

https://dspace.org/

Investability and the likelihood of graduation into emerging market status: a focus on developing economies

Albert, Letting K.

2021
University of the Witwatersrand, Johannesburg
https://hdl.handle.net/10539/41209

Albert, Letting K.. (2021). Investability and the likelihood of graduation into emerging market status: a focus on developing economies [Master's dissertation, University of the Witwatersrand, Johannesburg]. WireDSpace.

Downloaded from a DSpace repository. https://dspace.org/

INVESTABILITY AND THE LIKELIHOOD OF GRADUATION INTO EMERGING MARKET STATUS: A FOCUS ON DEVELOPING ECONOMIES

Submitted by:

Letting K. Albert

1559694

Supervisor:

Professor Kalu Ojah

A Master's Thesis submitted to the Faculty of Commerce, Law and Management, University of the Witwatersrand, Johannesburg, in fulfilment of the requirements for the Master of Management in Finance and Investment (MMFI).

October 15th, 2021

DECLARATION

I declare that this research project is my own work. It is submitted in partial fulfillment of the requirements for the Masters of Management of Finance and Investment at the Witwatersrand Business School. This material has not been submitted at any other institution for any other degree or examination. Also, all sources used in this project have been acknowledged by means of references.



…….

Albert Letting

2021 October 15

ACKNOWLEDGEMENTS

First and foremost, I would like to express my sincerest appreciation to my supervisor, Professor Kalu Ojah for academic and professional guidance, encouragement and interest in my area of study. May God grant you long and happy life. I extend my deepest appreciation to Dr. Thanti Mthanti for his invaluable advice on this topic.

Finally, I would like to thank my loving parents Alfrick Sang, Jennifer Sang for their love and constant encouragement and motivation. My heartfelt thanks to my sisters Angela, Cathy and Gorreti for their love and support.

ABSTRACT

Emerging market economies remain a valuable component for many investors due to existing diversification benefits within the risk-return framework. In return for their attractiveness, emerging market economies achieve affordable external financing which is critical for their growth. Most developing countries are trying to attract foreign investment because being deemed investable is analogous to be index-included. This paper sought to determine the stylized factors of investability in developing countries. The factors were estimated using a Logit model against 72 countries comprising of graduated countries appearing in the MSCI index and other economically similar countries, with potential for an upgrade.

The study revealed that macroeconomic indicators such as GDP, taxation and unemployment rate were statistically significant while Government expenditure, inflation and trade openness had a negative impact on the probability of inclusion in the emerging market index. Government effectiveness, human capital development, production infrastructure and the level of private investment were found to positively impact investability. Institutional variables such as business climate, transparency and accountability, ease of doing business rank and depth of credit information were found to show a strong positive correlation to a country's graduation into the index. It was observed that foreign investors prefer a large, transparent and liquid market where sovereign credit ratings show the right signals.

With respect to policy making, the arguments based on this study promote the view that index inclusion is a gradual process and is followed by increased investor awareness. The findings show that efforts by countries aiming for index inclusion can increase the likelihood by focusing on faster pace of fixing macroeconomic indicators. While efforts to improve on all fronts would be desirable, progress on physical infrastructure, human capital, financial market development, regulatory framework and political risk is likely to be gradual and not directly linked to macroeconomic policies. Simultaneously, a steady progress towards well-functioning financial markets and domestic policies is likely to have a greater impact on increasing the near-term investability.

Table of Contents

DECLARATION i
ACKNOWLEDGEMENTS ii
ABSTRACT iii
ABBREVIATIONS vi
CHAPTER 1: INTRODUCTION 1
1.1 Statement of the problem 3
1.2 Objectives of the study 5
1.3 Research questions 6
1.4 Relevance of the Study 6
CHAPTER 2: LITERATURE REVIEW 8
2.1 The role of capital flows 8
2.1.1 Foreign Direct Investment 9
2.1.2 Political Stability 12
2.1.3 Institutional quality and infrastructure 12
2.1.4 Taxation 14
2.1.5 Exchange Rate 14
2.2 Factors affecting capital allocation. 15
2.3 Event shocks and emerging economies dependence on external funding 16
2.4 Risk elements to investments in Africa 17
2.5 Behavioural aspects of fund management and decision making 20
CHAPTER 3: EMERGING MARKET INDICES 23
3.1 Definition of Emerging Market 23
3.2 Emerging Market Indexes Classification Criteria 24
3.2.1 Morgan Stanley Capital International (MSCI) Evaluation Criteria 24
3.2.2 S&P Dow Jones Emerging Market Indices 25
3.2.3 Bloomberg Barclays Indices 26
3.3 Shortcomings of the classification criteria 26
3.4 Impact of country inclusion in index benchmarks 29
3.5 Cursory relations between investability and foreign investment to emerging economies 31
CHAPTER 4: RESEARCH METHODOLOGY 37
4.1 Data and model specification 39
4.2 Hypothesis tests and variable definitions 43

CHAPTER 5: RESULTS 47
5.1 Descriptive statistics 47
5.2 Correlation matrix 49
5.3 Regression results 52
5.3.1 Model 1 52
5.3.2 Model 2 52
5.3.3 Model 3 52
5.3.4 Model 4 53
5.3.5 Model 5 53
5.3.6 Model 6 53
5.3.7 Model 7 53
5.4 Marginal effect analysis 54
CHAPTER 6: DISCUSSION 57
CHAPTER 7: CONCLUSION 65
7.1 Recommendations 68
REFERENCES 71
APPENDIX A: MSCI MEASUREMENT CRITERIA 85
APPENDIX B: EVIEWS LOGIT MODEL RESULTS 86

List of Tables

Table 4. 1: Potential explanatory variables 38
Table 4. 2: Variables used in previous empirical studies 40
Table 4. 3: Descriptive statistics of countries used in the sample 42

Table 5. 1: Descriptive Statistics of explanatory variables in Cluster A. 47
Table 5. 2: Descriptive Statistics of explanatory variables in Cluster B. 48
Table 5. 3: Logit model results for 7 estimations relative to inclusion in the Index. 51
Table 5. 4: Marginal analysis results. 54

List of Figures

Figure 3. 1: MSCI EM country index weighting comparison. 27
Figure 3. 2: Emerging market indices. 31
Figure 3. 3: FDI to Brazil. 33
Figure 3. 4: FDI to India. 34
Figure 3. 5: FDI to South Africa 34
Figure 3. 6: FDI to South Korea 35
Figure 3. 7: FDI to Venezuela 36

ABBREVIATIONS

DSSI – Debt Service Suspension Initiative

EM – Emerging Markets

FDI – Foreign Direct Investment

GDP – Gross Domestic Product

IFC – International Finance Corporation

LOGIT – Logistic Regression Model

M&A – Mergers and Acquisitions

MNCs – Multinational Corporations

MSCI – Morgan Stanley Capital International

ROI – Return on Investment

SADC – Southern African Development Community

SSA – Sub-Saharan Africa

S&P – Standard & Poor's

UNCTAD – United Nations Conference on Trade and Development

WB – World Bank

WGI – World Governance Indicators

CHAPTER 1: INTRODUCTION

In the search for new global financial markets, investors have been aroused by new emerging market countries developed over the past few years. The key point of interest is the potential diversification benefits that accrue from the inclusion of such countries in international portfolios. Furthermore, the broadening of investment arena to include emerging market countries has influenced the access of international capital markets, especially for developing countries. Following from this, there is a race for many countries to be classified as emerging markets, with the threshold having important implications for policy change and direction.

A developing country benefits in two ways when it achieves emerging market status: first, its cost of finance is lowered as it accesses international capital markets, secondly, it expands the pool of potential foreign investors who can buy its bonds. This paper sought to build on existing literature and suggest ways in which a country would be classified as an emerging market economy. In other words, what are the stylized factors which increase the likelihood of a country achieving emerging market status?

For those countries that are not considered emerging, identifying specific factors that can be used by policy makers towards an upgrade is important. To obtain a measure which can be used for concrete classification, both qualitative and quantitative factors contribute to the core variables of an emerging market benchmark. The analysis of these factors, could provide a set of indicative sequencing of optimal approaches to achieving an upgrade for many developing countries.

Beyond the set of commonly known emerging market economies, African countries are beginning to receive significant attention within the emerging market space. More so, frontier economies were the subject of this study in view of their growth trajectory and desire to join the cluster of emerging market economies.

Sub-Saharan Africa has witnessed adjustments and economic transformation which presents investors with new opportunities. The continent has adjusted in the following realms; accelerating infrastructure growth, improving public services, a vibrant private sector, transformative use of technology and embracing good governance and respect for the rule of law.

Africa's growth story and investments outlook builds upon its deficiencies and challenges. In particular, inadequate infrastructure supply, socio-political instability and price volatility on resource-dependent countries are among the notable reasons for weak continent's GDP. In the face of these challenges, the continent continues to consistently paint a positive growth trajectory. In a report on African economies, themed "Lions on the Move" McKinsey Global Institute finds the following:

> *In the years ahead, Africa will benefit from strong fundamentals including a young and growing population, the world's fastest urbanization rate, and accelerating technological change. These will help drive rapid growth in consumer markets and business supply chains and will offer opportunities to build large, profitable industrial and services companies. But much work needs to be done both by companies themselves and by Africa's governments to translate opportunity into tangible economic benefits*.

These findings should encourage business opportunities and growth, government policy making towards growth and human development. There is no doubt that Africa's overall growth performance has been dragged down in recent years by a sharp slowdown in particular investment determinants. Arising from this skepticism, this paper attempted to answer the question; what is the real state of investability in African emerging market economies and what makes it attractive to invest in Africa? While African economies face retrogressive growth and uncertain investment environments, its investability depends on understanding the primary drivers of growth, investment and productivity.

The informative work of Ladekarl and Zervos (2004) has summarized the key investability issues in emerging markets into "Housekeeping" and "plumbing" issues. In terms of the highlights, African countries appear to have made progress in adopting well-functioning financial markets and taming monetary and fiscal disturbances. Meanwhile political environment and efficiency of plumbing issues remain critical determinants of investment flows.

A departure from the general factors that investors consider most important, this study was concerned with devising a standard formula for ascertaining what investors deem important in African countries. In other words, is there an index guided criteria for African emerging market economies which investment allocation can mirror? Perhaps an interesting entry point into these

factors is to assess the crucial development made by institutional investors in Sub-Saharan Africa in driving growth. Nellor (2008), in his article points out that several African countries have become promising candidates in emerging markets. Interestingly his study articulates the changes happening in the global environment and how investors are seeking better yields. This search has led to the rise of frontier markets in Africa.

This study is organized as follows: chapter two provides the background information on relevant variables that influence investability. Several strands of literature are reviewed to investigate possible determinant variables. The remainder of the paper is structured to recap on the role of financial reform agenda and liberalization in African countries and linkages to the current architecture of financial markets. The third chapter outlines the econometric methodology and database. The fourth chapter describes the data and the main results of estimation. Based on the findings, chapter five discusses the stylized factors that any country wishing to cross the threshold into emerging market status should consider. The last section provides summaries and concluding remarks.

1.1 Statement of the problem

Emerging market economies remain a valuable component for many investors due to existing diversification benefits within the risk-return framework. In return for their attractiveness, emerging market economies achieve affordable external financing which is critical for their growth. A consistent positive outlook based on a broad set of economic, social and political factors imply a reduction in the country's borrowing costs in the international capital markets. By leveraging the support of external finance such economies are deemed investable and this is analogous to being listed as an emerging market.

Emerging markets are exposed to vulnerabilities across the spectrum of sovereign, household, and corporate borrowers. The situation is particularly dire for some low-income developing countries faced with widening budget deficits and external debt pressure. Allen et al. (2012) observe a "financial development gap" especially among developing countries that are unable to finance both public and private aggregate economic activity. Kodongo & Ojah (2016) find that the financing

gap is pervasive and cross border flows increase the investability of recipient countries and provide a financing relief on particular production sectors.

The focus on the investment-saving gap of emerging market economies and its attendant features explains why some countries receive preferential treatment and become classified as emerging market while others remain potential candidates. Developing countries have huge debt service obligations and are eligible for any debt relief at any stage of economic development. Institute of International Finance (IIF, 2020) Report on Debt Service Suspension Initiative (DSSI) notes that since 2011, external debt levels have risen again in many of these countries, on average the increase has been around 10 percentage points to over 47% of GDP. It estimates that total external debt in developing countries has more than doubled since 2010 to $750 billion as at 2019. The statistics show the level of cross border flows into emerging market economies and significance in the international capital markets.

In the last decade, Africa recorded increased investment in the form of foreign flows. Much of these flows were invested in the commodities sector. It is therefore not surprising that investments in infrastructure related areas including power, construction and ICT made up 44% of all FDI into the continent[1]. Whereas the global race for commodities also supported this boom, Africa received both long term investors and short-term speculators. Furthermore, the increased availability of other investment products has led to changes in how investors are allocating their portfolios. Investment in Africa declined by 14%, and flows to Least Developing Countries (LDCs) and structurally weak economies remain volatile and low (UNCTAD, 2017). These developments also show a pattern of skewed investments in certain sectors of the economy.

Between 2010 and 2015, Africa's overall real GDP growth averaged just 3.3%. This deceleration of growth, reflects more challenging economic conditions. However, it also exposes a divergence in the growth paths of economies within Africa. While resource endowed nations continue to deteriorate, other SSA countries continue to experience rapid growth. Several issues have been noted across the African nations, including deteriorating budget and current-account balances,

[1] Africa Investment Report of 2016

slowing rates of FDI and domestic savings, and stagnating human capital development (McKinsey & Company, 2016).

Africa's share of global investments has remained persistently lower despite accelerating GDP expansion. Some of the reasons observed are small nature of financial markets and illiquidity in comparison to mature, advanced markets (Loggie, 2007). Nonetheless, escalation of integration efforts of African markets into the world portfolio shows positive interest in securities of developing countries (Bekaert & Harvey, 2002).

The perspectives in investment criteria especially at country levels is a hotly contested debate in asset allocation and portfolio management. Investors assess opportunities in different ways and have different views of how risk evolves with the holding period. As argued by McEnally (1985), risk is ultimately in the eyes of the beholder. As a consequence, some investors assess risk with volatility, others with downside volatility, and others with factors (Estrada, 2012). Since there is no right or wrong approach, the controversy lies in ascertaining which factors influence increased investment in African emerging markets. While theory looks at all investors as "return chasers", there is very little evidence between increased investment in Africa and the fundamental characteristics of these economies. It is therefore exciting to empirically determine how attractive these economies are especially to foreign institutional and individual investors. This study examined in depth the country level issues that investors look out for in the African financial landscape.

1.2 Objectives of the study

Importantly, the objectives of this study are to ascertain the underlying investability factors that distinguish emerging market economies that have graduated from those that are in the process of achieving such status. This analysis provides the link between country level characteristics (macro, financial development, legal) and investment allocations with the goal of ranking these countries according to established investability factors. Understanding the linkages uniting capital market development in emerging market economies and level of capital flows required further investigation.

Investment rating agencies such as S&P, Fitch and Moody's share broad criteria for classification, although their weighting variables across all the variables considered vary (Jaramillo 2010). While such internal factors influence investment decisions, they only form an opinion which a credit rating agency utilize on advising their clients. A more difficult task is how investors view investment risks in emerging market economies and what criteria or index they follow. Kohers, Kohers, and Pandey (1998) do not see any pattern among investors on country selection, but they rather observe use of rational expectations based on past and future economic conditions of a country. Furthermore, existing studies tend to focus on a single outcome at a time and miss important aspects of how these countries behave and perform over time. This study attempted to resolve this dilemma by considering a wide range of factors that constitute a general benchmark.

1.3 Research questions

This study was guided by the following questions:

1) What is an emerging market economy in the context of market terminologies?
2) What are the stylized investability features of a country?
3) Which investability factors aid countries graduate onto emerging market status?
4) Which emerging market definition fits the data better?

1.4 Relevance of the Study

This study is timely and relevant for both institutional and individual investors who are on the lookout for good returns and diversification. The identification of an overall optimum portfolio is critical in portfolio construction. Speidell and Sappenfield, (1992) illustrate how diversification opportunities may emerge from emerging markets. From their assessment, investing in younger, less developed markets is a valuable investment strategy. While emerging markets reward investors richly, they also possess high risks (Errunza, 1977; Wilcox, 1992). The relevance of emerging markets is gaining momentum in spite of high risks; in particular, emerging markets lower portfolio risk because of relatively lower correlation with advanced markets.

At the core of a stronger capital markets architecture is the capacity of financial system. Emerging market economies are susceptible to shocks and crises which impact on capital flows. Investor confidence is eroded sharply in emerging markets because of fundamental factors such as current

account imbalances, large moves in real exchange rates, trade and domestic output gaps and political instabilities. Whereas in practice, investors could employ the mean-variance framework in portfolio construction, the degree of inclusion of an emerging market depends largely on investor sentiment and tolerance for country risk (Kohers, Kohers, & Pandey, 1998).

African markets are becoming a darling of most multinational corporations (MNCs) and it registers significant financial flows which are seen to be beneficial for growth. It is good to explore the thinking behind such flows and narratives such as: "Africa Rising". Furthermore, African financial markets have become more sophisticated with the advent of technology which have resulted in complex financial instruments. This study complements those of cross-border flows into emerging markets (Ojah & Kodongo, 2014) and financial constraints faced by developing economies (Muhanji & Ojah, 2011; Allen et al., 2012; Mavrotas & Santillana, 1999; Dupas & Robinson, 2009; World Bank, 2013; Andrianaivo & Yartey, 2010; Ojah et al., 2010; Japelli et al., 2005) among others.

The role of investment flows in emerging markets has received overwhelming reviews. Going by the contribution that foreign flows now make to Africa's GDPs, diaspora funds possess the levers of financial development (Ojah & Kodongo, 2014). Although their study focuses on financing gap in African countries, it maps out the effect of cross-border flows into various production sectors. Specifically, for Africa, foreign direct investment (FDI) inflow grew from US$5.61 billion in 1997 to US$58.53 billion in 2008; foreign portfolio investments (FPIs), which were largely in equity form, rose from US$804 million in 2004 to US$19.78 billion in 2010; and the formerly less considered remittances from the Diaspora (RFD) surprisingly surpassed FPI as a source of cross-border flow to Africa, standing at an impressive US$39.31 billion in 2010. Therefore, the evidence is that African countries accepted reform agenda on liberalization.

CHAPTER 2: LITERATURE REVIEW

In this section, several strands of literature are examined that describe aspects of investability. First the role of investment flows is highlighted. Secondly, a description of several factors that determine these flows is provided. Third, the study explores current practices of investment methodologies and designs in emerging market economies.

2.1 The role of capital flows

The instrumental role of cross-border capital flows on economic performance has been looked at by Kodongo and Ojah (2016). They establish how different types of flows (FDI, Foreign portfolio flows (FPI) and Remittances from diaspora (RFD)) can provide financing gap relief to African economies for several specific production sectors. From this study, RFP and FDI provide the most relief while FPI is least likely to reduce financial constraints. However, recipients of FPI were considered attractive and had increased the chances of receiving FDI and RFP. They recommend that African countries match each flow type with appropriate production sectors to realize the benefits of flows. In support of this view, Nellor (2008) observes that financial flows in Africa have increased and are leading to growth through intermediation. He cautions such economies on falling trap to short term flows that are characterized by reversals in times of crisis.

Previous theoretical and empirical studies have focused on the role of international capital flows on market growth. For example, FDI is shown to provide new sources of capital, technology, and imparts necessary skills to recipient nations. This creates an efficient way of production and increases household income through job creation (Fernandes & Paunov, 2012; Gohou & Soumaré, 2012).

Few studies have dedicated their research on micro-impacts of foreign flows. In fact, most studies focus on the impact of foreign flows on the economy and attendant macro variables (Choong et al., 2010; Nyamongo et al., 2012). However, multilateral institutions have utilized data flows to analyze impact on micro sectors. For example, World Bank (2011b) has established that 50% of remittances in most African countries are invested in the real estate sector.

Most studies continue to reveal that Africa's share of global flows is increasing due to developments in financial markets. Despite the smallness of African economies, well developed equity and credit markets are channels for international capital flows (Deléchat *et al*, 2010; Giovanni, 2005). In support of this aspect, Giuliano and Ruiz-Arranz (2009) find that remittances are more pro-cyclical in countries with less developed financial systems.

These studies have reached common ground on a list of several factors that influence capital flows into a country. These include macroeconomic issues, political stability, business climate, institutional quality and infrastructure and exchange rate. In fact, Ladekarl and Zervos (2004) emphasize how these issues enter investability decision making and create opinions about countries. Whereas the focus of their study was on emerging markets, this study was built on exploring further on investability characteristics in emerging economies that have met the criteria utilizing data from available robust indicators.

2.1.1 Foreign Direct Investment

Kodongo and Ojah (2016) emphasize that FDI should provide most African countries that are financially constrained with the necessary cross-border financing solutions due to its long gestation period.

a) Economic growth

The growth hypothesis theory has received extensive empirical evidence that demonstrate that financial development has a positive impact on growth of host nations (Levine & Zervos, 1998). The impact of financial systems development in a country is linked to promotion of savings and investment thereby impacting on economic growth. In emerging markets in Sub-Saharan Africa Nellor (2008) observes that private sector led growth supported by opening up of the financial markets is the main driver that influences promising new candidate nations into emerging market frameworks. Many studies such as Xing and Wan (2006), Hansen and Gianluigi (2007), Singh and Jun (1995), Root and Ahmed (1979) and Lim (1983) show that the growth hypothesis theory interacts with FDI inflow but not robust.

However, Nandi (2012) had a linear equation with a positive slope explaining the relationship between GDP and FDI for the BRIC countries over ten years. The findings also note a reduction in FDI inflows into the BRIC countries in the recession 2008-2009. Ho and Rashid (2011) had contradictory findings for ASEAN countries between 1975 and 2009. They found that economic growth is significant in attracting FDI into a country but the coefficient size was smaller. This emphasizes the fact that slower rather than rapid growth helps attract investment into a country.

A vast amount of empirical literature analyzes the impact of growth of a country on attraction of FDI but the results are mired depending on time-periods, choice of country and applied methodology. Overall, the role of economic growth on the potential of FDI in emerging economies is significant.

b) Market size

Market size is widely accepted as a significant determinant of FDI. Market size hypothesis states that large market size represented by real GDP implies higher purchasing power where firms can potentially receive higher returns on capital and investment. Several studies show a positive relationship between market size and FDI; (Bhavan et al., 2011; Leitao & Faustino, 2010; Hailu, 2010; Root & Ahmed, 1979; Mohamed & Sidiropoulos, 2010).

Wei & Prasad (2005) studied the comparative differences between inward FDI in China and India and found that China enjoyed higher FDI from OECD countries mainly due to larger domestic market and international trade ties with OECD countries while India had an advantage due to cheaper labour cost, lower country risk and geographical proximity to OECD countries. Economic blocs such as BRICS and MINT have benefitted from their prevailing market size (Akpan et al. 2014 and Jadhav, 2012).

c) Trade Openness

There are various empirical research work which state that there is a positive relationship between FDI and trade volumes. Studies byErdal and Tatoglu (2002), Janicki and Wunnava (2004), Gastanaga et al. (1998), Kodongo and Ojah (2016), Pistoresi (2000), Leitao and Faustino (2010), Anyanwu (2011) and Kravis and Lipsey (1982) use the share of trade in GDP as proxy of openness.

Jadhav (2012) found that the impact of trade openness on FDI inflows in the host country depends on whether an investment is market seeking or export oriented. FDI inflows have a positive impact in a market seeking investment that is less open economy with trade restrictions. On the other hand, an export oriented MNC prefers to locate in an open economy with less trade restrictions as this implies less transaction costs associated with exporting its products. Studies by Janicki and Wunnava (2004), Rogmans and Ebbers (2013), Singh and Jun (1995) and Bhavan, et al., (2011) corroborate this hypothesis.

Moreover, Asiedu (2005) found that trade liberalization among African countries does not enhance FDI attraction. Similar results were generated by Akpan et al. (2014) among the BRICS countries. It is therefore clear that export-oriented host countries should direct their policies towards liberalization to encourage FDI inflows (Singh & Jun, 1995).

d) Inflation

Empirical research on inflation offers no conclusive results on the direct impact of inflation on FDI inflows. Jadhav, (2012) and Kolstad and Villanger (2008) do not find inflation significant as determinant of FDI. However, other studies by Asiedu (2005), Hansen and Gianluigi (2007), Ho and Rashid (2011) and Addison and Heshmati (2003) find inflation significant in determining FDI inflows. These studies show that unsustainable price levels signify government's inconsistency in managing its money supply. Such internal economic imbalances are prevalent in many emerging African economies and explains the low rates of FDI over previous decades (Asiedu, 2002; Onyeiwu & Shrestha, 2004).

e) Labour cost

Tsai (1994) observes that cheap labour enhances FDI attraction. Economic literature posits higher wages reflect higher transaction costs and associated frictions that deter FDI in the form of MNCs activity in the host country. According to the International Division of Labour, both the Dependency theory and modernization hypothesis support the relevance of cheap labour in attracting FDI (Jadhav, 2012).

2.1.2 Political Stability

Political risk disrupts the investment climate of a country and can cause harm to property through governmental take-over, riots and operational restrictions. Daniels, et al., (2002), Dunning (1993) and Moosa (2003) conclude that political stability influences the decision whether to invest or not in a particular country. Through the analysis of diversification benefits on inclusion of emerging market countries, Kohers, Kohers and Pandey (1998) conclude that diversification benefits in international portfolios are diminished by political instabilities. In studies on the impact of war and conflicts in Africa, Rogoff and Reinhart (2003) and Suliman and Mollick (2009) find a negative relationship between the level of political rights of citizens in host nations and FDI. Similar findings have been found by (Li, 2008; Asiedu, 2002; and Sekkat & Varoudakis, 2004).

Other studies offer contradictory findings on the attraction of FDI in the host country in relation to the level of political stability. Eicher et al., (2011) found that host countries with religious tension, ethnic tension and military presence attract higher levels of FDI. On average host nations with high political risk attract high levels of FDI (Singh & Jun, 1995). Similar results were obtained by Kim and Li (2014) who in a study of 104 countries from 2000 to 2009, concluded that host nations with weak political instability received more FDI.

From literature, the conclusion derived is that politically stable governments with effective policies that support infrastructure investment for the private sector and investment in human capital support the capacity of the host nation to spur both domestic and foreign investment.

2.1.3 Institutional quality and infrastructure

Acemoglu, Johnson and Robinson, (2002) concluded that good institutions that observe the rule of law enhanced by key infrastructure support market transactions. According to the institutions hypothesis theory such infrastructure includes, investment in machinery, human capital, and better technologies. These factors are found to be significant determinants of both economic and political participation by citizens of a nation.

Prasad et al., (2003) found that good governance is a pull factor of investment flows to countries. Muhanji & Ojah (2011) found that transparency of government operations has a direct positive impact on investment flows from mutual funds. On the other hand, the study notes that weak governance institutions lead to lower growth due to domestic capital flight even in the presence of financial integration. Acemoglu et al. (2002) found that selective application of the rule of law and lack of property rights motivates unchecked power among the political and economic elites and reduces education and investment among the citizens therefore increasing external indebtedness in developing nations.

Analyzing institutions and microstructures in emerging markets, Segot and Lucey (2006) ties down information efficiency to institutional quality. Specifically, Mobarek and Keasey (2000) explain that a reduction in insider trading and improvement in information flows, can be achieved through a rise in market size, better auditing regulations and strong disclosure requirements.

Muhanji and Ojah (2011) show that various dimensions of good governance (enforcement of property rights, constraints on the actions of the elite society and equity in opportunity offering) are pull factors for investment flows which provide debt relief for most African countries. Globerman and Shapiro (2002) posit protection of individual and property rights through credible institutions, legal systems and government policies that encourage trade liberalization enhance attraction of FDI. Other studies Blonigen (2005), Cheng and Kwan (2000), Kumar and P (2008), Zhao and Zhu (2000), Andrianaivo and Yartey (2010), Allen et al.,.(2012), Ojah et al., (2010), Ojah and Kodongo (2014) and Japelli et al., (2005) verify the importance good quality institutions and infrastructure support on attraction of investment flows and growth of nation states.

In literature, institution quality is measured by levels of corruption and weak enforcement of contracts. Jadhav (2012), Habib and Zurawicki (2002) and Smarzynska and Wei (2002) found negative effects of corruption on FDI inflows.

2.1.4 Taxation

Tax is an input in the cost of doing business and is expected to affect potential returns from both foreign and domestic investment (Scholes, et al., 1990). Tax regulation's and government policy affects FDI flows negatively. Usher (1977) confirms this by showing that governments of developing countries offer tax incentives in order to attract more FDI, Dupasquier and Osakwe (2006) and Anyanwu & Yameogo (2015) found that most African countries have rolled out ill-conceived FDI incentives through tax holidays.

On the other hand, some studies have found that taxation is insignificant in influencing both domestic and foreign investment (Carlton, 1983; Jackson & Markowski, 1995; Yulin & Reed, 1995; Porcano & Price, 1996). In particular, corporate tax is statistically insignificant as a determinant of FDI (Onyeiwu & Shrestha, 2004).

2.1.5 Exchange Rate

Exchange rate risks are known to have implications for portfolio choice and investment decisions, so that higher exchange rate volatility would be expected to be associated with a decrease in remittances in the case of recipients (Lartey, 2016).

The impact of exchange rate on investment flows is two-fold; exchange rate movements and uncertainty on future volatility. In general, an expansion in the host economy indicates favourable working conditions for migrant workers and enhances their ability to remit to their families. Furthermore, the real exchange rate affects the purchasing power of host country currency, and determines investment flows. Real exchange rate depreciation in the home country increases the purchasing power of FDI, which would be expected to decrease the flow of FDI. A decrease in the price level in the home country and a nominal depreciation of the home currency is considered to have a negative effect on the flow of investments to the home country. This empirical finding has been supported by Aliber (1970, Kiyota and Urata (2004), Benassy-Quere, et al., (2005) and Cleeve (2000).

The effect of uncertainty on future rates has been studied by Itagaki (1981), Cushman (1985) and Takagi and Shi (2011). These studies found that exchange rate volatility amplifies FDI inflows through a market seeking mechanism although it may reduce exports of the home country. In a study of Japanese FDI in China between 1981 and 2002, Xing and Wan (2006) found that a weaker yuan and pegging of the yuan to the dollar attracted more foreign investment. Likewise, Kiyota and Urata (2004) observed that Japanese flows increased in the host country during depreciation of the currency although more volatility in the exchange rate led to a reduction in the FDI.

2.2 Factors affecting capital allocation.

Other studies have deduced how portfolio managers, institutional investors such as pension funds determine which countries to invest in. These studies demonstrate strong relationship between a country's fundamental macro variables and its investability. Aggarwal *et al*., (2003) examine investment allocation choices of US mutual funds in emerging markets post-Asian financial crisis. According to their study, both country and firm characteristics such as investor protection, legal frameworks and accounting standards create conductive environment to harness investment. Ojah and Mokoaleli-Mokoteli (2012) have reinforced this aspect by proposing requisite environmental infrastructure that governments must avail for the adoption of internet reporting by developing countries.

In an IMF working paper, discussing factors affecting equity flows into India, Gordon and Gupta (2003) establish that both external and domestic factors are important. As such countries credit ratings, interest rates and stock returns influence portfolio flows. Tesar and Werner (1998) reveal that US investors are primarily driven by signals about the local economy, increasing their portfolio allocations when expectations indicate high returns in the domestic market. Global factors, such as volatility in global interest rates, are insignificant in the allocation of the U.S. equity portfolio. This evidence suggests that equity inflows can be a reliable source of capital as long as local market conditions are consistent with long-run growth and stability.

As much as literature shows positive relationship between portfolio inflows and stock returns Bohn et al., (1996) this may not represent causality or "return chasing" investors. Investor preference for African financial investments may reflect changing favourable conditions that act as pull factors.

One way to assess this is to look at emerging market prospects in terms of installing sound economic institutions to manage cyclical fluctuations of commodity prices, sound fiscal policy and private sector led growth (Nellor, 2008).

Some research has gone into analyzing the genesis of foreign capital flows, via the study of effects of liberalization. Levine and Zervos (1998), Obstfeld (2009) and Singh and Weisse (1998), in particular, demonstrate the effects of liberalization on savings and investments. Such studies have had a strong inclination to adoption of IMF's recommendations to African countries after the oil crisis and recession of the 1970s. Therefore, these studies portray that liberalization of capital accounts has influenced the growth of equity markets, foreign exchange and real estate markets. However, some African oriented studies reveal inconsistent results of foreign flows on growth. Omoniyi and Omobitan (2011) and Sathye (2009) show that FDI has insignificant relationship with GDP in Botswana, Nigeria and South Africa.

Other time studies have consistently proved the significance of liberalization on financial development and its attendant growth of a country's economy. This paper builds on this matter to devise a list of investable countries in Sub-Saharan Africa.

2.3 Event shocks and emerging economies dependence on external funding

The excessive dependence on external financing by emerging economies puts them at risk in the event of crises. Emerging markets depend on two channels of inflows; the foreign capital and income channels (Carstens & Shin, 2019). The capital channel reflects the net borrowing through capital inflows. This channel attracts opportunistic investors seeking high return within the short-term. The more emerging markets rely on short-term portfolio inflows or 'hot money', the greater their exposure to global dollar liquidity shortages. The income channel consists of net exports of goods and services. For emerging market economies, they earn income from commodities, tourism services and cross-border endowment due to labour dominance.

A sudden shock such as the 2008 Financial Crisis, sharply reduces emerging markets' access to dollars, exports, tourism receipts, and even remittances. Hevia and Neumeyer (2020), note that in the event of crises, emerging market economies are hit more compared to advanced economies.

Foreign investors leave emerging markets in favour of safer hard assets. Accordingly, growth prospects, fiscal balances and exports are negatively impacted upon (Baldwin & Mauro, 2020). Against this backdrop, countries exposed to higher external debt to serve and those wishing to strengthen their access to external funding, should develop tools to defend capital flows during event shocks.

The most obvious line of defense is using a country's monetary policy room to support growth by stimulating production. This measure is however hindered by investors' refrain from weak currencies. Capital controls may provide a temporary relief but are expensive and result in loss of foreign investment. Self-insurance and regional insurance schemes are an option for integrated economies such those in Asia. Since the depth and duration of a shock is uncertain, it justifies the need for developing countries to explore other potential options to cushion against adverse effects of crises and remain investable.

2.4 Risk elements to investments in Africa

There are various elements of risk in portfolio investments including; political and economic risks. Studies focusing on investment risk evaluation focus on the aspects of perceived events and policies of countries. Traditionally, international investors have primarily been using classical investment evaluation methods such as the internal rate of return (IRR), net present value (NPV) and discounted payback period which are all relevant for evaluating investment opportunities (Pereiro, 2006). Risk pricing and valuation in practice employ models that account for specific country exposure. In fact, Pereiro notes that investors include a country risk premium in the determination of a discount rate for every project.

Risk indicators in emerging markets can be summed under market volatility, liquidity and investment restrictions. Emerging market economies experience downside risk due to associated market booms and bursts. Singh (1997) found that the impact of volatility is skewed towards equity market development. In addition, studies by Bekaert and Harvey (1995) highlight that increased benefits of liberalization on the reduced volatility. Due to liberalization, increased foreign participation through diversification opportunities means smooth market orders and diminished volatility. This study shows that investors focusing on fundamental valuation factors reduce

volatility. On the other hand, volatility in emerging markets is increased when market integration induces an external shock in the domestic economy (Levine & Zervos, 1998).
Poor liquidity remains an obstacle to foreign investment in emerging market economies. Market liquidity impacts high trading costs and restrains the potential of economies to be investable (Chuhan, 1994). Secondly, it impacts equity premium for a given investment project (Jones, 2002). Third, liquidity levels determine information efficiency on trading orders (Kunt & Levine, 1996). The measurement by differences in indicators of political risk place developing economies at a fragile path of significantly higher liquidity costs. Lesmond (2005) showed that countries with weak political and legal institutions have higher liquidity costs than advanced countries.

Foreign investors are faced with both direct and indirect investment barriers in their decision process when investing in emerging markets. Direct barriers to international investments include capital controls and transactions costs (Black, 1974; Stulz, 1981) while the indirect barriers are exhibited through information asymmetries (Merton, 1987; Gehrig, 1993). Imposing capital movement restrictions exerts adverse pressure on investment portfolio choice and allocation. In a study of investment restrictions across countries, Bonser-Neal, Brauer, Neal, and Wheatly (1990) observe that government imposed capital market restrictions contribute to the degree of segmentation of international investment arena.

Some studies have analyzed risk in SSA into macro-economic stability issues and political stability. Most of the elements that contribute into this separate classes have carried out assessments on the overall stability of African countries. In a study conducted by the Institute of Security Studies (ISS), at least a third of African countries are considered fragile. The study conducted by Cilliers and Sisk (2013) shows that fragile states are characterized by cyclical violence, poor state performance, economic exclusion, weak governance and poverty. This study provides an outlook of the direct impact that such risk features present to investments in Africa.

Political risk remains the key investability determinant for most investors. This risk has a direct link to legal and regulatory processes in a country. Political regime stability, electoral processes and regime transition fuel instability in most African countries. Crouzel (2014) observed that in selected African countries, elections in the last decade have not legitimized those in power, and

have been the source of greater instability; the Democratic Republic of Congo (2006), Guinea-Bissau (2008), Kenya (2007 and 2008), Lesotho (2007), Nigeria (2007), Senegal (2012), Togo (2005) and Zimbabwe (2008). Cilliers and Sisk (2013) note that political risk in fragile states will remain high if these countries do not tame high levels of poverty, low literacy levels and political exclusion coupled with high unemployment and a young population.

African markets are hit by macro-economic instability because of their small open nature and limited local depth for sustainability (Kasekende, 2009; Lyakurwa, 2010; Taiwol, 2009). High Inflation rates and currency instability are influenced by dependency on commodity exports. A fall in commodity prices and slower production hurts the financial markets and this leads to self-reinforcing growth decline and lower investor confidence. Kasekende (2009) emphasized that African countries should adopt a dual stimulus and economic reform targeted at infrastructure improvement to support the business environment. This should see these nations diversify their export channels, reduce dependency on aid and deepen the financial markets.

The Ease of Doing Business rankings provided by World Bank comprise an independent view of the legislative and regulatory risks that plague African countries. The selected criteria highlight the state of affairs on issues related to the strength of legal rights, protection of investors, financial market development and funding access, regulatory capacity, institutional efficacy particularly the legal system and policy suitability. These ratings show the dynamics that domestic firms experience in the business environment but are limited in their depth because they do not capture the reflection of foreign investors. Accordingly, issues such as restrictions on foreign asset ownership, localization requirements, taxation nuances and capital controls are not included in this report. Overall, the report points out that, most African countries have less regulated financial market system compared to mature economies. Poor legal structures and restrictive regulation have undue influence on elements such as access to credit, protection of minority investors, paying of taxes and enforcement of contracts.

The extent to which investors believe each of these risk factors can be identified early on and effectively managed will improve the outlook for the investability of each country.

2.5 Behavioural aspects of fund management and decision making

A separate category of research shows trading strategies employed by investors. Borensztein and Gelos (2000), present findings of possible reversals on financial investments and herding behavior in emerging markets. In a study of the association of domestic stock returns and portfolio investment, Kim and Wei (2000) show that foreign investors in Korea overlooked positive feedback trading prior to the Asian Crisis but were more cautious post-crisis.

There is growing literature on foreign investment decisions. Brennan and Cao (1997), use show the difference between domestic and foreign investors using information asymmetries. Dahlquist and Goran (2001), discuss market organization in terms of information disclosure and note that costs of gathering information on foreign firms that creates a "home bias". As such, they declare that shares float is reduced due to high number of shares closely held in some countries. Edison and Warnock (2003) examine U.S. equity holdings across nine emerging market economies before the Financial Crisis and find that weighting tilts towards large stocks listed in US stock exchanges.

Notably, it is important to separate determinants of investment decisions into domestic and external factors. Other classifications which might be relevant for African countries are global and regional factors such as geographical market proximity and asset class homogeneity. Based on this aspect, some studies have called for the integration of African securities exchanges to enhance liquidity and thus attractiveness of their assets. Investors that focus on macroeconomic and political variables are deemed to be using a top-down approach while those that focus on assets of top-quality firms while caring less for macroeconomic variables use a bottom-up strategy (Sharma, 2002). The findings of Harrison et al., (2004) show that African manufacturing firms consider state driven factors such as infrastructure, access to finance and party competition as the key aspects in improving a country's competitiveness.

Yet Karemera et al., (1999) find random walk hypothesis consistent with many emerging market returns.[2] Their study adds to the importance of rational expectations and market efficiency of

[2] Random walks inform trading strategies and stock returns. See Poterba and Summers (1988, pp. 53±54), Lo and MacKinlay (1989), and Eckbo and Liu (1993).

emerging market economies. It appears that African financial markets with highly predictable equity returns and low correlation with mature markets, are beneficiaries of foreign investment because of diversification benefit of their assets. This suspicion is confirmed by Harvey (1994), who's findings reveal that incorporating emerging market equities in a portfolio diversifies away risk and increases returns.

Within this paper, some light is shed on risk-based allocation techniques which often yield superior performance even though returns may not be part of underlying objective of the strategy. From Lee (2011), risk characteristics and especially uncorrelated risk sources which lend themselves to investment criteria allow better diversified allocation strategies.

Only recently have African countries attracted significant institutional investors, especially into equity markets. Emerging Markets Private Equity Association (EMPEA), shows that private equity investment in Africa (including North Africa) rising from US$1.5 billion in 2012 to US$1.8 billion in 2013. Private equity interest in Sub-Saharan Africa, in particular, is at an all-time high.[3] By 2016, African developing economies had recorded FDI inflows of US$ 59.4 billion representing 3.4% of the world's share. [4]

In the current arena of investment management, firms have evolved several criteria to analyze to viability of African emerging markets. For example, Citi Global Emerging Markets Research conducts detailed analysis on developing African countries covering financial markets developments, macroeconomic monitors, politics and governance. Although this research is produced for its institutional and retail clients, it highlights investment risks of the investable countries. Such in-house research and valuation reports have provided investors with real-time information evaluation of investment opportunities. In the same vein multilateral institutions such as UNCTAD have spearheaded global investment agenda with the aim of achieving sustainable

[3] According to the EMPEA 2013 annual survey of global institutional investors, for the first time the region ranked as the most attractive emerging market for Global Partners investment

[4] UNCTAD, World Investment Report 2017

development.[5] Furthermore, annual Global Competitiveness Index ranks world nations on the ease of doing business and attractiveness to investment.

Cross country studies have been popular among groups such as the World Bank. The World Bank's Enterprise Surveys (WBES) focuses on constructing a benchmark on the investment climate in developing countries, in around 80 countries. This survey helps investors to understand determinants of firm performance and behaviour across sectors and regions.

The contribution of this paper stems from applying of the framework of Laderkarl and Zervos (2004) in an empirical multi-asset allocation study. Under this approach, the maximum diversification portfolio emerges from a risk parity strategy that is extracted from underlying portfolio assets. Therefore, this approach will complement existing evaluation techniques of investment opportunities especially those anchored upon a top-down strategy.

[5] World Investment Report of 2017 has developed an Investment Policy Framework and Roadmap that is aimed at reforming international investment agreements in 130 countries by aligning investment policies to achieving SDGs

CHAPTER 3: EMERGING MARKET INDICES

This chapter concentrates on existing emerging market indices that have developed sets of criteria and means of measurement for qualification of countries into emerging market status. Based on the literature review, this study estimates a set of potential determinants which categorize a country as investable. Whereas market indices provide insights into distinctive features of a particular country, empirical contributions in literature offer limited advancement in knowledge regarding comparative aspects of the research questions. Hence, we lack clarity on the benchmark of countries that fit into classical definition of an emerging market.

3.1 Definition of Emerging Market

Emerging markets have been described as stock markets of developing economies that have begun to exhibit features of mature stock markets such as those of developed economies (IFC 1980). A recent study by Ojah (2014) concluded that when a developing country's financial markets have begun to collectively or individually emerge from the dominance of government as the main player in financing economic production then a country can graduate to an emerging market pool.

According to the World Bank's International Finance Corporation, a country is classified as an *emerging market*[6] if it exhibits low, lower-middle or upper-middle income status for at least three consecutive years as well as a low investable market capitalization to GDP ratio. From this definition, it is clear that IFC refer to any economy in the developing category as emerging, regardless of their stage of development. In addition, the classification in their database deals primarily with equity markets and stock exchanges[7].

Early definitions have often been criticized for lacking a measurement criterion and limiting towards stock markets. Nonetheless the growing importance of private sector participation in

[6] The income threshold was $ 12,376 per capita in 2018. Investable market capitalization refers to the market that can be accessed to investors immediately and has no limits or restrictions on holdings. A country is reclassified as `developed' if its investable market capitalization to GDP ratio reaches the top 25% of the emerging market universe for three consecutive years.

[7] IFC's Investable indexes were introduced in March 1993 and are designed to meet the needs of foreign investors in terms of accessibility of markets and local stocks for foreign investors, the IFC Investables offer the ideal performance benchmark for both active and passive international investors.

assisting government in production is seen to demonstrate the development of emerging market economies (Nellor, 2008).

3.2 Emerging Market Indexes Classification Criteria

Benchmark indices are used by foreign investors for three primary purposes: first, as a target for portfolio performance, secondly, for disclosure of information about market instruments and third, as references for index-linked products. Index providers offer investors a number of benchmark-related services and solutions which border these primary uses under portfolio management. However, no single benchmark design is universal for all investors. The goal of each Indices is to offer a broad criteria of emerging market securities from which investors are able to customize the most appropriate benchmark for their portfolio preference.

All benchmark providers screen markets based on liquidity of the market, its size, trading frequency and infrastructure. A stock market that meets all these requirements is considered investable. Faced with an ever-growing number of indices, institutional investors have evolved to monitoring information and transparency of emerging markets as important tools for their investment objective. In fact, all index providers construct indices with no trading bottlenecks, as concern for investors is placed on trading access and liquidity.

The process of evaluating benchmark providers requires an investor to define their investment objective in the context of constructing an emerging market portfolio. At the most basic level, benchmark indexes can be broken down into four tiers: broad-market exposure, economic market exposure, geographic exposure and growth or value style approach. Each of the four major index providers; MSCI, FTSE, Standard & Poor's, and Dow Jones has developed its own criteria to screen securities for inclusion in its broad global market index.

3.2.1 Morgan Stanley Capital International (MSCI) Evaluation Criteria

The MSCI Emerging Market Index has evolved to focus on both qualitative and quantitative measures. Quantitative measures include size, liquidity and economic growth whereas qualitative measures comprise of governance issues, capital mobility and market accessibility. The framework applied in generating the index focuses on the opportunity offering to international investors

regarding capacity and liquidity in the emerging market of choice. Given market sophistications and maturity of markets, current index mix includes factors such as Environmental, Social, and Governance (ESG) of emerging countries.

MSCI has also compiled an index of countries in the frontier markets with minimum criteria being at least some openness to foreign ownership, partial ease to capital flows and at least two companies worth about $800 million each. Frontier markets are considered relatively small compared to emerging markets and are characterized by tighter restrictions on shares ownership and foreign participation. Such markets have experienced growth in financial infrastructure but their idiosyncratic nature of and their increased sensitivity to local matters results in underperformance. Whereas individual frontier economies may be faced with particular political and economic risks, their geographic diversity and less financial links to the advanced economies make them less intertwined. This level of low correlation creates a basket of economies that can offer diversification opportunities in the long-run for foreign investors.

3.2.2 S&P Dow Jones Emerging Market Indices

S&P Dow Jones seeks to measure performance of emerging market companies through a classification system of ranking float market capitalization, revenue, and net profit. The index composition seeks to achieve three distinctive and attractive features of emerging market countries'; economic growth, liquidity and diversification. S&P Dow Jones Classification recognizes that both quantitative and qualitative criteria may be limiting and thus scheduled reviews are warranted for countries that are on course towards achieving emerging market status. Among the initial approaches for a new entrant into the index include a market capitalization of at least US$2.5 billion, annual turnover of at least US$1 billion and a minimum market development ratio of 5% per annum. Furthermore, the index requires that foreign investors are protected from their investments in emerging markets. This is achieved through market participation feedback that considers the following sets of criteria;

i. A stable sovereign debt rating of at least BB+
ii. Stable inflation regime with an average annual Consumer Price Index (CPI) of not more than 15%

iii. Minimal restrictions on foreign ownership of property and investments
iv. Removal of capital controls and foreign exchange restrictions

While S&P Dow Jones Indices utilizes quantitative criteria and measurement, foreign investor sentiment is a key input. Additionally, the index does not bend towards quantitative rankings if issues such as foreign exchange rules and regulations, trade settlements, availability of real time data is violated. As such the bottom up approach that involves analyzing companies in a certain segment and weighting to the whole economy may vary from investor to investor. Recognizing such debates, the S&P Dow Jones indices offers an elaborate range of quantitative criteria that utilizes aspects such as political stability, legal and property rights, macroeconomic conditions and financial market infrastructure.

3.2.3 Bloomberg Barclays Indices

Bloomberg defines country eligibility in emerging markets through hard currency, local currency and inflation-linked benchmarks. Under this approach foreign currency sovereign rating based on Moody's, S&P and Fitch are relied upon. A country qualifies to be included in the index list if it is ranked in third party classifications such the World Bank's income group categories of low middle income and IMF's non-advanced status. Other aspects of domestic market investability such as size of the market, limits on foreign investment, registration and account set-up of foreigners, clearing and settlement, taxation and market liquidity are evaluated for a potential market inclusion. Additionally, investability concerns such as foreign exchange convertibility, registration processes and geographic coverage affect eligibility of countries (Bloomberg, 2017).

3.3 Shortcomings of the classification criteria

The indices on emerging markets provide several interesting evidence and explanations on the performance and classification of countries. Particularly there is strong evidence that shows that index builders construct an opportunity set out of emerging markets with the knowledge that investors prefer uncorrelated growth to the developed markets (MSCI Index Research, 2014). To this end, all indices are developed with blended approaches with full integration of the risk premia associated with emerging markets. While the developed tools of assessment and a majority of the

investors may agree on the classification criteria there are issues that prevail affecting utility of the indices.

MSCI Emerging Markets (EM) Index, is constructed based on where large capital flows are created or directed and it does not reflect where future opportunities lie. In addition, the index is weighted by market capitalization, which means it is influenced by the scale of a business and its equity base. Therefore, index-based investments and returns are often shaped by company size rather than investors having conviction in a business and its performance over the long term.

Index-based approach to emerging markets can result in distortions arising from tracking capital flows. To demonstrate this, Mexico had the largest weight at 30% in 1992 due to liberalization of and privatization of state-controlled enterprises. The policy shift led to large capital inflows from foreign investors despite weak regulation, corruption, political and economic instability. The financial crisis in the mid-1990s fueled by credit boom and soaring inflation led to reversal of capital flows. From Figure 3.1 below, Mexico's share in the index is below 10%.

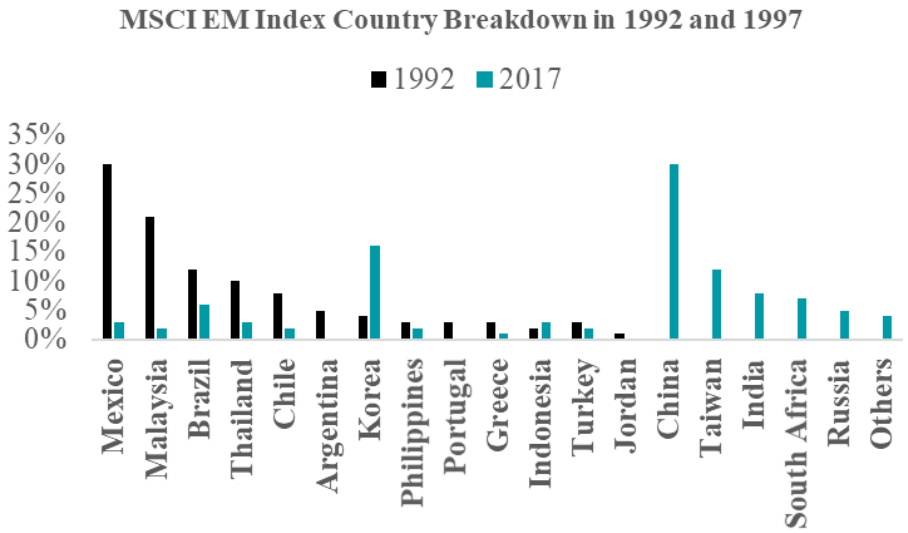


Figure 3. 1: MSCI EM country index weighting comparison.

Source: MSCI, December 31, 1992 and December 31, 2017.

Another distortion arises from selective approach to investing within emerging markets. There is a prevailing orthodoxy that benchmarks are largely skewed towards state-owned enterprises which impacts overall return in the long-term. For example, China's One Belt, One Road (OBOR) policy

is powered by state-owned enterprises that direct massive capital towards centrally planned initiatives with little success or minimal return on equity to shareholders. Ultimately, an index with a substantial proportion of state-owned enterprises, is susceptible to political scandal and misallocation of capital by politicians.

MSCI utilizes vague parameters in deriving market accessibility for a country. It relies on factors such as governance, openness and freedom of capital flows. With this framework, the resultant toolkit offers investors with an undifferentiated decision whether to invest in an emerging market or a frontier market. Whereas developed economies are stable and have an efficient operational framework, both emerging and developed economies have modest levels of stability and weaker institutional framework. MSCI provides no clear distinction for investors interested in both emerging and frontier markets and sometimes a blend of the two markets is created to offer a new flavor that is uncorrelated with emerging markets.

Additionally, MSCI concentrates on size and liquidity of an emerging economy. Companies within an emerging economy have to remain liquid and sufficiently large for eligibility. For example, Morocco was reclassified from an emerging economy to a frontier one due to diminishing size of its companies (MSCI Index Research, 2014). Other factors such as sector weightings may constitute threats to the robustness of the index because broad, market–cap-weighted emerging market benchmarks are dominated by banks, financial companies and companies in the extractive sectors of the economy. Given these factors, it is challenging to assess emerging market consumer companies using conventional index solutions.

Market accessibility stands out as the most significant factor for a country to achieve emerging market status. This factor is observed for individual country reviews among market participants. For example, Saudi Arabia remains as a stand-alone country classification in the index due to positive reforms initiated in the Tawadul Stock Exchange although registration and custodial processes still pose a challenge to foreign investors (S&P Dow Jones Indices, 2017). The removal of capital controls and foreign exchange restrictions have improved foreign investor accessibility in Argentina while repatriation limits, quota limits on the Stock Connect programs, and stock

suspensions create operational difficulties for market participants in China. (S&P Dow Jones Indices, 2017).

Based on all index-based choices in emerging economies, S&P Dow Jones is more robust and provides a better classification than MSCI because of its country classification and broader coverage. For example, South Korea was promoted to a developed market in 2001 and is ineligible under S&P Dow Jones index but appears to enjoy 16% weighting in the MSCI index. Also, small-cap stocks of emerging economies are well covered in the index but only large and mid-cap stocks appear in the MSCI index. Other inclusion factors such as regulatory environment, foreign ownership restrictions, taxation, custody and registration and investor protection have been addressed objectively by the S&P Dow Jones Index.

Overall, all index tools in emerging economies offer investors with benefits of precision in decision making, diversification and liquidity. Nonetheless, neither index provides a clear-cut path for countries that wish to graduate into either emerging economy from frontier economies or developed economies from emerging ones. This ambiguity provides governments with a challenge on how to make their economies investable and attract cheaper external funding. Accordingly, governments of developing countries do not have guidelines that they can use to leverage on the support of finance.

3.4 Impact of country inclusion in index benchmarks

Index providers identify indicators that capture a country's risk profile and growth opportunities. This presents investors with an opportunity to dedicate their funds with a majority of assets in eligible countries. Cantor and Packer (1996) note that index inclusion acts as a strong sentiment for an emerging economy as it shows robustness of parsimonious set of economic variables including GDP growth, inflation, level of debt, economic development, per capita income and default history.

In evaluating the impacts of index inclusion in emerging markets stocks between 1996 – 2004, Hacibedel and Bommel (2004) observe the following; first, there is increased foreign investor awareness as a result of perceived eligibility attributed to the *radar screen effect* by (Merton,

1987). This implies permanent changes in stock price and a decrease in risk premia for the emerging market stock. Secondly, inclusion in a global benchmark index results in a gradual integration of emerging markets to the world markets. Ultimately, being included in a set of investable assets increase foreign investments into emerging markets and magnifies economic growth.

Ladekarl & Zervos (2004) summarized funds allocation among international investors into three broad categories; “Must invest”, “May invest” and “Cannot invest” countries. “Must” countries enjoy the largest allocation of funds because of their attractive economic, political, financial infrastructure, legal and regulatory framework. These countries have the largest investor base in their economies signifying financial market liquidity. “May” countries are not considered in any benchmark index and remain unattractive until they improve on their macro-economic, political, financial market development and legal environment issues. “Cannot” countries are characterized by sanctions and are deemed morally irresponsible. As such investors have no discretion to invest in these countries because of poor institutional quality, weak governance and unstable macroeconomic conditions.

"Must" countries enjoy the largest share of funds in an index while "May" countries get the remainder of the funds. For example, three emerging market equity funds depict their asset allocation as shown in Figure 3.2. The green section represents "Must" countries allocations while the orange section represents "May" countries.



Figure 3. 2: Emerging market indices.

Source: Various fund prospectuses

From the Figure 3.2, it can be seen that all emerging market funds have between 75% and 85% of funds in "Must" countries while the balance is allotted to "May" countries. All the three indices, have similar list of countries in their geographic exposure except for S&P Dow Jones which shows a slight disparity in both country and sector allocation.

3.5 Cursory relations between investability and foreign investment to emerging economies

Some research has gone into analyzing the benefits that accrue to a country receiving foreign investable capital. Bevan and Estrin (2004) and Ho and Rashid (2011) find that FDI inflows increase the level of investment on the host country through various channels such as improved production capacity, jobs, non-physical resources through transfer of technology and managerial

skills. Also, in a series of studies over long-term periods, FDI is found to improve the rate of productivity growth for domestic firms in the host country (Liu, *et al*. 2000; Hejazi & Safarian, 1999; Markusen & Venables, 1999). On the contrary in a study of 28 developing countries, Herzer and Nunnenkamp (2012) concluded that there were no long term or short terms benefits of FDI to GDP growth. These findings also relate to those of Whalley and Xin (2009) where they examined the contribution of inward FDI to China during the accelerated economic growth period and found out that in an export led economy future plateaus of inward FDI affect sustainability of exports.

Yao and Wei (2007) studied new industrializing countries and tested two propositions that FDI promotes production efficiency, technology and knowledge. They suggested that FDI growth was positive in both propositions and acted as a catch-up driver with the world's advanced countries. Tuan et al. (2009) conclude that inward FDI increases regional development and economic growth directly through output growth and indirectly by enhancing total factor productivity (TFP).

Moreover, to enable emerging economies' participation in production process, certain enabling factors are important- Prasad et al. (2003) finds that countries with pull factors such as sound macroeconomic policies and good institutional governance attract FDI and are pro-growth. Muhanji and Ojah (2011) note that elements such as transparency of governments has a strong influence on investment inflows from international mutual funds. An improved entrepreneurial environment facilitates local firms to access financial resources through foreign investment (Urata & Kawai, 2000). In addition, Kim and Li (2014) report that increased FDI smoothens new venture creation in less-developed countries.

In line with the conclusion by Morisset (1999) host economy contributes towards integration into the global economy through increased foreign investment; this is achieved through effective institutional infrastructure and governance systems. Even in the presence of financial integration, the prospects of growth are diminished in an environment of weak institutional governance (Muhanji & Ojah, 2011).

Still on the trends of cross-border flows into emerging economies, some studies provide linkages of disruptive flows which impact on the economic performance of recipient countries. The

comprehensive studies by Kodongo and Ojah (2012), Ojah and Kodongo (2014), Ojah (2011, 2013) show that cross-border inflows to Africa is not of the same effect. In particular they note that foreign portfolio inflows are subject to high volatility compared to FDI and remittances. Also, Sjoholm and Blomstrom (1999) indicates that technology spill-overs is not evenly distributed across all industries. From the foregoing, it is evident that emerging economies may plunge into further levels of unsustainable debt and shrinking production base if they do not embrace policies that increase their investability.

Most emerging economies are unable to finance aggregate economic activity and are constantly faced with huge financial constraint (Allen et al. 2012). External funding for emerging and developing market economies is a critical need for growth. Such funding is received as cross-border flows and it aides developing economies to access affordable funding (Muhanji & Ojah, 2011). The impact of cross-border flows into emerging economies ranked in an index is highlighted below in reference to four countries: Brazil, India, South Africa, and South Korea.

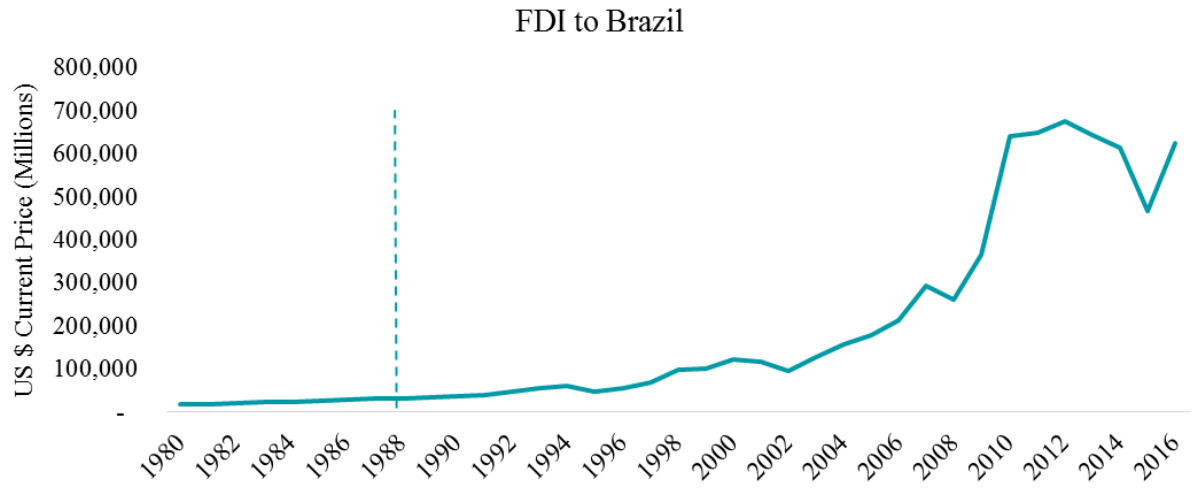


Figure 3. 3: FDI to Brazil.

Source: UNCTAD

Brazil was included in the initial MSCI index in 1988 (18.91% of MSCI Emerging Markets), prior to this period it received an average of US$23.50 billion in FDI inflows annually (Figure 3.3) compared to an annual average of US$246.45 billion between 1989 and 2016.

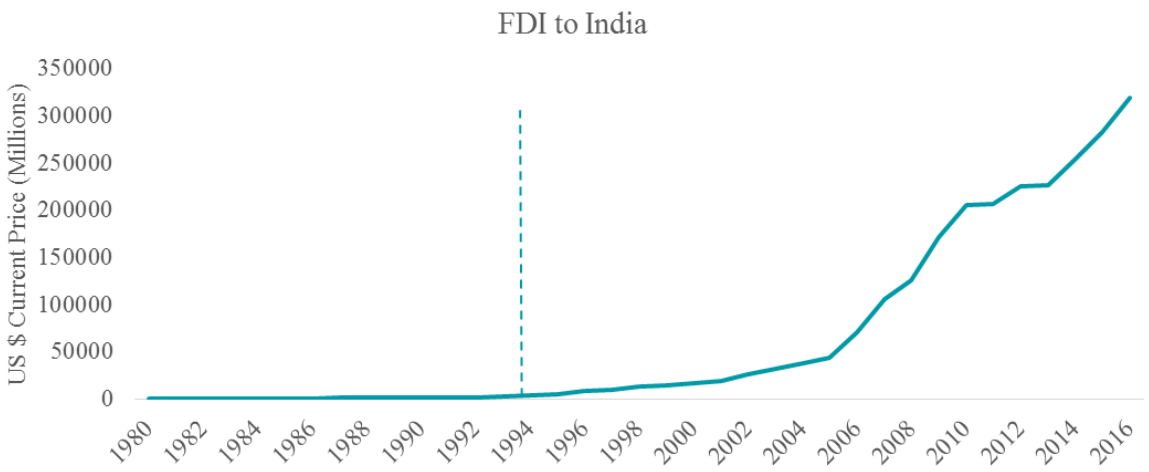


Figure 3. 4: FDI to India.

Source: UNCTAD

In early 1994, India was introduced into the MSCI emerging market index with a weighting of 7.8%. The average FDI inflows rose from US$13.01 billion before inclusion to US$109.91 billion after 1994. India remains a favourite emerging market for foreign investors because it has the fastest growth in Real GDP (MSCI Barra, 2008) and has adopted market liberalization (MSCI Barra, 2008, p.50).

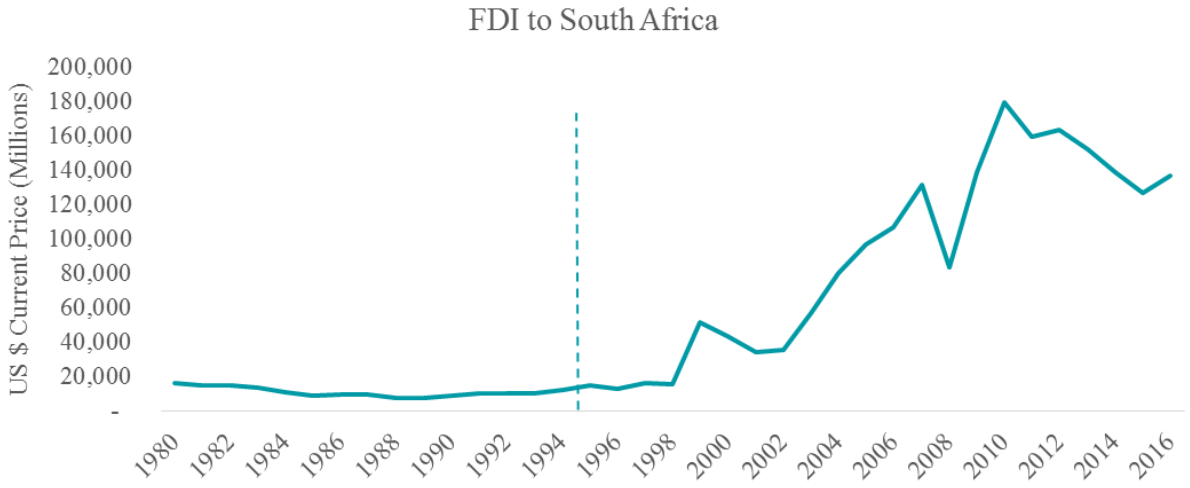


Figure 3. 5: FDI to South Africa

Source: UNCTAD

Following the collapse of Apartheid in South Africa, the country became eligible in the MSCI index in 1995 (14.8% of Emerging Markets). Average FDI inflows rose from US$12 billion before inclusion to US$93.51 billion between 1995 and 2016, highlighting the increased interest by foreign investors in deeper coverage of the emerging markets.

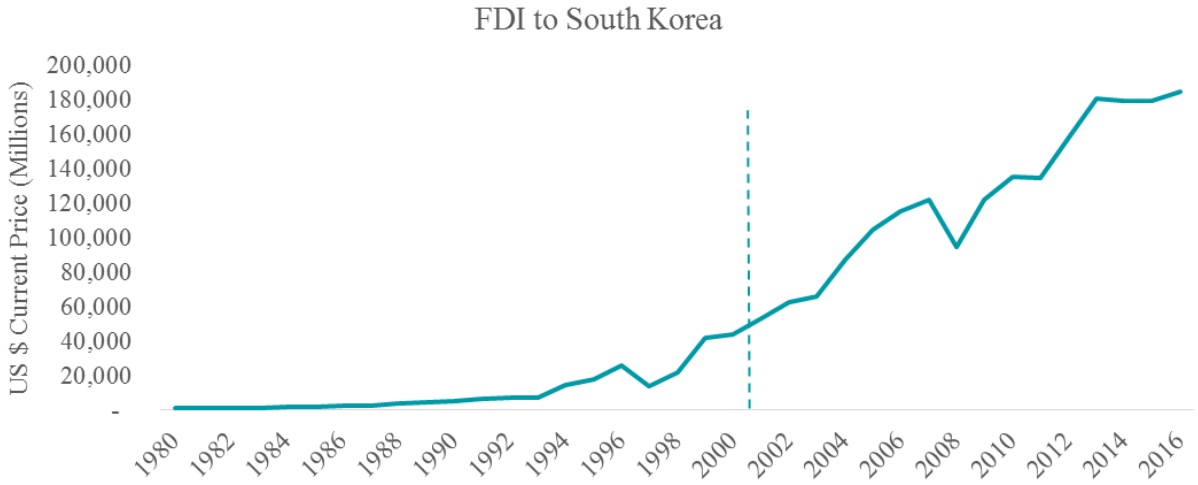


Figure 3. 6: FDI to South Korea

Source: UNCTAD

The inclusion of South Korea in the MSCI Index happened gradually as a result of improvements in accessibility. South Korea became eligible progressively from 1992 to 1998, as foreign ownership limits were gradually lifted until 2001 when it attained full addition into the index. This saw annual average FDI inflows increase from US$10.87 billion to US$128.61 billion after 2001.

From the exhibits above, economic development and openness of markets are important drivers of inclusion into global opportunity sets, which is akin to being an investable country. All countries represented in an index have a common pattern of multi-stage development. At the initial stage, countries have low levels of GDP with economies heavily influenced by governments. This leaves a narrow stock market with only few companies in the financial and utilities sector. In the second stage, the economy becomes specialized with expanding production sector supported by export of natural resources and manufacturing. This expansion and widening investor base require funding which will be sourced from foreign investment. At this stage, the country has initiated reforms in the legal and regulatory arena to protect interests of both domestic and international investors thereby stimulating access to foreign capital flows.

El-Erian and Spence (2008) support this pattern by observing that investable countries build strong political and social policies that support growth. This growth is subject to high levels of investment funded by large domestic savings and complemented by FDI. The FDI trends for some countries in the "May" category show that flows are somewhat volatile due to weak economic and political fundamentals and smaller markets which present increased risk premium.

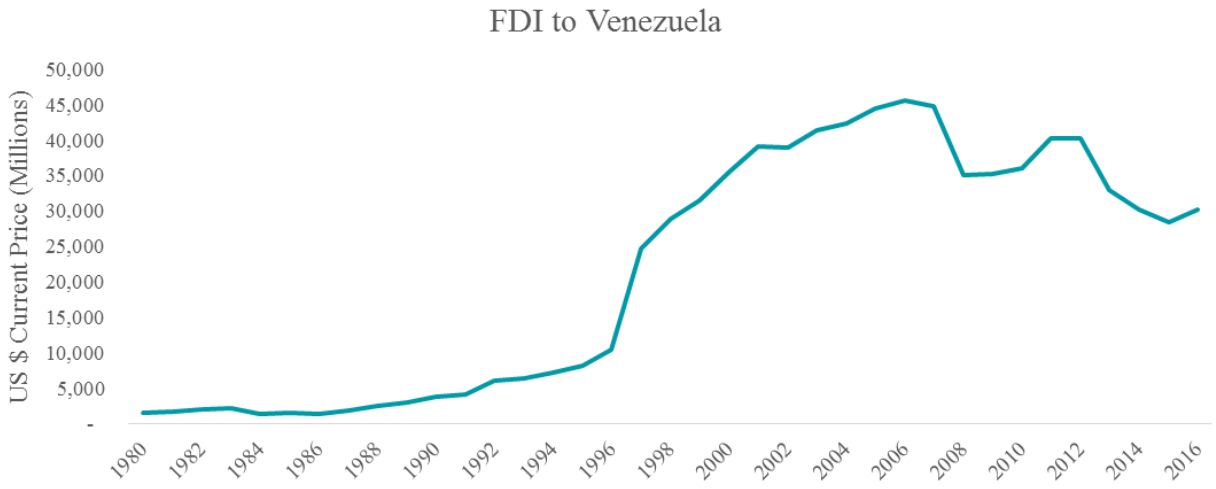


Figure 3. 7: FDI to Venezuela

Source: UNCTAD

Since the discontinuation of Venezuela from the MSCI index in 2008, the country is now ranked as a "May" invest economy. Consequently, its flows have declined between 2008 and 2016.

CHAPTER 4: RESEARCH METHODOLOGY

In this chapter, the underpinning research approach, justification of the assumptions and empirical model are presented. The objective of this study was to delineate the stylized features of an emerging market country and establish the features that enable developing countries graduate onto such benchmarks. In this regard, the study analyzed two sets of countries, in which the first cluster consisted of all the countries listed under the official emerging market rankings of MSCI and S&P Dow Jones indices while the second cluster comprised of developing countries with promising investability features but did not rank in emerging market benchmarks. The tests of association between variables reveal the appropriate terminology to define an emerging market.

Based on the discussed literature, this study estimated potential determinant of investability variables that influence attraction of foreign flows into emerging market economies. These variables are classified into the following categories with *a priori* expectations of signs:

Explanatory Variables	Indicators	Expected sign	Data sources
Macroeconomic Indicators			
Market size	GDP (Current US$)	+	World Bank
	GDP per capita, PPP (Current International,	+	
Growth rate	GDP growth (annual %)	+	World Bank
Inflation	Inflation, consumer prices (annual %)	-	World Bank
Government Expenditure	Government final consumpion expenditure (as % of GDP)	+	World Bank
Trade Openness	Trade/GDP	+	World Bank
Unemployment rate	Unemployment, total (% of total labor force) (national estimate)	-	World Bank
Institutional Quality and Infrastructure			
Institutional Quality and Infrastructure	Human Development Index	+	UNDP
	Mobile cellular subscriptions (per 100 persons)	+	World Bank
	Number of internet users per 100 persons	+	World Bank
	Electric power consumption per capita	+	World Bank
	Number of registered carrier aviation departure	+	World Bank
	CPIA, property rights and rule based governance rating	+	World Bank
	Domestic credit to private sector (% of GDP)	+	World Bank
Political stability			
Worldwide Governance Indicators	Voice and Accountability	+	World Bank
	Political Stability No violence	+	World Bank
	Governance Effectiveness	+	World Bank
	Regulatory Quality	+	World Bank
	Rule of Law	+	World Bank
Government Sector Indicators			
Taxation	Total tax rate	-	World Bank
Exchange rate	Official exchange rate	+	World Bank
Current account	Current account balance (% of GDP)	-	World Bank
Government debt	Central government debt, total (% of GDP)	-	World Bank
Business climate & transparency			
Ease of doing business index	Depth of credit information index (0=low to 8=	+	World Bank
	CPIA business regulatory environment rating	+	World Bank
	Cost of business start-up procedures (% of GN	+	World Bank
	Time required to enforce a contract (days)	+	World Bank
	Time to resolve insolvency (years)	+	World Bank
	Ease of doing business index (1=most business	+	World Bank
	Business extent of disclosure index (0=less disc	+	World Bank
	Control of corruption	+	World Bank
Financial depth and Investor protection			
Broad money	Broad money (% of GDP)	+	World Bank
Market size (Equity flows)	Market capitalization/GDP	+	World Bank
Market liquidity	Stocks traded,turnover ratio (%)	+	World Bank
Sovereign credit ratings	Moody's ratings	+	Moody's

Table 4. 1: Potential explanatory variables

4.1 Data and model specification

The data set in both pools of emerging market economies comprises time series data for the period 1998-2018. The dataset for all variables was obtained from World Bank Development Indicators database. The World Bank lists 33 sets of indicators to measure economic growth.

The Table 4.2 summarizes empirical methodologies that were employed by other researchers. The outcomes from these studies show proximate determinants to economic growth and development, improvements in business climate and symbolic transmission to investability. Building on evidence provided by existing literature, the paper identified a set of potential determinants of graduation to emerging market status. The choosing of variables was guided by relevant index' reports and previous empirical evidence. The study utilized five indicators; GDP per capita, Current international $ PPP, inflation, consumer prices (annual %), trade, unemployment rate and central government debt (as % of GDP).

Author	Year	Sample size	Period of study	Methodology	Factors studied
Akpan *et al.*	2014	BRICS and MINT	2001-2011	Pooled time series cross-sectional analysis	Political and Economic
Lederman *et al.*	2013	13 countries of SADC	2005-2009	OLS	Economic, Infrastructure and Institutional
Jadhav	2012	BRICS	2000-2009	Multiple Regression	Economic, Institutional and Political factors
Eicher *et al.*	2012	46 countries	1988-2000	Bayesian model, averaging BeckitBMA; OLS	Economic, Institutional, Business Climate and Political factors
Anyanwu	2011	African Countries	1980-2007	OLS with Generalized Linear Model (GLM)	Economic, Infrastructure and Political factors
Asiedu and Lien	2011	112 developing countries	1982-2007	GMM by Arellano and Bond (1991) System GMM by Blundell and Bond (1998)	Political
Ho and Rashid	2011	ASEAN countries	1975-2009	Multiple Regression	Economic
Hailu	2010	African Countries	1980-2007	Least Square Dummy Variable (LSDV) regression	Economic
Kim	2010	28 countries	1990-2002	Pooled OLS	Political
Gholami *et al.*	2010	6 countries in Asia-Pacific Region	1996-2005	Generalized Least Squares (GLS)	Economic and Political
Kinda	2010	77 countries	2000-2006	IV FE logit	Business Climate
Nasser and Gomez	2009	Latin American Countries	1978-2003	Generalized Least Squares (GLS)	Infrastructure and Institutional quality
Dutta and Roy	2008	97 countries	1984-2003	Pooled OLS	Economic and Political
Quazi	2007	Latin American Countries	1995-2004	Generalized Least Squares (GLS) and Random Effects	Business Climate and Economic
Hasen and Gianluigi	2007	AMU countries	1990-2006	Simulataneous Equation Regression	Economic
Chowdhury and Mavrotas	2006	3 Asian developing countries	1969-2000	Simulataneous Equation Models (Toda-YamamotoVECM)	Economic
Deichmann *et al* .	2003	Euro-Asia countries	1954-1995	Conditional Logit	Infrastructure and business climate
Globerman and Shapiro	2002	114 countries	1995-1997	OLS with Heteroskedastic-consistent standard errors	Infrastructure
Asiedu	2002	71 countries	1988-1997	OLS	Economic
Nunnenkamp	2002	28 developing countries	1987-1999	Regression	Economic
Chakrabarti	2001	135 countries	1994	Extreme Bound analysis	Economic
Hausmann and Fernández-Arias	2000	33 countries	1996-1998	OLS	Economic, Institutional and Business Climate
Singh and Jun	1995	31 countries	1970-1973	Regression	Economic and institutional
Schneider and Frey	1985	80 developing countries	1976-1980	Multiple Regression	Political and Economic

Table 4. 2: Variables used in previous empirical studies

Both samples were subjected to the Logit Model to assess the differentiation degree and evaluate which variables apply to graduation of countries onto emerging market status as proposed in literature (Ladekarl & Zervos, 2004; Aggarwal et al. 2003; Giovanni, 2005; Nellor, 2008; Kodongo & Ojah, 2016).

The Logit model takes a cumulative distribution function of the logistic distribution and transforms a linear model to derive a non-linear relationship. This yields an S-shaped curve which utilizes predictive probability on a dichotomous event. In logistic modelling with a discrete outcome, the dependent variable is dichotomous and a dummy variable is created which takes any number and rescales to take a value between 0 and 1.

The Logit methodology is superior to discriminant models because its coefficients can be interpreted in the form of an odds ratio. Also, the model assumes a categorical dependent variable and does away with heteroskedasticity. More importantly, the motivation for using this methodology lies in the nature of the logistic distribution which embraces fatter tails in variables (Gujarati, 2008).[8]

This study employed a qualitative response model to determine the factors which influence the probability of a country to join an emerging market index. In essence, the dependent variable is categorical and defined as a dichotomous random variable. It assumes a value of '1' if a country is ranked in a particular time period 't' and '0' otherwise. The model specifies macroeconomic parameters, political factors, infrastructure, institutional quality, foreign exchange, taxation and business environment in determining the probability of graduation into an index in each of the categories.

In the list of countries that are analyzed in this study, there are 25 mature emerging market economies that have graduated into the MSCI index and 47 developing countries with the potential to graduate to the index. The 25 countries are considered favourable and appear in emerging market indices, implying that they have attractive features which 47 developing economies do not possess.

[8] The predictive power of the Logit distribution is enhanced in situations where fatter tails exist in time series analysis and it is useful for rational choice perspective on human behaviour.

The choice of the 47 countries was based on availability of data for key macroeconomic, and governance indicators. The data for 72 developing countries was taken for year 1998 to 2018. There are 36 explanatory variables under study.

Descriptive Statistics of Countries in the Sample						
	Latin America	**Europe**	**Africa**	**Middle East**	**Asia**	**Total Sample**
Number of countries	16	16	21	8	11	**72**
Cluster 1	6	5	3	3	8	**25**
Cluster 2	10	11	18	5	3	**47**
Percentage of countries with emerging market status	37.5%	31.3%	14.3%	37.5%	72.7%	
Percentage of countries working towards an upgrade	62.5%	68.8%	85.7%	62.5%	27.3%	

Table 4. 3: Descriptive statistics of countries used in the sample

Asia recorded the highest number of countries with emerging market tag at 73% while Africa was associated to 86% of countries seeking to achieve investability. Since we have a discrete choice model, the desired function was defined as follows;

$$y_t = \alpha_o + \sum \beta_i X_{it} + \sum \beta_i Z_{it} + \sum \beta_i W_{it} + \sum \beta_i D_{it} + \sum \beta_i F_{it} + \sum \beta_i T_{it} + \sum \beta_i S_{it} + \mu_t$$

Where Y_t is a dichotomous variable that;

Takes a value $y_t = 1$ when a country joins an index in a given period

$y_t = 0$ Otherwise

X_{it} = Macroeconomic parameters where i= 1,2,3,4

Z_{it} = Political factors where i= 1,2,3,4

W_{it} = Infrastructure determinants where i= 1,2,3,4

D_{it} = Institutional variables where i= 1,2,3,4

F_{it} = Foreign exchange rates and taxation

T_{it} = Business climate where i= 1,2,3,4

S_{it} = Indicators of capital flows

The status of a country in the emerging market index is the dependent variable while an investigation on a vector of explanatory variables form the dominant factors that can be used to generate a ranking system.

4.2 Hypothesis tests and variable definitions

In connection with the discussions of the previous section, seven specification models were chosen to represent selected variables that are expected to impact a country's attractiveness to foreign investment and its attendant ranking to indices. Accordingly, seven hypotheses were tested.
The first hypothesis tests the impact of macroeconomic variables. This model integrates factors such as market size, market growth potential, inflation, government expenditure, trade and unemployment rate.

$$IND_i = \alpha_o + \beta_1 GDP_i + \beta_2 GDPC_i + \beta_3 GDPG_i - \beta_4 INF_i + \beta_5 GCONSM_i + \beta_6 TRD_i + \beta_7 UR_i + \mu_t \quad (1)$$

Where IND_i is the country's status in the index, GDP and GDPC are measures of market size, GDPG is the annual growth rate measuring the market potential, INF is the inflation, GCONSM is the general government consumption expenditure as a percentage of GDP, TRD is the ratio of trade/GDP as a measure of country's openness and UR is the prevailing unemployment rate. All the independent variables were of the expected sign and significant except inflation.

GDP was included in the equation as a measure of the overall economic activity of a country, through the effect of both private and government consumption and investment. An increasing demand for goods and services signifies higher GDP and therefore higher revenue for investors. It is expected that unchecked *inflation rates* corrode economic growth through rising cost of living attributed to higher product prices. *Government expenditure* interacts with economic growth through increased investment in social and human capital. *Trade* openness through liberalization and elimination of protectionism results into more resource inflow from foreign investment.

The second model hypothesized the impact of political stability on the likelihood of graduation into emerging market status. The empirical literature shows that politically stable regimes attract more investments, hence a significant positive relationship is expected.

$$IND_i = \alpha_o + \beta_1 PS_i + \beta_2 VA_i + \beta_3 GE_i + \beta_4 RQ_i + \beta_5 RL_i + \mu_t \quad (2)$$

Where IND_i is the country's status in the index, PS shows political stability and absence of violence, VA is voice and accountability, GE represents government effectiveness, RQ represents regulatory quality and RL is rule of law. These variables are derived from propositions of Worldwide Governance Indicators.

The third model analyzed the impact of infrastructure on the likelihood of graduation into an index. Endogenous growth literature credited to the seminal works of Romer (1986,1990), Lucas (1988) and Barro (1990) summarizes the importance of infrastructure and human capital on measurement of growth. The findings show that human capital is a factor input of production, besides physical capital and labour. Even though the returns to public investments in education may be lower than those generated by infrastructure, the rationale for inclusion in this specification is provided in the literature of growth models (Aschauer, 1989; Barro, 1990).

$$IND_i = \alpha_o + \beta_1 HDI_i + \beta_2 MPU_i + \beta_3 IU_i + \mu_t \quad (3)$$

Where IND_i is the country's status in the index, HDI is the Human Development Index identifying the human capital formation of a country and the government's role through spending, MPU is the mobile cellular subscriptions (per 100 people) and IU is the number of internet subscriptions per 100 people. Such elements are brought about by public infrastructure which mean increased competitiveness and trade raising foreign investment flows and domestic profitability of firms (Fourie, 2006; Fedderke & Garlick, 2008; Richaud, et al. 1999).

The fourth model focused on the impact of institutional quality on the likelihood of graduation into emerging market status. Institutions can be isolated from a broad view of structural policies that affect their performance. Since institutions are not directly measurable, elements that resemble protection of individuals from government diversion of resources into unproductive uses can be employed (Hall & Jones, 1999). Overall, higher institutional quality translates to a better rank for a country through the Institutions Climate Index[9].

[9] Eicher *et al*. (2007) select an array of economic indicators that quantify institutions index among OECD countries. The Institutions Climate Index is able to track well the economic performance of OECD nations for the period 1994 to 2006.

$$IND_i = \alpha_o + \beta_1 EC_i + \beta_2 AVR_i + \beta_3 PROP_i + \beta_4 DCRDT_i + \mu_t \quad (4)$$

Where IND_i is the country's status in the index, EC represents electric power consumption, AVR is the number of registered carrier aviation departures annually, PROP represents protection of property through the impartiality of the legal system and DCRDT is the domestic credit to the private sector, a measure of infrastructure investment to the private sector.

The fifth model analyzed the impact of government sector indicators such as taxation and foreign exchange rates. Through Tax-effect Hypothesis Feldstein and Horioka (1980) argue that increased corporate tax liabilities reduce after-tax earnings. This implies that investors negatively react to excessive taxation[10]. On the other hand, in an open economy foreign exchange rates affect firm inputs or outputs and its magnitude of influence depends upon the level of financial integration and the country's level of adherence towards policy. Countries that adhere to the official exchange rate receive the highest rating since their currency is fully convertible and without restrictions (Fraser Institute, 2006).

Previous empirical studies underscore the relevance of both domestic and external debt towards achieving an upgrade among emerging markets. Consequently, it was relevant to include variables that measure the level of debt within developing countries.

$$IND_i = \alpha_o - \beta_1 TX_i - \beta_2 CABal_i - \beta_3 GVDEBT_i + \beta_4 FX_i + \mu_t \quad (5)$$

Where IND_i is the country's status in the index, TX represents the total tax rate, CABal is the current account balance, GVDEBT is the central government debt as a share of GDP and FX is the official exchange rate prevailing in a country.

The sixth model measured the correlation between a country's business climate and the likelihood of graduation to emerging market index. The general consensus is that investor friendly markets

[10] Barro (1990) pioneered studies on optimal taxation in endogenous growth framework.

build confidence in economic policy and increase resources receivable. All the variables in this equation were expected to have a positive relationship to a country's attractiveness.

$$IND_i = \alpha_o + \beta_1 CBS_i + \beta_2 BED_i + \beta_3 TE_i + \beta_4 TR_i + \beta_5 CC_i + \beta_6 DCI_i + \beta_7 EDB_i + \beta_8 BRE_i + \mu_t \quad (6)$$

Where IND_i is the country's status in the index, CBS is the cost of business start-up procedures, BED is the extent of business disclosure, CC is control of corruption, DCI is the depth of credit information TE is the time required to enforce a contract while TR is the time to resolve a dispute. All these variables are compilations generated by the World Bank through its Ease of Doing Business Index.

To measure the level of financial intermediation, the test equation included a component of domestic credit to the private sector. This measure has been widely used by numerous studies such as Levine et al. (2000) and Ahgion et al. (2005)[11] to assess a developing nation's improvements in financial intermediation to enhance growth and attract FDI.

The last model combined market characteristics that attract foreign flows into a country and its inclusion in emerging market indices. Through preferred channels of bond and equity flows, investors follow large markets that are highly liquid and with the highest credit rating. As such, all components were expected to yield a positive relationship to a country's attractiveness.

$$IND_i = \alpha_o + \beta_1 MKTCAP_i + \beta_2 LIQ_i + \beta_3 M3_i + \beta_4 SCR_i + \mu_t \quad (7)$$

Where IND_i is the country's status in the index, MKTCAP is the total market capitalization of the economy, LIQ is the measure of market liquidity, as proxied by the turnover ratio, while CR is the sovereign credit rating assigned to a country by Moody's.

[11] Financial intermediation is considered important as it helps in investment monitoring, information generation for future events, diversification and risk management, exchange of goods and services and in mobilizing savings.

CHAPTER 5: RESULTS

The regression analysis focuses on the periods 1998 to 2018, in annual data. The countries under study correspond to both graduated and non-graduated emerging market economies in Latin America, Europe, Middle East, Africa and Asia. The descriptive statistics of both clusters are shown in Table 5.1.

5.1 Descriptive statistics

CLUSTER A	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Observations
AVR	295953	139869	4692008	7500	503198.6	5.19869	36.26449	26367.63	0.0000	1.54E+08	1.32E+14	521
BED	6.585714	7	10	1	2.598726	-0.527576	2.317091	23.03743	0.0000	2305	2356.929	350
BRE	3.371795	3.5	4	3	0.338688	0.349082	2.197189	1.8394	0.3986	131.5	4.358974	39
CABAL	0.859073	-0.574071	33.18472	-14.4719	6.353203	1.760847	8.104978	785.2888	0.0000	420.9456	19737.6	490
CBS	16.26456	13.65	131.7	0.2	15.1783	3.306494	19.35777	4098.891	0.0000	5139.6	72569.94	316
CC	-0.0787	-0.22	1.59	-1.43	0.650508	0.460734	2.689696	18.71091	0.0001	-37.38257	200.5783	475
DCI	7	7	8	0	1.170097	-2.370716	12.15398	664.2282	0.0000	1050	204	150
DCRDT	57.23339	42.39961	160.1248	7.619452	41.22576	0.969221	2.624319	77.32402	0.0000	27243.1	807292.6	476
EC	3714.254	2619.961	16390.73	74.49062	3592.774	1.557139	5.101525	249.9555	0.0000	1578558	5.47E+09	425
EDB	72.20264	62	170	4	42.24856	0.276884	1.901368	14.31663	0.0008	16390	403396.7	227
FX	621.29	19.063	14236.94	0.9995	2099.912	4.47272	22.92296	10075.47	0.0000	314994	2.23E+09	507
GCONSM	72.07231	74.98406	98.21614	24.45039	13.04336	-1.103652	4.528033	156.7539	0.0000	37621.75	88637.35	522
GDP	6.55E+11	2.77E+11	1.39E+13	1.03E+10	1.42E+12	6.110204	45.99527	43704.75	0.0000	3.44E+14	1.05E+27	525
GDPC	21303.24	12727.28	141635	1852.81	24974.33	2.67675	10.33404	1796.681	0.0000	11141592	3.26E+11	523
GDPG	4.059154	4.215032	26.17025	-13.1267	3.828254	0.071796	7.817567	505.2431	0.0000	2118.879	7635.532	522
GE	0.213531	0.162129	1.51	-1.21	0.599712	-0.022445	2.286269	10.12198	0.0063	101.4271	170.476	475
GVDEBT	46.41637	49.80605	143.949	1.893522	23.28009	0.492903	3.850253	11.72199	0.0028	7705.118	89423.82	166
HDI	0.731044	0.747	0.906	0.44	0.104391	-0.712166	2.929074	44.06457	0.0000	380.143	5.655812	520
INF	5.312543	3.808791	85.74649	-4.86328	6.311299	6.083934	66.18327	85391.26	0.0000	2629.709	19677.25	495
IU	8.052606	4.030842	41.59693	0.000288	9.56208	1.429912	4.415512	188.7962	0.0000	3583.409	40596.42	445
LIQ	54.68296	32.54382	480.2873	0.734602	64.66005	3.007136	14.81068	3139.986	0.0000	23458.99	1789435	429
M3	66.47969	57.39305	207.6737	10.93903	36.07744	1.2644	4.585165	185.2034	0.0000	33173.37	648187.6	499
MKTCAP	58.10108	42.28453	352.1564	2.488777	51.70933	2.251073	9.622201	1154.211	0.0000	25099.67	1152431	432
MPU	77.78864	82.90832	212.639	0.017194	51.23558	0.054616	1.98892	22.58035	0.0000	40761.25	1372919	524
PROP	2.782051	2.5	3.5	2.5	0.426042	0.961371	2.10251	7.316441	0.0258	108.5	6.897436	39
PS	-0.34211	-0.28	1.26	-2.81	0.945867	-0.319555	2.33783	16.76216	0.0002	-162.5022	424.0711	475
RL	0.011417	-0.04	1.43	-1.43	0.669358	0.192515	1.992913	23.00726	0.0000	5.423307	212.3709	475
RQ	0.21515	0.23	1.54	-1.35	0.626637	0.012461	2.236684	11.54394	0.0031	102.196	186.1274	475
SCR	9.295146	9	19	3	3.871762	0.368425	2.341463	20.9566	0.0000	4787	7705.138	515
TAX	43.06937	40.05	137.6	11.3	22.57608	1.464583	6.020776	209.5104	0.0000	12231.7	144239.2	284
TE	695.8602	600	1711	230	309.0893	1.098211	3.774955	71.42682	0.0000	219891.8	30093909	316
TR	2.759	2.5	9.2	1	1.300869	2.213546	10.20073	893.1214	0.0000	827.7	505.9857	300
TRD	71.68937	59.10387	220.4068	16.43858	41.61977	1.282678	4.129709	170.8962	0.0000	37421.85	902478.8	522
UR	7.603659	6.1069	33.2914	0.11	6.11173	1.848024	6.660195	518.6079	0.0000	3497.683	17145.14	460
VA	-0.07958	0.08	1.29	-1.91	0.831651	-0.339272	2.033154	27.61359	0.0000	-37.80043	327.8387	475

Table 5. 1: Descriptive Statistics of explanatory variables in Cluster A.

Source: Author's calculations based on World Bank data

CLUSTER B	Mean	Median	Maximum	Minimum	Std. Dev.	Skewness	Kurtosis	Jarque-Bera	Probability	Sum	Sum Sq. Dev.	Observations
AVR	27313.17	17833	283787	0	31431.92	3.232698	18.62104	10706.27	0.0000	24554538	8.87E+11	899
BED	5.110942	5	10	0	2.214832	0.253399	2.224701	23.52165	0.0000	3363	3222.901	658
BRE	3.316594	3.5	4.5	1.5	0.602615	-0.75887	3.396862	23.48239	0.0000	759.5	82.79694	229
CABAL	-2.72499	-3.315165	45.45407	-41.5269	9.010938	0.989086	9.337814	1732.018	0.0000	-2569.666	76487.57	943
CBS	47.35868	16.95	1316.4	0	93.56157	6.488695	66.81455	128281.4	0.0000	34382.4	6346481	726
CC	-0.24225	-0.35	2.34	-1.52	0.749161	0.839529	3.517013	114.845	0.0000	-216.33	500.6286	893
DCI	5.241135	6	8	0	2.887945	-1.035396	2.467373	53.71948	0.0000	1478	2343.603	282
DCRDT	42.43323	32.38635	308.9784	0.18617	32.45511	2.054824	12.18787	3431.745	0.0000	34498.22	855307.6	813
EC	3394.648	1435.362	54799.17	22.75582	6683.236	4.757521	30.58205	27135.37	0.0000	2596906	3.41E+10	765
EDB	96.74334	94	188	9	46.54528	0.1238	2.133053	13.98869	0.0009	39955	892582.8	413
FX	7145317	17.70476	6.72E+09	0.023706	2.19E+08	30.6268	939.0011	34497452	0.0000	6.72E+09	4.52E+19	941
GCONSM	80.83299	80.75181	121.46	38.71266	12.92254	-0.414664	3.46569	35.20604	0.0000	75498.01	155803.6	934
GDP	4.33E+10	2.55E+10	4.82E+11	2.46E+09	5.18E+10	3.198294	17.46813	10249.54	0.0000	4.26E+13	2.64E+24	983
GDPC	12756.27	8190.726	91473.46	429.8073	14081.57	2.238222	9.310434	2444.289	0.0000	12501148	1.94E+11	980
GDPG	4.162252	4.255477	19.67532	-17.669	3.899126	-0.839944	7.296987	871.8441	0.0000	4091.494	14929.53	983
GE	-0.12552	-0.2	2.11	-1.58	0.666555	0.506671	3.053495	38.31427	0.0000	-112.09	396.3113	893
GVDEBT	55.85547	50.76144	161.2322	5.741187	33.32652	0.782937	2.948139	22.50094	0.0000	12288.2	243233.9	220
HDI	0.654653	0.703	0.938	0.283	0.149442	-0.4564	2.087182	67.69914	0.0000	638.287	21.7523	975
INF	7.18276	4.517305	254.9485	-60.4964	13.30662	9.238635	147.5024	808218.2	0.0000	6565.043	161661.4	914
IU	6.444903	1.76068	43.67305	0	9.240555	1.711812	5.167767	516.5587	0.0000	4865.902	64382.44	755
LIQ	11.72404	6.538654	101.2403	0	15.44691	3.215332	15.08865	2679.528	0.0000	4021.347	81603.57	343
M3	50.39185	40.97005	260.0643	8.57049	38.11625	2.668118	12.4858	4279.214	0.0000	43689.73	1258167	867
MKTCAP	31.66717	24.1465	235.3731	0.579547	28.4922	2.221145	11.27378	1451.45	0.0000	12508.53	319851.4	395
MPU	68.24069	67.43273	210.0492	0	52.32842	0.2504	1.864884	62.79021	0.0000	66807.63	2678021	979
PROP	2.895197	3	4	1	0.622969	-0.743887	3.2389	21.6648	0.0000	663	88.48472	229
PS	-0.13001	-0.04	1.62	-2.4	0.826876	-0.281302	2.441719	23.37434	0.0000	-116.1	609.8819	893
RL	-0.19809	-0.25	1.96	-2.34	0.783339	0.294886	2.821132	14.13268	0.0009	-176.89	547.3496	893
RQ	-0.05604	-0.11	1.7	-2.33	0.73102	-0.138744	3.045905	2.943449	0.2295	-50.04	476.6764	893
SCR	11.17694	11	21	1	3.774632	-0.303868	2.702657	14.22856	0.0008	8338	10614.64	746
TAX	39.63754	38.15	112.9	10.7	13.97681	0.449469	4.110207	54.58742	0.0000	25447.3	125220	642
TE	680.8278	598	1459	210	284.852	1.216976	3.877115	202.477	0.0000	494281	58826983	726
TR	2.827042	3	5.3	0.8	1.00672	0.258366	2.743744	9.841754	0.0073	2007.2	718.5608	710
TRD	86.03344	79.31666	326.0066	22.49216	42.36957	2.09183	10.16018	2710.731	0.0000	81387.63	1696446	946
UR	8.108269	7.1708	23.9999	0.69	4.579421	0.721425	3.107118	55.38494	0.0000	5148.751	13295.68	635
VA	-0.1032	-0.17	1.63	-1.67	0.790287	0.073171	1.997124	38.21948	0.0000	-92.16	557.1022	893

Table 5. 2: Descriptive Statistics of explanatory variables in Cluster B.

Source: Author's calculations based on World Bank data

Table 5.1 and Table 5.2 show that descriptive tests from both clusters yield similar results, with most variables exhibiting statistically significant values hence the rejection of null hypothesis of a normal distribution.

5.2 Correlation matrix

Correlation matrix; Model 1							
	GDP	**GCONSM**	**GDPC**	**GDPG**	**TRD**	**UR**	**INF**
GDP	1.000						
GCONSM	-0.261	1.000					
	0.000						
GDPC	0.001	-0.609	1.000				
	0.974	0.000					
GDPG	0.101	-0.277	0.092	1.000			
	0.001	0.000	0.003				
TRD	-0.180	-0.224	0.245	0.031	1.000		
	0.000	0.000	0.000	0.328			
UR	-0.120	0.370	-0.247	-0.245	-0.103	1.000	
	0.000	0.000	0.000	0.000	0.001		
INF	-0.051	0.127	-0.161	-0.101	-0.170	0.077	1.000
	0.104	0.000	0.000	0.001	0.000	0.013	

Correlation matrix; Model 2					
	VA	**PS**	**GE**	**RQ**	**RL**
VA	1.000				
PS	0.545	1.000			
	0.000				
GE	0.592	0.706	1.000		
	0.000	0.000			
RQ	0.665	0.679	0.900	1.000	
	0.000	0.000	0.000		
RL	0.621	0.742	0.920	0.890	1.000
	0.000	0.000	0.000	0.000	

Correlation matrix; Model 3			
	MPU	**HDI**	**IU**
MPU	1.000		
HDI	0.586	1.000	
	0.000		
IU	0.560	0.653	1.000
	0.000	0.000	

Correlation matrix; Model 4				
	AVR	**EC**	**PROP**	**DCRDT**
AVR	1.000			
EC	0.154	1.000		
	0.070			
PROP	0.288	0.005	1.000	
	0.001	0.957		
DCRDT	0.407	0.364	0.385	1.000
	0.000	0.000	0.000	

Correlation matrix; Model 5				
	CABAL	**TAX**	**GVDEBT**	**FX**
CABAL	1.000			
TAX	-0.095	1.000		
	0.160			
GVDEBT	-0.342	0.344	1.000	
	0.000	0.000		
FX	-0.010	0.017	-0.060	1.000
	0.879	0.800	0.372	

Correlation matrix; Model 6								
	CBS	**BED**	**TR**	**TE**	**CC**	**DCI**	**BRE**	**EDB**
CBS	1.000							
BED	-0.161	1.000						
	0.106							
TR	0.025	0.203	1.000					
	0.801	0.041						
TE	-0.344	0.113	-0.074	1.000				
	0.000	0.260	0.458					
CC	-0.324	-0.036	-0.166	0.223	1.000			
	0.001	0.719	0.096	0.024				
DCI	-0.231	-0.008	-0.312	-0.107	-0.023	1.000		
	0.019	0.939	0.001	0.285	0.822			
BRE	-0.405	-0.277	-0.218	0.122	0.498	0.194	1.000	
	0.000	0.005	0.028	0.224	0.000	0.051		
EDB	0.323	0.125	0.207	0.107	-0.382	-0.589	-0.530	1.000
	0.001	0.212	0.037	0.283	0.000	0.000	0.000	

Correlation matrix; Model 7				
	LIQ	**MKTCAP**	**SCR**	**M3**
LIQ	1.000			
MKTCAP	0.028	1.000		
	0.482			
SCR	-0.149	-0.352	1.000	
	0.000	0.000		
M3	0.281	0.306	-0.183	1.000
	0.000	0.000	0.000	

The matrices provide a glimpse of multicollinearity in models 1 and 2 through highly statistically significant odds ratios. Accordingly, the variables GDPC and GDPG were omitted from the regression in model 1 while VA and RQ were omitted from model 2. Due to the high correlation between variables, the estimated results were generated from generating logs to smoothen outliers in the variables.

All the 7 logit models were estimated and the results of selected regressions are shown in Table 5.3. Altogether, the models performed well since all the variables that are statistically significant show the predicted signs. A detailed discussion of these variables follows.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
GDP	2.697 (0.000)						
GCONSM	-1.970 (0.000)						
TRD	-0.793 (0.010)						
INF	-0.309 (0.010)						
UR	0.388 (0.012)						
PS		-0.943 (0.000)					
GE		1.345 (0.000)					
RL		-0.037 (0.867)					
HDI			3.839 (0.000)				
MPU			-0.340 (0.001)				
IU			0.002 (0.972)				
AVR				3.407 (0.000)			
EC				0.743 (0.124)			
PROP				-2.434 (0.155)			
DCRDT				-4.515 (0.001)			
TAX					2.778 (0.556)		
CABAL					0.503 (0.062)		
GVDEBT					1.289 (0.018)		
FX					0.280 (0.186)		
CBS						-0.072 (0.049)	
BED						-0.016 (0.966)	
TE						0.002 (0.175)	
TR						-1.141 (0.130)	
DCI						0.447 (0.071)	
CC						-5.855 (0.026)	
EDB						0.010 (0.672)	
BRE						-1.224 (0.459)	
MKTCAP							1.172 (0.000)
LIQ							1.540 (0.000)
M3							-2.088 (0.000)
SCR							-0.241 (0.439)

Table 5. 3: Logit model results for 7 estimations relative to inclusion in the Index.

Source: Author's calculations based on World Bank data

They include macroeconomic factors, infrastructure and institutional quality indicators, political stability, business climate and portfolio flow indicators.

Significance is at 5% confidence level.

The table shows that investability of an emerging market economy can be modelled parsimoniously with a handful of regressors.

5.3 Regression results

5.3.1 Model 1

In the first model, R-squared is 0.62, which shows that the model explains 62% variation of investor determinants in emerging market economies. GDP, Government levels of consumption, trade openness, inflation and unemployment rate are statistically significant determinants of graduation into emerging market status. GDP and unemployment rate (UR) are the economic factors that positively affect emerging market rankings. On the other hand, government consumption (GCONSM), trade (TRD) and inflation (INF) are negatively correlated with the likelihood of graduation.

5.3.2 Model 2

This model measured the impact of political variables captured through World Governance Indicators on the graduation of a country into an emerging market economy. The coefficient of government effectiveness (GE) was positive which implies that it has a positive effect on foreign investor participation in emerging markets. Political stability (PS) and rule of law (RL) have a negative effect on country ranking in the emerging market index. Government effectiveness and level of political stability are statistically significant variables with the model's R-squared at 11%.

5.3.3 Model 3

Scrutinizing three measures of infrastructure development on the possibility of a country's graduation to the emerging market index, human development index (HDI) remains the only statistically significant variable with a positive coefficient. Mobile phone users per 100 persons (MPU) is statistically significant despite a negative influence on index graduation. Internet users per 100 persons (IU) is not statistically significant to influence a country's ability to graduate to the index. The model's R-Squared is 6% implying that it's regressors were not correct predictors of graduation.

5.3.4 Model 4

This model provides an extension to the infrastructure parameters that impact a country's graduation primarily through government investment. Electric consumption (EC) used as a proxy for production technology and new registered aviation carriers (AVR) used as a proxy for transportation infrastructure are positively correlated with a country's graduation onto the index. On the other hand, property rights (PROP) and domestic credit to the private sector (DCRDT) have a negative correlation to a country's inclusion in the index. The model provides a good fit for prediction since it has an R-squared of 60%.

5.3.5 Model 5

This model measured the impact of government sector variables such taxation, exchange rate, level of debt and current account balance on the odds of a country graduating into the index. All the four variables except foreign exchange rates (FX) are statistically significant at 5% and positively correlated to the ranking in the index. The model had a low R-squared of 29%.

5.3.6 Model 6

It is expected that a favourable business environment, spurs growth and improves a country's rank on emerging market index. However, of all the regressors in the model, only time to enforce contracts (TE), depth of credit information (DCI) and ease of doing business index (EDB) were found to be positively correlated with a country's ranking in the index. Surprisingly, control of corruption (CC), cost of business start-up procedures (CBS) business extent of disclosure (BED), Time to resolve disputes (TR) and business regulatory environment (BRE) had a negative impact on country's inclusion in the index. The model had an R-squared of 49%.

5.3.7 Model 7

The last model evaluated pull factors of foreign capital flows into a country such size of the market represented by aggregate market value, market liquidity represented by turnover ratio, sovereign credit ratings by Moody's and financial depth of an economy as evidenced by broad money. All the four variables except broad money (M3) and sovereign credit rating (SCR) had the expected positive coefficient implying that they increased a country's chances of graduation into the index.

Market capitalization (MKTCAP) and liquidity (LIQ) were highly statistically significant with the model exhibiting an R-squared of 39%.

5.4 Marginal effect analysis

To determine the marginal effect of each categorical regressor on the likelihood of graduation into the index, the derivatives from the estimated logit models were subjected to forecasting to determine the expected values holding the covariates constant.

Variable	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model 7
GDP	9.520						
GCONSM	-1.700						
TRD	-7.500						
INF	-2.350						
UR	2.750						
PS		-0.445					
GE		0.960					
RL		-0.271					
HDI			2.200				
MPU			-0.002				
IU			-0.007				
AVR				2.300			
EC				4.380			
PROP				-3.080			
DCRDT				-5.250			
TAX					0.007		
CABAL					0.034		
GVDEBT					-0.002		
FX					0.001		
CBS						-8.360	
BED						-1.940	
TE						3.260	
TR						-1.320	
DCI						5.160	
CC						-6.760	
EDB						1.250	
BRE						-1.410	
MKTCAP							0.002
LIQ							0.007
M3							-0.003
SCR							9.640

Table 5. 4: Marginal analysis results.

Source: Author's calculations based on forecasted Logit model estimates

Table 5.4 depicts the behaviour of the regressors on the probability of inclusion in the emerging market index. An increase in the market size by 1% led to an increase of 9.5% in the country's probability of inclusion into the index. Trade had the largest negative influence on the probability of a country's inclusion in the index, with a 1% increase signaling a 7.5% reduction in the odds. A 1 % increase in the unemployment rate led to a 2.7% increase in chances of a country graduating to the emerging market index.

Marginal analysis of Worldwide Governance Indicators (WGI) suggests that the variables offer negligible chances of a country's probability of inclusion in the index. For example, increase in government effectiveness yields an increase of 0.9% in the odds of being classified in the index. Increase in political stability, implying an improvement in risk perception was found to decrease odds of graduation by 0.45%.

Infrastructure indicators offer better insights into the chances of a country's graduation into emerging market status. An increase in production infrastructure (EC) by 1%, will lead to a 4.38% rise in the odds while improvements in transport infrastructure leads to a 2.3% increase in the odds. Technological advancements as signified by mobile and internet penetration may not attract any significant favour for any country compared to human development index which increases the odds by 2.2%.

The effect of tax, exchange rate volatility and current account balances show small jumps in graduation levels of countries. For instance, a 1% increase in tax, improves the odds of graduation by 0.007% while currency depreciation results in 0.001% chance in the odds of inclusion in the index. Evaluating the effects of business climate variables shows that only depth of credit information (DCI) has the largest positive impact at 5.16% while cost of business start-up procedures (CBS) has the largest negative change at 8.36% for a unit increase of the regressor. Marginal analysis from this model suggests that negative probabilities may persist and have larger magnitudes relative to positive outcomes.

Marginal effects of capital flow variables show low impact on the ability of a country to graduate to the index. Market size has a marginal impact of 0.002% while liquidity has an impact of 0.007%.

On the contrary, sovereign credit ratings improved the chances of graduation by 9.64% signifying that progress towards achieving investment grade status can lead to a country attracting foreign capital flows.

CHAPTER 6: DISCUSSION

The above results present the empirical tests of the key variables that can provide guidance about where efforts should lie for aspiring economies seeking an upgrade to emerging market status. Motivated by the need to receive affordable external financing, non-indexed economies can improve their likelihood of graduation into emerging market status by concentrating on a set of factors. Going by the hypothesis that a select number of variables are expected to impact a country's attractiveness to foreign investment and its attendant ranking to indices, the results from the two separate clusters show that a greater number of these factors are important for the probability of graduation into emerging market status. In other words, if a country is able to pursue a steady progress towards fixing macroeconomic variables, institutional quality, adopting well-functioning financial markets and taming political risk then it can be positively identified as an emerging market.

Model 1

In the study of macroeconomic indicators, an analysis on the market size, government expenditure, trade, inflation and unemployment were expected to be statistically significant and relevant for the determination of emerging market status. Market size was found to be statistically significant in determining the likelihood of index placement. This prediction is fully supported by existing literature on market size hypothesis (Lim, 1983). In most cases, the greater the new market size, the greater is the propensity to enter the market. Fedderke & Romm (2006), Tarzi (2005), Khair-UZ-Zaman et al. (2006) and Zhang (2001) show robust evidence that investment in a developing economy by foreign investors is purely supported by the market size of the economy. The result also agreed with Helfat and Lieberman (2002) and Jadhav (2012), that the larger the market, the greater the long-term benefits that accrue from exploiting resources.

Government expenditure was found to have a negative impact on the probability of inclusion in the emerging market index. The study by Anyanwu (2011) and Hansen and Gianluigi (2007 supports this result by showing that government expenditure is a proxy for the level of government involvement in the economy. Hailu (2010) concludes that high levels of public investment force out private investment. In addition, most potential candidates for emerging market economies have relatively large governments that lock out private investment in an economy (Mkenda & Mkenda,

2004). In this sense, a negative relationship is expected between government consumption expenditure and the likelihood of graduation into the emerging market index.

Inflation, a proxy for economic instability was found to be negatively correlated with the odds of graduation into the index. This result is also reflected by studies done by Nnadozie and Osili (2004) and Khair-UZ-Zaman et al. (2006) who show that higher inflation discourages foreign investment. Asiedu (2002) sheds some light on this factor by claiming that for African countries, inflation is associated with the decision to invest, or otherwise. It is therefore understood that steady inflation is a reference point for macroeconomic stability of an economy.

Contrary to the findings by Yih Yun et al. (2000), Asiedu (2002) and Feils and Rahman (2008) trade openness was negatively correlated to the likelihood of graduation into the index. This result debunks the view that trade liberalization is an enabling factor for foreign investment flows and is supported by the findings of (Yanıkkaya , 2003). In his study, he finds that trade restrictions in the form of tariffs, as well as trade-related taxes favour growth in both developing and developed countries. According to "tariff jumping" hypothesis closed economy coupled with trade restrictions can be an incentive on market-seeking FDI. This exposes the rather weak relationship between trade openness and investability. It can be argued that passive trade liberalization may not necessarily lead to positive economic outcomes, particularly in developing economies that wish to graduate into the index. Also, countries that wish to achieve emerging market status, should question their trade liberalization path and export orientation as they play catch-up with advanced economies.

Unemployment rate had a positive impact on the likelihood of graduation into the index. It can be argued that high unemployment rates attributed to labour force growth, skills, the labour market information mismatch influence attractiveness of emerging market economies. Jadhav (2012) obtains strong evidence for dependency theory among developing economies and modernization hypothesis on the importance of low-cost labour in attracting FDI. Tsai (1994) also shows that cheap-labour hypothesis among developing countries encourages foreign investment.

Model 2

Model 2 incorporated measures of political stability based on the World Governance Indicators (WGI). Political stability and rule of law were found to be negative statistically significant factors of investability among emerging market economies. On the other hand, the effectiveness of government intervention was found to be the only positive statistically significant factors.

Despite the obvious effect of political stability on the attractiveness of an economy, the result demonstrates that political risk within developing emerging economies provides positives for local economic development due to increased inflows. The results are corroborated by La Porta et al. (1999), Lucas (1990) and Kim (2010) where they show that emerging market economies and potential candidates of graduation entangled by political risk and low levels of rule of law attract more FDI inflows than stable economies. Although a great deal of attention has been devoted to finding the linkage between political risk and FDI within the host nation Dunning (1993), Moosa (2002), Jadhav (2012), Singh and Jun (1995) and Bennet and Green (1972), the linkage between foreign flows within emerging market context remains an extended debate.

Kim and Li (2014) attribute investor preference to political volatile economies to three reasons; first, new investment in emerging market economies is guaranteed by firms already invested in the country. This implies that despite political upheavals, firms with entrepreneurial activity partner with locals to stabilize the business operating conditions while providing an assurance to new entrants. Secondly, stable countries generate capital flows to invest in politically strained countries. Third, politically unstable countries attract consistent FDI, only after controlling for macroeconomic conditions. This implies that an upgrade towards emerging market status maybe achieved only if the necessary and sufficient condition of stable macroeconomic factors is implemented.

Government effectiveness was a positive enabler of graduation into the index. Lederman et al. (2010) reveals that among SADC economies, the general government quality, appeals to investors and “good governments” attract FDI.

Model 3

The impact of institutional variables associated with human capital and technology connectivity showed varied results. Human capital and internet penetration had a positive impact on investability, although internet penetration was not statistically significant. The marginal impact due to improvement in human capital (2.2%) shows that a country's capacity to take advantage of externalities in economic development might be limited by local conditions surrounding technology and human capital (Al Nasser & Gomez, 2009). Suliman and Mollick (2009) agree that African countries can achieve better economic growth through improvements in literacy levels.

The patterns of human capital development enter macroeconomic parameters very well and inform the levels of investability. Jadhav (2012) notes a strong incentive for economic growth in the BRICS stems from intensive usage of human capital to enhance productivity and technology transfer. Noorbakhsh et al. (2001) also found that human capital, which can also be a proxy for investment attractiveness, is a key determinant of FDI.

Connectivity measured through mobile and internet penetration shows that investment in technology infrastructure will not increase the chances of a country graduating into the index. At the same time, rapid technological change poses new challenges for developing countries because it can outpace the capacity of governments and society to adapt to the changes that new technologies bring about, since they affect labour markets, perpetuate inequalities, and raise ethical questions (UNCTAD , 2018).

Model 4

Based on the measures of production infrastructure and the level of private investment, model 4 revealed that aviation departures and electric consumption positively impact investability while property rights and credit to the private sector have a negative impact on chances of a country upgrading into emerging market index.

The result is aligned with those of Al Nasser and Gomez (2009) and Lipsey (2003) where the level of infrastructure has a positive impact on the financial system of a country. Particularly, they indicated that investment in the physical infrastructure is an incentive for FDI.

In developing economies, infrastructure improvement is critical determinant for international competitiveness (Quazi, 2007). Aviation departures, a proxy for transport infrastructure shows a marginal impact of 2.3% while investment in electric consumption improves the odds of graduation into the index by 4.38%. The argument from this finding is that production infrastructure has a higher impact than transportation infrastructure. Azizov (2007) studies FDI determinants on Commonwealth Independent States (CIS) and yields similar results. Whereas improving physical infrastructure shows positive results on competitiveness of developing countries, Loree and Guisinger (1995), and Asiedu (2002) show that availability and quality of infrastructure boosts productivity spill-over effects and determine the direction of FDI.

We know that the quality of government is closely related to its interference with the private sector, leading to the performance of private sector. Credit provided to the private sector remains negative and statistically significant. Credit provision is therefore not a good measure to the level of vibrancy of the private sector. Similar results were reported by Anyanwu and Erhijakpor (2004) for African countries.

A possible explanation for the outcome of weak property rights and attraction of foreign investment is the difficulty in enforcement. Hausmann and Fernandez-Ariaz (2000) conclude that FDI may be promoted by inadequate property rights since firms will independently invest in their own know-how, expand in new markets and exploit resources without trusting local partners.

Model 5

Model 5 encompassed all variables that influence monetary and fiscal policy of an economy. Taxation, current account balance and exchange rate fluctuations were found positive and statistically significant in determining investability. The result is aligned with that of Quazi (2007).

There are several explanations why taxation may influence investability positively. First, generally, foreign investors and firms view emerging markets from the long-term perspective and in the presence of more repressive taxation regimes, there exist preferential tax incentives to lure them into new markets, while the same may not apply to domestic firms. This conclusion is reached

by Usher (1977) and Hadari (1990). Secondly, according to "tariff jumping" hypothesis, in open economies which is a key feature of developing countries, investors are able to jump the "tariff-wall" in the presence of high tariffs due to taxation (Hamid & Chakrabarti, 2009).

Exchange rate volatility within emerging markets is predominantly high and from the results somehow, investors are attracted to such economies. According to Bennassy-Quere et al. (2000), depreciating currencies of host nations create more wealth for foreign investors. Furthermore, Lecraw (1991), dismantles the influence of exchange rate into two motives. If the foreign investment is seeking to exploit market opportunities, the exchange rate becomes an enabler on the likelihood of graduation into the index. Likewise, if its resource-seeking or export-oriented, the impact of the real exchange rate is negative. It can thus be argued that investability considerations are driven by long-term considerations and not speculative considerations on exchange rate expectations. For these reasons, Kim (2010), concludes that the more liberal a country's foreign exchange system, the more likely FDI is to be independent or exogenous.

In line with expectations, only central government debt had a negative impact on investability. the implication being that any upgrade decisions by index providers gives higher weighting to public debt. In contrast, current account balance had a positive impact on investability, implying that a strong process of fiscal consolidation, could result in steady reduction in debt levels.

Model 6

Model 6 recorded the impact institutional and business climate variables on the odds of graduation into the index. Of all the 8 variables, evaluated, only ease of doing business, depth of credit information and time to enforce contracts were found to be positive, yet insignificant. Contrary to the findings of Daude and Stein (2007), on the importance of institutional variables using bilateral FDI, this study revealed that it is vital to disaggregate each category.

Contrary to expectation, control of corruption depresses investability. This shows that the prevalence of corruption and low transparency is not harmful to foreign investment. This agrees with the findings of Kim (2010), who reveals that countries with high level of corruption of government and low level of democracy have higher FDI inflows. From literature, corruption is

linked to less transparency, bureaucracy, inefficiency and greater costs for business and lost resources. The conflicting findings from this study indicate that even with high corruption in a country, markets function because of the linkage between greater opportunities for foreign investors. Li and Resnick (2003) confirm this hypothesis by comparing foreign investor preference to democratic regimes and autocratic regimes. They find that foreign investors prefer autocratic regimes because of the stability they enjoy operationally, without the worry of changing policies and shifts in power.

Depth of credit information and time to enforce contracts are indicators for the level of accountability. The positive coefficients show that investors prefer transparent markets with less information asymmetry. This emphasizes the need for robust disclosure and attraction of foreign investment for emerging market economies. Conversely, the extent of disclosure for business and the regulatory environment may negatively reduce the chances of graduation into the index. Anyanwu (2011) in his study on the determinants of FDI among African countries notes that regulation and cost frictions within the formal financial channels deter remittances especially among immigrants sending money home. This observation also buttresses the result of the negative coefficient of cost of business start-up procedures.

As expected from theory, the higher the rank in the Ease of Doing Business Index by the World Bank, the higher the investability of a country. Consequently, policies directed at expanding efficiency of financial markets and improving investment sentiment act as a pull factor for capital inflows. This observation is confirmed by Nellor (2008) through his study on the impact of private-sector led growth in Sub-Saharan Africa. Countries that wish to graduate into emerging market index, should remain increasingly efficient, promote conducive business environment and are rewarded through increased capital inflows which provide the much-needed debt relief for growth.

Model 7

The final model analyzed the indicators that were expected to influence foreign portfolio flows. All the factors showed positive coefficients except broad money. To make sense of these observations, studies conducted on the evolution of financial systems and endogenous growth theory are important. King and Levine (1993), Levine and Zervos (1996, 1998), Rousseau and

Wachtel (1998), Levine et al. (2000) and Hondroyiannisa et al. (2004) all conclude that the financial system provides a mechanism for pooling resources, mobilizing capital through savings, technological innovation and improving resource allocation. From the foregoing, we can conclude that a larger financial market proxied by market capitalization improves investability of an emerging market economy because there is greater mobilization of capital and resource allocation.

Generally, more liquid markets are preferred by foreign investors over small, illiquid ones. Besides the direct effect of liquidity on return of securities such as stocks, Nasser and Gomez (2009) show that it is necessary to improve stock market trading volumes and the level of credit to the private sector through banks to spur FDI inflows. Without these conditions, foreign investors would demand greater compensation for the risk they are taking in emerging markets characterized by high liquidity risk. Hausmann and Fernandez-Arias (2000) provide useful findings from debt markets in Latin America. They show that the presence of illiquidity in the debt markets implies an application of a stochastic tax rate which shifts portfolio allocation away from the debt markets.

Sovereign credit ratings showed the right signal but remained statistically insignificant even after testing for robustness. Cantor and Packer (1996) construct a set of variables that influence credit ratings and show that foreign investors have access to these set of information for decisions on whether to invest or not. Similarly, Borensztein et al. (2007) show that sovereign credit ratings have a bi-directional causality; they have a significant effect on private index ratings as well as sovereign borrowing in international capital markets. In addition, this positive causality can only be achieved once a developing country controls for macroeconomic conditions and firm-level indicators.

Broad money supply, a measure of financial depth had negative impact on the chances of index inclusion. Although the predictive power of the variable was low, it can be argued that the growth rate in money supply indicates high inflation rates and lack of a country's capacity to sustain a given domestic debt. With a steady reasonable money supply, inflation is kept in check and economic growth is realized. Foreign investors monitor actions from monetary fundamentals and this provides impetus for investment. The results by Arfanuzzaman (2014) reinforces the role of long-term relationship between policy setting and attractiveness of an emerging market.

CHAPTER 7: CONCLUSION

The persistent impact of being investable has important implications for emerging market economies. It represents an externality that securing steady and consistent capital flows is an imperative. Achieving emerging market status for developing countries has two-fold benefits: first, it lowers financing costs for developing countries in international capital market access that are constrained by the sovereign rating, secondly, it expands the pool of potential buyers of a country's bond issuances to institutional investors. The capital from foreign investors complement domestic savings in emerging market economies and thereby contribute to sustainable growth. For their part, countries that are aiming to attract these capital flows, are struggling to put in place policies and procedures likely to promote and maintain their sustained access to foreign investors.

Emerging market indices build on extensive and broad measures to screen countries for inclusion in the index. While index providers outline a guide post for investors, the resultant toolkit offers undifferentiated decision for countries that wish to achieve emerging market status. Other factors such as sector weightings pose a threat to the robustness of the index because index builders choose an opportunity set dominated by certain sectors of the economy. From this shortcomings, previous studies have attempted to constitute determinants of investability that impact both FDI and portfolio flows. This study builds on previous research by focusing on stylized factors that increase the likelihood of graduation into an emerging market index.

Using a sample of 72 countries chosen from MSCI rankings of emerging markets, frontier and other economically similar ones, this study sought to obtain a measure which could be used for concrete classification of an emerging market benchmark. The analysis of these factors, aimed at providing a set of indicative sequencing of optimal approaches to achieving an upgrade for many developing countries. The study employed a Logit model of estimation using data from 1998-2018 obtained from the World Development Indicators by the World Bank.

The main empirical results can be summarized as follows; In the study of macroeconomic indicators, market-strength variable was found to be statistically significant parameters for determining likelihood of inclusion in the index. The greater the new market size, the greater is the propensity to enter the market. Government expenditure, inflation and trade openness were

found to have a negative impact on the probability of inclusion in the emerging market index. High unemployment rate is found to positively impact the likelihood of graduation into the index.

Political stability and rule of law were found to be negatively correlated with investability. Perceptions of government effectiveness was found to be the only positive statistically significant factor in determining investability. The study finds that despite political risks, firms with entrepreneurial activity partner with locals to stabilize the business operating conditions while providing an assurance to new entrants. Additionally, politically-unstable countries attract consistent FDI, only after controlling for macroeconomic conditions. This implies that an upgrade towards emerging market status maybe achieved only if the necessary and sufficient condition of stable macroeconomic factors is implemented.

Human capital development was found to have a positive impact on the chances of a country achieving emerging market status. Investment in human capital and its intensive usage enhances productivity and technology transfer. Connectivity measured through mobile and internet penetration revealed that investment in technology infrastructure will not increase the chances of a country graduating into the index. This was attributed to effect of rapid technology in outpacing government's capacity to adapt, labour market frictions and persistent inequalities.

Production infrastructure and the level of private investment were found to positively impact investability. To promote and maintain stable private capital flows to developing economies, it was found that production infrastructure has a higher impact than transportation infrastructure.

Taxation, current account balance and exchange rate fluctuations were found positive and statistically significant in determining investability. Investability considerations are driven by long-term considerations and not speculative considerations on exchange rate expectations or high taxation. Foreign investors receive preferential tax incentives to lure them into new markets and are capable of circumventing any tariffs imposed on them. Foreign investment is an exogenous variable where a liberal exchange rate prevails and its impact on investability depends on the motive of investment.

In line with expectations, only central government debt had a negative impact on investability. The implication being that any upgrade decisions by index providers gives higher weighting to public debt. In contrast, current account balance had a positive impact on investability, implying that a strong process of fiscal consolidation, could result in steady reduction in the levels of debt.

Under the study of institutional variables and business climate, transparency and accountability were found to be important factors influencing investability. Moreover, the ease of doing business rank and depth of credit information were found to show a strong positive correlation to a country's graduation into the index. Control of corruption, contrary to initial hypothesis, was found to have a negative correlation to investability. A possible justification was that within the bureaucracy maze exist greater opportunities for foreign investors to exploit.

From the indicators of foreign portfolio flows, it was found that large, transparent and liquid markets play a positive role in measuring investability. Sovereign credit ratings showed the right signal but remained statistically insignificant even after testing for robustness. It was explained that sovereign credit ratings can show a positive causality once a developing country controls for macroeconomic conditions and firm-level indicators.

7.1 Recommendations

The objective of this study was to ascertain the underlying investability factors that distinguish emerging market economies that have graduated from those that are in the process of achieving emerging market status. Understanding the linkages uniting financial market development for emerging market economies and level of capital flows is critical for developing countries as it maps out the eligibility process.

The findings of this study support the related literature of Ladekarl and Zervos (2004) that emphasis should be placed on adopting well-functioning financial markets, taming macroeconomics volatility and ensuring efficiency of critical determinants of investment flows.

This being the case, we can deduce the following policy implications for African countries; First, the evidence indicates that macroeconomic policies have a greater impact on investability. Market size and growth have a positive impact on investability. African countries should promote more regional cooperation and integration to increase market size in Africa and help attract investors currently constrained in part by the small size of some domestic African markets. This is all the more important given our finding that large market size attracts consistent foreign investment to emerging market economies. It is crucial for developing countries to manage inflation rates and budgetary allocations. Government spending in public goods should not crowd out private investment.

The study exposed the weak relationship between trade openness and investability. It can be argued that passive trade liberalization may not necessarily lead to positive economic outcomes, particularly in developing countries that wish to graduate into the index. African countries with open economies, should question their trade liberalization path and export orientation as they play catch-up with advanced economies.

Secondly, an important contribution of this paper relates to the finding that foreign investment flows follow high political instability. Simultaneously, the study finds that consistent track record of government intervention and stability of the legal environment are positive indicators of investability. Thus, foreign investment is responsive to investment in regulatory framework and

good governments. As a first step, politically unstable countries, need to encourage reforms for increased political participation. It is noteworthy, that this result should provide further avenues for research to establish the level of country risk that foreign investors are willing to tolerate.

Third, for developing countries to increase foreign investment, the patterns of human capital and promotion of physical infrastructure should be priority. Therefore, government's expenditure on schools, colleges and vocational training institutions complements low levels of technology investment.

Fourth, policies directed at expanding efficiency of financial markets and improving investment sentiment act as a pull factor for capital inflows. Developing countries should remain increasingly efficient, promote conducive business environment and implement sound economic and financial policies. These should encompass monetary discipline, exchange rate and debt management policies supported by domestic policies. Equally important are policies that enhance depth of credit information, maintain the sanctity of contracts, as well as other measures needed to advance the ease of doing business index and an open investment environment.

Fifth, given the weak financial development of developing countries, African countries should improve the quality of domestic financial systems and integrate them into the global financial markets to make the economies more attractive to foreign investment. One possible way to encourage strong predictor of financial flows is to increase the financial depth of the economy and manage external foreign sovereign obligations. Hence, in this regard, investment policy instruments should be in place to assure higher credit ratings.

In general, developing African countries have the opportunity to influence the inflow of foreign investment by controlling the highlighted factors of investability. With respect to policy making, the arguments based on this study promote the view that index inclusions is a gradual process and is followed by increased investor awareness. The pull factors are essential tools in attracting foreign portfolio flows in emerging markets and it impacts on country's borrowing costs. This paper brings out the perceived investability of a country and the extent of financing for

development and growth, which may provide future research opportunities. The inclusion in a global benchmark index such as MSCI EM provides a case to test for these issues.

The findings of the study show that efforts by countries aiming for index inclusion can increase the likelihood by focusing on faster pace of fixing macroeconomic indicators. While efforts to improve on all aspects would be desirable, progress on physical infrastructure, human capital, financial market development, political risk and regulatory framework is likely to be gradual and not directly linked to macroeconomic policies. Simultaneously, a steady progress towards well-functioning financial markets and domestic policies is likely to have a greater effect on increasing the likelihood of investability.

In terms of market terminologies, the findings of this study find the definition of emerging markets according to Ojah (2014) more superior to IFC (1980). The definition by Ojah (2014) correctly specifies the importance of financial market development in a country and the diminishing role of governments in financing production. Nonetheless, both definitions converge at the point of distinguishing the features of mature emerging economies and those that wish to upgrade.

REFERENCES

Acemoglu, D., Johnson, S., & Robinson, J. (2002). Reversal of fortune: geography and institutions in the making of the modern world income. *The Quarterly Journal of Economics, ,* 231-1294.

Addison, T., & Heshmati, A. (2003). The New Global Determinants of FDI Flows to Developing Countries: The Importance of ICT and Democratization. *World Institute for Development Economic Research (UNU-WIDER)*.

African Union Commission. (2015). *Agenda 2063.* Addis Ababa: AU Publications.

Aggarwal, R., Klapper, L., & Wysocki, P. (2003). *Portfolio Preferences of Foreign Institutional Investors.* World Bank.

Ahgion, P., Howitt, P., & Mayer-Foulkes, D. (2005). The effect of financial development on convergence: Theory and evidence. *Quarterly Journal of Economics*, 120, 173–218.

Akpan, U. S., Isihak, S. R., & Asongu, S. A. (2014). Determinants of foreign direct investment in fast growing economies, Working paper. *African Governance and Development Institute*, 14/002.

Al Nasser, O. M., & Gomez, G. X. (2009). Do well-functioning financial systems affect the FDI flows to Latin America? *International Research Journal of Finance and Economics*(29), 61-79.

Aliber. (1970). *A Theory of Direct Foreign Investment. in c.p Kindleberger (Ed).* The International Corporation, Assymposium Combrite MA: MIT. Press.

Allen , F., Otchere, I., & Senbet, L. W. (2012). African financial systems: A review. *Review of Development Finance*, 1(2), 79-113.

Andrianaivo, M., & Yartey, C. (2010). Understanding the Growth of African Financial Markets. *African Development Review*, 22(3), 394-418.

Anyanwu, J. (2011). Determinants of Foreign Direct investment inflows to Africa.1980-2007. *African Development Bank group,* Working paper, No 136.

Anyanwu, J. C., & Erhijakpor, A. O. (2004). Trends and determinants of foreign direct investment in Africa. *West African Journal of Monetary and Economic Integration*, Second Half, 21-44.

Anyanwu, J., & Yameogo, N. (2015). What drives Foreign Direct Investments into West Africa? An empirical investigation. *African Development Review*, 199–215 .

Arfanuzzaman, M. (2014). An Assessment and Determinants of Real Wage: A Macroeconomic Overview of Bangladesh. *International Knowledge Sharing Platform*, *4*(9).

Aschauer, D. (1989). Is public expenditure productive? *Journal of Monetary Economics*, 177-200 .

Asiedu, E. (2002, Vol.30). On the Determinants of Foreign Direct Investment to Developing Countries: Is Africa Different? *Elsevier*, pp. 107-119.

Asiedu, E. (2005). Foreign Direct Investment in Africa: The Role of Natural Resources, Market Size, Government Policy,Institutions and Political instability. *United Nations University*, Working paper.

Azizov, A. (2007). Determinants of FDI in CIS countries with transition economy. *Aarhus School of Business*.

Baldwin, R., & Mauro, B. W. (2020). *Economics in the time of COVID-19.* a VoxEU ebook, London: CEPR Press.

Barro, R. (1990). Government expenditure in a simple model of endogenous growth. *Journal of Political Economy*, 98, S103-S125.

Bekaert, G., & Harvey, C. (2002). Research in emerging markets finance: looking to the future. *Emerging Markets Review*, Vol. 3(4), pp. 429-448.

Bekaert, G., & Harvey, C. R. (1995). Time-varying world market integration. *Journal of Finance, 50*, 403-44.

Benassy-Quere , A., Fontagné, L., & Lahrèche-Révil, A. (2005). How does FDI react to corporate taxation? *International Tax and Public Finance*, 583-603 .

Bennet, P. D., & Green, R. T. (1972). Political instability as a determinant of direct foreign investment in marketing. *Journal of Marketing Research, 9*, 162-186.

Bevan, A., & Estrin, S. (2004). The determinants of foreign direct investment into European transition economies. *Journal of Comparative Economics*, 775-787 .

Bhavan, T., Xu, Changsheng, & Zhong, C. (2011). Determinants and growth effect of FDI in South Asian Economies:Evidence from a panel data analysis. *International Business Research*, 4(1).

Black, F. (1974). International capital market equilibrium with investment barriers. *Journal of Financial Economics, 1*(4), 337-352.

Blonigen, B. (2005). A Review of the empirical literature on FDI determinants. *National Bureau of Economic Research, Working Paper*.

Bloomberg. (2017). *Bloomberg Barclays Indices.* New York: Bloomberg Finance L.P.

Bohn, Henning, & Tesar, L. (1996). U.S. equity investment in foreign markets: portfolio rebalancing or return. *American Economic Review*, 86 (2), 77–81.

Bonser-Neal, C., Brauer, G., Neal, R., & Wheatly, S. (1990). International investment restrictions and closed-end country fund prices. *Journal of Finance, 45*, 523-47.

Borensztein, E., & Gelos, G. R. (2000). *A panic prone pack? The behavior of emerging market mutual funds.* IMF Working Papers (Vol. No. 00/198).

Borensztein, E., Cowan, K., & Valenzuela, P. (2007). *Sovereign Ceilings "Lite"? The Impact of Sovereign Ratings on Corporate Ratings in Emerging Market Economies.* Washington D.C: International Monetary Fund.

Brennan, M. J., & Cao, H. H. (1997). International portfolio investment flows. *Journal of Finance*, 52, 1851– 1880.

Cantor, R., & Packer, F. (1996). Determinants and impact of sovereign credit ratings. *FRBNY Economic Policy Review*, October.

Carlton, D. (1983). The location and employment choices of new firms: An econometric model with discrete and continuous endogenous variables. *Review of Economics and Statistics*, 65 (3): 440-449.

Carstens, A., & Shin, H. S. (2019). *Emerging markets aren't out of the woods yet.* BIS.org.

Cheng, L., & Kwan, Y. (2000). What are the determinants of the location of foreign direct investment? The Chinese experience. *Journal of International Economics*, 379-400 .

Choong, C. K., Baharumshah, A. Z., Yusop, Z., & Habibullah, M. S. (2010). Private capital flows, stock market and economic growth in developed and developing countries: A comparative analysis. Japan and the World Economy. 22(2), 107-117.

Chuhan, P. (1994). Are institutional investors an important source of portfolio investment in emerging markets? *Policy Research Working Paper Series 1243, The World Bank*.

Cilliers, J., & Sisk, T. D. (2013). *Assessing Long-Term State Fragility in Africa: Prospects for 26 'more fragile' Countries.* Retrieved from Institute for Security Studies: http://www.africaportal.org/dspace/articles/assessing-long-term-state-fragility-africa-prospects-26-%E2%80%98more-fragile%E2%80%99-countries:

Cleeve, E. (2000). Why do Japanese firms locate in particular British regions? *Asia Pacific Journal of Economics and Business*, 4,112-124.

Crouzel, I. (2014). *Elections and the Risk of Instability in Africa: Supporting Legitimate Electoral Processes.* Retrieved from http://www.africaportal.org/dspace/articles/elections-and-risk-instability-africa-supporting-legitimate-electoral-processes.

Cushman, D. (1985). Real exchange rate risk, expectations, and the level of direct investment. *The Review of Economics and Statistics*, 297-308 .

Dahlquist, M., & Goran, R. (2001). Direct foreign ownership, institutional investors, and firm characteristics. *Journal of Financial Economics*, 59, 413– 440.

Daniels, J. D., Radebaugh,, L. H., & Sullivan, D. P. (2002). Globalization and Business. Upper Saddle River, New Jersey: Prentice Hall.

Daude, C., & Stein, E. (2007). The quality of institutions and foreign direct investment. *Economics and Politics, 51*(2), 379-400.

Deléchat, C., Ramirez, G., Wagh, S., & Wakeman-Linn, J. (2010). How global financial markets affect Sub-Saharan Africa. (pp. 57(1), 172-208). IMF Staff Papers.

Dunning, J. H. (1993). Multinational Enterprises and the Global Economy. Harlow: Addison-Wesley.

Dupas, P., & Robinson, J. (2009). Savings constraints and microenterprise development: evidence from a field experiment in Kenya. *National Bureau of Economic Research*, Cambridge, MA.Working Paper no.14693.

Dupasquier, C., & Osakwe, P. (2006). Foreign direct investment in Africa: Performance, challenges, and responsibilities. *Journal of Asian Economics*, 241-260.

Eckbo, B. E. & Liu, J. (1993). Temporary components of stock prices: New univariate results. *Journal of Financial and Quantitative Analysis* 28, 161-176.

Edison, H., & Warnock, F. E. (2003). U.S. investors' emerging market equity portfolios: A security-level analysis. *Review of Economics and Statistics*.

Eicher, T., Helfman, L., & Lenkoski, A. (2011). Robust FDI determinants: Bayesian model averaging in the presence of selection bias. University of Washington: Department of Economics.

Eicher, T., Papageorgiou,, C., & Roehn, O. (2007). Unraveling the fortunes of the fortunate: An iterative Bayesian model averaging approach. *Journal of Macroeconomics,*.

El-Erian, M., & Spence, M. (2008). Growth strategies and dynamics: insights from country experiences. *World Economics Journal*.

Erdal, F., & Tatoglu, E. (2002). Locational determinants of FDI in an emerging market economy, Evidence from Turkey . *Multinational Business Review*, 10(1), 21-28.

Errunza, V. R. (1977). Gains from international portfolio diversification into less developed countries. *Journal of International Business Studies*(Fall- Winter), 83-99.

Estrada, J. (2012). Stocks, bonds, risk, and the holding period: An International Perspective. *Risk Management Journal*, 1-27.

Fedderke, J., & Garlick, R. (2008). Infrastructure development and economic growth in South Africa: A review of the accumulated evidence. *University of Cape Town*, Policy Paper Number 12.

Fedderke, J., & Romm, A. T. (2006). Growth impact and determinants of foreign direct investment into South Africa, 1956-2003. *Economic Modelling, Volume 23*(5), 738-760 .

Feils, D. J., & Rahman, M. (2008). Regional economic integration and foreign direct investment: The case of NAFTA. *Management International Review, 48*(2), 147-163.

Feldstein, M., & Horioka, C. (1980). Domestic saving and international capital Flows. *Economic Journal*, 314-29 .

Fernandes, A. M., & Paunov, C. (2012). Foreign direct investment in services and manufacturing productivity: Evidence for Chile. *Journal of Development Economics*, 97(2), 305-321.

Fourie, J. (2006). Economic infrastructure: A review of definitions, theory and empirics. *South African Journal of Economics*, 530–556.

Fraser Institute. (2006). Economic freedom of the world: *2006.* Vancouver: Annual Report.

Gastanaga, V., Nugent, J., & Pashamova , B. (1998). Host country reforms and FDI inflows: How much difference do they make? *World Development*, 26(7), 1299-1314.

Gehrig, T. (1993). Intermediation in search markets. *Journal of Economics and Management Strategy*, 97-120.

Giovanni, J. D. (2005). What drives capital flows? The case of cross-border M&A activity and financial deepening. *Journal of International Economics*, 65(1), 127-149.

Giuliano, P., & Ruiz-Arranz, M. (2009). Remittances, financial development, and growth. *Journal of Development Economics*, 90(1), 144-152.

Globerman , S., & Shapiro, D. (2002). Global foreign direct investment flows: The role of governance infrastructure. *World Development,*, 1899-1919 .

Gohou, G., & Soumaré, I. (2012). Does foreign direct investment reduce poverty in Africa and are there regional differences? *World Development*, 40(1), 75-95.

Gordon, J., & Gupta, P. (2003). Portfolio flows into India: Do domestic fundamentals matter? IMF Working Paper, Vol. 03/20.

Gujarati, D. N. (2008). Basic Econometrics. New York: The McGraw−Hill.

Gwatidzo, T. & Ojah, K. (2014). Firms' debt choice in Africa: Are institutional infrastructure and non-traditional determinants important? *International Review of Financial Analysis*, 31, 152-166.

Habib, M., & Zurawicki, L. (2002). Corruption and foreign direct investment. *Journal of International Business Studies*, 291-307.

Hacibedel, B., & Bommel, J. V. (2004). Do emerging markets benefit from index inclusion? *Said Business School, Working Paper, University of Oxford*.

Hadari, Y. (1990). The role of tax incentives in attracting foreign investments in selected developing countries and the desirable policy. *The International Lawyer, 73*(2), 285-293.

Hailu, Z. (2010). Demand side factors affecting he inflow of foreign direct investment to African countries: Does capital market matter? *International Journal of Business and Management*, 5(5), 104-116.

Hailu, Z. (2010, August). Impact of foreign direct investment on trade of African countries. *International Journal of Economics and Finance, 2*(3), 122-133.

Hall, R. E., & Jones, C. C. (1999). Why do some countries produce much more output per worker than others. *Quarterly Journal of Economics*, 144, 83-116.

Hamid , B., & Chakrabarti, A. (2009). Foreign equity participation under incomplete information. *Journal of Economic Behavior & Organization, 67*(1), 279-295.

Hansen , B. T., & Gianluigi, G. (2007). The determinants of foreign direct investment: A panel data study on AMU countries. http://www.ljmu.ac.uk/AFE/AFE+docs/cibef1109.pdf.

Harrison, A. E., Love, I., & McMillan, M. S. (2004). Global capital flows and financing constraints. *Journal of Development Economics*, 75(1), 269-301.

Harvey, C. R. (1994). Conditional asset allocation in emerging markets, *Working Paper*. Cambridge, MA: National Bureau of Economic Research.

Hausmann, R., & Fernandez-Arias, E. (2000). Foreign direct investment: good cholestral? *Inter-American Development Bank Working Paper No. 348*, 1-46.

Hejazi, W., & Safarian, E. (1999). Trade, foreign direct investment, and R&D Spillovers. *Journal of International Business Studies*, 491-511 .

Helfat, C. E., & Lieberman, M. B. (2002). The birth of capabilities: market entry and the importance of pre-history. (O. U. Press, Ed.) *Industrial and Corporate Change, 11*(4), 725-760.

Herzer, D., & Nunnenkamp, P. (2012). The effect of foreign aid on income inequality:Evidence from panel cointegration. *Kiel Institute for the World Economy* (p. Kiel Working Paper No. 1762). Kiel: Hindenburgufer 66.

Hevia, C., & Neumeyer, P. A. (2020, April 21). A perfect storm: COVID-19 in emerging economies. *VoxEU.org*.

Ho, C., & Rashid, A. M. (2011). Macroeconomic and country specific determinants of FDI. *The Business Review*, 18(1), 219-226.

Hondroyiannis, G., Lolos, Sarantis, Papapetrou, & Evangelia. (2004). Financial markets and economic growth in Greece 1986-1999. *Working paper No.17*.

Itagaki, T. (1981). The Theory of the multinational firm under exchange rate uncertainty. *Canadian Journal of Economics*, 276-97 .

Jackson, S., & Markowski, S. (1995). The Attractiveness of countries to foreign direct investment; Implications for the Asia-Pacific region'. *Journal of World Trade*, 159–179.

Jadhav, P. (2012). Determinants of foreign direct investment in BRICS economies, Analysis of economic, institutional and political factor. *Procedia Social and Behavioral Sciences*, 37, 5-14.

Janicki, H., & Wunnava, P. (2004). Determinants of foreign direct investment:empirical evidence from EU accession candidates. *Applied Economics*, 36(5),505-509.

Japelli, T., Pagano, M., & Bianco, J. (2005). Courts and banks: Effects of judicial enforcement on credit markets. *Journal of Money, Credit and Banking*, 37, 223-244.

Jaramillo, L. (2010). Determinants of investment grade status in emerging markets. International Monetary Fund.

Johnson, R. B., & Onwuegbuzie, A. J. (2004). Mixed methods research: A research paradigm whose time has come. *Educational Researcher*, 33(7), 14-26.

Jones, C. M. (2002). A century of stock market liquidity and trading costs. *Unpublished*, Columbia Business School, New York.

Karemera, D., Ojah, K., & Cole, J. A. (1999). Random walks and market efficiency tests: evidence from emerging equity markets. *Review of Quantitative Finance and Accounting*, 13, 171-188.

Kasekende, L. (2009). Africa and the global economic crises : Impacts, policy responses and political economy. Retrieved from African Development Bank: http://www.africaportal.org/dspace/articles/africa-and-global-economic-crises-impacts-policy-responses-and-political-economy:

Khair-UZ-Zaman, Hashim, S., & Awan, Z. (2006). Economic determinants of foreign direct investment in Pakistan. *Gomal University Journal of Research*, *22*, 49-57.

Kim, H. (2010). Political stability and foreign direct investment. *International Journal of Economics and Finance, 2*(3), 59-71.

Kim, P., & Li, M. (2014). Injecting demand through spillovers: foreign direct investment, domestic socio-political conditions, and host-country entrepreneurial activity. *Journal of Business Venturing*, 210-231.

Kim, W., & Wei, S. (2000). Foreign portfolio investors before and during a crisis. *Journal of International Economics*, Vol. 56, pp.77-96.

King, G. R., & Levine, R. (1993). Finance and growth: Schumpeter might be right. *Quarterly Journal of Economics, 108*(3), 717-37.

Kiyota , K., & Urata, S. (2004). Exchange rate, exchange rate volatility and foreign direct investment. *The World Economy*, 1501-1536 .

Kodongo, O., & Ojah, K. (2012). The dynamic relation between foreign exchange rates and international portfolio flows: Evidence from Africa's capital markets. *International Review of Economics & Finance, 24*(C), 71-87 .

Kodongo, O., & Ojah, K. (2016). Cross-border capital flows and economic performance in Africa: *A Sectoral Analysis.* Johannesburg.

Kohers, T., Kohers, G., & Pandey, V. (1998). The contribution of emerging markets in international diversification strategies. *Journal of Applied Financial Economics, 8*, 445-454.

Kolstad, I., & Villanger, E. (2008). Determinants of foreign direct investment in services. *European Journal of Political Economy*, 518-533.

Kravis, I., & Lipsey, R. (1982). The location of overseas production and production for export by U.S multinational firms. *Journal of International Economics*, 12,201-223.

Kumar, N., & P, D. (2008). East Asian infrastructure development in a comparative global perspective: An analysis of RIS infrastructure index. *Research and Information System for Developing Countries Discussion Paper 135.* New Delhi.

Kunt, A., & Levine, R. (1996). Stock market development and financial intermediaries: Stylized facts. *World Bank Economic Review, 10*(2), 291-321.

La Porta, Rafael, Lopez-De-Silanes, Florencio, Shleifer, Andrei, & Vishny, R. (1999). The quality of government. *Journal of Law, Economics and Organization, 15*, 222-79.

Ladekarl, J., & Zervos, S. (2004). Housekeeping and plumbing:the investability of emerging markets. *Emerging Markets Review*, 1-26.

Lartey, K. E. (2016). The Cyclicality of Remittances in Sub-Saharan Africa. *Journal of Economic Development,* 41(1):1-18

Lecraw, D. J. (1991). Factors influencing FDI by TNCs in host developing countries: A preliminary report. London: Buckley P.J., Clegg J. (eds) Multinational Enterprises in Less Developed Countries. Palgrave Macmillan.

Lederman, D., Mengistae, T., & Xu, L. (2010). Microeconomic consequences and macroeconomic causes of foreign direct investment in southern African economies. The World Bank.

Lee, W. (2011). Risk-based asset allocation: A new answer to an old question. *Journal of Portfolio Management*, 37, 11–28.

Leitao, N. C., & Faustino, H. C. (2010). Determinants of foreign direct investment in portugal,. *Journal of Applied Business and Economics*, 11(3).

Lesmond, D. A. (2005). Liquidity of emerging markets. *Journal of Financial Economics, 77*(2), 411-452.

Levine , R., & Zervos, S. (1998). Capital control liberalization and stock market development. *World Development*, 1169– 1183.

Levine, R., & Zervos, S. (1996). Stock Market Development and Long-Run Growth. *World Bank Economic Review*, 10(2), 39-323.

Levine, R., Loayza, N., & Beck, T. (2000). Financial intermediation and growth: causality and causes. *Journal of Monetary Economics*, 46, 31–77.

Li, Q. (2008). Foreign direct investment and interstate military conflict. *Journal of International Affairs*, 53-66.

Li, Q., & Resnick, A. (2003). Reversal of fortunes: democratic institutions and foreign direct investment inflows to developing countries. *International Organization, 57*(1), 175-211.

Lim, D. (1983). Fiscal incentive and direct foreign investment in less developed countries. *The Journal of Development Studies*, 19, 207-212.

Lipsey, R. E. (2003). Foreign direct investment and the operations of multinational firms: Concepts, history, and data. *Journal of the Japanese and International Economies, 17*(2), 101-117.

Liu, X., Siler, P., Wang, C., & Wei, Y. (2000). Productivity spillovers from foreign direct investment: Evidence from UK industry level panel data. *Journal of International Business Studies*.

Lo, A. & Mackinlay, C. A. (1989). The size and power of the variance ratio test in finite samples: A Monte Carlo investigation. *Journal of Econometrics,* 40(2), 203-238

Loggie, K. (2007). Frontier markets: Investment rationale, accessibility and risks. New York: Standard and Poor's analyst report, McGraw-Hill Companies.

Loree, D., & Guisinger, S. (1995). Policy and non-policy determinants of U.S equity foreign direct investment. *Journal of International Business Studies, 26*(2), 281-299.

Lucas, R. (1988). On the mechanics of economic development. *Journal of Monetary Economics*, 22, 3-42.

Lucas, R. (1990). Why doesn't capital flow from rich to poor countries? *American Economic Review, 80*, 92-6.

Lyakurwa, W. (2010). The Global financial crisis: implications for Africa. Nairobi: African Economic Research Consortium.

Markusen, J., & Venables, A. (1999). Foreign direct investment as a catalyst for industrial development. *European Economic Review*, 335-356.

Mavrotas, G., & Santillana, M. (July 1999). "Savings mobilisation: Key issues". *International Conference on Finance and Development Research Programme*. Manchester: University of Manchester.

McEnally, R. (1985). Time diversification: surest route to lower risk? *Journal of Portfolio Management*, Summer, 24-26.

McKinsey & Company. (September 2016). *Lions on the Move II: Realizing the potential of Africa's economies.* Washington, DC: Mckinsey Global Institute.

Merton, R. C. (1987). A simple model of capital market equilibrium with incomplete information. *Journal of Finance, 42*(3), 483-510.

Mkenda, B. K., & Mkenda, A. F. (2004, April). Determinants of FDI inflows to African countries: A panel data analysis, economic and social research foundation, globalisation and East Africa. *Working paper series no.11*.

Mobarek, A., & Keasey, K. (2000). Weak- form market efficiency of an emerging market: evidence from Dhaka stock market of Bangladesh. *Presented at ENBS Conference.* Oslo: Available online at: http://www.bath.ac.uk/cds/enbs-papers-pdfs/mobarek-new.pdf.

Mohamed, S. E., & Sidiropoulos, M. G. (2010). Another look at the determinants of foreign direct investment in MENA countries. *Journal of Economic Development*, 35(2).

Moosa, I. A. (2003). Foreign Direct Investment: Theory*, Evidence and Practice.* London: Palgrave.

Morisset, J. (1999, November). Foreign direct investment in Africa: Policies also matter. Retrieved from World Bank. elibrary: https://doi.org/10.1596/1813-9450-2481

MSCI Barra. (2008). Emerging Markets*: A 20 year Perspective.* New York: MSCI Barra Inc.

MSCI Index Research. (2014). MSCI Global Investable *Market Indexes.* New York: MSCI Inc.

Muhanji, S., & Ojah, K. (2011). External shocks and persistence of external debt in open vulnerable economies: The case of Africa. *Economic Modelling*, 28(4), 1615-1628.

Nandi, S. (2012). Comparative analysis of foreign direct investment trends in emerging economies. *Procedia - Social and Behavioral Sciences, 37*, 230–240. doi: 10.1016/j.sbspro.2012.03.289

Nellor, D. (2008). The Rise of Africa's "Frontier" Markets*:Finance and Development.* Michigan: ProQuest Central.

Nnadozie, E., & Osili, U. O. (2004). U.S. foreign direct investment in Africa and its determinants. UNECA Workshop of Financial Systems and Mobilization in Africa.

Noorbakhsh, F., Paloni, A., & Youseff, A. (2001). Human capital and FDI inflows to developing countries: New empirical evidence. *World Development, 29*(9), 1593-1610.

Nyamongo, E. M., Misati, R. N., Kipyegon, L., & Ndirangu, L. (2012). Remittances, financial development and economic growth in Africa. *Journal of Economics and Business*, 64(3), 240-260.

Obstfeld, M. (2009). International finance and growth in developing countries: What have we learned? *IMF Staff Papers*, pp. 56(1), 63-111.

Ojah, K. (2011). Is the enterprise creation the importance of venture capital in emerging markets real? Answers from JSE's IPOs. *African Journal of Finance*(13), 1-24.

Ojah, K. (2013, October). Financial inclusion in South Africa; An unfinished conversation. *Wits Business School Journal, 34*, 64-65.

Ojah, K., & Kodongo, O. (2014). Financial markets development in Africa: Reflections and the way forward. *Oxford Handbook Online*, 1-24.

Ojah, K., & Mokoaleli-Mokoteli, T. (2012). Internet financial reporting, infrastructures and corporate governance: An. *Review of Development Finance*, 69-83.

Ojah, K., Gwatidzo , T., & Kaniki, S. (2010). Legal environment, finance channels and investment: The East African example. *Journal of Development Studies*, 46(4), 724-744.

Omoniyi, B. B., & Omobitan, O. A. (2011). The impact of foreign direct investment on economic growth in Nigeria. *International Research Journal of Finance & Economics*, (73), 133-143.

Onyeiwu, S., & Shrestha, H. (2004). Determinants of foreign direct investment in Africa. *Journal of Developing Societies*, 89-106 .

Pereiro, L. E. (2006). The practice of investment valuation in emerging markets: Evidence from Argentina. *Journal of Multinational Financial Management*, 16(2).

Pistoresi, B. (2000). Investimenti diretti esteri e fattori di localizzazione: L'America Latina e il Sud Estasiatico. *Rivista di Politica Economica*, 90,27-44.

Porcano, T., & Price, C. (1996). The effects of government tax and non-tax incentives on foreign direct investment. *Multinational Business Review*, 9-20.

Poterba, J. & L. Summers (1988). Mean-reversion in stock prices: Evidence and implications." *Journal of Financial Economics* 22, 27-59.

Prasad, E., Rogoff, K., Wei, S., & Kose, M. (2003). Effect of globalization on developing countries: Some empirical evidence. Retrieved from IMF Board Document: http://www.imf.org/external/np/res/docs/2003/031703.pdf

Quazi, R. M. (2007). Investment climate and foreign direct investment: A study of selected countries in Latin America. *Global Journal of Business Research, 1*(2), 1-13.

Richaud, C., Sekkat, K., & Varoudakis, A. (1999). Infrastructure and growth spillovers:A case for a regional infrastructure policy in Africa. *Mimeo, University of Brussels*.

Rogmans, T., & Ebbers, H. (2013). The determinants of foreign direct investment in the Middle East North Africa region. *International Journal of Emerging Markets*, 240-257.

Rogoff, K., & Reinhart, C. (2003). FDI to Africa: The role of price stability and currency instability. *IMF Working Paper No. 03/10*, 1-41.

Romer, P. (1986). Increasing returns and long run growth. *Journal of Political Economy*, 1002-37.

Romer, p. (1990). Endogenous technological change. *Journal of Political Economy*, S71-S102.

Root, F. R., & Ahmed, A. A. (1979). Empirical determinants of manufacturing direct foreign investment in developing countries . *Economic Development and Cultural Change*, 27,751-767.

Rousseau , P., & Wachtel, P. (1998). Financial intermediation and economic performance: Historical evidence from five industrialized countries. *Journal of Money, Credit and Banking, 30*(4), 657-78.

S&P Dow Jones Indices. (2017). *S&P Global BMI, S&P/IFCI Methodology.* New York: S&P Dow Jones Indices LLC.

Sathye, S. (2009). The development of Sub-Saharan Africa: The role of foreign direct investments. *International Journal of Business Research,* 9(3), 136-141.

Scholes, M., Wilson, P., & Wolfson, M. (1990). Tax planning, regulatory capital planning, and financial reporting strategy for commercial banks. *Review of Financial Studies*, 25-50 .

Segot, T. L., & Lucey, B. M. (2006). Efficiency in emerging markets—Evidence from the MENA region. *Journal of International Financial Markets, Institutions and Money, 18*(1), 94-105.

Sekkat , K., & Varoudakis, A. M. (2004). Trade and foreign exchange liberalization, investment climate and FDI in the MENA countries. *Working Papers DULBEA.* Oxford: University of Oxford.

Sharma, R. (2002, June 10). Indian markets' character problems. *Economic Times*.

Singh, A. (1997). Stock markets, financial liberalization and economic development,. *Economic Jounral*, 771-82.

Singh, A., & Weisse, B. (1998). Emerging stock markets, portfolio capital flows and long-term economie growth: Micro and macroeconomic perspectives. *World Development*, 26(4), 607-622.

Singh, H., & Jun, K. (1995). Some new evidence on determinants of foreign direct investment in developing countries. *Policy Research Working Paper 1531.* World Bank.

Sjoholm, F., & Blomstrom, M. (1999). Technology transfer and spillovers? Does local participation with multinationals matter? *European Economic Review*, 915-923.

Smarzynska, B., & Wei, S. (2002). *Corruption and Cross-Border Investment: Firm Level Evidence.* William Davidson Institute Working Paper No. 494.

Speidell, L. S., & Sappenfield, R. (1992). Global diversification in a shrinking world. *Journal of Portfolio Management, 19*, 57-68.

Stulz, R. M. (1981). On the effects of barriers to international investment. *Journal of Finance, 36*(4), 923-934.

Suliman, A., & Mollick, A. (2009). Human Capital Development, War and Foreign Direct Investment in Sub-Saharan Africa. *Oxford Development Studies*, 47-61.

Taiwol, S. H. (2009). *Global Economic Crisis : The Need for African Government Interventions for Rapid Economic Recovery and Stability.* Nairobi: African Economic Research Consortium (AERC).

Takagi , S., & Shi, Z. (2011). Exchange rate movements and foreign direct investment (FDI): Japanese investment in Asia, 1987–2008. *Japan and the World Economy*, 265-272.

Tarzi, S. (2005). Foreign direct investment flows into developing countries: Impact location and government policy. *Journal of Social, Political and Economic Studies, 30*(4), 497-515.

Tesar, L. L., & Werner, I. M. (1998). *The internationalization of Securities Markets since the 1987 Crash.* Brookings-Wharton Papers on Financial Services.

Tsai, P. (1994). Determinants of foreign direct investment and its impact on economic growth. *Journal of Economic Development,* 19.

Tuan, C., Linda , F., & Bo, Z. (2009). China's post-economic reform growth:The role of FDI and productivity progress. *Journal of Asian Economics*, 280-293.

UNCTAD . (2018). *The impact of rapid technological change on sustainable development.* Vienna: United Nations Commission on Science and Technology for Development.

UNCTAD. (2017). *World Investment Report: Investment and the Digital Economy.* Geneva: United Nations.

Urata, S., & Kawai, H. (2000). The determinants of the location of foreign direct investment by Japanese small and medium-sized enterprises. *Small Business Economics*, 79-103 .

Usher, D. (1977). The welfare economics of the socialization of commodities. *Journal of Public Economics*, 151-168 .

Wei, S., & Prasad, E. (2005). The Chinese Approach to Capital Inflows: Patterns and Possible Explanations. *National Bureau of Economic Research*, 1-60.

Whalley, J., & Xin, X. (2009). China's FDI and Non-FDI Economies and the Sustainability of Future High Chinese Growth. *China Economic Review*, 143-158.

Wilcox, J. W. (1992). Taming frontier markets. *Journal of Portfolio Management, 19*, 51-56.

World Bank. (2011b). *Diaspora for Development in Africa.* Washington, D.C: The International Bank for Reconstruction and Development / The World Bank.

World Bank. (2013). *Global Financial Development Report 2014: Financial Inclusion.* World Bank Publications.

Xing, Y. (2006). Why is China so attractive for FDI? The role of exchange rates. *China Economic Review*, 17(2), 198-209.

Xing, Y., & Wan, G. (2006). Exchange Rates and Competition for FDI in Asia. *The World Economy*, 419–434.

Yanıkkaya , H. (2003). Trade openness and economic growth: a cross-country empirical investigation. *Journal of Development Economics, 72*(1), 57-89.

Yao, S., & Wei, K. (2007). Economic growth in the presence of FDI: the perspective of newly industrialising economies. *Journal of Comparative Economics*, 29, 466-484.

Yih Yun, Y. J., Groenewold, N., & Tcha, M. (2000). The determinants of foreign direct investment in Australia. *The Economic Record, 76*(232), 45-54.

Yulin, N., & Reed, M. (1995). Locational determinants of the US direct foreign investment in food and kindred products. *Agribusiness, An International Journal*, 77–85.

Zhang, K. H. (2001, July). What attracts foreign multinational corporations to China? *Contemporary Economic Policy, 19*(3), 336-346.

Zhao, H., & Zhu, G. (2000). Location Factors and Country of Origin Differences: An Empirical Analysis of FDI in China. *Multinational Business Review*, 8 (1), 60-73.

APPENDIX A: MSCI MEASUREMENT CRITERIA

Aspect	Definition
Openness to foreign ownership	
Qualification of investors	Existence of a level playing field for all categories of investors.
Limits on foreign ownership	Proportion of the market being accessible to non-domestic investors.
Participation level of foreign investors	Proportion of shares still available for non-domestic investors and a foreign board where non-domestic investors could trade the shares.
Rights of investors	Equal economic and voting rights for both majprity and minority shareholders.
Ease of capital inflows / outflows	
Capital flow restriction level	Existence of restriction on movement of capital to and from the host stock market.
Level of market liberalization	Existence of a developed onshore and offshore foreign exchange market
Efficiency of the operational framework	
Market entry	
Registration and account sign-up	Assess the level of registration requirements, i.e tax IDs, set-up of local accounts, approval process and time to complete the checks and approvals.
Market organization	
Legal regulations	Existence of an advanced legal and regulatory framework governing the financial markets to avoid ambiguity and enhance access.
Level of information disclosure	Timely disclosure of complete stock market information items such as market alerts, company news, public offers and dividend declarations.
Market infrastructure	
Clearing and settlement	Well functioning clearing and settlement system based on the broad framework published by the Bank for International Settlements (BIS)
Custody	Existence of an efficient mechanism that prevents brokers to have unlimited access to the investor's accounts and guarantees the safekeeping of its assets. Healthy competition among local custodian banks, presence of global custodian banks.
Registry and depository	Well functioning central registry or independent registrars and a central depository.
Level of trading	Competition among brokers that allows for market efficiency
Transferability	Possibility of off-exchange transactions and similar transfers.
Stock lending	Presence of regulatory framework allowing extensive use of stock lending.
Short selling	Existence of a regulatory framework allowing short selling.
Availability of Investment	Existence of restrictions on access to derived stock exchange information, data and products that prevents the creation of investment
Institutional framework	Basic rule of law and the stability of the "free-market" economic system, with consistent track record of government intervention with regards to foreign investors.

APPENDIX B: EVIEWS LOGIT MODEL RESULTS

Model 1

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 12:37
Sample (adjusted): 21 1526
Included observations: 979 after adjustments
Convergence achieved after 7 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-56.81200	6.114998	-9.290600	0.0000
LNGDP	2.697472	0.189971	14.19937	0.0000
LNGCONSM	-1.969834	0.764430	-2.576867	0.0100
LNTRD	-0.793098	0.257544	-3.079471	0.0021
LNUR	0.387867	0.153515	2.526574	0.0115
LNINF	-0.309115	0.120510	-2.565060	0.0103

McFadden R-squared	0.621330	Mean dependent var	0.427988
S.D. dependent var	0.495040	S.E. of regression	0.288341
Akaike info criterion	0.529323	Sum squared resid	80.89569
Schwarz criterion	0.559271	Log likelihood	-253.1037
Hannan-Quinn criter.	0.540717	Deviance	506.2075
Restr. deviance	1336.804	Restr. log likelihood	-668.4020
LR statistic	830.5964	Avg. log likelihood	-0.258533
Prob(LR statistic)	0.000000		

Model 2

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 12:43
Sample (adjusted): 43 1490
Included observations: 398 after adjustments
Convergence achieved after 4 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-0.259151	0.135781	-1.908595	0.0563
LNPS	-0.942993	0.205032	-4.599248	0.0000
LNRL	-0.036951	0.220243	-0.167774	0.8668
LNGE	1.344965	0.267912	5.020172	0.0000

McFadden R-squared	0.116043	Mean dependent var	0.417085
S.D. dependent var	0.493698	S.E. of regression	0.457592
Akaike info criterion	1.221104	Sum squared resid	82.49973
Schwarz criterion	1.261169	Log likelihood	-238.9996
Hannan-Quinn criter.	1.236973	Deviance	477.9993
Restr. deviance	540.7497	Restr. log likelihood	-270.3749
LR statistic	62.75043	Avg. log likelihood	-0.600502
Prob(LR statistic)	0.000000		

Obs with Dep=0	232	Total obs	398
Obs with Dep=1	166		

Model 3

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 12:47
Sample (adjusted): 4 1533
Included observations: 1178 after adjustments
Convergence achieved after 4 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	2.492549	0.520798	4.786022	0.0000
LNMPU	-0.389589	0.119744	-3.253505	0.0011
LNIU	0.001888	0.052757	0.035784	0.9715
LNHDI	3.839139	0.528395	7.265657	0.0000

McFadden R-squared	0.058918	Mean dependent var	0.377759
S.D. dependent var	0.485033	S.E. of regression	0.469031
Akaike info criterion	1.254584	Sum squared resid	258.2688
Schwarz criterion	1.271805	Log likelihood	-734.9498
Hannan-Quinn criter.	1.261077	Deviance	1469.900
Restr. deviance	1561.925	Restr. log likelihood	-780.9626
LR statistic	92.02551	Avg. log likelihood	-0.623896
Prob(LR statistic)	0.000000		

Model 4

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 12:52
Sample (adjusted): 197 1529
Included observations: 135 after adjustments
Convergence achieved after 6 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-24.80903	6.404473	-3.873703	0.0001
LNEC	0.743412	0.482630	1.540335	0.1235
LNAVR	3.407495	0.732809	4.649908	0.0000
LNDCRDT	-4.514962	1.185665	-3.807957	0.0001
LNPROP	-2.433828	1.711881	-1.421728	0.1551

McFadden R-squared	0.600742	Mean dependent var	0.214815
S.D. dependent var	0.412223	S.E. of regression	0.251441
Akaike info criterion	0.489515	Sum squared resid	8.218942
Schwarz criterion	0.597118	Log likelihood	-28.04225
Hannan-Quinn criter.	0.533242	Deviance	56.08451
Restr. deviance	140.4719	Restr. log likelihood	-70.23597
LR statistic	84.38744	Avg. log likelihood	-0.207720
Prob(LR statistic)	0.000000		

Model 5

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 12:56
Sample (adjusted): 136 1506
Included observations: 73 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-15.01711	4.956787	-3.029606	0.0024
LNTAX	2.777691	1.450333	1.915209	0.0555
LNFX	0.279758	0.211672	1.321660	0.1863
LNGVDEBT	1.289103	0.542643	2.375601	0.0175
LNCABAL	0.503147	0.270056	1.863124	0.0624

McFadden R-squared	0.292927	Mean dependent var	0.671233
S.D. dependent var	0.473016	S.E. of regression	0.382023
Akaike info criterion	1.032568	Sum squared resid	9.924050
Schwarz criterion	1.189448	Log likelihood	-32.68872
Hannan-Quinn criter.	1.095087	Deviance	65.37744
Restr. deviance	92.46211	Restr. log likelihood	-46.23105
LR statistic	27.08467	Avg. log likelihood	-0.447791
Prob(LR statistic)	0.000019		

Model 6

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 13:10
Sample (adjusted): 205 1533
Included observations: 102 after adjustments
Convergence achieved after 6 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	-3.033010	8.670868	-0.349793	0.7265
CBS	-0.072409	0.036792	-1.968068	0.0491
BED	-0.016798	0.397449	-0.042265	0.9663
TE	0.002825	0.002083	1.356279	0.1750
TR	-1.141199	0.753285	-1.514962	0.1298
CC	-5.855580	2.625266	-2.230471	0.0257
DCI	0.447449	0.247802	1.805675	0.0710
EDB	0.010806	0.025482	0.424053	0.6715
BRE	-1.224823	1.654391	-0.740346	0.4591

McFadden R-squared	0.491589	Mean dependent var	0.127451
S.D. dependent var	0.335124	S.E. of regression	0.241719
Akaike info criterion	0.564400	Sum squared resid	5.433802
Schwarz criterion	0.796016	Log likelihood	-19.78443
Hannan-Quinn criter.	0.658189	Deviance	39.56885
Restr. deviance	77.82850	Restr. log likelihood	-38.91425
LR statistic	38.25965	Avg. log likelihood	-0.193965
Prob(LR statistic)	0.000007		

Model 7

Dependent Variable: INDEX
Method: ML - Binary Logit (Quadratic hill climbing)
Date: 10/15/21 Time: 13:12
Sample (adjusted): 1 1505
Included observations: 624 after adjustments
Convergence achieved after 5 iterations
Covariance matrix computed using second derivatives

Variable	Coefficient	Std. Error	z-Statistic	Prob.
C	1.204687	1.316895	0.914793	0.3603
LNMKTCAP	1.171902	0.172331	6.800279	0.0000
LNLIQ	1.540463	0.132133	11.65839	0.0000
LNM3	-2.087727	0.300004	-6.958990	0.0000
LNSCR	-0.241008	0.311588	-0.773483	0.4392

McFadden R-squared	0.395511	Mean dependent var	0.649038
S.D. dependent var	0.477654	S.E. of regression	0.344235
Akaike info criterion	0.799491	Sum squared resid	73.35029
Schwarz criterion	0.835037	Log likelihood	-244.4413
Hannan-Quinn criter.	0.813304	Deviance	488.8826
Restr. deviance	808.7537	Restr. log likelihood	-404.3769
LR statistic	319.8711	Avg. log likelihood	-0.391733
Prob(LR statistic)	0.000000		