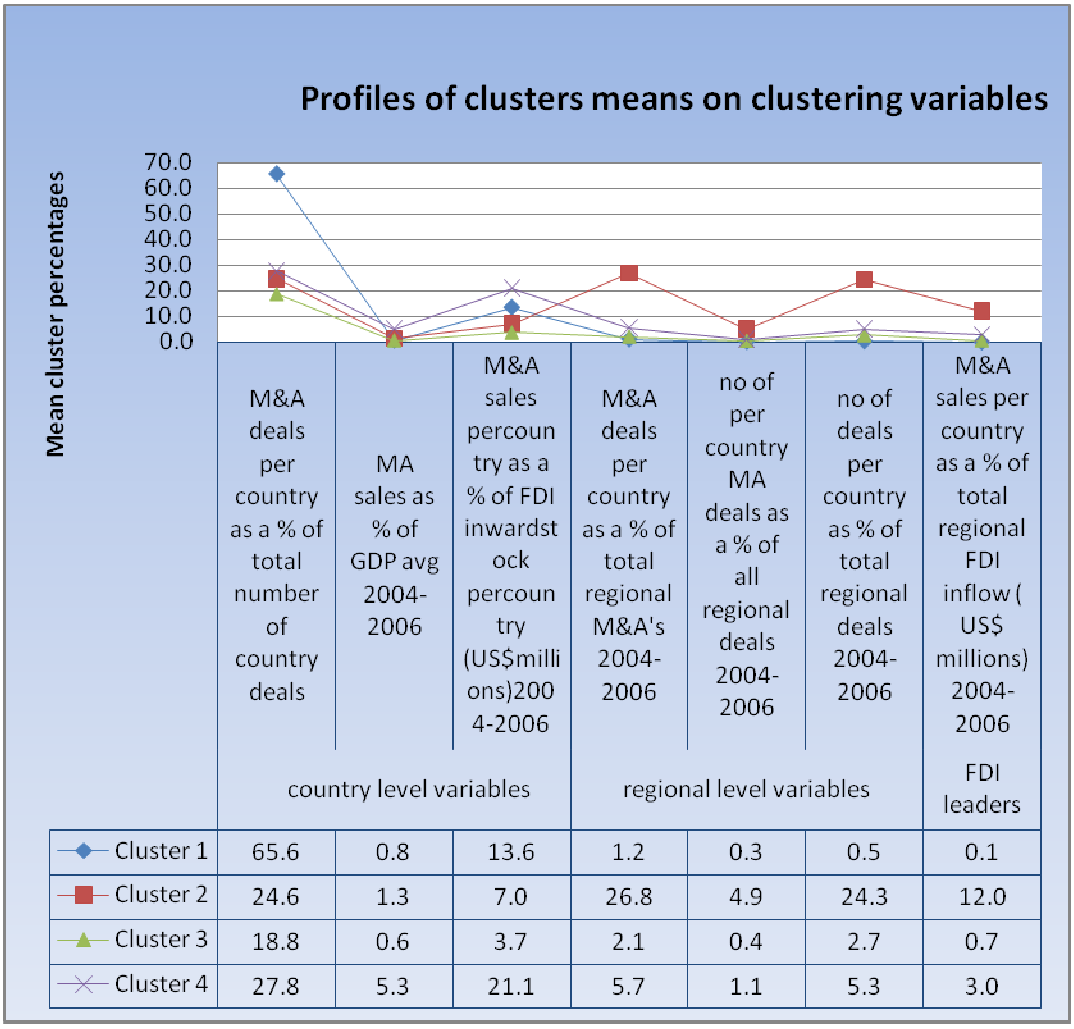
Significance The 4 Cluster Outcome Variables	Between	Df	Within	Df2	F	Signif.
Country Level And Regional Level Outcome Variables	SS		SS			P
M&A deals per country as a % of total number of country deals	50.41373	3	31.28026	97	52.1110	0.000000
MA sales as % of GDP avg 2004-2006	65.97963	3	43.13435	97	49.4581	0.000000
M&A deals per country as a % of total regional M&A's 2004-2006	85.79472	3	24.09246	97	115.1410	0.000000
no of per country MA deals as a % of all regional deals 2004-2006	76.82970	3	33.08581	97	75.0824	0.000000
M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006	56.94909	3	46.37006	97	39.7100	0.000000
no of deals per country as % of total regional deals 2004-2006	70.62784	3	39.40670	97	57.9504	0.000000

A cluster analysis was then run on the outcome variables listed in table 15 above.

5.5.2 THE FOUR CLUSTER SOLUTION

The four cluster solution may be seen both graphically and as a table with the means percentages included in table 16 below. Once again the premise that a country level and regional level group exist in the data was confirmed with the cluster analysis. The clusters are discussed in greater depth below.

TABLE 14: PROFILES OF CLUSTER MEANS FOR A 4 CLUSTER SOLUTION



	M&A deals per country as a % of total number of country deals	MA sales as % of GDP avg 2004-2006	M&A sales percountry as a % of FDI inwardstock percountry (US$millions)2004-2006	M&A deals per country as a % of total regional M&A's 2004-2006	no of per country MA deals as a % of all regional deals 2004-2006	no of deals per country as % of total regional deals 2004-2006	M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006
	country level variables			regional level variables			FDI leaders
Cluster 1	65.6	0.8	13.6	1.2	0.3	0.5	0.1
Cluster 2	24.6	1.3	7.0	26.8	4.9	24.3	12.0
Cluster 3	18.8	0.6	3.7	2.1	0.4	2.7	0.7
Cluster 4	27.8	5.3	21.1	5.7	1.1	5.3	3.0

5.5.3 NAMING THE CLUSTERS

Cluster 1 all the countries in cluster 1 showed a high value for the intra-country number (or volume) of M&A deals respective to the other clusters. Cluster 1 countries are intra-country performers. They do not perform well at a regional level.

Cluster 2 displays a strong performance on the regional level M&A variables which are:

-M&A deals per country as a % of total regional M&A's 2004-2006

-no of per country MA deals as a % of all regional deals 2004-2006

-M&A sales per country as a % of total regional FDI inflow) 2004-2006

-no of deals per country as % of total regional deals 2004-2006

Cluster 2 also displays the strongest regional FDI attraction. Cluster 2 countries are regional performers.

Cluster 3 countries do not perform on any of the variables; they may be labeled poor M&A performers.

Cluster 4 countries are country level performers like cluster 1 but perform better on M&A dollar sales value than on M&A volume.

For the purpose of this study clusters 1 and 4 are both considered as country level performers their distinction lies in a difference of measure that is volume of M&A deals versus value of M&A deals respectively.

In light of the descriptions defined above, each of the four clusters has displayed distinctive mean characteristics based on a regional and country distinction and on the strength of the M&A attraction. As in the PC analysis above the clusters can be plotted onto the M&A attractiveness axes based on their regional and country level M&A differences. The ANOVA testing of the independent variables for significance adds to a deeper understanding of the differences between the clusters. Prior to setting out the results of the ANOVA's however the member countries of each cluster are tabulated in the next section.

5.5.4 Cluster Member countries

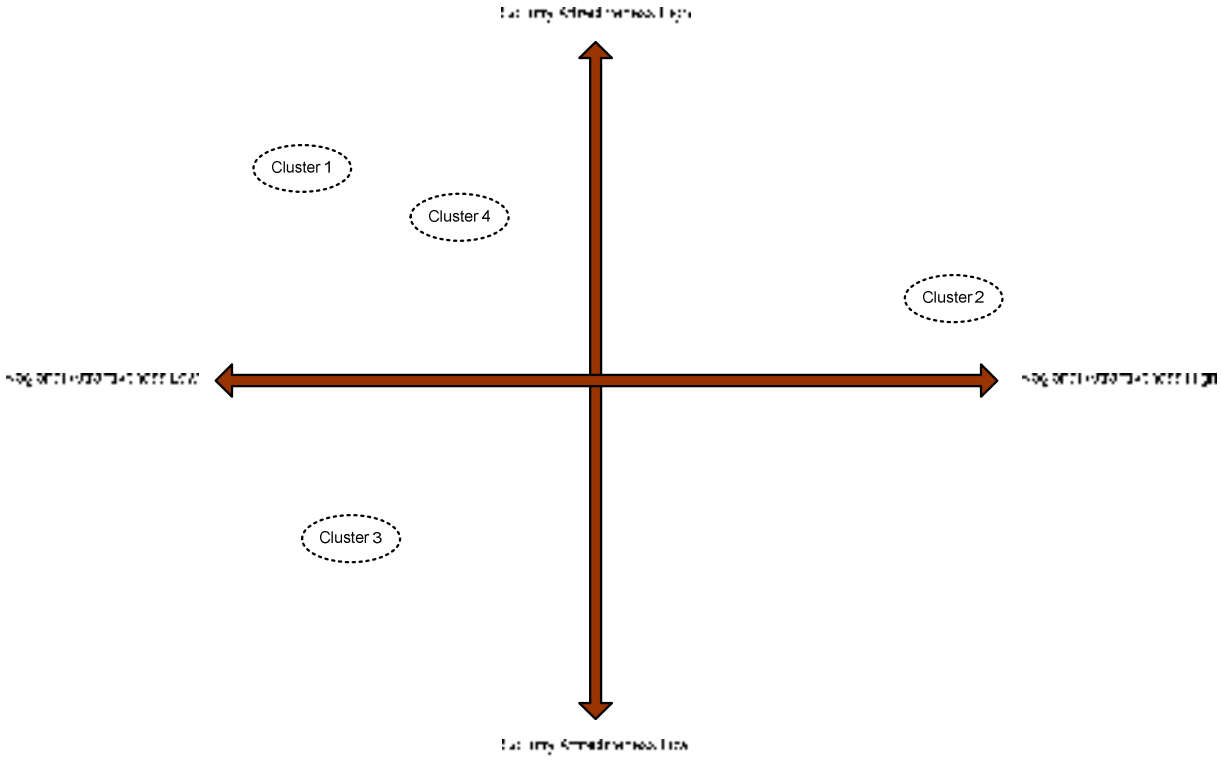
A four cluster solution was accepted. The member countries of each of the four clusters are listed in the tables below. The M&A attractiveness axes have been included to show the regional or country level of attractiveness for each cluster.

TABLE 15: CLUSTER COUNTRY MEMBERS

Cluster 1	Cluster 2	Cluster 4
Belize	Brazil	Armenia
Brunei Daruss	India	Bulgaria
Burkina Faso	Indonesia	Colombia
Congo	Malaysia	Croatia
Guatemala	Mexico	Ghana
Kyrgyzstan	Romania	Mauritius
Libya	Russian Fed	Panama
Macedonia,	South Africa	Ukraine
Mozambique	Thailand	
Nicaragua	Turkey	
Paraguay	U A E	
Qatar		
Rwanda		
Swaziland		
Zimbabwe		

Table 16: members of cluster 3

Egypt	Morocco	Uzbekistan
El Salvador	Myanmar	Venezuela
Equatorial Guinea	Namibia	Viet Nam
Eritrea	Nepal	Yemen
		Zambia
Angola	Georgia	Pakistan
Argentina	Guinea	Peru
Azerbaijan	Guyana	Philippines
Bahrain	Honduras	Saudi Arabia
Bangladesh	Iran	Senegal
Belarus	Iraq	Sierra Leone
Bolivia	Jordan	Sri Lanka
Bosnia & Herz	Kazakhstan	Sudan
Botswana	Kenya	Suriname
Cambodia	Kuwait	Syria
Cameroon	Lao PDR	Tajikistan
Chile	Lebanon	Tunisia
Congo, DRC	Madagascar	Turkmenistan
Costa Rica	Mali	Uganda
Côte d' Ivoire	Mauritania	Tanzania
Ecuador	Moldova	Uruguay



5.6 INDEPENDENT VARIABLE ANOVA ANALYSIS OF CLUSTER COUNTRIES:

Multiple one way ANOVAS were run on the independent variables of the cluster countries in order to determine whether the mean values for the independent variables were significantly different amongst the 4 clusters. The results of the ANOVA analysis are tabled below (table 19). The original table may be found in the appendices as appendix 4.

In table 19 below the significant and non-significant variables from the ANOVA results were listed. The means of these variables differed amongst the clusters. In order to discover amongst which clusters the means differed significantly post- hoc tests were conducted on the significant variables listed in table 19.

The results of the post –hoc tests in addition to the means of the variables which differed may be found in table 20.

TABLE 17: CLUSTER ANOVA SIGNIFICANT AND NON-SIGNIFICANT VARIABLES

4 Cluster Solution - Significant Predictor Variables	p Value	4 Cluster Solution Non-Significant Predictor Variables
Telephone Mainlines (Per 1000 People)	0.0127066	GDP Growth Average 2000-2005
Cellular Subscribers (Per 1000 People)	0.0101971	% Of Primary Affiliates Per Country 2006
Total No Of Foreign Affiliates 2006	3.582e-06	
% Of Secondary Affiliates Per Country 2006	0.0031008	Average GDP/Cap
% Of Tertiary Affiliates Per Country 2006	0.0031143	Average Pol Stab 2002-2004
		Average Rule Of Law 2002-2004
Average GDP 2002-2004	6.183e-17	Average Control Of Corruption 2002-2004
Average Pol Con2002-2004	0.0364304	Average Agriculture, Hunting, Forestry & Fishing As A % Of GDP 2002-2004
HDI Average 2002-2004	0.0175873	Resource =1 Non0resource=0
Average Voice& Accountability 2002-2004	0.0031819	Average Mining, Manufacturing & Utilities As A % Of GDP 2002-2004
Average Government Effect 2002-2004	0.0010804	Average Construction As A % Of GDP 2002-2004
Average Regulatory Quality 2002-2004	0.0039423	Average Services As A % Of Gdp2002-2004
		Average Transport, Storage And Communications As A % Of GDP 2002-2004
		Avg Industry as A % Of GDP 2002-2004

TABLE 18: COMPARISON OF SIGNIFICANT CLUSTER MEANS AND POST-HOC RESULTS

Comparison of Cluster means for significant predictor variables						Post hoc test results - Comparison of clusters with significant differences between them					
Predictor variables	Cluster 1 mean	Cluster 2 mean	Cluster 3 mean	cluster 4 mean	mean of all groups	Cluster 1 & Cluster 2	Cluster 1 & Cluster 3	Cluster 1 & Cluster 4	Cluster 2 & Cluster 3	Cluster 2 & Cluster 4	Cluster 3 & Cluster 4
Cellular Subscribers (Per 1000 People)	280.3538	500.1091	230.0509	411.7286	286.9849				*		
Total No Of Foreign Affiliates 2006	67.000	2865.600	169.211	290.143	483.165	***			***	**	
Avg GDP 2002-2004	7693.5	297548.2	27662.6	27136.3	54048.7	***			***	***	
Avg Voice& Accountability 2002-2004	1.935333	2.516364	1.833731	2.613750	1.984950				*		*
Avg Govt Effect 2002-2004	2.018000	2.670909	1.980746	2.471250	2.100297	**			**		
Avg Reg Qual 2002-2004	2.106000	2.644545	1.965821	2.623750	2.112673				*		

Note significance value at: * < 0.050, **< 0.010 and *< 0.001**

Predictor Variable	Significant				
	Yes all	No all	Cluster	PC Regional	PC Country
GDP			√	√	
GDP/cap		X			
HDI				√	
Voice& accountability	√		√	√	√
Pol Stab		X			
Government effectiveness			√	√	
Rule of law		X			
Regulatory Quality			√	√	
Control of Corruption		X			
Polcon 3				√	
telephone mainlines		X			
cellular subscribers (per 1000 people)			√	√	
Construction as a % of GDP		X			
Transport, storage and communications as a % of GDP				√	
Total no of foreign affiliates			√	√	
Agriculture, hunting, forestry & fishing as a % of GDP				√	
Mining, manufacturing & utilities as a % of GDP					√
Services as a % of GDP				√	√
Industry as a % of GDP					√
Resource =1 non-resource=0				√	

TABLE 19: SUMMARY OF SIGNIFICANT RESULTS FOR CLUSTERS AND PC/EXTREME GROUP REGIONAL & COUNTRY

5.7 Post- hoc analysis of the significant mean differences

The post hoc tests showed 8 independent variable means as being significantly different amongst the clusters. These variables have been marked in the post – hoc table (table 20) with stars to signify significance as follows: * < 0.050, **< 0.010 and ***< i.e. significance at the 5% level, 1% level and 0.1% level.

The discussion on the specific cluster differences will be undertaken in chapter 6 which follows this chapter.

This chapter is concluded with a table (table 21) summarising the results of the two analyses which measured the same underlying concepts and which separated the 117 economies of this study into meaningful groups based on their M&A attractiveness at a regional and at a country level. The results show that the institutional predictor voice and accountability were significant for all the groups both regional and country level. Predictors which were not significant for the cluster or PC/EGV (extreme group variance) included the institutional variables political stability, rule of law and control of corruption and the percentage of primary affiliates in the host economy.

Chapter six will draw the findings of this chapter together with the current academic theory as embodied literature review (chapter2) in order to create an argument for the rejection or acceptance of the null hypotheses. This in turn allows for the creation of a macroeconomic, location based profile of M&A activity in developing economies.

6. DISCUSSION

6.1 INTRODUCTION

The question as to why M&A activity in developing regions is markedly less common than in developed regions was posed in the introduction to this paper. In an attempt to partly explain this phenomenon, an examination of the macroeconomic location factors of host countries was embarked upon. The literature contained in chapter two summarised the extant literature on FDI and M&A activity especially that relating to host country location factors. Hypotheses were then developed to test the ideas relating to the role of specific families of location factors (such as institutions and infrastructure) and their effect on M&A activity.

The statistical analyses employed accounted for the large variation in the data set to provide a set of empirical results which confirmed many of the hypotheses. The task undertaken in the sections below draw the threads of each of the previous chapters together in order to build a macroeconomic host location model for the attraction of M&A activity at a regional and at a country level in developing regions.

6.2 UNDERSTANDING THE REGIONAL AND COUNTRY LEVEL RESULTS

Prior to discussing the hypotheses individually it is necessary to elucidate several general observations with regards to the findings of the research.

One of the advantages of the cluster and PC/extreme group tests was the separation of regional level M&A leaders from country level M&A leaders.

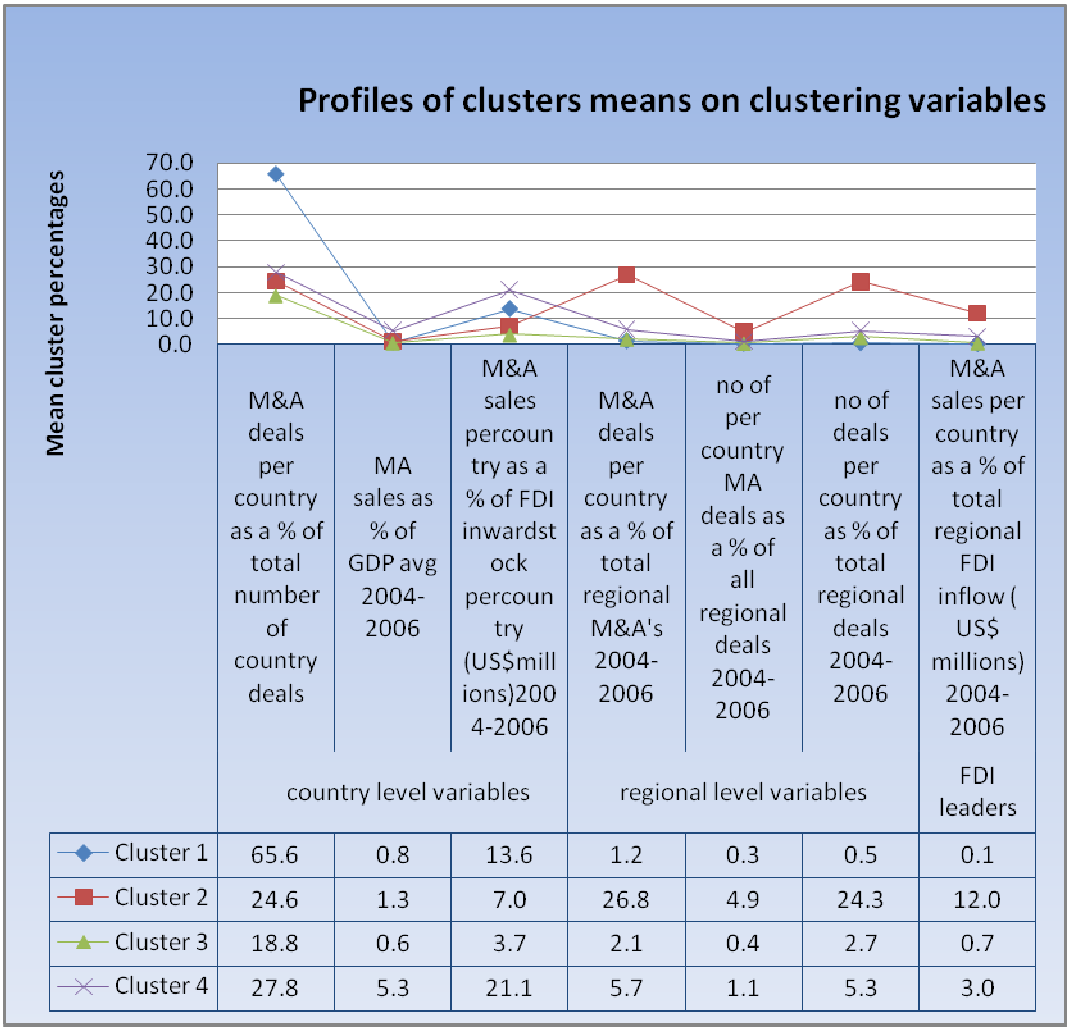
The regional level M&A leader group in both tests (PC & Cluster) comprised of the same countries. The top twelve countries in the PC analysis are India, RSA, Brazil, Indonesia, Malaysia, Mexico, Romania, Argentina, Thailand, Russia, UAE and Turkey. These countries constituted cluster 2 in the cluster analysis and the12 top ranked most attractive economies in the PC analysis.

The country level M&A leader groups, being cluster 1 and cluster 4, are illustrated in the cluster profile diagram below (table 22). The graph shows the superior performance of cluster 1 and cluster 4 which attain the highest percentage means on the country M&A attractive variables (left). The member countries of these clusters are listed in tables 17 & 18 (chapter 5). Further, the PC attractiveness analysis corroborated the cluster analysis findings with the top 12 countries identified as the most attractive developing country M&A destinations also being found in either cluster 1 or cluster 4 above.

Therefore the findings of both the analyses substantiated each other at both the regional and country levels of attractiveness.

The only exceptions to the common findings of the tests were a few countries which fell into the 2nd quartile of the PC analysis country level attractiveness group but are also found in the cluster 3 non- performing M&A group. These countries included Pakistan, Ecuador, Uzbekistan, Tunisia, Mauritania, Kuwait and Peru. This discrepancy is a result of the calculation of the outcome variable which was measured in purely value terms for the PC analysis. This however does not materially affect the outcomes of the investigation.

TABLE 20: CLUSTER MEAN PERCENTAGE PROFILES



	M&A deals per country as a % of total number of country deals	MA sales as % of GDP avg 2004-2006	M&A sales percountry as a % of FDI inwardstock percountry (US$millions)2004-2006	M&A deals per country as a % of total regional M&A's 2004-2006	no of per country MA deals as a % of all regional deals 2004-2006	no of deals per country as % of total regional deals 2004-2006	M&A sales per country as a % of total regional FDI inflow (US$ millions) 2004-2006
	country level variables			regional level variables			FDI leaders
Cluster 1	65.6	0.8	13.6	1.2	0.3	0.5	0.1
Cluster 2	24.6	1.3	7.0	26.8	4.9	24.3	12.0
Cluster 3	18.8	0.6	3.7	2.1	0.4	2.7	0.7
Cluster 4	27.8	5.3	21.1	5.7	1.1	5.3	3.0

The cluster profile graph above illustrates not only the regional M&A leadership of cluster 2 but in addition the strong regional FDI attraction of this cluster. The FDI variable was included specifically for comparison purposes and highlights the difficulty of separating FDI attractiveness from M&A attractiveness.

The M&A leadership of cluster 2 may be due to the regional leader effect (Edgington and Hayter, 2000) of these countries as safe FDI destinations and economic hubs within a region. The cluster 2 countries are the FDI 'poster boys'

of the developing world and include the BRICS countries (Brazil, Russia, India excl. China and incl. South Africa).

These regional leader groups showed significantly higher GDP, FDI and foreign affiliate numbers than the remainder of the developing countries.

The large market sizes of these regional leader countries have several implications in terms of M&A attraction. First, large markets attract market seeking MNE's, the literature shows that these firms are likely to utilise M&A's as a mode of entry (Buch and De Long, 2001). The fact that they are economic hubs and attract greater volumes of FDI than other developing countries also results in an increased presence of foreign affiliates operating in their markets (Qian and Delios 2008; and Kolstad and Villanger, 2008). These affiliates are likely to be followed by service industry firms (following their domestic clients) into these foreign markets (Qian and Delios 2008) thereby creating a virtuous circle for increased FDI and M&A activity.

An interesting group of countries emerged as country level M&A leaders (top 12 PC analysis countries) in that these are not regional FDI leaders but attracted a greater amount of M&A activity than greenfield activity. In these countries, M&As attractiveness is not distorted by the regional leader effect and associated FDI attractiveness; hence M&A host location drivers can be studied in a purer form. These countries comprise an interesting and eclectic bunch which include amongst others Mauritius, Burkina Faso, Bulgaria, Panama, Ghana, Kyrgyzstan, Armenia, Croatia, Ukraine, Colombia, Yemen and Azerbaijan. The importance of this group of countries will be re-emphasised in the final section of this chapter.

Differences exist between the regional leader group and the country level leader groups which make these groups unique in interpretation. These differences include GDP, the number of primary, secondary and tertiary affiliates and government effectiveness. For the M&A attractive cluster 4 countries, the only significant variable separating them from regional leaders appears to be their market size and the number of foreign affiliates. Therefore cluster 4 must have some interesting features considering these countries do not comprise the largest markets. The answer lies in their institutions, specifically the variable, voice and accountability, wherein they score the highest in the post hoc cluster analysis and in the pc t-tests, these countries have a significantly higher mean at the 1% significance level on the institutional variable, voice and accountability (a proxy for democracy). Notably Cluster 4 scores higher than even cluster 2 regional leader group in terms of voice and accountability. The cluster 1 countries have a significantly lower mean on the voice and accountability variable.

Another important factor to emphasise is that FDI attractiveness does not automatically mean M&A attractiveness.

Vietnam is interesting example of this as they are strong FDI attractors in their region but fall into the M&A non-performing cluster 3 group. This may be partly due to government regulation relating to the local ownership of companies thereby necessitating the need for greenfield investments.

6.3 EXPLORING THE HYPOTHESIS

This section focuses on evaluating the research hypotheses as presented. The results of the PC and cluster analysis will be combined for each hypothesis in order to allow for comparisons and overlaps of the findings.

A few of the hypotheses are supported by the PC analysis but not by the cluster analysis. This discrepancy may be explained by the enhanced sensitivity of the PC analysis relative to the cluster analysis as discussed in the methodology section. To reiterate the PC analysis compares the means of the extreme quartile groups of countries and does not compare the full sample of countries. The cluster analysis tests the entire sample of countries and the post-hoc tests compared the differences amongst the clusters therefore significant mean differences between the clusters are expected to be lower.

6.3.1 HYPOTHESIS 1

Hypothesis 1 stated that the market size and level of economic development represented by GDP, GDP/capita and HDI values is greater in M&A attractive economies than in the economies of M&A unattractive countries.

- GDP

The PC analysis results show that at a regional level group the hypothesis is strongly supported (p=0.000) with regional leaders (quartile 4 countries) having significantly larger GDP means than the M&A non-attractive regional economies (quartile 1 countries)

The cluster analysis indicates that a significant difference for GDP occurs between cluster 2 and cluster 1, 3 and 4 respectively. Cluster 2 represents the regional M&A and FDI leaders, therefore market size is a significant factor in M&A attraction within our cluster analysis.

De Long (2001) informed that the FDI decisions of MNEs may be attributed to location specific factors including the size of the foreign market whilst Raff *et al*, (2008) found M&A activity to be higher in destinations with strong market potential. Kolstad and Villanger (2008) highlight that FDI in services to developing countries is determined by market size. The literature therefore reinforces the findings of the analysis and supports the hypothesis presented.

- HDI

HDI is a composite measure of the health and educational status of the populace. The health and educational status of the populace is critical in enabling the transition from an agrarian economy toward non-agricultural sector growth. The literature shows that economic development with accompanied income and diversified growth attracts M&A activity therefore higher HDI levels should be associated with more economically productive economies and a larger services sector (Basu and Guariglia, 2007). It is therefore expected for HDI to be significantly higher in M&A attractive economies.

The PC analysis results show that at a regional level group the hypothesis is supported with regional leaders (quartile 4 countries) having significantly (p=0.001) larger HDI means than the M&A non-attractive regional economies

(quartile 1 countries). The hypothesis that the level of human development of a society contributes to the M&A attractiveness of a society finds support in the analysis.

- GDP / CAPITA

The literature alluded to a causality effect in that economies shifting away from agrarian based economies toward higher productivity economies i.e. increased services sector development experienced rising per capita incomes (Gollin et al 2002 & Kolstad and Villanger, 2008) which in turn was associated with a larger number of M&A's.

The hypothesis that GDP per capita is an economic factor significant in the attraction of M&A activity is however not supported by our analyses. The PC and cluster analysis both show that any level, country or regional, GDP/Capita is not a significant factor in M&A attraction. This view has not been described in the literature reviewed and should attract further consideration.

6.3.2 HYPOTHESIS 2

The hypothesis states an expectation that the higher the institutional strength of an economy the more likely it is to attract M&A deals. The various dimensions of institutional strength are defined by the following variables:

- Voice and accountability
- Political stability.
- Government effectiveness

- Rule of law.
- Regulatory quality
- Control of corruption
- The ease with which the executive of a country is able to pass legislation and change regulations unhindered (POLCON 3).

- VOICE AND ACCOUNTABILITY

Kolstad and Villanger (2008) describe that highly undemocratic countries deter foreign investors. This view is also supported by Busse & Hefeker, 2007 and Buch & De Long, 2001).

- POLITICAL STABILITY

The literature supports the importance of political stability in FDI attraction (Busse & Hefeker, 2007, Pajunen, 2008) and suggests that different institutional factors may influence decisions on M&A relative to overall FDI.

- GOVERNMENT EFFECTIVENESS

Pajunen (2008) found that a state guaranteeing political rights and civil liberties ensured FDI attractiveness.

- RULE OF LAW

Rammal and Zurbruegg, (2006) found the qualities of regulations in the host economy to be a significant factor in the attraction of FDI.

- REGULATORY QUALITY

The literature describes that a more active market for mergers and acquisitions is the outcome of a corporate governance regime with stronger investor protection (Rossi and Volpin, 2004).

- CONTROL OF CORRUPTION

Control of corruption surprisingly is not featured in depth in the literature. Busse and Hefeker (2007) found that corruption was important to a lesser degree than other institutional determinants of foreign investment flows.

- EXECUTIVE POWERS

Polcon 3 (the measure for the variable) was specifically described by Delios and Henisz (2004) to measure the level of political constraints to the executive of a state. In countries where policymakers' discretion is high Delios and Henisz (2004) explain that managers face a higher likelihood that the status quo policies which affect their costs, revenues or asset values will change and so affects their decision to enter an economy.

Both sets of analyses at both a country and regional found that the measure voice and accountability was an important determinant in the M&A attractiveness of an economy. The other institutional variables found varying degrees of support: government effectiveness and regulatory quality were found to be significant at a regional level for both analyses whilst the measure of

political constraints to the powers of an executive (POLCON 3) only found support at the regional level for the higher sensitivity PC analysis.

No support was found for the measures political stability, rule of law and control of corruption. Interestingly several authors (Yothin, 2007; Desbordes, 2007) finds differing institutional sensitivities occur between MNEs engaging in horizontal or vertical strategies. Vertical strategies tend to be more sensitive to political upheaval as it threatens supply chain management. This is relevant as M&A's tend to follow horizontal strategies which are less sensitive to political instability.

6.3.3 HYPOTHESIS 3

Hypothesis 3 predicted that the higher the infrastructural values the greater the attraction of M&A's into an economy.

Norda (2008) described that weak infrastructure and inefficient ports are impediments to FDI trade. Other authors also supporting the importance of infrastructure in attracting foreign investment include Wu and Barnes (2008) and Bellak *et al (*2008).

- TELEPHONE MAINLINES & CELLULAR SUBSCRIBERS

The telecommunication variables are described together as whilst their analytic findings differ, the importance of the availability of telecommunication networks is undoubted. The PC and cluster analysis results show that at a regional level and country level group the hypothesis for telephone mainlines is not supported. However, both the PC and cluster analysis demonstrate that the hypothesis for

a higher value of cellular subscription is to be strongly supported as a factor in M&A attraction. The literature review is limited in relation to telecommunications but anecdotal experience within Africa demonstrates that cellular mobile penetration far exceeds fixed line penetration and this may account for the differences in results seen in our analysis.

- CONSTRUCTION

The PC and cluster analysis results both do not support the hypothesis for construction as a percentage of GDP being a significant factor in M&A attraction.

- TRANSPORT STORAGE & COMMUNICATIONS

The PC analysis regional level test is the only analysis which finds support for the hypothesis concerning transport and related spend as a percentage of GDP as a factor in M&A attraction. It is possible that the measures used as a proxy to test for infrastructural factors in this study were not adequate as the literature finds strong support for the importance of infrastructure in attracting FDI. This is an avenue which requires further exploration.

6.3.4 HYPOTHESIS 4

Given the evidence in Qian and Delios (2008) who found that the strategy of services firms was to follow existing clients along their international trajectory and Fontagne and Mayer (2005) who note that firms exhibit an agglomeration tendency that is, firms follow firms into locations it was hypothesised that the

number of foreign affiliates in an M&A attractive economy is greater than the number of foreign affiliates in an M&A unattractive economy.

The results of both the PC analysis and cluster analysis supported this hypothesis by finding a greater number of foreign affiliates in M&A attractive economies at the regional level. Therefore the number of foreign affiliates in a developing economy is a marker for M&A attraction.

6.3.5 HYPOTHESIS 5

Hypothesis 5 is designed to illustrate the nature of the make-up of the sectoral structure likely to be responsible for attracting M&A activity.

Gollin *et al* (2002) indicate that those countries able to increase agricultural productivity experience sharp declines in agriculture's share of GDP. He goes on to describe that the increase in economic productivity results in the growth of aggregate incomes and general economic development. Kongsamut, Rebelo & Xie (2001) further supports that a sectoral reallocation of labour from agriculture into manufacturing and services is a necessary structural change or transformation for growth. This structural change with a likely resultant growth in GDP is therefore likely to stimulate M&A.

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- AGRICULTURE, FORESTRY, FISHING-

The hypothesis states that agriculture, hunting, forestry and fishing as a percentage of GDP are smaller for M&A attractive than M&A unattractive economies.

The PC analysis at the regional level supports the hypothesis that agriculture and related industries as a percentage of GDP is smaller for M&A attractive than M&A unattractive economies. The bottom quartile countries have a significantly larger agricultural mean size than the top quartile of countries.

This result was expected as agrarian economies have smaller levels of economic development which cannot support a large service or manufacturing sector wherein M&A is more likely. However the cluster analysis is not equivocal in this regard.

- MINING, MANUFACTURING AND UTILITIES

The hypothesis concerning mining, manufacturing and utilities as a % of GDP is greater for M&A attractive than M&A unattractive economies was proven to be false

Interestingly the variable was found to be significant at a country level in the PC analysis however the mean values indicate that M&A attractive economies have significantly smaller mining sectors than M&A attractive economies.

The group of countries contained in the PC country level attractive group are charecterised by smaller GDPs than the regional leader group but attract more M&As than greenfield investment.

Two explanations may be postulated for the liability that a larger mining sector has on the M&A attractiveness of countries. First these countries with large mining sectors may be overly dependent on mining and manufacturing FDI (and resultant M&A) and fail to adequately diversify their economies towards higher value-add industries (Sachs and Warner, 2001). Second, if the economy is inadequately controlled by institutions, the mining sector may become a source

of conflict thereby reducing the overall attractiveness of the economy in these countries (Bulte and Damania, 2004).

- SERVICES

The services industry accounted for 62% of global FDI stock in 2006 (UNCTAD, 2008). Kolstad and Villanger (2008) indicate that the bulk of FDI deals involve services and a large proportion of M&A's are in the services sector

Anand and Delios (2002) describe that a firm by engaging in a cross-border M&A is able to access the local knowledge and downstream capabilities of a local firm and use this to supplement its portable advantages in serving the new host market (Nocke and Yeaple, 2007). Services are notably higher value-add industries including finance, business, and transport (producer services). These services tend to follow domestic clients into foreign markets to capture growth of their customers (Buch and De Long, 2001). Further service businesses tend to require physical presence, local expertise, and knowledge of local social and cultural norms, by using M&A as an entry strategy, the foreign firm is able to access the local firms' superior knowledge of these factors. As a result, M&A is a more likely as an entry mode into the services market (Petrou, 2007; Kogut and Singh, 1988). Thus support for the hypothesis of services as a % of GDP being greater for M&A attractive than M&A unattractive economies is offered in the literature.

PC and cluster analyses support the hypothesis that the higher the proportion of the services industry as a percentage of GDP, the more attractive the market is to M&A.

- INDUSTRY

The hypothesis states that industry as a % of GDP is greater for M&A attractive than M&A unattractive economies.

Kolstad and Villanger (2008) support that FDI increases in relation to the development of manufacturing and services industries in developing countries. The agglomeration tendency of firms may also be linked to industrial growth i.e. as more firms locate within the industrial sector so more firms follow (Fontagne and Mayer, 2005).

The hypothesis is supported that the industry sector was found to be significant in the PC country level, specifically countries with smaller GDPs but attracting more M&A's than greenfield investment.

6.3.6 HYPOTHESIS 6

Our hypothesis is that resource rich countries with strong institutional controls will attract greater M&A activity than a resource poor economy. Similarly resource rich country with poor institutions will attract less M&A activity than a resource poor economy.

The PC analysis results support the hypothesis whilst the cluster analysis is not equivocal in its support of the hypothesis.

This finding is adequately explained in the literature. Snyder (2006) finds that leaders within resource rich who fail to build institutions of joint extraction have an increased risk of civil war whereas those who are able to create institutional controls are less likely to experience disruptions to economic growth.

Auty (2001) alludes to rent seeking behavior in some resource-abundant countries which results in distortionary government actions which have negative effects on the economy.

The specific case study of Malaysia is offered as an example of a resource-rich country able to direct its resource wealth towards development goals through effective institutional channels and become more M&A attractive (Bulte, Damania and Deacon, 2005). Malaysia is found in regional level top quartile of M&A attractive countries or cluster 2 of our analysis.

DISTILLING THE FINDINGS

In the section which preceded the hypotheses discussion, the differences in M&A attractiveness at the regional level to that of attractiveness at the country level were introduced. This section returns to this argument.The hypothesis findings may be overwhelming in that they describe the results of interactions with two sets of statistical methodologies at a regional level and at a country level, in addition to which a large set of variables were tested. The intention of this complexity was to open up a set of areas in the M&A developing economy paradigm to further exploration.

In order to distil the findings on M&A attractiveness for the purposes of this paper however the research question concerning M&A attractiveness is discussed below.

If we define pure M&A attractive economies as economies which attracted more M&A than greenfields internally it allows the discussion on the regional leader groups which attracted large volumes of M&A's to be delayed. This is not in any way a means to trivialise the importance the host of macroeconomic variables

found to be significant in the section above (and summarised at the end of chapter5) but merely to postpone the debate on regional level M&A attraction as the scope of this paper is limited.

Strictly speaking the cluster 2 and regional leader groups whilst attracting large volumes of M&A activity within a region were not attracting a greater number of M&A deals internally. Greenfield deals continue to dominate these markets. In other words, it is partly true that these countries were M&A attractive by virtue of being FDI attractive. Examining however the PC analysis at the country level of M&A attraction and the cluster 4 countries in the cluster analysis, we are able to identify true M&A attractive economies i.e. economies attracting a greater ratio of M&A activity to greenfield investments.

The hypothesis testing whilst very informative at a regional level tends to cloud the true issues behind M&A attractiveness. Studying the PC country level analysis and the cluster 4 analysis, only four factors were found to be significant, namely voice and accountability, lower mining manufacturing as % of GDP, increased services and industry as a percentage of GDP.

From the cluster analysis, we take note that the GDP of these groups is significantly smaller than the regional leader group, therefore these are small economies with low resources and strong pillars of democracy in place (represented by voice and accountability). These countries are also well diversified as their services and industrial sector are significant in relation to the size of the market.

Returning to the argument of Auty (2001), it is stated that government actions often have disastrous effects in resource abundant countries whilst resource-

poor countries were more likely to pursue a strong developmental state agenda wherein diversification was seen as prerogative and which resulted in these countries following a more favourable economic growth path.

This argument has strong implications for the country level group of M&A attractive economies which appear to place democracy and sectoral diversification as priorities. Interestingly, some comparisons with the early economies of Western Europe may be made. These economies were initially relatively small and resource poor but have very successfully diversified into higher value-add service-based industries. This group of countries may therefore contain the answer to the developed economy markers which charecterise developing economies attractive to M&A's. Hence a developing economy pursuing the strengthening of democratic institutions, a developmental policy of diversification and charecterised by a small agrarian and mining sector relative to a large services and industrial sector with high values of voice and accountability is highly likely to be the developing market economy which will exhibit M&A attractiveness.

7. CONCLUSION

7.1 INTRODUCTION

A bar graph introduced in chapter 1 illustrated the number of M&A deals in the developed and developing world and clearly indicated that M&A as a mode of entry choice was more common in the developed world. Multinational enterprises choosing to invest in the developing economies of the globe overwhelmingly chose greenfield deals over M&A's as entry strategies into these markets. This led to the question as to whether features of M&A's as an entry choice represented a marker for development in some way. What was it about certain countries in the developing world which predisposed them to M&A attraction which other countries in these regions did not possess? The question was therefore based on host country location characteristics.

In order to answer this question which had not been approached through any other studies available a list of relevant macroeconomic variables were drawn from the literature and tested against the attractiveness of economies as regional attractors of M&A and on a standalone basis, at a country level. Through testing the significance of the macroeconomic features of a developing economy against the attractiveness of the economy to M&A it was hoped that the variables found to be significant would enable the generation of a model M&A attractive economy in terms of macroeconomics. A feature of this paper was the creation of attractiveness axes which enabled the concept of regional *versus* country level attraction to be illustrated along the two dimensions. The goal was to be able to map developing countries onto these axes and in so

doing categorise and understand the distinct nature of these groups in addition to the macroeconomic variables which positioned them on the axes.

7.2 THE RESULTS

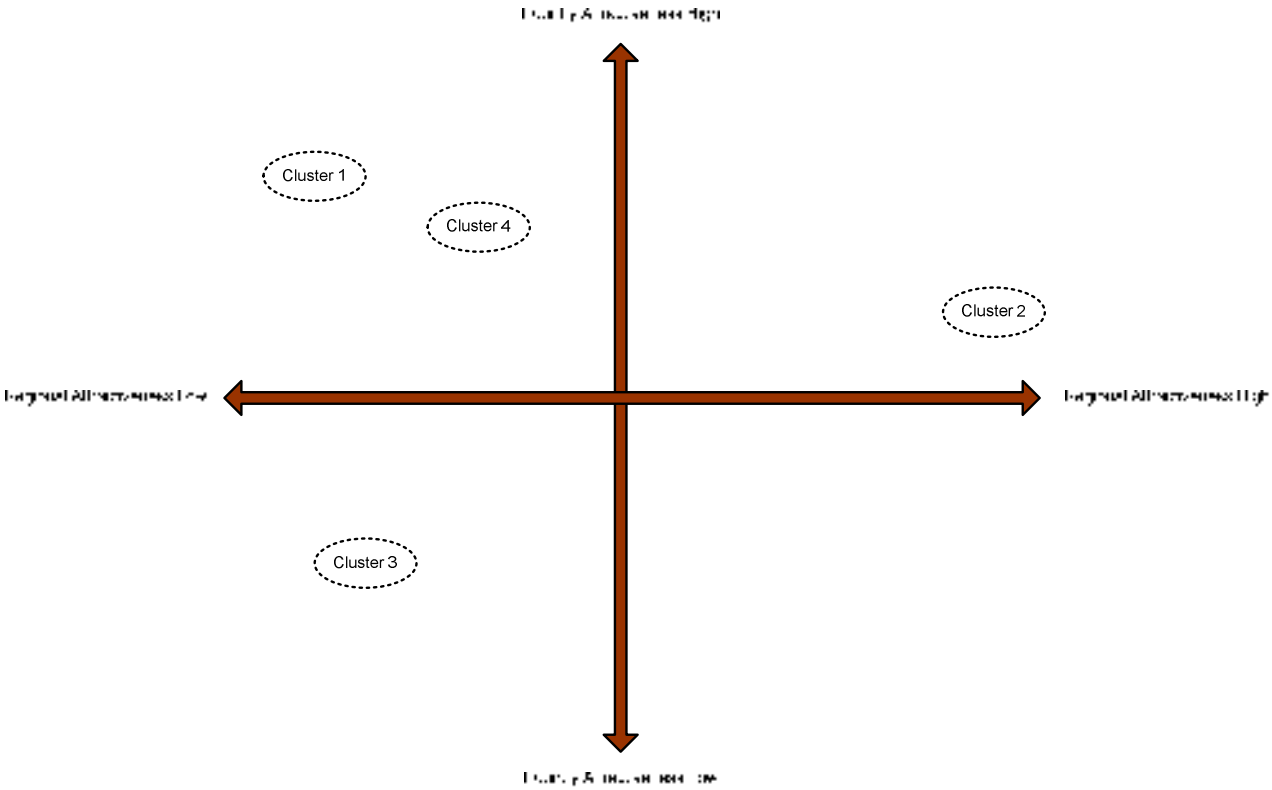


FIGURE 13: THE MAPPED M&A ATTRACTIVENESS AXES

The figure above displays the success of the study in mapping all the members of the cluster countries in terms of their M&A attractiveness level. Chapter 5 which contains the results of the study lists the member countries of each cluster. The results of the PC analysis corroborated the cluster findings apart from a few countries which were explained as having little effect on the study.

The predictor variables which were run against the countries mapped on the axes enabled a profile for each of these clusters to be generated.

The variables found to be significant and relevant for inclusion in the building of the M&A attractive profile may be found summarised in Chapter5.

Regional level M&A attractive economies were influenced by a host of variables. These were the market potential variables of higher GDP and human development (HDI), the stronger institutional variables voice and accountability, government effectiveness, regulatory quality and a greater value of political constraints to the executive of a country. In terms of infrastructure increased cellular subscribership and transport, storage and communications was associated with increased M&A attractiveness. The sectoral part of the profile consisted of a smaller agricultural sector and a larger services sector. Regional M&A attractive economies were also found to have larger resource sectors i.e. they were resource rich economies.

The profile of an M&A attractive economy at the country level contained far fewer variables. This profile was that of a country with a significantly smaller GDP relative to the regional leaders, the strongest democracies of any of the cluster as evidenced by the significantly higher voice and accountability measure, a relatively larger industrial and services sector and tellingly a smaller mining sector.

The study was therefore able to identify macroeconomic markers for M&A attractive economies. The section below will describe the practical implications of these findings to managers and policy makers and will offer future research directions.

7.3 PRACTICAL IMPLICATIONS OF THE FINDINGS

Apart from adding to the literature on M&A's the research has strategic implications for businesses planning to locate activities within developed regions. With scarce resources to allocate, the MNE strategy must carefully consider cost-effective locations wherein they may exploit their firm specific advantages adequately. Understanding the macro environmental features which support M&A activity may aid in the choice of the most practical and competitive location for a firm's operations. Tong *et al* (2008) found that country and industry effects and their interaction substantially influence firm performance. The authors advocate that MNEs within industries with growth opportunities need to learn how to exploit country specific factors by locating operations there.

The phenomenon of developed economy MNE's shifting labour intensive and particularly, unskilled labour intensive production, to affiliates in developing economies has been documented by the National Bureau of Economic Research (Lipsey, 2002). Lipsey also comments on the absence in the literature of the effects which FDI may have on countries consumers. Mergers and acquisitions may result in the consolidation of industries increasing the monopoly power of firms with resulting higher prices (Haller, 2008; Nocke and Yeaple, 2007). Greenfield operations would have the opposite effect by reducing the power of local producer monopoly positions and increasing local competition. At the same time superior technology and innovation brought in by the acquiring firms may improve local production efficiencies thereby lowering the local cost of goods (Lipsey, 2002). Therefore countries with low unemployment levels such as Vietnam but charecterised by inefficient local

production methods may consider the study's findings helpful in guiding policy research to improve local efficiencies by attracting greater merger and acquisition activity.

Understanding the repercussions of weak institutional levels and poor infrastructural planning may be useful to policy makers. The results indicate clearly that institutions matter; legal and financial frameworks are critical in concluding M&A deals as they require valuations of the potential target and detailed contractual arrangements. MNEs would be concerned with frequent and unpredictable changes to the host's regulatory framework and the resultant threat this could pose to the returns of the company.

7.4 FUTURE RESEARCH DIRECTIONS

A large volume of literature refers to the vertical and horizontal and global and multi domestic strategies of MNE's in foreign locations. There appears to be an overlap of multidomestic, horizontal strategies and M&A's. Unfortunately data limitations make it difficult to explore this relationship. A study of the nature of their association with modes of entry would an interesting avenue for further exploration.

Cuervo–Cazurra (2008) analyses the multi-nationalization of developing country MNE's which he finds differ from those of developed countries. Another interesting area in which to develop future research would be to divide the total number of M&A's according to home country origins in order to test if their institutional sensitivity differs proportionally to the strength of institutions in their country of origin. Unfortunately the data for the number of M&A deals employed

in horizontal versus vertical production is unknown but would create an interesting avenue for future studies

The dissimilar spillover effects of greenfield versus M&A is a clear motivation for the two modes of entry to be analysed and understood as distinct entities, even though much of the literature on the developmental role of FDI treats FDI as a single entity (Dunning & Narula, 1996; Dunning 2001; Rugman & Li, 2007)

The effects of M&A investment into developing regions, local linkages and their impact on growth and development in the host are also areas of great interest especially to policy makers. This study has used GDP per capita to describe market wealth; this measure however ignores the effects of unequal income distribution. A study which employs the Gini- coefficient as a variable will go much further in studying the paradigm of MNE spillover in developing economies. Another area also in the realm of MNE investment and poverty reduction would be a more detailed examination of sectoral transformation, agricultural productivity and resource wealth as factors affecting host economy income inequalities and growth.

In addition to the suggestions above the statistical analysis uncovered an array of interesting interactions such as the sectoral implications of resource wealth and agricultural productivity in M&A attractiveness which not be fully explored due to the scope of this research.

Thus from the above it is clear to see that the building of a macroeconomic profile for M&A attractive economies has useful applications and creates a broad platform from which further studies and understanding may be gleaned in

the growing markets of the developing world whose importance in global FDI is becoming ever more important.

This study attempts to define an M&A attractive economy , but it is important to note that M&A attractiveness occurs at two levels which are explained as follows:

3. M&A attractiveness occurs at the country level; that is an economy where M&A (rather than greenfield) is the predominant choice of FDI entry and

4. M&A attractiveness occurs at a regional level; that is an economy which attracts the greatest number of M&A deals within its geographical region.

In order to clarify this distinction some examples of each are listed. The economies of Mauritius and Guatemala belong to the first 'country attractive' group. Their country FDI deals consist of a greater number of M&A deals than greenfield deals. At a regional level however they do not attract the greatest number of M&A deals within their respective regions.

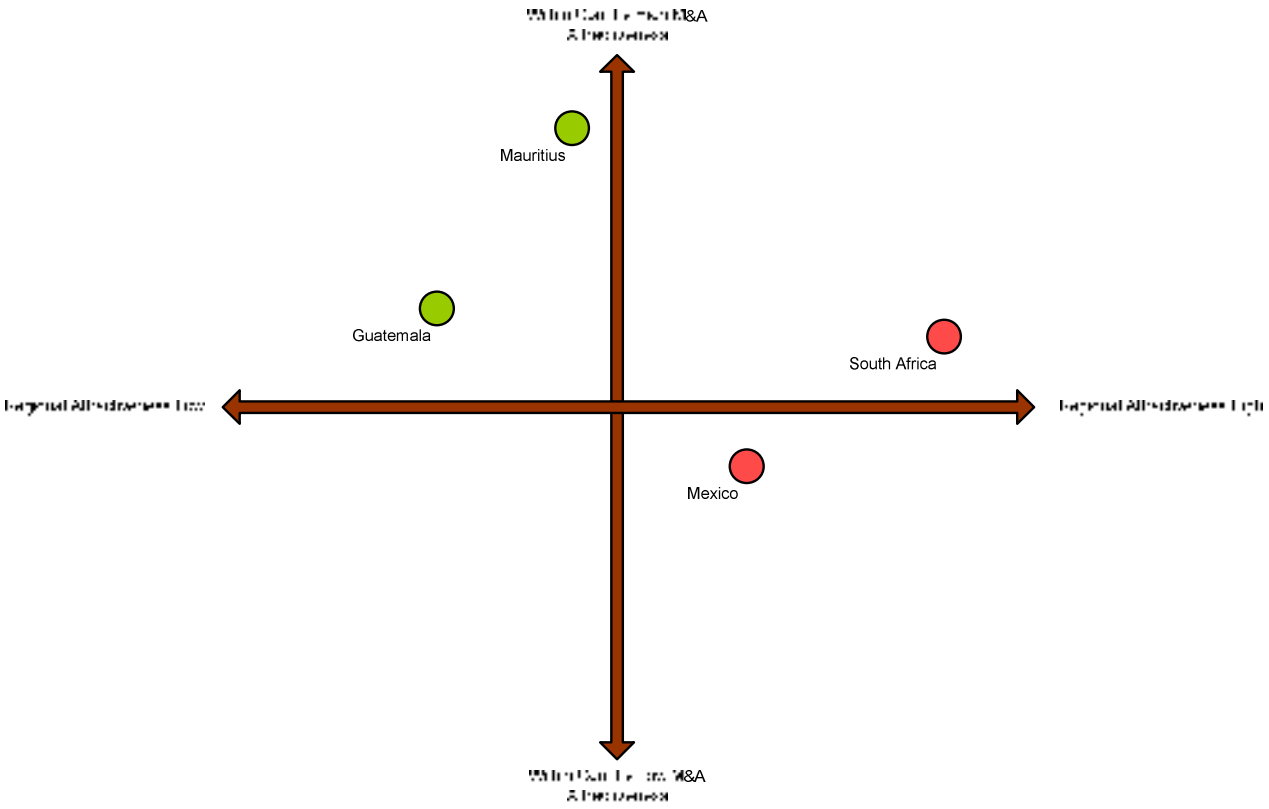
Found in the second 'regional attractiveness' group are South Africa and Mexico. These countries attract the greatest number of M&A deals within their respective regions. However, at a country level the number of greenfield deals far outweighs the number of M&A deals.

These examples highlight that economies displaying M&A attractiveness at the country level are not necessarily the same economies that attract the greatest number of M&A deals regionally. The axes in figure 2 below were created in order to graphically represent the two dimensions of

attractiveness. The example countries listed above are positioned in terms of their relative M&A attractiveness in these dimensions.

The research was conducted on a sample of 117 developing economies. Variables representing market characteristics, infrastructure, institutions, economic sectoral make-up and level of foreign economic activity are tested for significance in order to deduce which are related to the within-country M&A attractiveness and which to the regional level M&A attractiveness of the developing economies being studied. The assembly of the significant macroeconomic variables will inform an understanding of which macroeconomic factors explain M&A's as an FDI choice and add to the understanding of why mergers and acquisitions are infrequently used as a mode of entry into developing economies.

FIGURE 14 REGIONAL AND COUNTRY ATTRACTIVENESS AXES



7.5 CONTRIBUTION TO THE LITERATURE

The FDI attractiveness of economies has been well explored in the literature. However, research on the role of FDI in economic development is dominated by a generalised view of FDI where the separation of entry mode strategies was not central. Several authors have commented on the underreporting of M&A as a process distinct from the FDI umbrella in the literature, these same authors have begun to explore in greater depth the M&A concept (Kogut & Singh, 1988; Raff et al, Ryan & Stähler, 2005; Nocke & Yeaple, 2007 & Haller, 2008).

The M&A literature is concentrated on the developed economies of the world as the greatest volume of M&A activity has historically occurred in developed regions. Much of the literature on M&A's describes the increasing number of these deals and its importance in global FDI, often by referring to the global total (Haller, 2008; Bjorvatn, 2004; Horn & Persson, 2001, Shimizu, Hitt, Vaidyanath, Pisano, 2004). None of these studies have referred to the relative scarcity in utilisation of M&A's in the developing world relative to the developed regions of the globe. This paper aims to make a contribution not just to the emerging literature on M&A's but also to its particular developing economy paradigm.

Further this study explores M&A's in the context of several predictor variables which appear to be underrepresented in the literature to date. These variables include the sectoral make-up, including the resource wealth of an economy and the regional versus country attractiveness dimension of M&A attraction.

Rugman and Verbeke (2008) comment that the exploration on the regional *versus* the global strategy of firms requires 'substantive extensions of extant international business theory'.

The study also contributes to the emerging literature on the importance of institutions in FDI and to one level deeper that is the interaction of M&A's and institutions. A strong call has been made by certain scholars for a far stronger exploration of an institution based view of international business strategy (Dunning, 2001; Peng *et al*, 2008).

The highlighted sections of Meyer's (2004) framework are the broad areas within which this research is based.

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APPENDICES

TABLE 21: REGIONAL AND COUNTRY ATTRACTIVENESS LIST AND RANKING

Appendix 1	Rank Regional M&A attractiveness	Regional M&A attractiveness		Rank Country M&A attractiveness	Country M&A attractiveness
Albania	3	-0.59695	Albania	-0.22091	49
Algeria	22	-0.50669	Algeria	-0.66351	8
Angola	31	-0.48291	Angola	-0.67564	4
Argentina	77	0.95504	Argentina	-0.25341	46
Armenia	21	-0.50707	Armenia	0.90303	81
Azerbaijan	91		Azerbaijan		
Bahrain	51	-0.35541	Bahrain	-0.59631	18
Bangladesh	40	-0.45035	Bangladesh	-0.39852	37
Belarus	26	-0.49762	Belarus	-0.66567	6
Belize	5	-0.56980	Belize	0.03089	63
Bolivia	23	-0.50637	Bolivia	-0.28460	43
Bosnia and Herzegovina	45	-0.41006	Bosnia and Herzegovina	-0.22082	50
Botswana	10	-0.53824	Botswana	-0.33595	40
Brazil	85	3.11423	Brazil	-0.40607	36
Brunei Darussalam	88		Brunei Darussalam		
Bulgaria	74	0.49219	Bulgaria	2.45823	85

Burkina Faso	1	-0.81391	Burkina Faso	4.67217	86
Cambodia	24	-0.50389	Cambodia	-0.56811	22
Cameroon	92		Cameroon		
Chile	72	0.41931	Chile	-0.09800	56
Colombia	71	0.40345	Colombia	0.81623	78
Congo	32	-0.48068	Congo	-0.56112	23
Congo, Democratic Republic of	30	-0.48345	Congo, Democratic Republic of	-0.50304	29
Costa Rica	35	-0.46264	Costa Rica	-0.38399	39
Côte d' Ivoire	13	-0.53331	Côte d' Ivoire	-0.62038	15
Croatia	66	-0.09001	Croatia	0.87151	80
Ecuador	55	-0.31359	Ecuador	0.24742	69
Egypt	75	0.58127	Egypt	-0.28442	44
El Salvador	36	-0.46137	El Salvador	-0.00700	61
Equatorial Guinea	93		Equatorial Guinea		
Eritrea	94		Eritrea		
Ethiopia	95		Ethiopia		
Gabon	8	-0.54206	Gabon	-0.43042	35
Georgia	42	-0.42553	Georgia	-0.16633	54
Ghana	62	-0.21133	Ghana	1.89195	83
Guatemala	34	-0.46471	Guatemala	-0.46387	33
Guinea	11	-0.53655	Guinea	-0.66076	9
Guyana	96		Guyana		
Honduras	97		Honduras		
India	87	4.47456	India	-0.31087	41
Indonesia	81	1.96844	Indonesia	0.23859	68
Iran, Islamic Republic of	15	-0.52388	Iran, Islamic Republic of	-0.64409	11
Iraq	43	-0.42284	Iraq	-0.66060	10

Jordan	65	-0.12656	Jordan	-0.03806	59
Kazakhstan	60	-0.22807	Kazakhstan	-0.18592	52
Kenya	47	-0.37712	Kenya	-0.18396	53
Kuwait	12	-0.53403	Kuwait	0.01879	62
Kyrgyzstan	14	-0.52797	Kyrgyzstan	1.06603	82
Lao People's Democratic Republic	7	-0.55855	Lao People's Democratic Republic	0.20139	67
Lebanon	28	-0.49085	Lebanon	-0.53035	27
Libyan Arab Jamahiriya	19	-0.50966	Libyan Arab Jamahiriya	-0.67419	5
Macedonia, TFYR	27	-0.49691	Macedonia, TFYR	0.04362	65
Madagascar	38	-0.45911	Madagascar	-0.58028	19
Malaysia	80	1.83932	Malaysia	-0.21129	51
Mali	18	-0.50993	Mali	-0.62707	13
Mauritania	20	-0.50856	Mauritania	0.32190	71
Mauritius	61	-0.21374	Mauritius	5.44211	87
Mexico	82	2.10503	Mexico	-0.55058	25
Moldova, Republic of	25	-0.50075	Moldova, Republic of	-0.30362	42
Morocco	67	-0.07754	Morocco	-0.14784	55
Mozambique	48	-0.37626	Mozambique	-0.61461	17
Myanmar	98		Myanmar		
Namibia	49	-0.36841	Namibia	-0.22207	48
Nepal	99		Nepal		
Nicaragua	29	-0.48372	Nicaragua	-0.03914	58
Nigeria	64	-0.13017	Nigeria	-0.28428	45
Oman	50	-0.35828	Oman	-0.57740	20
Pakistan	69	0.12567	Pakistan	0.04359	64
Panama	57	-0.31113	Panama	2.04796	84
Paraguay	89		Paraguay		

Peru	70	0.13893	Peru	0.26612	70
Philippines	68	0.10631	Philippines	-0.45862	34
Qatar	90		Qatar		
Romania	78	1.00295	Romania	0.77845	76
Russian Federation	84	2.70295	Russian Federation	-0.46579	32
Rwanda	37	-0.46100	Rwanda	-0.46953	31
Saudi Arabia	52	-0.35395	Saudi Arabia	-0.68009	3
Senegal	100		Senegal		
Sierra Leone	17	-0.51028	Sierra Leone	-0.63906	12
South Africa	86	3.59947	South Africa	0.10116	66
Sri Lanka	9	-0.53908	Sri Lanka	-0.66410	7
Sudan	58	-0.30115	Sudan	0.65421	74
Suriname	101		Suriname		
Swaziland	16	-0.51088	Swaziland	-0.48027	30
Syrian Arab Republic	39	-0.45391	Syrian Arab Republic	-0.01932	60
Tajikistan	4	-0.58134	Tajikistan	-0.57596	21
Thailand	79	1.50218	Thailand	-0.23769	47
Tunisia	63	-0.17359	Tunisia	0.42570	73
Turkey	83	2.18032	Turkey	0.71227	75
Turkmenistan	6	-0.56586	Turkmenistan	-0.55555	24
Uganda	56	-0.31281	Uganda	-0.06308	57
Ukraine	73	0.48130	Ukraine	0.82457	79
United Arab Emirates	76	0.71507	United Arab Emirates	-0.69652	1
United Republic of Tanzania	46	-0.40278	United Republic of Tanzania	-0.68043	2
Uruguay	33	-0.46757	Uruguay	-0.38454	38
Uzbekistan	41	-0.44220	Uzbekistan	0.36499	72
Venezuela	59	-0.25848	Venezuela	-0.51967	28

Viet Nam	44	-0.41269	Viet Nam	-0.61471	16
Yemen	2	-0.62301	Yemen	0.78430	77
Zambia	54	-0.34751	Zambia	-0.54445	26
Zimbabwe	53	-0.35140	Zimbabwe	-0.62270	14

TABLE 22: REGIONAL LEVEL ANOVA ON EXTREME GROUPS QUARTILE1 AND QUARTILE 4

PC Analysis Regional level attractiveness Q1 and Q4 means and significance	Mean	Mean	t-value	df	p	Valid N	Valid N	Std.Dev.	Std.Dev.	F-ratio	p
	Q1	Q4				Q1	Q4	Q1	Q4	Variances	Variances
telephone mainlines (per 1000 people)	136.14	213.3	-1.73561	40	0.090332	21	21	133.87	153.7	1.32	0.543043
cellular subscribers (per 1000 people)	160.90	454.0	-3.29523	34	0.002306	16	20	234.57	287.1	1.50	0.431212
GDP Growth Avg 2000 0 2005	5.28	4.8	0.61369	29.18538	0.544174	20	21	2.81	1.5	3.32	0.010511
Total no of foreign affiliates 2006	30.93	1850.7	-2.54327	18.00474	0.020382	14	19	30.73	3118.8	10297.83	0.000000
% of primary affiliates per country 2006	4.11	1.9	1.71912	15.60199	0.105365	14	19	4.60	1.7	7.41	0.000165
% of secondary affiliates per country 2006	24.24	53.8	-1.36749	19.04542	0.187394	14	19	13.66	93.0	46.42	0.000000
% of tertiary affiliates per country 2006	72.24	64.6	1.84907	31	0.074005	14	19	13.65	10.2	1.78	0.252573
GDP average 200402006	20954.77	268297.3	-4.08428	21.06093	0.000529	21	21	44624.23	273907.9	37.68	0.000000
FDI%GDP Avg 2000/2004	17.39	24.6	-1.65281	39	0.106399	20	21	13.54	14.2	1.10	0.837198
Avg GDP 2000/2004	14821.39	191063.7	-4.10799	21.07341	0.000499	21	21	31794.02	194015.4	37.24	0.000000
Avg Pol 2000/2004	0.23	0.4	-2.43953	40	0.019235	21	21	0.19	0.2	1.09	0.841847
HDI Avg 2000/2004	0.60	0.7	-3.56877	29.59240	0.001246	21	21	0.17	0.1	3.91	0.003627

Avg GDP/cap	2311.00	3550.5	-0.89796	40	0.374580	21	21	4101.21	4815.8	1.38	0.479030
Avg voice& accountability 2000/2004	1.76	2.4	-3.12355	40	0.003318	21	21	0.78	0.6	1.72	0.232793
Avg Pol Stab 2000/2004	2.03	2.0	0.08298	40	0.934283	21	21	0.73	0.8	1.15	0.751064
Avg Govt effect 2000/2004	1.95	2.5	-3.45916	40	0.001301	21	21	0.55	0.5	1.13	0.780217
Avg Rule of law 2000/2004	1.92	2.3	-1.95642	40	0.057423	21	21	0.60	0.6	1.08	0.871685
Avg Reg Qual 2000/2004	1.97	2.5	-2.86344	40	0.006642	21	21	0.69	0.6	1.40	0.461430
Average Control of Corruption 2000/2004	2.05	2.3	-1.36193	40	0.180842	21	21	0.59	0.6	1.05	0.921426
Avg Agriculture,hunting, forestry & fishing as a % of GDP 2000/2004	20.42	11.0	2.87328	25.39884	0.008095	21	21	14.03	5.2	7.27	0.000043
Resource =1 non0resource=0	0.71	1.0	-2.82843	40	0.007275	21	21	0.46	0.0	0.00	1.000000
Avg mining, manufacturing & utilities as a % of GDP 2000/2004	27.15	29.3	-0.56211	26.89154	0.578698	21	21	15.87	6.7	5.63	0.000302
Avg construction as a % of GDP 2000/2004	5.76	4.9	0.89714	26.33661	0.377773	21	21	3.91	1.6	6.15	0.000157
Avg services as a % of GDP2000/2004	41.90	52.6	-2.69973	40	0.010121	21	21	13.30	12.3	1.17	0.728435
Avg transport, storage and communications as a % of GDP 2000/2004	6.63	9.3	-3.03288	40	0.004240	21	21	2.86	2.7	1.08	0.862148
Ag industry as a % of GDP 2000/2004	34.89	34.2	0.19716	28.69690	0.845093	21	21	14.46	6.9	4.37	0.001767

TABLE 23 : **COUNTRY LEVEL ANOVA ON EXTREME GROUPS QUARTILE1 AND QUARTILE 4**

PC Analysis country level attractiveness significance and quartile means	Mean	Mean	t-value	df	p	Valid N	Valid N	Std.Dev.	Std.Dev.	F-ratio	p
	Q1	Q4				Q1	Q4	Q1	Q4	Variances	Variances
telephone mainlines (per 1000 people)	137.42	192.38	-1.19610	38	0.239067	19	21	121.26	163.65	1.821	0.206260
cellular subscribers (per 1000 people)	297.52	285.93	0.10845	31	0.914338	14	19	357.49	257.39	1.929	0.195381
GDP Growth Avg 2000 0 2005	6.04	5.04	1.50314	27.13941	0.144352	21	20	2.80	1.18	5.649	0.000390
Total no of foreign affiliates 2006	109.63	277.59	-1.98418	34	0.055355	19	17	193.68	307.27	2.517	0.062008
% of primary affiliates per country 2006	3.02	3.58	-0.42384	34	0.674353	19	17	4.27	3.62	1.392	0.510574
% of secondary affiliates per country 2006	21.77	27.83	-1.57777	34	0.123879	19	17	12.21	10.67	1.310	0.591924
% of tertiary affiliates per country 2006	76.20	69.96	1.56887	34	0.125940	19	17	12.27	11.50	1.138	0.800396
GDP average 200402006	50400.57	60639.69	-0.38370	40	0.703235	21	21	77049.80	94961.51	1.519	0.357640
FDI%GDP Avg 200202004	25.66	25.77	-0.01488	32.82770	0.988214	21	21	27.63	16.64	2.755	0.028275
Avg GDP 200202004	35116.23	43456.42	-0.43825	40	0.663560	21	21	54699.46	67921.41	1.542	0.340825
Avg Pol 200202004	0.19	0.27	-1.38229	40	0.174552	21	21	0.18	0.19	1.129	0.788421
HDI Avg 200202004	0.58	0.68	-1.83476	33.59430	0.075410	21	21	0.23	0.14	2.550	0.042164
Avg GDP/cap	3473.35	1880.68	1.18181	23.23323	0.249235	21	21	5938.83	1694.04	12.290	0.000001
Avg voice& accountability 200202004	1.55	2.09	-2.52965	40	0.015460	21	21	0.60	0.76	1.609	0.295572
Avg Pol Stab 200202004	1.88	1.92	-0.14188	40	0.887886	21	21	0.90	0.86	1.097	0.837882
Avg Govt effect 200202004	1.93	2.17	-1.34443	40	0.186383	21	21	0.65	0.51	1.646	0.273679

PC Analysis country level attractiveness significance and quartile means	Mean	Mean	t-value	df	p	Valid N	Valid N	Std.Dev.	Std.Dev.	F-ratio	p
Avg Rule of law 200202004	1.92	1.99	-0.30081	40	0.765120	21	21	0.79	0.56	1.983	0.134186
Avg Reg Qual 200202004	1.84	2.24	-1.76765	40	0.084748	21	21	0.84	0.61	1.947	0.144829
Average Control of Corruption 200202004	2.01	2.06	-0.26901	40	0.789307	21	21	0.72	0.49	2.127	0.099498
Avg Agriculture,hunting, forestry & fishing as a % of GDP 200202004	17.61	18.08	-0.11792	40	0.906722	21	21	13.46	12.38	1.183	0.710510
Resource =1 non0resource=0	0.76	0.76	0.00000	40	1.000000	21	21	0.44	0.44	1.000	1.000000
Avg mining, manufacturing & utilities as a % of GDP 2000/2004	33.82	24.15	2.35145	25.91934	0.026582	21	21	17.58	6.84	6.606	0.000091
Avg construction as a % of GDP 200202004	4.81	5.99	-1.40737	40	0.167041	21	21	2.66	2.77	1.082	0.862175
Avg services as a % of GDP200202004	43.76	51.48	-2.23295	40	0.031214	21	21	10.97	11.45	1.091	0.847576
Avg transport, storage and communications as a % of GDP 200202004	7.54	9.64	-2.01772	40	0.050364	21	21	3.39	3.35	1.027	0.953009
Ag industry as a % of GDP 200202004	38.64	29.37	2.25021	25.87425	0.033164	21	21	17.59	6.81	6.659	8.58E-05

TABLE 24: ANOVAS AND T-TESTS FOR MEAN DIFFERENCES ON CLUSTERS

4 cluster	SS	df	MS	SS	df	MS	F	p
telephone mainlines (per 1000 people)	195,724.64	3.00	65,241.55	1,630,464.35	95.00	17,162.78	3.80	0.01
cellular subscribers (per 1000 people)	787,421.00	3.00	262,473.67	5,362,237.01	82.00	65,393.13	4.01	0.01
GDP Growth Avg 2000 0 2005	18.71	3.00	6.24	954.18	96.00	9.94	0.63	0.60
Total no of foreign affiliates 2006	64,544,236.96	3.00	21,514,745.65	157,212,972.73	81.00	1,940,900.90	11.08	0.00
% of primary affiliates per country 2006	50.47	3.00	16.82	1,073.05	81.00	13.25	1.27	0.29
% of secondary affiliates per country 2006	27,437.18	3.00	9,145.73	147,977.62	81.00	1,826.88	5.01	0.00
% of tertiary affiliates per country 2006	1,633.56	3.00	544.52	8,816.79	81.00	108.85	5.00	0.00
Avg M&A sales per country (US $ millions) 200402006	154,354,986.06	3.00	51,451,662.02	95,763,501.45	97.00	987,252.59	52.12	0.00
GDP average 200402006	1,478,780,366,114.06	3.00	492,926,788,704.69	1,166,176,179,734.27	97.00	12,022,434,842.62	41.00	0.00
FDI%GDP Avg 200202004	2,342.11	3.00	780.70	85,786.11	96.00	893.61	0.87	0.46
Avg GDP 200202004	736,885,154,358.45	3.00	245,628,384,786.15	594,493,251,651.13	97.00	6,128,796,408.77	40.08	0.00
Avg Pol 200202004	0.32	3.00	0.11	3.56	97.00	0.04	2.95	0.04
HDI Avg 200202004	0.27	3.00	0.09	2.46	97.00	0.03	3.54	0.02
Avg GDP/cap	127,139,102.17	3.00	42,379,700.72	2,312,796,806.80	97.00	23,843,266.05	1.78	0.16

Avg voice& accountability 200202004	7.84	3.00	2.61	51.53	97.00	0.53	4.92	0.00
Avg Pol Stab 200202004	2.69	3.00	0.90	61.58	97.00	0.63	1.41	0.24
Avg Govt effect 200202004	5.74	3.00	1.91	31.97	97.00	0.33	5.81	0.00
Avg Rule of law 200202004	3.03	3.00	1.01	40.74	97.00	0.42	2.41	0.07
Avg Reg Qual 200202004	6.65	3.00	2.22	45.30	97.00	0.47	4.74	0.00
Average Control of Corruption 200202004	1.63	3.00	0.54	38.79	97.00	0.40	1.36	0.26
Avg Agriculture,hunting, forestry & fishing as a % of GDP 200202004	751.77	3.00	250.59	15,406.16	97.00	158.83	1.58	0.20
Resource =1 non0resource=0	0.86	3.00	0.29	18.45	97.00	0.19	1.51	0.22
Avg mining, manufacturing & utilities as a % of GDP 200202004	613.00	3.00	204.33	22,224.71	97.00	229.12	0.89	0.45
Avg construction as a % of GDP 200202004	15.61	3.00	5.20	771.82	97.00	7.96	0.65	0.58
Avg services as a % of GDP200202004	1,108.87	3.00	369.62	18,296.58	97.00	188.62	1.96	0.13
Avg transport, storage and communications as a % of GDP 200202004	80.45	3.00	26.82	1,024.01	97.00	10.56	2.54	0.06
Ag industry as a % of GDP 200202004	433.42	3.00	144.47	20,237.88	97.00	208.64	0.69	0.56