FOREIGN DIRECT INVESTMENT, ABSORPTIVE CAPACITY, BUSINESS ENVIRONMENT AND PERFORMANCE OF MANUFACTURING FIRMS IN KENYA

WANJERE DISHON MUNUHE

A THESIS SUBMITTED IN PARTIAL FULFILLMENT OF THE REQUIREMENTS FOR THE AWARD OF THE DEGREE OF DOCTOR OF PHILOSOPHY IN BUSINESS ADMINISTRATION, UNIVERSITY OF NAIROBI.

2022
DECLARATION

I hereby declare that this thesis is my original work and has not been submitted to any other university for the award of a degree.

Signed.............................................  Date..............................

Dishon Munuhe Wanjere
Department of Business Administration
Faculty of Business and Management Sciences, University of Nairobi, Kenya.

This doctoral thesis has been submitted with our approval as the University supervisors.

Signed .............................................  Date..............................

Prof. Martin Ogutu,
Department of Business Administration,
Faculty of Business and Management Sciences, University of Nairobi, Kenya.

Signed .............................................  Date..............................

Prof. Mary Kinoti
Department of Business Administration
Faculty of Business and Management Sciences, University of Nairobi, Kenya.

Signed .............................................  Date..............................

Prof. X.N. Iraki
Department of Management Science and Project Planning
Faculty of Business and Management Sciences, University of Nairobi, Kenya.
DEDICATION

This thesis is dedicated to my mother Mrs. Elizabeth Gathoni Wanjere, my brothers Mr. Francis Kariru Kiboi and Mr. Wilson Gathitu Wanjere, and my sister Mrs. Grace Nyambura Ndungu for their selfless effort and unwavering support during my academic career. It's because of them that i've gotten this far.
ACKNOWLEDGMENTS

This thesis is the tangible outcome of an intellectual journey that carried me through different kinds of literature, institutions, people and learning experiences. Throughout this long journey, I was supported and encouraged by several academics, practitioners and friends. A few must be mentioned by name. First and foremost, I am grateful to the Almighty God for His never-ending grace in bringing me thus far. May He be glorified forever and ever.

Secondly, my supervisors Prof. Martin Ogutu, Prof. Mary Kinoti and Prof. X.N.Iraki deserves a particular mention. The team constantly guided and encouraged me throughout. Their intellectual guidance, patience and kindness are unforgettable. The Faculty of Business and Management Sciences, Doctoral Studies Committee and the Department of Business Administration deserve special thanks for providing the necessary guidance.

Thirdly, a special mention also goes to Prof. Wainaina for his tutorials on data analysis. Dr. Moses Ngoze also provided a good critique of my methodology and data analysis chapters of my work, Prof. John Kuria Thuo gave some illuminating suggestions on areas of improvement on the initial draft thesis report. Mr. Kihumba Muya and Mr. Machuki who played a very critical role during my fieldwork and analysis of data, and Pamela for her support during typesetting documents and Mr. Robert Ndirangu for editorial assistance and Dr. William Thitai Ngatia for encouraging throughout the thesis writing journey.

Lastly, my deepest gratitude is reserved for my family members who were the main source of inspiration, strength and support. My wife Mrs. Mary Nyaruai Mugwe, my children Jeremy Wanjere, Judy Muthoni and Jayden Mugwe deserve special admiration and thanks. Your patience and support made it easier for me to plan and polish this work. I also extend deep appreciation to my, brothers Mr. Francis Kariru and Mr. Wilson Gathitu and my sister Mrs. Grace Nyambura Ndungu and their families for their support and prayers. I also extend deep appreciation to my mother Mrs. Elizabeth Gathoni and my late father Mr. Wanjere Kariru, for loving and believing in me. Finally, my academic journey would not have been successful without the encouragement from my late uncles Mr. Gideon Wanjoji, late Mr. Dishon Munuhe, late Mr. Moses Nyonji Kariru and their families.
# TABLE OF CONTENTS

DECLARATION ........................................................................................................... ii
COPYRIGHT© ............................................................................................................... iii
DEDICATION ............................................................................................................... iv
ACKNOWLEDGMENTS ............................................................................................... iv
LIST OF TABLES ......................................................................................................... x
LIST OF FIGURES ....................................................................................................... xii
ABBREVIATIONS AND ACRONYMS ....................................................................... xiii
ABSTRACT ................................................................................................................ xiv
CHAPTER ONE ....................................................................................................... 1
INTRODUCTION ....................................................................................................... 1
1.1 Background of the Study ................................................................................... 1
  1.1.1 Foreign Direct Investment ............................................................................... 6
  1.1.2 Absorptive Capacity ..................................................................................... 12
  1.1.3 Business Environment .................................................................................. 14
  1.1.4 Performance of Manufacturing Firm ............................................................. 16
  1.1.5 A Review of Manufacturing Firms in Kenya ................................................... 19
1.2 Research Problem ............................................................................................. 22
1.3 Research Objectives ......................................................................................... 26
1.4 Value of the Study ............................................................................................. 27
1.5 Structure of the Thesis ....................................................................................... 28
CHAPTER TWO ..................................................................................................... 30
LITERATURE REVIEW ............................................................................................ 30
2.1 Introduction ........................................................................................................ 30
2.2 Theoretical Foundation .................................................................................... 30
  2.2.1 Eclectic Theory .......................................................................................... 30
  2.2.2 Dynamic Capabilities Theory .................................................................... 33
  2.2.3 The Knowledge-based Theory .................................................................... 35
  2.2.4 Resource Dependence Theory .................................................................. 37
2.3 Empirical Studies Review .................................................................................. 38
2.3.1 Foreign Direct Investment and Performance of Manufacturing Firm ............38
2.3.2 Foreign Direct Investment, Absorptive Capacity and Performance of Manufacturing Firm ........................................................................................................45
2.3.3 Foreign Direct Investment, Business Environment and Performance of Manufacturing Firm ........................................................................................................51
2.3.4 Foreign Direct Investment, Absorptive Capacity, Business Environment and Performance of Manufacturing Firm ..................................................................................55

2.4 Summary of Knowledge Gaps ........................................................................58
2.5 Conceptual Framework ......................................................................................65
2.6 Hypotheses of the Study ....................................................................................66
2.7 Chapter Summary ................................................................................................67

CHAPTER THREE .............................................................................................68
RESEARCH METHODOLOGY ............................................................................68

3.1 Introduction ........................................................................................................68
3.2 Philosophical Foundation of the Study ..............................................................68
3.3 Research Design ..................................................................................................70
3.4 Study Population ..................................................................................................70
3.5 Data Collection Method ......................................................................................72
3.6 Pilot Testing .........................................................................................................73
3.7 Reliability and Validity Tests ...............................................................................74
  3.7.1 Reliability Test ..................................................................................................74
  3.7.2 Tests of Validity ................................................................................................75
3.8 Operationalization of Variables .........................................................................76
3.9 Data Analysis Techniques ....................................................................................79
3.10 Pretesting for Regression Assumption ...............................................................85
3.11 Chapter Summary ...............................................................................................86

CHAPTER FOUR ...............................................................................................87
DATA ANALYSIS, RESULTS AND DISCUSSIONS ................................................87
4.1 Introduction .........................................................................................................87
4.2 Preliminary Results ............................................................................................87
  4.2.1 Response Rate ................................................................................................87
5.3 Conclusion ......................................................................................................................... 170
5.3.1 Relationship Between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya ........................................................................................................... 170
5.3.2 Effect of Absorptive Capacity on the Relationship Between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya ........................................... 171
5.3.3 Effect of Business Environment on The Relationship Between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya ........................................... 171
5.3.4 The Joint Contribution of Foreign Direct Investment, Absorptive Capacity, and Business Environment on Performance Manufacturing Firms in Kenya ......................................................................................................................... 172
5.4 Implications of the Study ................................................................................................. 172
5.4.1 Theoretical Implications ................................................................................................. 172
5.4.2 Policy Implications .......................................................................................................... 174
5.4.3. Implication for Managerial Practice ............................................................................. 176
5.5 Contribution to Knowledge .............................................................................................. 178
5.6 Limitations of the Study ................................................................................................... 179
5.7 Suggestions for Further Research ..................................................................................... 181
5.8 Chapter Summary ............................................................................................................. 183
REFERENCES .......................................................................................................................... 184
APPENDICES ........................................................................................................................... 202
Appendix I: Introduction Letter .............................................................................................. 202
Appendix II: Research Permit .................................................................................................. 203
Appendix III: Questionnaire .................................................................................................... 204
Appendix IV: Target Population of the Study .......................................................................... 209
LIST OF TABLES

Table 2.1: Summary of Knowledge Gaps ................................................................. 59
Table 3.1: Reliability Statistics .............................................................................. 74
Table 3.2: Variable Description ............................................................................. 78
Table 3.3: Objectives, Hypotheses, Tests, and Analytical Models ...................... 81
Table 4.1: Response Rate ...................................................................................... 88
Table 4.2: Data Entry Errors ................................................................................ 89
Table 4.3: Outliers .................................................................................................. 90
Table 4.4: Range Values ...................................................................................... 90
Table 4.5: Missing Data ....................................................................................... 91
Table 4.6: Normality Test Statistics ..................................................................... 93
Table 4.7: Collinearity Statistics .......................................................................... 97
Table 4.8: Levene Test Statistics .......................................................................... 98
Table 4.9: Length of Service ............................................................................... 100
Table 4.10: Level of Foreign Ownership ............................................................. 101
Table 4.11: Sector of Economic Activity ............................................................ 102
Table 4.12: Source of Foreign Direct Investment ............................................... 103
Table 4.13: Mode of Entry .................................................................................. 104
Table 4.14: Time of Receipt of Foreign Direct Investment .................................... 105
Table 4.15: Capital Flow ..................................................................................... 106
Table 4.16: Advanced Production Technology ................................................... 108
Table 4.17: Marketing Expertise .......................................................................... 110
Table 4.18: Management Knowhow ................................................................... 112
Table 4.19: Overall Mean Score for Measures of all FDI Variables .................... 114
Table 4.20: Acquisition ...................................................................................... 116
Table 4.21: Assimilation .................................................................................... 118
Table 4.22: Transformation ............................................................................... 119
Table 4.23: Exploitation ..................................................................................... 120
Table 4.24: Absorptive Capacity ....................................................................... 122
Table 4.25: Financial Access ............................................................................. 124
Table 4.26: Government Regulations ................................................................. 125
Table 4.27: Physical Infrastructure

Table 4.28: Business Environment

Table 4.29: Profit Achieved in 2018

Table 4.30: Return on Equity

Table 4.31: Capacity Utilization

Table 4.32: Employment Productivity

Table 4.33: Correlation Analysis

Table 4.34: Regression Results for Capital Flow, Advanced Production Technology, Marketing expertise and Management Knowhow on Performance of Manufacturing Firm’s

Table 4.35: Foreign Direct Investment on Performance of Manufacturing Firm

Table 4.36: The Mediating Role of Absorptive Capacity on Foreign Direct Investment and Performance of Manufacturing Firm

Table 4.37: Regression Coefficients of Foreign Direct Investment and Absorptive Capacity

Table 4.38: Moderating Effect of Business Environment

Table 4.39: Coefficients of the Interaction between Business Environment and Foreign Direct Investment

Table 4.40: Joint Contribution of Foreign Direct Investment, Absorption Capacity, Business Environment on Performance of Manufacturing Firms

Table 5.1: Summary of Findings
LIST OF FIGURES

Figure 2.1: Conceptual Model............................................................................................66
Figure 4.1: Histogram of Foreign Direct Investment .........................................................94
Figure 4.2: Histogram of Absorptive Capacity .................................................................95
Figure 4.3: Histogram of Business Environment ................................................................95
Figure 4.4: Histogram of Performance of Manufacturing Firm ..........................................96
Figure 4.5: Summary of Resultant Findings ....................................................................138
Figure 4.6: Moderator Model.............................................................................................143
### ABBREVIATIONS AND ACRONYMS

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>APT</td>
<td>Advanced production technology</td>
</tr>
<tr>
<td>BSC</td>
<td>Balanced Scorecard</td>
</tr>
<tr>
<td>CBK</td>
<td>Central Bank of Kenya,</td>
</tr>
<tr>
<td>CF</td>
<td>Capital flow</td>
</tr>
<tr>
<td>DC</td>
<td>Dynamic capability</td>
</tr>
<tr>
<td>FP</td>
<td>Firm’s performance</td>
</tr>
<tr>
<td>FDI</td>
<td>Foreign Direct Investment</td>
</tr>
<tr>
<td>IFC</td>
<td>International Finance Corporation</td>
</tr>
<tr>
<td>ILO</td>
<td>International Labor Organization</td>
</tr>
<tr>
<td>IMF</td>
<td>International Monetary Fund</td>
</tr>
<tr>
<td>JSE</td>
<td>Johannesburg Stock Exchange</td>
</tr>
<tr>
<td>KBV</td>
<td>Knowledge-based view</td>
</tr>
<tr>
<td>KENINVEST</td>
<td>Kenya Investment Promotion Authority</td>
</tr>
<tr>
<td>KNBS</td>
<td>Kenya National Bureau of Statistics</td>
</tr>
<tr>
<td>LDC</td>
<td>Less Developed Countries</td>
</tr>
<tr>
<td>ME</td>
<td>Marketing expertise</td>
</tr>
<tr>
<td>MK</td>
<td>Management knowhow</td>
</tr>
<tr>
<td>MNC</td>
<td>Multinational Corporations</td>
</tr>
<tr>
<td>MNE</td>
<td>Multinational Enterprises</td>
</tr>
<tr>
<td>OECD</td>
<td>Overseas Economic and Commercial Development</td>
</tr>
<tr>
<td>RBV</td>
<td>Resource-based view</td>
</tr>
<tr>
<td>R&amp;D</td>
<td>Research and Development</td>
</tr>
<tr>
<td>SME</td>
<td>Small and Medium Enterprises</td>
</tr>
<tr>
<td>SSA</td>
<td>Sub-Saharan Africa</td>
</tr>
<tr>
<td>UNCTAD</td>
<td>United Nations Centre on Trade and Development</td>
</tr>
<tr>
<td>WTO</td>
<td>World Trade Organization</td>
</tr>
</tbody>
</table>
ABSTRACT

Scholars appear to agree on the need for foreign direct investment for a country's prosperity, but their views on its influence differ. The main point of their divergence is how foreign direct investment affects the performance of local economy a concern that need to be reflected on before developing policies to spur foreign investment. The general objective of the research was to look into the effect of foreign direct investment, absorption capacity, and the business environment on performance of manufacturing firms in Kenyan. The specific objectives were to determine the effect of foreign direct investment on performance of manufacturing firms, the mediating and moderating roles of absorptive capacity and the business environment respectively on the relationship. The joint contribution of foreign direct investment, absorption capacity and the business environment on performance of Kenyan manufacturing firms was also investigated. The study was based on eclectic theory, dynamic capabilities theory, knowledge based theory and resource dependence theory. An empirical gap in the literature of foreign direct investment, absorptive, and business environment was identified to guide the formulation of the conceptual framework. The study included 100 firms that were registered with KAM and had 10% or more foreign ownership. The Chief Executive Officers or their appointed officers in the organizations were the respondents. A structured questionnaire was used to acquire primary data. The data was found to be reliable by Cronbach's Alpha reliability tests. The study received a response rate of 75%, which was higher than the recommended response rate of 50%. The data was analyzed using descriptive and inferential statistical methods. Diagnostic tests were performed prior to regression analysis and the data found to meet all of the required conditions. The findings of the study confirmed the link between foreign direct investment and performance of manufacturing firm. Furthermore, the research affirmed that absorptive capacity mediated and the business environment moderated the relationship between foreign direct investment and manufacturing firm performance. These findings add to our understanding of foreign direct investment inflows and support the significance of foreign direct investment in the economic development of Kenya. According to the findings, the country's authorities should be concerned not only with attracting foreign direct investment but also with ensuring spillover to domestic businesses. Furthermore, they should ensure that concerns such as absorptive capacity and business environment that impede the flow of capital, technology, and expertise to domestic enterprises from foreign direct investment are fully remedied. The study contributes to our knowledge by proposing a model that links foreign direct investment, absorptive capacity, the business environment and firm performance. Future research could include more respondents from different levels of the organization and improve generalizability by focusing on organizations in similar industries and with similar levels of foreign direct investment.
CHAPTER ONE
INTRODUCTION

1.1 Background of the Study

The share of foreign direct investment (FDI) inflows to developing nations has increased throughout the 1990s, according to United Nations Centre on Trade and Development (UNCTAD) estimates, with these countries controlling a larger amount of global FDI inflows than previously (UNCTAD, 2012; and UNCTAD, 2013). However, academics argue over the role of FDI in the growth of the host country (Barrios, Gorg, and Strobl, 2011). Some experts have maintained that FDI is beneficial, while others have emphasized the importance of the negative implications. Onyekwena (2012) backs up this claim that FDI is beneficial by pointing out that developed countries have over many years spent extensively in research activities. As a result, these economies have experienced spurring economic growth. However, Sub-Saharan African countries, like other developing countries have not registered much progress. Investment in technology by the private/public sector has been very low resulting in a very low technological capacity and subsequently low economic growth (Codjoe, 2012).

Codjoe (2012) observed that countries of Sub-Saharan Africa lack the technological competence to drive economic progress in the region. The countries have endeavored to improve their skills and technology by importing capital goods, investing in research and development and hiring well-trained workers and managers from multinational corporations (Onyekwena, 2012). Nonetheless, Sub-Sahara Africa's countries attempts to acquire modern technologies have failed, slowing their progress toward industrialization.
The United Nations Centre on Trade and Development (UNCTD) (2021) submit that Sub-Saharan Africa nations will require policies that support frontier technologies while also resuming efforts to fully use existing technology in order to diversify their economies and modernize traditional sectors.

Gorg and Strobl (2001) noted that foreign direct investment inflows are a good conduit for developing countries to bridge their developmental gap with the developed world. Besides, foreign direct investment add to the development of host economies by providing funding for investment, improving technical capacities and transferring new technologies to the host nation's domestic companies (Tajul, Abdul, & Haslindar, 2012). A case in point is the industrialization of South Asian Tiger Countries where foreign direct investment projects were judiciously selected to realize national industrial policy objectives. In particular, the Korean authorities used foreign direct investment to improve certain key industries considered important to the Korean long-term growth program (Wade, 1990). A similar observation was made in Taiwan where government leadership used FDI to resolutely improve the technological level of the country's production effort and export structure (Singh & Zammit, 2009). Further, Nyeadi and Adjasi (2020) noted that firms with links to larger conglomerate groups have more creative activities.

The Kenya’s technological and skill position, like many other Sub-Saharan African countries, is very weak. Ngui, Chege and Kimuyu (2016) asserted that Kenya's lack of requisite technological dynamism is attributed to an inappropriate educational system that has not addressed the country's skills needs. Loungani and Razin (2001) observed that unlike other forms of capital, foreign direct investment is better as it is more resilient to the
turbulence of financial crisis and carries other benefits through spillovers. Kenya suffer from inadequate supporting infrastructure, low investment in research and poor linkage with the institution of higher learning among other factors required to spur economic growth (Ngui, Chege, & Kimuyu, 2016). The country as a result has faced a constrained technological position that has slowed its development. Academicians and policy practitioners agree that Kenya and other Sub-Saharan African countries can overcome this situation by attracting foreign direct investment.

Hallin and Lind (2012) submitted that the effect of foreign direct investment on recipient country firms has split scholars with no clear consensus regarding its impact on local firms. In absence of a consensus among scholars, policymakers have tended to assume that foreign direct investment has positive effects on host country economies. Harding and Javorcik (2011); UNCTAD, (2012) observed that this conviction has resulted in the formulation of policies that attract foreign direct investment in many of these countries. Yi, Zhigang and Lianming (2017) noted that many less developed countries have embraced programs to appeal to foreign investors in the hope that this would give them the requisite technological capacities and skills to spur their local industry. Further, decision-makers in many developing countries have liberalized their economies in an attempt to draw more foreign direct investment with a singular hope that this would support their country's development agenda.

World Bank Group (2010) observed that governments worldwide recognize the need to cultivate a good relationship with foreign investors having realized that foreign direct investment brings superior knowledge that could spill to indigenous firms and upgrade
their technical capabilities. Furthermore, establishing Multinational Enterprises (MNEs) in developing nations is viewed as presenting high-capability firms to low-capability manufacturing settings, with the implicit expectation that spillover from MNEs to local enterprises will occur (Newman, Rand, Talbot and Tarp, 2015). However, it is worth noting that MNEs by nature protect their patented technology and knowledge transfer to the local firm is contingent on their absorptive capacities and facilitative business environment.

Furthermore, past research have found substantial evidence that loan access and availability is a serious barrier to growth of firms in Sub-Saharan Africa (IMF, 2018). To begin with, banks in the region do not fund investments like they do in other parts of the world. Second, the International Monetary Fund (2018) reports that Sub-Saharan Africa has the highest number of enterprises that require loans to develop but are unable to obtain credit from banks. According to Selaya and Sunesen (2012), nations with little private direct investment rely on foreign aid, which complements and catalyses’ foreign direct investment. Muli, Aduda, Lishenga, and Abala (2017) asserted that developing nations employ FDI to supplement their low levels of national savings in order to foster economic development. Besides foreign direct investment also aids in restructuring economies of countries through technology transfer, promotion of exports to other countries and transferring managerial skills together with creating employment opportunities (Onyekwena, 2012).

The study's goal is to look at how foreign direct investment affects the performance of Kenyan manufacturing companies. According to Asuantri and Yasmin (2017), the absorptive capacity of enterprises dealing with foreign direct investment can either speed
up or slow down the transmission of benefits from the foreign direct investment firm to local firms. Other studies have established that a business environment with appropriate physical infrastructure, financial support and supportive government policies enhances the growth of firms (Edrees, 2015; Brașoveanu & EvelinaBâlu, 2014). The research goes beyond examining the effect of foreign direct investment spillover on local enterprises to examining the influence of absorptive capacity and the business environment in the link between foreign direct investment and local firm performance.

The research is based on the eclectic theory, which expounds how FDI occurs and the positive foreign direct investment firm value connection (Dunning, 1993), dynamic capabilities theory, which explains an organization's adaptive and absorptive capability (Wang & Ahmed, 2007), the knowledge-based theory, which considers knowledge as the greatest resource (De Carolis, 2002), and the resources dependency theory, which explains organization’s dependence on the environment (Pfeffer and Salancik, 2003). The study setting was the Kenya manufacturing sector, which remains the country's most important economic sector. The sector is also widely varied with many subsectors and with some firms performing well while others have been performing poorly as reflected by the amount of profit and return on equity and capacity utilization. These conditions provided an appropriate setting for the current study.
1.1.1 Foreign Direct Investment

There are numerous definitional concerns on the terminology of foreign direct investment. Foreign direct investment, according to Overseas Economic and Commercial Development (OECD) (2008) is an ongoing commitment that includes a lasting affiliation implying a long-term concern of a resident entity in one nation in an entity resident in another country. The foreign investors aim to exercise substantial power on the running of the firm operating in the other country. The common strand in the OECD (2008) definitions is that of long-lasting concern and influence on management decisions of the local firm invested on. World Bank (2010) also reinforces this by conceptualizing foreign direct investment as both long-term and short-term capital, earnings re-invested in a company and all equity capital that is included in the balance of payment that produces trade and industry benefits to the host nations by providing technology, foreign currency, capital, enhanced competition and even enable investors to access foreign markets. International Monetary Fund (2018) defines a foreign direct investment entity or enterprise as "an enterprise in which a foreign investor residing in another country's economy controls 10% of the controlling interest of the enterprise. This means that the foreign investor will have a long-lasting relationship or interest in the domestic firm.

From the aforementioned discussion, foreign direct investment is an investment by a foreign company or individual in a business in the host economy. Moreover, a foreign direct investment enterprise is an entity recognized based on the degree of decision-making power by a foreign investor. As such, enterprises do not have to be linked to a multinational enterprise or any other firm operating overseas or may act purely on their own. Foreign direct investment, according to Muhammad and Kashif (2013) is not only a source of
private investment but also a bundle of financial resources, technology, managerial skills, and jobs. It is further noted that technology, research and development are intense in some few countries and are mainly diffused to local firms through labour turnover and imitation of technology from foreign firms. Foreign direct investment spillovers are residual benefits that come from a foreign direct investment and accrues to indigenous firms raising their overall level of productivity and for which firms owned by foreigners are never compensated (Harris and Robinson, 2004). Technical spillover, according to Zeqiri and Bajrami (2016) is one of the positive human capital spillovers especially common when a foreign and a local organization are integrated.

Jensen (2008) differentiates between two types through which foreign direct investment can arise; Greenfield or Brownfield investments. Greenfield investment happens where multinationals enterprise form affiliations in other countries and brownfield investments result from mergers and acquisitions of local firms, or through privatization programs (Jensen, 2008). Greenfield investment has been very predominant in many developing countries but of late brownfield investment is presently evolving as the new type of foreign direct investment in Sub-Saharan African countries (Jensen, 2008). We also have FDI taking a form of joint ventures which are partnerships between a local enterprise, the government, and overseas firm based in the host nation. The selection of partner and mutual trust among associates, according to Dunning and Lundan (2008) are critical factors in determining the sustainability and competitiveness of cross-border joint ventures. In Sub-Saharan Africa, another type of foreign direct investment is emerging the foreign entrepreneur who runs businesses that are not owned by multinational corporations (UNIDO, 2007).
Industrial organization and international finance are two perspectives of foreign direct investment, according to Lipsey (2001) and Graham (1995). This implies that we can measure foreign direct investment at the international and industrial organizations or micro-levels. Foreign direct investment can be looked at as an entity linked to the operations of transnational corporations at the level of industrial organizations (MNEs). Multinational corporations generate foreign direct investment through the establishment of overseas subsidiaries, acquisitions, and mergers with existing domestic firms (Lipsey, 2001). Multinational corporations invest in other countries to combat local protectionist policies and to boost local content by using domestic supplier networks (Alvstam, Ivarsson, & Petersen, 2020). The resulting foreign direct investment firms are distinct from the overall movement of capitals reported in balance of payments statistics.

Foreign Direct Investment brings money into a country, and foreign partners in the host country can help local businesses through technical spillovers (Gorg & Strobl, 2001). Markusen (2002) affirmed this position by arguing that MNCs bring some type of firm-specific resources that manifest themselves as superior marketing, management and production technology and given that these have characteristics of a public good, they may benefit the host country’s indigenous firms. This makes them an attractive supplier of innovative technology for less developed countries when compared with other forms of investment like portfolio equity, debt flows and domestic investment (Onyekwena, 2012). Loungani and Razin (2001) and IMF (2000) avowed that foreign direct investment appears more resistant to the instability of financial crisis compared to the other forms of investments. The intangible assets characterizing foreign direct investment infer that it is a personification of contemporary technologies with possible paybacks to host economies.
through the introduction of new technologies and innovations, superior management systems, products, skills and manufacturing expertise (Javorcik, 2008).

Leman and Ismet (2015) observed that multinational companies a key foreign direct investment vehicle invest heavily in research and development laboratories spread across the world making them a key source of new technologies, new products and production processes, new patents and speeding up of innovative activities within host countries. The International Monetary Fund (2018) and the Government of Qatar (2014) affirmed that besides the provision of capital, foreign direct investment encourages partners to transfer knowledge and technology to host countries and provide them with opportunities to promote their products in the global market. Marco and Claudia (2014) propounded that foreign direct investment is driven by marketing access, with multinationals investing in low-cost countries and serving both domestic and international markets. Further, Adams (2009) defined the transfer of technology by multinational companies as including not only scientific processes but also organizational, managerial and marketing skills. Nyeadi (2022) examined the association between foreign direct investment and business value in Sub-Saharan African and established that it has positive significant influences. The host firms benefited from technical, managerial, innovation and skills transfer.

The enforcement of the doctrines of free and fair competition by supranational organizations such as GATT, WTO, NAFTA and the EU has weakened the ability of national government to influence MNEs a situation that is likely to change with the emergence of national bigot leaders in the western societies (Alvstam, Ivarsson, & Petersen, 2020). Furthermore, the preferred destination of foreign direct investment is not
developing countries, but developed countries, according to foreign direct investment inflow trends (Khondoker & Kaliappa, 2010). Kenya has performed poorly in enticing foreign direct investment, according to UNCTAD (2012), despite having the most resilient and best-diversified economy in the Eastern Africa region. Nonetheless, all signs point to foreign direct investment continuing to flow and Kenya catching with its neighboring states.

In the 1970s and 1980s, Kenya's government adopted trade restrictions and capital controls as part of an import-substitution development programme targeted at preserving local businesses and saving precious foreign exchange (Ngui et al. 2016). The inward-looking expansion policy hampered trade and foreign direct investment, and had negative consequences for economic development (Rodrik, 1998). Between 1990 and 2000, foreign direct investment inflows were relatively low, averaging between US$17 million and US$119 million. In 2004, the Kenyan government established KENINVEST as a semi-autonomous body to supervise efforts to attract foreign direct investment into the nation. This resulted in consistent foreign direct investment inflows to various industries in Kenya attaining US$ 141 million in 2009 and US$ 133 million in 2010 (UNCTAD, 2011), 716 million dollars in 2020 (UNCTAD, 2021). Regional integration projects by bodies like the East African Community (EAC), the Common Market for Eastern and Southern Africa (COMESA), and the African Continental Free Trade Area (AfCFTA) have supplemented government's efforts to increase foreign direct investment (UNCTAD, 2021).
Kenya's foreign direct investment stock climbed from Ksh 870,822 million in 2018 to KSh.940,899 million in 2019. This was attributed to the growth in both equity and retained earnings. Europe, Africa, the great Britain, Mauritius, and the United States of America all contributed an average of 28.3 percent, 27.2 percent, 13.5 percent, 11.0 percent, 10.3 percent, and 9.8 percent to the stock of foreign direct investment in 2019 (KNBS, 2020). Multinational corporations invest in a country to service not just the local market but also nearby nations. This imply that the marketing access conditions facing the host nation are critical, and that improved access would result in more foreign direct investment. Furthermore, as multinationals develop several manufacturing facilities concentrating in different stages of production, third-country access and the host country's openness to the rest of the globe are crucial factors in determining foreign direct investment (Marco & Claudia, 2014).

Drawing from eclectic theory and guided by our research context, the study operationalizes foreign direct investment as a construct that acts as a source of capital, advanced production technology, marketing expertise, and managerial knowhow that would otherwise be difficult for Kenya manufacturing firms to obtain. This is in line with Markusen and Venables (1999) and Blomström and Kokko (1998) who asserted that foreign direct investment is an important element in the advancement of emerging economies because it provides much-needed capital and knowhow to local businesses. This is also supported by Onyekwena (2012), Muhammad and Kashif (2013) and Leman and Ismet (2015) who propound that foreign direct investment is a critical driver of local firm development because it facilitates access to capital, technology and management knowhow.
1.1.2 Absorptive Capacity

The significance surrounding the notion of absorptive capacity in organization learning began to take recognition in the 1980s. This is evident from the numerous studies that accentuated the critical role played by the application of newfound knowledge in leveraging the firm competitiveness. Early researchers like Cohen and Levinthal (1990) conceptualized absorptive capacity as the potentiality of an enterprise to identify, integrate, and apply any form of external and valuable knowledge in pursuit of commercial success. It can also be seen as the capability of an enterprise to recognize and apply new technical knowledge created by public institutions and university researchers (Cohen & Levinthal, 1990). Further, Kneller (2005) describes absorptive capacity as the capability developed by local organizations, which is crucial for these organizations to make successful use of foreign technology. Zahra and George (2002) posited that absorptive capacity is the flexible capability an enterprise possesses that is grounded on four concepts, namely; knowledge acquisition, incorporation, conversion and application.

More recently, Lenart (2014) defined absorptive capacity as the capacity of companies to use existing information with an emphasis on their capability to transform and assimilate it together with their ability to acknowledge external knowledge as a rightful resource for innovation. Andrea and Carlos (2015) supported this by defining absorptive capacity as the dynamic ability that companies had in the processes of acquiring, assimilating, transforming and applying external knowledge in the processes of enhancing their innovative processes. Research on absorptive capacity suggests that innovative organizations tend to join forces with external actors in the process of acquiring new knowledge. This may involve acquiring knowledge from external sources that are outside
firms' foundations. During this process, organizations can improve their learning processes and competitive advantages (Laursen & Salter, 2014). This relational approach may involve both formal and informal networking activities that are capable of exchanging values through outward-looking strategies.

Onyekwena, (2012) asserted that knowledge spillover from advanced industrial economies to developing economies requires that local capabilities be present in host countries. It is also noted that foreign direct investment takes place in an organizational setting, such as businesses. The implication of this is that the knowledge resources also referred to as absorptive capacity available within such organizations plays a significant role in facilitating successful knowledge and technology spillover from foreign firms. Lau and Lo (2015) further noted that absorptive capacity is considered a crucial part of the learning system as it provides the potential to transform the knowledge base of an organization through acquisition, assimilation, reshaping and capitalization processes giving the firm real adaptive capacity.

Drawing from the dynamic capabilities theory, the study operationalized absorptive capacity as a system constituting of business's capacity to acquire, assimilate, transform and exploit knowledge. This is in line with the knowledge-based theory that considers knowledge as the most strategic resource. Cohen and Levinthal (1990), Lenart (2014), Andrea and Carlos (2015) and Zahra and George (2002) support this notion that acquiring new knowledge, assimilating the information, transforming information and applying the information are the most rightful ways of measuring absorptive capacity. The internal system that constitutes the absorptive capacity within firms enables firms to make use of
newly developed technologies. The study adopted the four variables of acquisition, assimilation, transformation and exploitation to operationalize absorptive capacity.

1.1.3 Business Environment

The concept of business environment is widely studied by scholars in the field of business. Early organization theorists conceptualized the business environment as based on uncertainty, dependence on resources, efficiency and ecology as the four main perspectives (Thompson, 1967; Hannan & Freeman, 1977). They argued that the business environment is a source of much uncertainty that affects organizations in diverse ways and organizations need to respond to these uncertainties using appropriate strategies. Dethier, Hirn and Straub (2010) posited that a business environment is a setting built to facilitate day-to-day business operations and includes the physical structures, financial accessibility, safety and regulatory frameworks. Rocha's study (as cited in Brașoveanu & EvelinaBâlu, 2014) suggested that simplified business environments supported by budgetary and fiscal policies were able to enhance the emergence of local firms. In addition, they suggested that the processes of attracting investment through the business environment depended largely on government regulation and physical infrastructure.

Khondoker and Kaliappa (2010) in their research noted that a small number of developing nations across the world draw a large substantial amount of foreign direct investment by creating a business-friendly environment and implementing more external trade-oriented policies. It has also been established that countries with friendly business environments like inexpensive and competent labour, cheaper and reliable power and well-maintained roads and other infrastructure networks tend to attract a higher flow of FDI. Alam and Shah
(2013) explained that the assessment of the business environment includes factors such as the steadiness of legal regulations, tax policy, infrastructure, business registration process, and human relations. Muhammad and Kashif (2013) noted that government policies that facilitate training encourage MNEs to invest in human resource development of the host countries, minimize financial constraints and markets failures and can help the host economy appropriate the benefits of FDI. World Bank's (2017) empirical results support a strong relationship between business environments and various aspects of performance of manufacturing firm. Hallward-Driemeier and Mengistae's study (as cited in Hodud, Madline, Faridah, Shamshubarida & Mohd, 2014) identified infrastructure as an influential factor in firm growth. They identified power outages and custom delays as some of the factors that affect a firm's performance negatively.

A stable macro-economic environment conducive to the private sector has characterized the Kenya’s investment climate after the government implemented various economic reform (KNBS, 2016). The Kenya FDI Survey Report of 2020 has reinforced this position (KNBS, 2020). Kenya has continued with its ambitious infrastructure expansion covering roads connectivity, upgrading of railway networks, modernization and expansion of airports, and expanding energy and telecommunication infrastructure. KNBS (2016) report further noted that an enabling business environment is a precondition for business prosperity and the policy maker's role is to develop policies that facilitate businesses to operate sustainably. Kenya has implemented several reforms in the areas of launching a firm, obtaining construction licenses, obtaining loans, paying taxes, safeguarding minority investors, and resolving insolvency. These reorganizations have improved the nation's attractiveness to investors in search of business opportunities in the region. The World
Bank Ease of doing business ranking for Kenya improved from position 80 in 2017 to 56 out of 190 countries in 2019 (KNBS, 2020).

Governments pursue particular policies related to capital intensification to create favorable conditions that would be attractive to foreign companies to expand production within domestic markets. The conducive business environment with profitable opportunities and low risks (Hodud et al. 2014) attracts foreign investors. Besides financial constraints, cost and access to finance have been recognized as an obstacle to firms' development in developing markets (Sprenger & Lazareva 2016). Kamran, Chor and Manova (2016) claim that countries that have good financial markets normally entice more MNCs than their counterparts with undeveloped financial markets do.

Drawing from the resource dependency theory, firms are interdependent with their environment and draw the resources from the environment. Rocha study (as cited in Brașoveanu & Evelina Bâlu, 2014), Dethier, Hirn and Straub (2010) and Alam and Shah (2013) agreed on three categories of business environment; financial constraints, government regulations and physical Infrastructure. This study adopted the three measures of the business environment and the choice is mainly informed by the study's setting, which is largely the manufacturing sector.

1.1.4 Performance of Manufacturing Firm

Academics operationalize concepts based on their study discipline, and manufacturing firm performance is a commonly used dependent construct in management studies. Scholars have noted that there is a lack of unanimity on the selection of appropriate performance
indicators, and that operational variables or measurements have received little attention. Previous research, according to Combs, Russell, and Shook (2005); Crook, Ketchen, Combs, and Todd (2008); and Richard, Devinney, Yip, and Johnson (2009), operationalized Organisation performance with a solo variable. Given the multiple measurements available, Richard et al., (2009) stated that a researcher would have to select all relevant dimensions to the study and review the findings of this selection.

Vilarmois, Benavent and Firmanz (2001) observed that firm's performance is a complex issue and unanimity on the operationalization of the concept is yet to be achieved. His view agrees with Firer and William study (as cited in Kariuki, K’Obonyo, & Ogutu, 2014) who asserted that the concept is associated with a wide variety of organization well-being from economic success, and output performance to sales achievement. Reasoning from the perspective of the resource dependency view and other theories, Pfeffer and Salancik (2003) focus on an organization's dependence on resources and generally reason that effective use of resources is likely to lead to improvement of organizational performance.

Critical analysis of organization performance literature indicates that no single measure can give a complete appreciation of the construct. The measurement of the construct requires the use of several indicators. A combination of quantitative or accounting indicators and qualitative or market indicators have been used as the two broad measures of performance when studying its relationship with a multiplicity of independent variables (Frank, Kessler & Fink, 2010). Kaplan and Norton (1992) suggested one of the most widely accepted measures of performance, the balanced scorecard. The balanced scorecard is the most comprehensive way of measuring performance because it includes financial
indicators as well as internal business processes, customer satisfaction, and organizational learning and growth.

Murugesan, Jayapal, Vinayagamoorthi, Kasilingam and Sigo (2016) identified nine determinants of performance of manufacturing firm and grouped these determinants into two dimensions. The first component was primarily financial, encompassing market value, organizational growth, and profitability. The second, strategic performance, was divided into six categories: social performance, environmental audit performance, customer satisfaction, employee satisfaction, environmental performance, and corporate governance performance. Michuki and Aosa (2011) describe organizational performance as the firm's success in relation to some standard, and they measure how well organization designs and implements relevant strategies to fulfil its vision and mission. Berraies, Chaher and Yahia (2014) defined organization performance as the extent to which an organization attains its objectives. Okeyo (2013) used two years' average percentage growth in sales, ROE, ROA and ratio of sales to profit customer and employees satisfaction to determine the firm's performance. Further, Oredo, Njihia, and Iraki (2016) employed growth in revenue, rise in market share, productivity development and profit growth as indicators of performance of manufacturing firm and argued that subjective performance metrics were substantially linked with objective measures of performance.

Previous scholars have defined performance measures with a lot of emphasis on the balanced scorecard as an inclusive and comprehensive measure of performance. The study incorporated the various aspect relevant to diverse stakeholders’ contentment to measure performance. Top executive opinions were sought because they have access to unbiased information on the company's performance and are better positioned to balance the
demands of diverse stakeholder groups. The current study is based on a balanced scorecard, which emphasizes the importance of both financial and non-financial indicators. Financial success indicators were profitability and return on equity, while non-financial performance was measured as capacity utilization and personnel productivity.

1.1.5 A Review of Manufacturing Firms in Kenya

Kenya's new administration was put under enormous pressure very soon after independence in 1963 to turn political freedom into economic freedom. Recognizing that locals lack the capacity to engage in transformative economic activity, the new government enacted many new regulations to preserve and promote additional foreign investment. Institutions such as the Industrial and Commercial Development Corporation (ICDC) and Kenya Industrial Estates (KIE) were created with the goal of encouraging indigenous Kenyans to participate in business activities (Hecox, 1988). The GOK also directed ICDC and the Development Finance Company of Kenya to provide favorable loans to all entrepreneurs, with an inclination towards indigenous entrepreneurs, in order to boost local industrial production.

The manufacturing sector in Kenya initially developed under the government policy of import substitution in 1967 (Ngui, Chege & Kimuyu, 2014). Bongomin, Nganyi, Abswaidi, Hitiyise and Tumusiime (2020) observed that the blueprint to guide the growth of Kenya's manufacturing industry remains unclear. However, the Kenya Association of Manufacturers (KAM), on the other hand, has recommended an agenda to ensure the manufacturing sector's future by developing a clear sector-based national policy and a clear implementation plan (KAM, 2018). It is noted that the Kenya's manufacturing activity is
dispersed across the country's major towns with the main industrial activities being food processing businesses (grain milling, beer manufacturing, and sugarcane crushing) and consumer products fabrication like automobile assembly from kits. The Kenya's industrial activities are mostly aimed toward addressing fundamental necessities through the provision of low-cost consumer goods and services (Ngui et al., 2016).

As is the case with many Sub-Saharan African Countries, Kenya's manufacturing sector is not robust enough and the economic growth is predominantly supported by agriculture and the service sector. Furthermore, Kenya lacks basic infrastructure, and many businesses have sought alternative sources of water, power, and security. This tends to distract the firms from focusing on their core business thereby increasing their cost of operations and rendering them uncompetitive (KAM, 2018). Over time, the manufacturing sector's contribution has stagnated at less than 10% and has experienced early de-industrialization as evidenced by the reduction in GDP contribution by the manufacturing sector to 4.2% in 2016 (KAM, 2018). The formal employment in manufacturing stood at 303.3 thousand people in 2017 which was about 11.4% of the total employment back then (KNBS, 2017). Bivens study (as cited in KAM, 2018) found that around 100 employment in the manufacturing sector supported 291 jobs in other sectors demonstrating the magnitude of economic development that a country can achieve if it manages the manufacturing sector in the right way.

The manufacturing sector has been recognized as one of Kenya's four core agendas that would steer the country's transformation (KAM, 2018). The goal of the National Government is for manufacturing to contribute around 20% of GDP to the national economy by 2022 (G.O.K, 2017). This can be realized if we increase the level of
investment in this sector and ensure we have the necessary skills and technologies to drive the sector. However, the level of investment realized in this sector is still very low and credit to the sector declined by 4.6% to Ksh 277.4 billion in 2016 from Ksh 290.9 billion in 2015 (KNBS, 2017). Other measures to spur growth will involve refining Kenya's industrial policy to foster globally competitive companies, promoting exports and global competitiveness, instituting rapid sector-focused foreign direct investment attraction and creating industrial zones and parks to promote manufacturing industries (KAM, 2018). To enhance the manufacturing sector in the country, several transformational policies have been established, including Vision 2030, the National Trade Policy, the Kenya Industrial Transformation Program, Buy Kenya Build Kenya, the Investment Policy, and the Big Four Agenda (KAM, 2018).

The Kenya manufacturing sector is part of the key agenda in the government transformation program and is the most suitable sector to analyze spillovers from foreign direct investment to local indigenous firms (G.O.K, 2017). With a GDP contribution of 9.5% in 2018, the sector is at the heart of Kenya's industrialization policy and provides the best entry point for foreign direct investment. However, despite the contribution of the manufacturing sector for the transformation of the Kenyan economy and the increased flow of foreign investment to the sector, foreign direct investment's effects on Kenyan manufacturing firms have not been systematically studied, making the sector a suitable context to scrutinize the link amongst foreign direct investment and firm's performance. The study analyzed spillovers that foreign direct investment firms have on local manufacturing firms. Several researchers such as Busienei, K'Obonyo and Ogutu, (2013), Okeyo, (2013) used the manufacturing sector in their study.
1.2 Research Problem

Foreign Direct Investment is a key foundation of development for Sub Sahara Africa countries and has a huge influence on manufacturing and more broadly commercial development. In line with foreign direct investment theory, foreign investment enables the development of higher levels of technology and manufacturing capability among local firms. Ricardo, Luisa and Simona's (2015) study on innovation performance impact of Multinational Enterprise's investing in the United Kingdom (UK) established that domestic firms that were active and with greater investment had a stronger innovative performance. Other scholars, Onyekwena (2012), Muhammad and Kashif (2013), Leman and Ismet (2015) and Asuantri and Yasmin (2017) supported this and noted that foreign direct investment inflows result in substantial capital growth, technology upgrade, marketing access and managerial knowhow acquisition. Gui-Diby (2014) and Hodud et al., (2014) posited that external factors in a business setting affect the innovative activities of a firm and that poor business environment results in a negative association of the variable foreign direct investment and expansion of the economy.

Asuantri and Yasmin (2017) asserted that the learning process occurs when local firms with adequate absorptive capacity interact with MNEs. The position is supported by Leman and Ismet (2015) who noted that FDI inflows lead to a surge in innovation where absorptive capacity is high and Pedro, Jorge and Jose (2014) who argued that technical progress is realized from foreign direct investment inflows when the absorptive capacity is large. Further, Laura's (2017) study on complementarities finds that foreign direct investment’s beneficial effect is not automatic but rather dependent on certain local conditions, which act to facilitate the realization of foreign direct investment benefits. Rueda and Shamsub’s
study (as cited in Asuantri and Yasmin, 2017) posits that countries do not achieve the same level of success in transforming and exploiting spillover technologies as MNEs do and that indigenous companies' absorptive capacity is instrumental in facilitating the assimilation of spillover from MNEs.

Renzi's (2012) study on the impact of multinational firms on the South African economy yielded varied results. The study affirmed the importance of FDI in the emerging market by claiming that FDI attracts foreign capital and boosts domestic investment and exports, whereas critics claimed that FDI creates oligopolistic market structures by dislodging local firms, resulting in a negative effect on the competitive structure of the host economy. Further, Galina and Cheryl (2011) supported Renzi’s position by asserting that the foreign direct investment spillovers on Chinese domestic company productivity yielded conflicting results, with positive outcomes being largely attributed to aggregation bias and a failure to account for foreign direct investment endogeneity.

Other studies have found contradictory findings on the association of foreign direct investment and performance of local manufacturing firms. Diyamett and Mutambla's (2014) study on Tanzanian firms found that very few firms acknowledged that foreign direct investment was their source of knowledge for technical capacities realized as evidenced by their limited linkages with foreign investors. Further, Yi, Zhigang and Lianming's (2017) study on foreign direct investment spillovers in China finds significant undesirable consequences on indigenous firms in a similar industry confirming that there is limited evidence that local businesses gain from their interaction with foreign MNCs.
Foreign direct investment’s influence on local enterprises in the Kenyan manufacturing sector has not been analytically investigated in spite of its importance and the position of the manufacturing sector for the Kenyan economy. However, the limited studies done within the Kenyan context have tended to confirm the significance of FDI to the local economy. Tiriba and Macharia (2014) recognized that MNCs create jobs, reduce poverty and dependency and have multiple effects on the economy. In the Kenyan manufacturing sector, Njoroge (2016) discovered a favorable significant link between foreign direct investment growth and strong governance, market size, trade openness, and currency rate. Wanjku, (2016) established that FDI is significant in influencing economic growth but it must interact with infrastructure development and openness of the economy to realized medium term and long-term aspirations.

The theory and empirical literature reviewed evidence provide divergent views, and incomplete information on the connection between foreign direct investment and firms' performance. The question of whether foreign direct investment is beneficial to the host country's businesses remains unanswered. One group of studies discovered that foreign direct investment has a detrimental bearing on local firm’s performance. However, another group discovered a positive association between the two factors. A number of others studies found mixed results. The lack of unanimity, according to Barrios, Gorg, and Strobl (2011) is due to the numerous methods used to measure foreign direct investment spillovers, as well as discrepancies in research design and methodology. Furthermore, cross-sectional studies predispose to uncover substantial spillovers in domestic business productivity, whereas panel data econometric techniques uncover insignificant or negative spillovers (Javorcik, 2008; Meyer, 2004; Gorg &d Strobl, 2001). Gui-Diby (2014) and
Hodud et al., (2014) postulated that a poor business environment results in a negative association between foreign direct investment and expansion of the economy. Laura (2017) noted that foreign direct investment’s beneficial effect is dependent on certain local conditions, which act to facilitate the realization of foreign direct investment benefits. Asuantri and Yasmin (2017) assert that the learning process occurs when local firms with adequate absorptive capacity interact with MNEs a position supported by Leman and Ismet (2015) and Pedro, Jorge and Jose (2014).

The current research differs from previous empirical studies done in examining the effect of foreign direct investment on manufacturing firms' performance as it considered two factors: absorptive capacity and business environment as key in facilitating spillovers from foreign direct investments to local firms. Previous studies failed to illuminate the interaction between foreign direct investment and these parameters when examining the influence of foreign direct investment on the performance of firms. As a result, the study attempted to overcome this gap by employing a variety of research methods. It looked at the effects of three variables on manufacturing firm performance: foreign direct investment, absorptive capacity, and business environment. It also sought to examine the direct link between foreign direct investment and manufacturing firm performance, the mediating impact of absorptive capacity and the moderating impact of the business environment. Earlier studies focused on one variable to determine manufacturing firm performance, but this study looked at the impact of a mixture of three variables (foreign direct investment, absorptive capacity and business environment).
1.3 Research Objectives

The study's general objective was to investigate the effect of foreign direct investment, absorptive capacity and business environment on the performance of manufacturing firms in Kenya. The specific objectives were to:

i. Establish the effect of foreign direct investment on the performance of manufacturing firms in Kenya.
   b. Establish the effect of advanced production technology on the performance of manufacturing firms in Kenya.
   c. Establish the effect of marketing expertise on the performance of manufacturing firms in Kenya.
   d. Establish the effect of management knowhow on the performance of manufacturing firms in Kenya.


iv. Establish the joint contribution of foreign direct investment, absorptive capacity and business environment on the performance of manufacturing firms in Kenya.
1.4 Value of the Study

Eclectic theory, Dynamic capabilities theory, Knowledge-based theory and Resource dependence theory are all used in the research. These theories have not been thoroughly interrogated in foreign direct investment literature. The study will advance the frontiers of knowledge by providing additional insight on the link between foreign direct investment, absorption capacity, and business environment and may offer new practical contributions on how to improve a company's performance. It will also help to fill in the gaps found in prior research and promote the growth of the foreign direct investment literature.

Policy making institutions like the Government of Kenya (GOK), Treasury, Ministry of Trade and other ministries will benefit from a better understanding of how they can formulate policies to help local firms gain more from the increased inflow of foreign direct investment. Manufacturing businesses' improved performance can be explained not only by higher foreign direct investment inflows, but also by their absorptive capacity and the business environment they operate in. This insight will aid in the creation of policies that promote greater spillover in manufacturing sector and other critical economic sectors.

Manufacturing firms will benefit from this study in that managers will be able to build the requisite absorptive capabilities in their firms to ensure they maximize the benefits coming from the increased inflow of foreign direct investment in the economy. The investors in the manufacturing sector will also be able to lobby the government to work toward improving the business environment. Further, the management of the manufacturing firms will also benefit from the knowledge that the performance of their firms is dependent on other variables and not just a higher inflow of foreign direct investment.
1.5 Structure of the Thesis

The document has five chapters. The first chapter is introduction divided into five sections that describe the study's background, research problem, research objective and value, as well as the study's structure. Foreign direct investment, absorptive capacity, business environment, performance of manufacturing firms, and a review of manufacturing firms in Kenya are among the five subsections.

The study's literature review is covered in the second chapter. The theoretical underpinnings, empirical studies review, summary of knowledge gaps, a conceptual framework, and study hypotheses are among the key sections. The electric, dynamic capacities, knowledge-based, and resource dependence are the four theories that make up the theoretical foundation. The empirical studies review is divided into four sections: foreign direct investment and firm performance, foreign direct investment, absorptive capacity and firm performance, foreign direct investment, business environment and manufacturing firm performance, and foreign direct investment, business environment and manufacturing firm performance.

The research methodology is discussed in the third chapter. The chapter is split into eight major sections consisting of the study's philosophical underpinning, research design, study population, data collecting, pilot testing, reliability and validity tests, operationalization of study variables, data analysis methodologies, and regression assumption pretesting are divided into eight major areas.
The data analysis, discussion, and results are presented in the fourth chapter. The chapter has four key sections consisting of preliminary results, descriptive findings, and a test of hypotheses and a discussion of results. The preliminary results consist of the response rate, preparation and screening of data and diagnostic tests. The diagnostic test section has three subsections consisting of the normality test, multicollinearity test and homogeneity test. The descriptive findings section has subsections consisting of general information, foreign direct information, absorptive capacity, business environment and firm's performance. It also has a section on relationship between predictor and criterion variables, test of the hypothesis and discussion of results as per the hypotheses of the study.

The summary of the findings, the conclusion, study's implications, the contribution to knowledge, the limits of the study and ideas for additional research are all included in the fifth and final chapter. The study's implications part is divided into three sections: theoretical, policy, and management practise implications.
CHAPTER TWO
LITERATURE REVIEW

2.1 Introduction

In this chapter, the purpose is to extensively review, analyze and reflect on the state of the understanding to this point regarding the link between foreign direct investment, absorptive capacity, business environment and firm's performance. It also covers various theoretical perspectives, knowledge gaps, conceptual frameworks, and study hypotheses.

2.2 Theoretical Foundation

The emphasis in this section is on the breadth of theoretical perspectives. The concepts of this study are grounded on four theories: eclectic theory, dynamic capabilities theory, knowledge-based theory and resource dependence theory. The eclectic theory serves as the study's anchor theory. The theories are discussed in detail in the proceeding section.

2.2.1 Eclectic Theory

The research is grounded in the eclectic theory propounded by Dunning (1993) and borrows heavily from the earlier works of Hymer (1960) and Kindleberger (1973). The aim was to develop an explicit understanding of the motivation behind companies’ participation in foreign direct investment. Dunning (2001) joined the work of Hymer with other theories to develop the eclectic theory. The proposition is known as the OLI paradigm with “O” denoting ownership advantage, “L” denoting location advantage, and "I" denoting internalization. Three elements, according to Dunning (1993), determine international production: advantages of ownership, location, and internalization. Firms invest when the
characteristics of a location blend with ownership and internationalization benefits to make the location attractive for investment. The eclectic theory assumes that companies will follow through with foreign direct investment if they can get the services or products provided internally and at a lower cost (Dunning, 1993).

An ownership advantage is the possession of a distinctive and treasured resource that is difficult to duplicate, resulting in a competitive edge over other businesses. It occurs when a company has a competitive advantage in terms of knowledge and technology that others lack. These reflect the unique qualities that allow companies to position themselves uniquely against their competitors. Hymer (1976) argued that compared to foreign companies, local companies are more poised to leverage their easy access to reliable information about the host country, better mapping of their consumers' preferences, protectionist state interventions, and safety from exchange rate risks. Kindleberger (1973) observed the need for foreign firms to own certain assets that can take the form of superior technology, strong marketing, superior management systems, and economies of scale, among others. Dunning (1993) proposed that foreign direct investment occurs when the benefits of exploiting these advantages supersede the associated opportunity costs. These advantages could be reflected by strategic agility or the monopolistic position of a company.

Location (L) advantages constitute the advantages of locating the firm where it can produce at a cheaper cost than its competitors. It's when a company is fortunate enough to be in a place that have bigger markets than its competitors, lower-cost labour, lower-cost materials, and adequate infrastructure. It involves locating a firm's activities where there is
a comparative advantage or where it is most favourable to conduct the activity in question (Porter, 1990). Dunning (1993) observed that locational advantages are a form of complementary assets. Scholars have investigated the unequal concentration of business activities across different geographic areas (Feldman and Audretsch, 1999; Scott, 2000). Porter (1996) argued that location constitutes a critical source of competitive edge for companies and that a company's global strategy is designed to maximize the comparative advantages of multiple countries. Regional integration has caused a shift in locational preferences as MNEs engage in international production (Dunning, 1998).

Internalization is a situation in which a company can acquire specific items by producing them inexpensively in both the country of origin and host countries due to market defects. It arises when it is advantageous to engage the market directly rather than through a third party or other firms. According to Dunning (1993), multinationals may decide to internalize their operations to exploit ownership advantages within a company and avoid the dissipation of those advantages. A firm would choose FDI if the benefits outweighed the costs of alternative arrangements such as licensing and exporting (Dunning, 2000). Foreign direct investment occurs when a company possesses an ownership advantage, it deems internalization of operations the best course of action, it is strategically positioned, and lastly, when its production fits its long-run strategy (Dunning, 1993).

According to Caves (1996) and Dunning (1998), multinational enterprises are primarily concerned with leveraging their intangible assets such as new technology, knowledge base, and brand-name in a foreign location under conditions dominated by protectionist policies. It is also observed that with drastic tariff reduction and virtual withdrawal of non-tariff
barriers through the World Trade Organisation (WTO) regime, MNEs can exploit their proprietorship of intangible assets in third world nations through export (Siddharthan & Lakhera, 2005). We further point out that internalization advantages require both ownership and location advantages. More so, intangible resources, including reputation and sophistication of technology during production, often characterize ownership advantages. Others, like administrative complexity, are tangible assets and may lead to the development of internal economies of scale. Besides, these advantages consist of tacit information, and transferring it may prove costly and involve the risk of opportunistic behaviour.

The eclectic theory has been criticized as lacking empirical validation raising questions on its adequacy. It has also been criticized because it tends to focus more on firms that own and control production activities across borders. Further the theory fails to evaluate extensively the difference between transactional and structural costs (Dunning & Rugman, 1985). However, despite these criticisms, it manages to demonstrate the way FDI is important to local companies and people, especially in transferring knowledge and technology, among other things. The eclectic theory explains the positive FDI-firm value link. Because of these advantages, an FDI-related firm outperforms a non-FDI-related firm.

2.2.2 Dynamic Capabilities Theory

The organization resources and capabilities concept was first developed in the management literature 1980s and a theory published for the first time by Teece and Pisano (1994). Zahra and Garvis (2000) argued that dynamism reflects the instability of a company's market conditions emanating from the constant unpredictability of customers leading to shifting
situations and provoking searches for new sources of advantages that is a potential source of competitive advantage. Further, Edelman and Yli-Renko (2010) observed that dynamism creates new sets of opportunities that could elevate the competitive ability of a company.

The dynamic capabilities framework is premised on a holistic approach constituting entrepreneurship, ownership advantages, knowledge creation, and sustainable advantages (Teece & Al-Aali, 2013). The proponents of the theory claim that companies should be in a position to build, re-configure and integrate all forms of competencies to capitalize on them (Teece, Pisano & Shier, 1997). The theory leads to the formation of strategic routes within organizations that allow them to alter resources bases through integration and acquisition to cultivate strategies that help them to generate value (Grant, 1996).

Zollo and Winter (2002) identified experience accumulation, organizational routines, knowledge codification, and knowledge articulation as the three mechanisms that interact to develop dynamic capabilities and improve already existing organizational routines by forming social processes that enable organizations to acquire, integrate, transfer and create knowledge. Chang (2012) used knowledge absorption, integrative ability, social networking and market-oriented sensitivity to negotiate and communicate dynamic capability measures. Feiler and Teece (2014) noted the dynamic capability could be either geared toward transforming, seizing or sensing. Wang and Ahmed (2007) added that dynamic capability could be thought of in terms of adaptive, innovative and absorptive capability components.
Dynamic capabilities theory has been condemned as lacking a precise definition and clear theoretical foundation, empirical grounding and measurements, making it hard for researchers and scholars to study the way dynamic capability can be used in the development and assessment of hypotheses and predictions as well as decision-making processes (Pavlou & El Sawy, 2011). The theory is also characterized by weakness in accounting for how firms can develop or acquire such capacities. However, the theory’s flaw is that it fails to explain financial performance of businesses. The theory also overlooks the need for possession of valuable resources and is more oriented toward the ability of a company to exploit its resources and make them fit changing needs (Teece & Al-Aali, 2013). Despite the criticism, the function of absorptive capacity as a dynamic capability is linked to its involvement in the generation of fresh information that is essential in the development of new capabilities inside companies (Zahra & George, 2002). The study adopted the dynamic capabilities approach since it is expected that through integration, reconfiguration and renewal of resources, firms would be able to appropriate the benefit of foreign direct investment leading to superior performance.

2.2.3 The Knowledge-based Theory

Theoretically, a firm's knowledge is its most important asset (De Carolis, 2002). The theory's proponents contend that the inimitability and social complexity of knowledge resources are what give them their value. According to Curado (2007), knowledge is seen as a particularly unusual strategic resource that can generate growing returns because, in contrast to other conventional economic generating components, it does not degrade over time. Although the resource based theory of the firm recognizes the crucial role that firm knowledge plays in achieving competitive advantages, it does not fully appreciate this role
because it views the knowledge as a generic resource rather than a resource with unique characteristics (Balogun & Jenkins, 2003). As a result, knowledge-based capabilities of various types are not taken into account by resource-based theory. The cornerstone for sustainable competitive advantage is knowledge resources, which are particularly important because they are intangible and dynamic in nature, allowing for idiosyncratic growth through causal ambiguity and route dependency (Wiklund & Shepherd, 2003; Curado, 2007). Increasingly knowledge employees like designers, financiers and management experts are present in firm's core functions (Child & McGrath, 2001).

In the extant literature, Senge study (as cited in Garvin, 1998) noted that companies with superior knowledge resources have been observed to post better performance outcomes than those with weak knowledge bases. In the same light, a superior knowledge base confers a firm with the ability to maintain future strategic flexibility (Grant, 1996; Volberda, 1996). An organisation is regarded as a knowledge-integrating entity, with knowledge application serving as its primary duty rather than knowledge generation (Grant, 1996). Optimizing talent utilization is also a critical basis of sustainable competitive advantage (Hiltrop, 1999).

The proponent of knowledge-based view asserts that organizations exist to generate, share and turn knowledge into value (Kogut & Zander, 1992). Knowledge resides in the human beings and facilitates skills and technology transfer from MNEs to the local firms making the theory relevant to the study. The firm-specific advantages namely advanced production techniques; managerial knowhow and market access spillover to manufacturing firms from FDIs make this theory relevant to the study.
2.2.4 Resource Dependence Theory

Pfeffer and Salancik (1978) originally composed this view, which is grounded on the firm's interaction with the environment. The theory proposes that organizations have a symbiotic relationship with their environment and this dependence on the environment leads them to be externally constrained and controlled. Organizations engage in exchange with their environment by forming coalitions, altering their organizational systems to obtain required resources. They reasoned that organizations need numerous kinds of resources to undertake their businesses and that these resources define how firms generate and make deliveries of their products or services to the market (Pfeffer & Salancik, 2003).

Organizations are interdependent in that they seek resources from foreign partners that include monetary and physical resources, technology, management skills, Marketing expertise, information and social legitimacy among others. Through such interdependence, organizations can combine their resource sets synergistically with complementary resources of the foreign partner; thereby creating bundles that are unique and difficult to replicate (Harrison, Hitt, Hoskisson & Ireland, 2001).

In regards to the manufacturing firms, the theory is critical in clarifying how the business environment affects the capacity of organisations to gain needed resources and is an important structure for analysing the outcome of the business environment on performance. Therefore, this study grounded its argument regarding organisations' interdependence with the business environment on resource dependence theory as one of the theoretical underpinnings. The resource dependency theory has been criticised, as it does not explain
the development or acquisition of new capabilities and adaptation to new situations by organisations. The other criticism of this theory is that it does not explain firm performance.

To summarize, the dynamic capabilities, knowledge-based, and resource dependence theory all help to explain foreign direct investment spillover and complement the eclectic theories. We note the limitation of each of the theories for our study. The numerous concepts from these theoretical streams were employed to enrich the study's theoretical foundation.

2.3 Empirical Studies Review

This research was intended to unravel the connection between foreign direct investment, absorptive capacity and firm performance. Uniquely, it asked what evidence is available regarding the interrelationships involving the variables. In this section, a review of recent empirically published research relating to these variables of interest is presented. The key findings from the academic sources are critically appraised to recognize the strengths and weaknesses of the empirical research.

2.3.1 Foreign Direct Investment and Performance of Manufacturing Firm

There’s a lot of emphasis on studies of foreign direct investment largely on account of its potential benefits to host countries. In his ground-breaking research on the benefits of inward foreign direct investment, Caves (1974) proved that the positive spillover influence of inbound foreign direct investment on domestic companies is due to allocative efficiency, technical efficiency, and, finally, technological transfer. The research of intra-industry productivity spillovers from foreign direct investment in the UK manufacturing industry
by Liu, Siler, Wang, and Wei (2000) found that the existence of foreign direct investment has a positive spillover effect on the output of UK-owned enterprises. According to Keshab and Vipin (2020), foreign direct investment brings superior technology and management skills to local enterprises, increasing their production.

Dadzie (2012) pointed out that foreign direct investment is instrumental for the growth of local firms as it provides investment funds, creates competition, increases their productivity through the adoption of better technologies or investing in human and/or physical capital. Onyekwena (2012) asserted that studies on foreign direct investment spillover assume that technologies are freely available to a local organization and that foreign direct investment automatically encompasses the transmission of technology and consequently local firms' benefits automatically. Pedro, Jorge and Jose (2014) study evaluated the influence of foreign capital on Spanish manufacturing firms and found that foreign direct investment had positive spillovers on indigenous firms and that when the foreign capital was large enough, it promoted technical progress. Newman, Rand, Talbot and Tarp (2015) evaluated the association between technology transfer, foreign investment and productivity spillover and empirically established that certain gains in productivity were linked directly to the connection between domestic and foreign-owned companies along the supply chain. Lugemwa (2014) finds that foreign direct investment is a prime variable in bolstering the development of manufacturing-based companies.

Onyekwena, (2012) affirmed that developing countries' pursuit of foreign direct investment is motivated by the belief that this kind of investment has definite advantages compared to other forms of investments, in particular domestic investment. Foreign Direct Investment
helps in promoting international economic integration and plays a critical role in the rapidly evolving globalization. It helps in creating direct and stable links between economies that last long and even serve as a vehicle for enterprise development locally. The International Monetary Fund (2018) affirmed that the benefit of foreign direct investment does not only appear as an expanded resource that can be invested in, but it also appears in the transfer of knowledge and technology. As such, foreign direct investment may be said to encourage partners to transfer knowhow and technology and also provide opportunities, especially to host countries, to promote their products in the global market (Government of Qatar, 2014). Marco and Claudia (2014) asserted that foreign direct investment is motivated by marketing access, and multinationals invest in low product cost countries and then serve domestic and foreign markets.

According to Leman and Ismet (2015), foreign direct investment has been the primary source of economic expansion in Sub-Saharan African nations. They asserted that multinationals are a key foreign direct investment vehicle and invest heavily in research and development laboratories spread across the world. As a result, they are a key source of new technologies, new products and production processes, new patents and speeding up of innovative activities within host nations. Thus, foreign direct investment promotes the development of local companies that produce local intermediate products and services, which in turn, boosts the overall development of firms that deal with the production of final products. Ilboudo (2014) found that foreign direct investment positively contributes to an increase in efficiency. This assertion agrees with Byung and Shufeng's (2015) findings that an inverted U-shaped distribution of the data between foreign direct investment and the productivity of local companies where productivity rose to a certain point, beyond which
it reduced as foreign direct investment increased. Leman and Ismet (2015) also observed that foreign direct investment inflows from developed countries were critical shapers of economic growth.

It is also emphasized that foreign direct investment contributes to economic development by increasing capital buildup and technology improvements, which in turn improves the performance of firms (Nadide & İbrahim's, 2014). Görg and Strobl (2001) established econometric evidence that multinationals have a favorable impact on the productivity of domestic firms in the high tech firm of the Irish economy. This suggests that there are spillovers in high tech firms whereby local firms learn new production technologies from multinationals through linkages with local firms, enabling them to produce more efficiently. The findings by Görg and Strobl (2001) observe that the favourable effect increases the chances of survival of such firms, at least in high tech sectors. In addition, Wang, Deng, Kafouros, and Chen (2012) found that different modes foreign entry had a significant impact on the scope of foreign presence and the productivity outputs of companies in the host country, and that there was a favorable link between a company's footprint in a foreign country and the productivity of the hosting economy. Nadide and Brahim (2014) asserted that capital accumulation leads to investment in the development of new concepts and abilities, and because knowledge is a public good to some extent, it enhances the level of technology not just within the organization but across the country.

Keshab and Vipin (2020) observed that India has a liberal and transparent foreign direct investment policy that has aided in the rapid accumulation of domestic capital and the generation of economic growth over the last 25 years. Foreign direct investment inflows
have enabled recipient countries to accumulate capital, acquire knowhow and new technological practices that have improved their levels of innovativeness and even promoted economic growth (Temiz & Aytac, 2014, Asuantri & Yasmin, 2017). This assertion is supported by Bruno and Cipollina (2014), who observed that through close proximity to foreign firms, domestic companies can learn through imitation how to expand to overseas territories. Further Leman and Ismet (2015) asserted that foreign direct investment inflows are among the easiest ways of closing capital deficiencies in developing countries as well as providing them with technological knowhow, financial capital and managerial expertise. They argue that whenever MNCs invest their money and resources in foreign countries, they transfer their product information, patents and business information to host countries. As a result, countries that face capital deficiencies and those that lack technological knowhow should attract foreign investors to boost their economic growth and accumulate more capital.

Leman and Ismet (2015) noted that multinational Enterprises expose local firms to modern technology and management techniques in the process of transferring technology and managerial skills to the local economy. Moreover, workers who move from MNEs or their affiliates to local firms can transfer technological knowhow and new management techniques. Damgaard (2011) established that domestic firms that supply to foreign firms become more efficient because of the productivity improvements and training programs undertaken by foreign firms. Leman and Ismet (2015) established that a one-point rise in foreign direct investment was linked to 0.83% and 0.42% incremental growth in research and development and application of patents setting the ground for better performance. Both product and process innovation have a strong positive relationship with company output,
according to Nyeadi, Kumbuor and Ganaa (2018). Firm value is anticipated to rise when foreign direct investment flows result in knowledge transfer, improved management practices, and increased capital flow, resulting in increased efficiency and large-scale production (Osabutey, Williams, & Debrah, 2014). Nyeadi (2022) further asserted that foreign direct investment and company value had a favourable significant influence in Sub-Saharan African, which he attributed to technology transfer, managerial transfer, innovation transfer, and skills transfer to local enterprises.

In contrast, Galina and Cheryl's (2011) review of literature on productivity of foreign direct investment spillovers in China found that proof of productivity spillovers from foreign direct investment is unlikely to be found, a situation attributed to institutional factors such as insufficient human capital limiting the channel for technological spillovers and local firm's ability to adopt new technologies. Gui-Diby (2014) claims that foreign direct investment inflow dampens economic development because the majority of the hosting regions have poor business environments and do not tap technology in the right way. Further, Diyamett and Mutambla's (2014) study on Tanzanian firms found that very few firms acknowledged foreign direct investment as the bases of technical capabilities achieved fact revealed in their limited linkages with foreign investors. Another study by Muhammad and Kashif, (2013) rejected the hypothesis that foreign direct investment bolstered the aggregate productivity of local companies in Mexico, as seventy-one (71) % of such investment was meant for purchasing already existing Mexican companies and did not necessarily lead to capital formation. Liu and Wang study (as cited in Bonga-Bonga & Guma, 2017) used Chinese experience to show that the drive to attract strong investment flows from outside is a highly effective mechanism for pushing forward the technological
capacity of the host regions. They also observed that such efforts were impeded by the
dearth of skilled labour in the hosting economy. Allais (2012), Rasool and Botha (2011)
asserted that skill shortage impacts hamper the positive outcomes of foreign direct
investment on total firm productivity and by extension a country's economic growth
potential.

Damgaard (2011) found a statistically significant negative spillover impact at the
cumulative level in his research of total productivity spillover. However, the study asserted
that results differed widely across industries with high export orientation and those in
competitive environments experiencing less negative spillovers. Further, Pavlínek and
Zízalova (2014) affirmed that local firms were vulnerable to positive and negative
spillovers. The negative horizontal spillovers emanated from failure to eliminate crowding
out phenomena, forcing most local companies to be purchased or engage in joint
arrangements with foreign companies and the worst cases close business. Barrios, Görg
and Strobl (2006) observed an insignificant link between these spillovers and the
performance of local companies in East-Central Europe. Further, the entry of foreign direct
investment resulted in temporal negative horizontal spillover (Pavlínek & Zízalova, 2014).
The study by Tajul, Abdul and Haslindar (2012) on the Malaysian manufacturing sector
found a positive spillover effect, but also noted that foreign direct investment inflows in
one area are likely to harm other sectors of the economy. Further Hatani, (2009) established
that the spread of technology from foreign to domestic companies makes them more
innovative and effective producers.
Past studies assessing the foreign direct investment link with the performance of local firms have generally presented inconclusive research findings. Whereas some of the literature demonstrated positive and significant relationships between foreign direct investment and local firm performance, others contradicted this view by indicating negative effects, lack of clear-cut association, or suggesting the need to take other variables into account. The study was prompted by the desire to assess the impact of foreign direct investment on the performance of manufacturing firms operating in Kenya at the time.

2.3.2 Foreign Direct Investment, Absorptive Capacity and Performance of Manufacturing Firm

The breadth of empirical base touching on the connection between foreign direct investment and performance has to a large extent indicated inconclusive results attributable to the isolated study of foreign direct investment and ignoring other variables that could impact the relationship. The most widely debated internal characteristics influencing the occurrence of spillover in literature are those related to the absorptive capacity of indigenous firms. Asuantri and Yasmin (2017) established that foreign direct investment and absorptive capacity have no favorable impact on technological invention when appraised independently but yield a significant positive effect on technological innovation when their interaction is considered. This implies that the learning process occurs when local firms intermingle with MNEs and this is made possible by the local firm’s absorptive capacity. The position is supported by Leman and Ismet's (2015) study which established that innovation attributable to foreign direct investment inflows increases with an increase in absorptive capacity in host countries.
Rueda and Shamsub's study (as cited in Asuantri and Yasmin, 2017) explained that countries do not achieve the same level of success in transforming technologies into innovation even where they receive the same technology. Further, Gorg and Strobl (2001) established that foreign direct investment imparted the survival of indigenous firm’s positively in top performing tech firms and negatively in those in low-tech industries, meaning that local firms with relatively higher absorptive capacity gain more from foreign direct investment than other firms. Ricardo, Luisa and Simona (2015) noted that foreign direct investment had positive implications on the performance of local companies and that the attributes of the companies played roles in mediating their ability and enthusiasm to obtain such benefits. They contended that the capacity of local companies to assimilate fresh knowledge was a key ingredient for them to capitalize on foreign direct investment. The efficacy levels of companies shape their absorptive capacity, particularly concerning new technology implying that the companies’ ability to seamlessly integrate new technologies into their operations rested on their level of productivity (Ilboudo, 2014).

In their work, Thorbecke and Wan (2004) stressed the gravity of building absorptive capacities in that it creates linkages and spillovers from foreign direct investments in the economic development of East Asian countries. The lessons from several East Asian countries have shown that staff training and other education programmes ensure the acquisition and application of new technology. Besides, there is evidence that highlights the significance of thoughtful action to advance absorptive capacity within firms (Thorbecke & Wan, 2004). Chang, Gong, Way and Jia, (2013) asserted that organizational ability to learn from past experiences together with flexible staff management practices may be used to explain the differences in firms' performance. Li and Liu (2005) noted that
factors like openness, human resources are significant in the association between foreign direct investment and financial performance. Liu and Wang study (as cited in Bonga-Bonga & Guma, 2017) using Chinese experience demonstrated that high foreign direct investment inflow is a good way of expanding the technological capabilities of the hosting economies but noted that an economy with skill shortage is hampered by heightened human capital development in a particular country. Anwar and Nguyen's (2010) study of Swiss and Vietnam manufacturing respectively found proof of spillover from foreign direct investment activities to local firms with adequate levels of absorptive capacity. Other study by Todo and Miyamoto (2002), Blalock and Gertler (2004), and Takii (2005) has shown that enterprises' research and development activities, as well as employees' levels of education, affect their potential to profit from MNE spillover.

Pedro, Jorge and Jose (2014) evaluated the influence of foreign capital on Spanish manufacturing firms and established that foreign direct investment had positive spillovers to local firms. They also established that when absorptive capacity and foreign capital were large enough, they promoted technical progress. Lau and Lo (2015) argue that a firm must take steps aimed at enhancing absorptive capacity to improve its innovation performance. They submitted that investment in research and development is a spur for innovation commerce and greater investment support better acceptance of new technologies in the design and innovation of new products. Görg and Strobl (2001) established econometric evidence that multinationals have no favorable impact on the productivity of low tech domestic firms in the Irish economy. The lack of spillovers in low-tech firms may be attributed to the nonexistence of an absorption capability for the new knowledge. Codjoe (2012) observed that foreign direct investment activity happens within an organizational
environment including the intangible resources of a company. In the same light, Navaretti and Soloaga (2001) warns that the inflow of capital commodities does not necessarily mean there will be an automatic transmission of technology and that building of technological capability is crucial for effective technology transfer. According to Kneller and Stevens (2006), a country must have sufficient absorptive capacity in order to fully benefit from the technology content of imported intermediate inputs. Li (2011) demonstrated that Chinese companies utilized local research and development efforts to drive the capacity of the local companies to integrate foreign technological knowhow in their operations.

Further, Todo and Miyamoto (2002); Blalock and Gertler (2004); Takii (2005) pointed out that efforts by local companies that are geared towards investment in research and development are associated with positive outcomes as far as the companies' ability to reap benefits from the spillovers is concerned. Similarly, companies with a better-educated pool of workers reaped more benefits due to the presence of foreign companies. Companies with sufficient absorptive capacity were more ready to gain from spillovers according to Blalock and Gertler (2004) study of Swiss industrial enterprises. Likewise, Liu, Siler, Wang and Wei (2000) noted that the rate to which the UK local enterprises gained from technology transfer largely depended upon the domestic firms' absorptive capacities. Similar evidence was adduced by Anwar and Ngueyn (2010) who noted that companies that demonstrate high-level absorptive capability benefit more from the spillovers emanating from foreign direct investment activities. Cheung and Lin's study (as cited by Asuantri and Yasin, 2017) observed that FDI inflows transfer technological innovation to the host country via backward linkages (technology transfer from foreign customers to local suppliers) or forward linkages (technology transfer from higher-quality inputs or equipment from
foreign suppliers to local firms), human capital mobilization, and the demonstration effect through the process of technological innovation transmission, known as the absorptive capacity of technological innovation. Codjoe (2012) asserted that although local companies may face major obstacles in their ability to make huge investments in innovation and research and development activities, it is of vital importance, that an internal mechanism exists that governs the firm’s ability to integrate new technologies into the operations of a company.

Cohen and Levinthal (1990) asserted that organizations that carry out their research and development are well placed to exploit and replicate outside knowledge than companies devoid of research and development initiatives. Further, Ivarsson and Alvstam (2005) noted that local firms that are capable of absorbing foreign technological knowhow and elevating their competitive edge can gain in terms of boosting their production, sales, and employment. Dunning and Lundan (2008); Meyer and Sinani (2009) noted that local firms' absorptive capacity and strength of interconnectedness stimulate the overall growth of the host economies. The extent of the favorable spillover outcome of inward foreign direct investment on the overall regional potential to innovate is largely determined by absorptive capacity, according to Fu (2008), Farole and Winkler (2012). High-productive firms allegedly have the advanced absorptive potential for transferring information from technically more progressive multinational firms, but organizations with varied degrees of productivity will have different levels of absorptive capacity. According to Chen, Huang, and Hsiao (2010) and Xu and Sheng (2012), enterprises with high absorptive capability are best positioned to gain from spillovers from foreign-owned enterprises.
Onyekwena, (2012) submitted that the technological spillover effects are enhanced and facilitated by the amount of local capabilities in the host country. Moreover, Barrios and Strobl (2002) noted that local firms with export orientation have more capacity to absorb new technology and are better placed to withstand competition. Muhammad and Kashif, (2013) submitted that foreign direct investment was found to be is more advantageous when it comes to a country that has created a sufficient pool of human capital and has a minimum threshold of skills. Thus, the individual country's context influences the probable gains of foreign direct investment for hosting countries and is therefore highly spatially variegated.

Glass and Saggi study and Kinoshita study (as cited in Damgaard, 2011) observed that productivity spillovers and the technological gap are contrariwise associated, meaning that highly productive local firms gain more from foreign direct investment. They also claimed that organizations require a certain level of absorptive ability acquired by research and development operations in order to recognize the value of new knowledge. They further established that the significance of interaction with domestic firms is reduced where firms have a high export orientation reducing the level of spillover from foreign firms. Wales, Parida and Patel's (2013) asserted that the link between absorptive capacity and company performance is inverted U-shaped, indicating that both positive and negative outcomes. Wales, Parida and Patel's (2013) drawing on statistics from 285 technology-based small and medium-sized businesses observed that growth in three potential secondary measures of performance begins to decline beyond lower levels of absorptive capacity and even turns negative and damaging beyond intermediate levels. Zou, Ertug, and George's (2017) observed that absorptive capacity has a limited impact on business performance when
accounting measures are applied casting doubt on the notion that it influences financial performance.

The review of literature has demonstrated that absorptive capacity role in performance of organizations has been progressively researched the objective of such study being the belief that spillover to domestic economies depends on their capacity to exploit the opportunity. Additionally, the reliability of the research data available for interrogation is burgeoning. This reflects a promising phase for renewed interest in the uncovering of the interplay between foreign direct investment and firm performance, which is imperative owing to the contingency of outcomes. We infer from the preceding section that foreign direct investment is a pervasive phenomenon whose impact may manifest both directly or indirectly through other variables. Therefore, these two variables can be combined to propose that foreign direct investment influences absorptive capacity that in turn influences a firm's performance.

### 2.3.3 Foreign Direct Investment, Business Environment and Performance of Manufacturing Firm

The influence of multinationals on the local economy has been empirically established to hinge on the business setting of the hosting country. Azman and Ahmad study (as cited in Edrees 2015) noted that spillover may be considerably higher in a particular business environment with better-quality infrastructure, quality human capital and established financial markets. Hsiang-Feng, Hsien-Bin and Dja-Shin's (2012) study on whether or not dynamism is a moderating factor concluded that external factors in a business setting affect the innovative activities of a firm. Keshab and Vipin (2020) affirmed that a liberal and
transparent foreign direct investment policy in India has resulted in a consistent improvement in the ease of doing business index, enhancing the experience of foreign sponsors who typically play key economic roles among enterprises across all sectors and industries. This is in agreement with Gui-Diby (2014) who observed that a poor business environment results in a negative association between foreign direct investment and stimulation of economic development.

Pradhan and Bagchi (2013) posited that investment in transport systems minimizes trading costs and consequently improves the competitive advantage of firms. Alfaro, Chanda, Oscar and Sayek's study (as cited in Muhammad and Kashif, 2013) found that foreign direct investment promoted growth about three times in countries that had well developed financial systems than their counterparts with poor financial systems. To support this position, they explained that the transfer of technology from MNEs differed among countries and depended upon cooperation among government, industry, academia and labour. Sprenger and Lazarevaa (2016) identified finance constraints as one of the key impediments to organization growth, particularly in emerging markets. Kamran, Chor and Manova (2016) submitted that host economies that possess stable stock markets normally receive more MNCs than their counterparts with undeveloped financial markets.

According to Hsiang-Feng et al., (2012), the environment has a moderating effect on the link between innovativeness and manufacturing firm performance. They established that the dynamic nature of environmental changes moderates the link between organizational performance and the decision-making processes and that harsh environmental condition minimize the innovativeness of a firm. Rocha's study (as cited in Braşoveanu &
EvelinaBălu, 2014) noted that an attractive business environment with appropriate budgetary policies supported the development of local firms. World Bank (2017) argued in support of improving the business regulatory environment as a way of facilitating investment in areas that were lagging behind. Hodud et al., (2014) explained that good business environments enabled firms to enter and exit markets easily; hence, improving productivity. Hallward-Driemeier, Wallsten, and Xu's study (as cited in Hodud et al., 2014) established that exploitive government regulations affected the performance of manufacturing firms negatively and that sales were likely to grow by 42.6%, whereas employment was expected to grow by 46.7% when regulatory burdens were reduced by one (1) standard deviation.

There is an overwhelming argument in favour of foreign direct investments inflows and this has resulted in policymakers working to attract higher foreign direct investment inflows to their countries with many scholars concentrating on researchers focusing on ways to boost inflows. However, we need to point out that an increase in foreign direct investment inflows does not automatically mean the financial health of the host country is good or developing. H-Arias and Albuquerque study (as cited in Tajul, Abduland, & Haslindar, 2012) posited that relative to other types of inflows, foreign direct investment has a higher likelihood of occurring in economies marked by inefficient markets owing to strong preference by investors for direct management of their portfolio over-reliance on steward oriented arrangements. The implication of this to policymakers of countries seeking access to global markets is that they should focus on creating dependable enforcement mechanisms and a better business environment instead of trying to get more
foreign direct investment as this is likely to lead to an overall efficient market and higher capital inflows.

Edrees (2015) examined the impact of the business environment and foreign direct investment on economic development in Sub-Saharan African, finding a negative link between foreign direct investment and economic development across low and middle-income strata using variables such as human resources and infrastructure. However, the current study contradicted earlier findings by researchers such as the World Bank (2006), who found no link between company performance and government regulations. Bruno and Cipollina (2014) affirmed that the indirect implications of foreign direct investment are characterized by inconclusive results as they are dependent on the development status of the host economy. Furthermore, we note that the moderating impact of business environments on the link between foreign direct investment and firm performance has not been thoroughly investigated. In a different setting, Okeyo (2013) established that external business environmental changes had moderating implications on performance. Indeed, past studies have reasoned that the simultaneous consideration of an organization's performance and business environment factors is likely to provide a richer understanding when examining a firm's performance. The current analysis proposes that a business environment moderates the link between foreign direct investment and manufacturing firm performance, based on the literature presented in this section.
2.3.4 Foreign Direct Investment, Absorptive Capacity, Business Environment and Performance of Manufacturing Firm

The existing empirical and theoretical investigations endorse that there is a connection between foreign direct investment and local company performance, however the data is equivocal (Pedro, Jorge and Jose, 2014; Newman, Rand, Talbot and Tarp, 2015; Lugemwa 2014). Pedro, Jorge and Jose, (2014) asserted that foreign direct investment plays a serious role in promoting the productivity of local companies as it is a source of technical progress that contributes to overall performance of manufacturing firm. Newman, Rand, Talbot and Tarp (2015) empirically established that certain gains in productivity were linked directly to the connection between domestic and foreign-owned companies along the supply chain. Lugemwa (2014) and Leman and Ismet (2015) asserted that foreign direct investment inflows have been the primary source of economic growth in developing nations, and they are critical in promoting the growth of local companies and the country as a whole.

Alfaro and Chen (2018) empirically established that the positive gains from multinational activities were attributable to technology and knowledge spillover and that reallocation of market resources explained most of the incremental growth observed in productivity. Rudra, Naville, Yuosre and Bele (2013) argued that smoothing out the inefficiencies of infrastructure such as the road transport system and telecommunication services is bound to moderate the production cost and consequently result in the increased competitive advantage of the firms. Lugemwa (2014) finds that foreign direct investment is central to the expansion of SMEs and that countries need to relentlessly attract foreign direct investment. Borenzstein et al study (as cited in Zou, 2010) asserted that when the human capital level of a host crosses a certain point, the country can gain from foreign direct
investment. The study used an integrated approach that was aimed at evaluating the benefits of foreign direct investment and established that they acted as complementary conditions for enabling firms to absorb them. These conditions included market structure, spatial co-location, financial market and policy environment (Alfaro and Charlton 2013; Alfaro and Chen 2018).

Foreign direct investment generates positive externalities like a competitive environment that enables markets to be allocated to the most productive firms, which can act as "absorptive capacities" (Laura, 2017). Furthermore, Meyer and Sinani (2009) contend that wealthy and poor countries stand a chance to gain from foreign direct investment inflows, while middle-income countries are severely disrupted. The aforementioned findings contradict with those of Blomstrom and Kokko (2001), who found that, unlike their middle-income counterparts, the poorest countries do not benefit from foreign direct investment spillovers. A similar position is held by Dimitratos, Johnson, Ibeh and Slow (2009) who asserted that wealthy countries are bound to reap more economic gains than their counterparts do.

Newman, Rand, Talbot and Tarp (2015) established that there were productivity gains that were directly connected to domestic and foreign-owned firms along the supply chain. Tülüce and Doğanb, (2014) observed that the spread of productivity spillover is an externalities issue transmissible from foreign producers to domestic ones. Laura (2017) noted that local conditions were able to hinder the extent to which foreign direct investment benefits could be realized and that efficient policies could eliminate factors that prevented local firms from developing adequate linkages and that conditions in the markets were able
to either attract or scare foreign direct investment. Nadide and İbrahim (2014) further established that foreign direct investment inflows led to improvement in human capital, infrastructure and research and development activities among local organizations. Besides, an efficient regulatory environment especially in transition economies was able to entice foreign direct investment. Wanjku, (2016) studied the impact of FDI on the growth of the Kenya economy and established that FDI is significant in influencing economic growth but it must interact with infrastructure development and openness of the economy to realized medium term and long-term aspirations,

On the contrary, Damgaard's (2011) study established significant negative productivity spillovers at the cumulative level but the outcomes vary broadly across organizations. The study submitted that domestic firms with high export orientation and those operating in the most competitive industries experience less negative spillovers than other domestic firms. Barrios, Görg and Strobl (2006) found negative and insignificant horizontal spillovers from foreign to local companies in East-Central Europe. Pavlinek and Zizalova (2014) analysis of firm-level qualitative data on linkages in spillover in global production submitted that spillovers posed negative impacts on the performance of the local companies and this was attributed to growing competition and high-quality requirements. Despite the inconsistencies in the earlier researches, the current study performed multivariate regression analysis to test the joint contribution of the variables. Table 2.1 presents a summary of knowledge gaps that were reviewed in literature.
2.4 Summary of Knowledge Gaps

The investigation done so far on the implications of foreign direct investment on the local economy is not conclusive and further analysis of other variables influencing the relationship is required. On the way to adequately address the influence of foreign direct investment inflows on the performance of the local manufacturing sector, more investigation is required. Exploration of intervening and moderating forces that reinforce or block the link between foreign direct investment and performance, such as absorptive capacity and the business environment, was recommended because it is obvious from the earlier studies that it has gotten insufficient consideration by researchers. The researcher finds inadequate studies on other factors influencing the link between foreign direct investment and firm performance.

In comparison to earlier studies that only employed one measure of performance, the current study investigated the foreign direct investment and manufacturing firm performance using both financial and non-financial indicators. The research went on to break down foreign direct investment into its numerous components and assess the influence of each on manufacturing firm performance.

The present study contrasts earlier studies by introducing absorptive capacity and business environment variables as mediating and moderating respectively in the link between foreign direct investment and a firm's performance. The review of the literature reveals several gaps as shown in Table 2.1. The study focused its attention on pertinent research gaps that seek to answer study questions that relate to the bases of variation in a firm's performance.
<table>
<thead>
<tr>
<th>Study</th>
<th>Focus of the Study</th>
<th>Main Findings</th>
<th>Knowledge gaps</th>
<th>Focus of current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Damgaard, J. (2011)</td>
<td>FDI and Danish Economy</td>
<td>The analysis shows that total productivity spillovers effects are adverse, but the outcomes vary widely across industries.</td>
<td>At the micro-level, the impact of FDI was investigated. The study did not consider the impact of absorptive capacity and the business environment on the relationship between FDI and firm performance.</td>
<td>The influence of FDI on firm performance was studied at the micro-level, as well as the intervening and moderating role of absorptive capacity and the business environment on the relationship between FDI and manufacturing firm performance.</td>
</tr>
<tr>
<td>Galina and Cheryl (2011)</td>
<td>Impact of FDI spillovers on Chinese local business productivity</td>
<td>FDI spillovers on Chinese domestic business are varied, with many favorable results attributed to aggregation bias or failure to control for FDI indigeneity.</td>
<td>The mixed results attributed to the failure of the study to consider other factors that enable local firms to benefit from FDI.</td>
<td>Using primary data, we investigated the impact of absorptive capacity and the business environment on the spillover of FDI gains.</td>
</tr>
<tr>
<td>Renzi (2012)</td>
<td>Examined the influence of MNCs on the economy of South African.</td>
<td>Established mixed results in guiding government policy and confirms the significance of FDI in developing economy.</td>
<td>The analysis relied on secondary data gathered from JSE-listed mining companies in South Africa.</td>
<td>The focus was Kenya's economy and examined the impact of FDI on manufacturing firms using primary data.</td>
</tr>
<tr>
<td>Tajul, Abdul and Haslindar, I., (2012)</td>
<td>Effects of FDI Spillover in Malaysia's manufacturing sector</td>
<td>There was a positive spillover effect, but FDI inflows in one area are likely to harm other sectors of the economy.</td>
<td>The varied results ascribed to the lack of the study to consider additional factors affecting the relationship.</td>
<td>The study looked into the function of absorptive ability and the business environment in the link between FDI and local firm.</td>
</tr>
</tbody>
</table>

Table 2.1: Summary of Knowledge Gaps
<table>
<thead>
<tr>
<th>Study</th>
<th>Focus of the Study</th>
<th>Main Findings</th>
<th>Knowledge gaps</th>
<th>Focus of current study</th>
</tr>
</thead>
<tbody>
<tr>
<td>Muhammad and Kashif (2013)</td>
<td>FDI and human capital and economic development of host economies</td>
<td>FDI boost economic growth through export promotion, encouraging investments and developing linkages.</td>
<td>Other variables that enable enterprises to reap the benefits of FDI were not considered in the study.</td>
<td>Used primary data to measure the impact of absorptive capacity and the business environment on the adoption of FDI benefits.</td>
</tr>
<tr>
<td>Diyamett and Mutambla (2014)</td>
<td>FDI and local technology capacities in LDC: Evidence from the Tanzanian manufacturing sector.</td>
<td>Weak link between knowledge, technological capacities and FDI</td>
<td>The study did not examine other benefits of FDI like managerial knowhow, marketing expertise and capital flows.</td>
<td>Examined the complete package of benefits from FDI to host countries in influencing the local firm's performance.</td>
</tr>
<tr>
<td>Lugemwa, (2014)</td>
<td>Absorptive capacity, TNCs and SMEs in LDC.</td>
<td>FDIs, are not sufficient in advancing of SMEs as absorptive capacity is needed to enable them to learn from TNCs</td>
<td>Was a conceptual paper that reviewed existing empirical evidence.</td>
<td>The effect of absorptive capacity and the business environment in the link between FDI and firm performance was explored using primary data.</td>
</tr>
<tr>
<td>Nadide and İbrahim, (2014)</td>
<td>FDI and SME expansion</td>
<td>Productivity spillover is a creation of externalities diffused from external to local firms and FDI improves infrastructure, R&amp;D and labour force of local firms.</td>
<td>This was a conceptual paper that relied more on existing empirical literature and did not use any primary data.</td>
<td>Primary data on the link between FDI and manufacturing company performance in Kenya was examined and tested.</td>
</tr>
<tr>
<td>Pavlınek and Zizzalova, (2014);</td>
<td>Global production networks linkages and spillovers: micro-level assessment of Czech automotive industry</td>
<td>The local firms vary in terms of their absorptive capacity and value chain which considerably impact their ability to gain from linkages and spillovers.</td>
<td>The study did not evaluate other factors and, in particular business environment moderating effect on the linkages and spillovers.</td>
<td>Examine and test the influence of the business environment on the linkages and spillovers at the micro-level.</td>
</tr>
<tr>
<td>Study</td>
<td>Focus of the Study</td>
<td>Main Findings</td>
<td>Knowledge gaps</td>
<td>Focus of current study</td>
</tr>
<tr>
<td>------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Pedro, Jorge and Jose (2014)</td>
<td>The effect of partaking by foreign capital and the spillovers from MNEs on the technological progress of manufacturing firms.</td>
<td>FDI has a positive spillover impact on domestic firms and presence of FDI and the absorptive capacity of spillovers from FDI are large, they are likely to promote technical progress.</td>
<td>The study did not examine the moderation of the business environment in the relationship.</td>
<td>Examined and assessed the moderating forces of business environment conditions in the association between FDI and performance</td>
</tr>
<tr>
<td>Tirimba and Macharia (2014)</td>
<td>Economic Impact of MNCs on the development of LDC.</td>
<td>MNCs create jobs, reduce poverty and dependency and have a multiplier effect on the economy.</td>
<td>The study did not examine factors that affect the link between FDI and the performance of local firms.</td>
<td>Assessed the mediating role of absorptive capacity and business environment on the linkage between FDIs and performance of manufacturing firm.</td>
</tr>
<tr>
<td>Edrees, A (2015),</td>
<td>Examined role of FDI, Business Environment on economic development of SSA region.</td>
<td>FDI exerted a significant negative influence on the economic development of low and middle-income groups.</td>
<td>The study focused on human capital and infrastructure as proxies of the business environment and the assessment was at the macro-level.</td>
<td>The context was on a developed country and examined the moderating role of business environment proxies and the assessment was done at the micro-level.</td>
</tr>
<tr>
<td>Leman and Ismet, (2015)</td>
<td>FDI, Research and development and Innovation in Asian countries.</td>
<td>FDI inflows from developed countries were critical shapers of economic growth.</td>
<td>No assessment of the role of other variables in the link between FDI and firms using secondary data.</td>
<td>Used primary data to examined the mediating and moderating role of absorptive capacity and business environment in the arrogation of gains of FDI</td>
</tr>
<tr>
<td>Study</td>
<td>Focus of the Study</td>
<td>Main Findings</td>
<td>Knowledge gaps</td>
<td>Focus of current study</td>
</tr>
<tr>
<td>-------------------------------</td>
<td>-----------------------------------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>------------------------------------------------------------------------------------------------------</td>
<td>---------------------------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Newman, Rand, Talbot and Tarp (2015)</td>
<td>Explores the link between technology transfer, FDI and productivity spillover.</td>
<td>The findings revealed that the interaction between local and foreign enterprises along the supply chain resulted in productivity benefits.</td>
<td>The study did not appraise the contribution of the other variables in the spillover.</td>
<td>Examined and tested the role of variables of the business environment and absorptive capacity on the interplay between FDI and performance.</td>
</tr>
<tr>
<td>Crescenzi, Gagliardi and Iammarino, (2015)</td>
<td>Presence of foreign multinationals and the innovation of domestic firms in the UK</td>
<td>The significant positive linkage between foreign multinationals and innovative outcomes of local companies in the same sector.</td>
<td>The study context was in a developed country setting and its findings may not be generalizable to a developing country setting.</td>
<td>Our study setting is a developing country setting and examined the interplay between FDI and the performance of manufacturing companies.</td>
</tr>
<tr>
<td>Ricardo, Luisa and Simona (2015)</td>
<td>Impact of foreign MNEs investing in the UK on innovation performance of local firms.</td>
<td>Local companies that were active and with greater investment have stronger innovative performance.</td>
<td>The research did not look at the impact of FDI on other performance indicators beyond innovation.</td>
<td>The influence of FDI on the manufacturing industry's financial and non-financial performance was investigated.</td>
</tr>
<tr>
<td>Njoroge, (2016)</td>
<td>Determinants of FDI growth in Kenya</td>
<td>A significant and positive linkage involving FDI and good governance, market size, trade openness and exchange rate.</td>
<td>The contribution of FDI on local firm performance was not examined in this study.</td>
<td>The contribution of FDI on local firm performance was examined in this study.</td>
</tr>
<tr>
<td>Laura, (2017)</td>
<td>Evaluated the effects of FDI on host countries’ economies.</td>
<td>Local factors matter and can restrict FDI advantages appropriation. FDI contribute an essential part in economic expansion through suppliers.</td>
<td>Was macro-based and failed to capture the interplay between the variables at a micro-level</td>
<td>The study assessed the implications of FDI, Absorption capacity and business environment on the performance of firms.</td>
</tr>
<tr>
<td>Study</td>
<td>Focus of the Study</td>
<td>Main Findings</td>
<td>Knowledge gaps</td>
<td>Focus of current study</td>
</tr>
<tr>
<td>-----------------------------</td>
<td>--------------------------------------------------------</td>
<td>-------------------------------------------------------------------------------</td>
<td>--------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
</tr>
<tr>
<td>Asuantri And Yasmin (2017)</td>
<td>FDI, Absorptive capacity and technology innovation in developing economies</td>
<td>When examined combined, established FDI and absorptive capacity have a large impact on technical innovation, but none when viewed independently.</td>
<td>Did not capture the moderating role of business environment and other indicators of performance besides innovation.</td>
<td>The study considered the contribution of business environment in the link between FDI and financial and non-financial performance has been considered.</td>
</tr>
<tr>
<td>Alfaro and Chen (2018)</td>
<td>Selection, market reallocation and productivity in local companies</td>
<td>Significant link between selection, market reallocation and total productivity gains</td>
<td>The study did not examine other factors that influence spillover</td>
<td>Studied the impact of absorption capacity and the business environment on the FDI and firm performance interaction.</td>
</tr>
<tr>
<td>Keshab and Vipin (2020)</td>
<td>Foreign investment and economic performance of firms in India</td>
<td>In India, FDI has had a vital influence in increasing sales, earnings, wages, and jobs.</td>
<td>The impact of other variables affecting the linkage between FDI and firm performance was not investigated in this study.</td>
<td>The study looked at the contribution of absorptive capacity and business environment on the FDI and firm performance association.</td>
</tr>
<tr>
<td>Nyeadi J.D. (2022)</td>
<td>The study investigated the relationship between FDI and firm value in SSA</td>
<td>Using firm-level data from Ghana, Nigeria, and South Africa, the study discovered that FDI has a significant beneficial impact on business value.</td>
<td>The study did not look into the other elements that influence the link between FDI and firm value.</td>
<td>The current study investigated the effect of absorption capacity and business environment on the link between FDI and firm performance.</td>
</tr>
</tbody>
</table>

A breakdown of gaps manifested in the literature relating to the association between foreign direct investment and firm's performance is illustrated in Table 2.1. Primarily, previous researchers have concentrated on the singular outcome of foreign direct investment construct on performance outcomes, curtailing the opportunity for exploration of how value-producing processes emerge. Guided by foreign direct investment theories, dynamic capabilities, knowledge-based, and resource dependence perspectives the research concentrated on the foreign direct investment measured as a multiple index of capital, technology, marketing, and management.

The study considered performance of manufacturing firm’s as a multi-dimensional concept that entails a holistic approach. Borrowing from the balanced scorecard method, the researcher integrated both financial and non-financial aspects to come up with a comprehensive measure of performance. Besides, the literature reviewed has indicated that researchers have selectively concentrated on the role of foreign direct investment at the country level. The current study overcame the limitation by investigating the impact of foreign direct investment at the micro or firm’s level.

Further analysis of the literature has also indicated that academicians have not sufficiently considered the other factors that influence the link between foreign direct investment and performance of manufacturing companies. In comparison to the previous studies, the current research presented absorptive capacity and business environment as mediating and moderating variables respectively and their impact on the link between foreign direct investment and performance of manufacturing firm tested.
2.5 Conceptual Framework

This denotes a set of broad thoughts and values extracted from relevant spheres of study and adapted in configuring subsequent presentations (Kombo and Tromp, 2009). The conceptual framework selected for this research is derived from theoretical underpinnings of the foreign direct investment theories, dynamic capabilities, knowledge-based and resource dependence perspectives, and empirical base affirming that appropriation of foreign direct investment spillovers is central in realizing performance of manufacturing firm. In a bid to supplement our knowledge of foreign direct investment and associated variables, the conceptual framework was established on a diverse theoretical underpinning.

Drawing from these theories, this study operationalized foreign direct investment as a multi-dimensional concept comprising capital flow, advanced production technology, marketing expertise, and management knowhow. The study proposed that the synergetic effect of these constructs on a firm’s performance offers a greater influence on a firm's performance in comparison to the independent effect of the individual components. However, the link is influenced by a series of other variables including absorptive capability and the business environment as suggested in the literature. The framework is displayed in figure 2.1:
2.6 Hypotheses of the Study

The hypotheses were drawn from the research objectives and the conceptual framework and are stated in null form as follows:

Hypothesis 1: Foreign direct investment has no significant effect on performance of manufacturing firms in Kenya,

Sub hypothesis 1a: Capital flow has no significant effect on performance of manufacturing firms in Kenya,

Sub hypothesis 1b: Advanced production technology has no significant effect on performance of manufacturing firms in Kenya,

Sub hypothesis 1c: Marketing expertise has no significant effect on performance of manufacturing firms in Kenya,
Sub hypothesis 1d: Management knowhow has no significant effect on performance of manufacturing firms in Kenya,

Hypothesis 2: Absorptive capacity has no significant mediating effect on the relationship between foreign direct investments and the performance of manufacturing firms in Kenya,

Hypothesis 3: The business environment has no significant moderating effect on the relationship between foreign direct investments and the performance of manufacturing firms in Kenya,

Hypothesis 4: The joint contributions of foreign direct investment, absorptive capacity, and business environment to the performance of manufacturing firms in Kenyan is not significant.

2.7 Chapter Summary

This section has documented the extant literature connected to the key study variables relating to the research or the empirical studies in the area, thereby addressing the question of why of the study. It discusses the theories and the theoretical literature guiding the research. The section also deliberated the linkages among the research variables and the existing relationship among them, so as to properly expound on the research problem in chapter one, hence bringing the knowledge gap. It is seen that most research studies have linked performance with one or two variables. Little empirical work has been conducted to address the potential reinforcement or inhibitory forces of absorptive capacity and business environment conditions on the link between foreign direct investment and performance. The study is exceptional in the sense that it has attempted to use an integrated approach that would simultaneously consider four variables namely, the foreign direct investment, Absorptive capacity, business environment and the performance of manufacturing firm.
CHAPTER THREE
RESEARCH METHODOLOGY

3.1 Introduction

The purpose of this section is to lay out the road map for efficient data gathering and analysis for the study. The chapter outlines information on the research methodology's constituent components, such as philosophical foundations, design, study population, data collection techniques, pilot testing, reliability and validity tests, operationalization of variables, data analysis techniques, and regression assumption pretesting. The main components are highlighted below.

3.2 Philosophical Foundation of the Study

The basic norms about which a researcher critically analyses and interacts with the world are reflected in research philosophy (Saunders, Lewis, and Thornhill, 2007). In the social sciences, there are two extreme research viewpoints: phenomenology and positivism, with many other methods in between, such as realism and pragmatism. According to Walliman (2011), realism is founded on the philosophical principles of idealism and humanism. It adopts an unprejudiced outlook of reality that exists outside of human mind but is perceived through societal conditioning. Realism holds that the view of the world that we see around us is the creation of the mind and we can only experience it personally through our perceptions. The Pragmatism technique takes an integrative approach to knowledge, regarding it as either an objective or subjective phenomenon as long as the outcomes are satisfying in specific disciplines (Saunders et al., 2007).
Cooper and Schindler (2014) affirmed that the positivist philosophical methodology is quantifiable and involves testing a hypothesis to either confirm or not confirm the hypothesis. The method is founded on independence, impartiality, measurement, and validity of outcomes. It, therefore, consents to the abstraction of several hypothetical ideas as well as a generalization of the outcomes. The origins of positivism lie mainly with empiricism, that is, all accurate information is grounded on positive knowledge obtained through observation. Positivism embraces the notion that the path to discovering the truth about the world should be rational with grounding on observations and experiments grounded on existing theory (Pranas, Jolita and Regina, 2018). It stresses that the researcher is free of whatever is being researched, and the selection of the research areas is not biased but determined objectively. Further, the operationalization of the concept has to be done in such a way that it can be measured in the target population.

The study was philosophically and methodologically guided by positivism as opposed to the phenomenological approach. Positivism is a conservative philosophical position in management studies with a close link to quantitative research methods and logic. It is concerned with empirical verification of a hypothesis from a theory (Paivi and Anne, 2015). According to Cooper and Schindler (2014), the key tenet of the scientific method is theory before inquest, statistical validation of suppositions, and empirically testable hypothesis. Positivist research embraces survey studies and allows researchers to use quantitative analytical techniques in their analysis. In addition, it draws inferences from data to establish existing relationships; thus, this study adopted the positivist approach to study the relationships, test hypotheses, and draw inferences.
3.3 Research Design

This is the outline employed to guide the investigator in the various stages of research and specify the study variables' relationships (Kothari, 2014). Nachamias and Nachamias (1996) perceive it as the blueprint for conducting the study including the procedures to be followed and techniques to be employed to address the research question. This study adopted a correlational technique to evaluate relationships among variables in the study. The correlational design test relationship existing between two variables of interest to the researcher to establish whether there is a positive, negative, or zero correlation (Valmi, Martha, and Isabel, 2007). The investigators used the correlational statistics test to describe and measure the magnitude of interaction among the variables.

The study purpose, the nature of the inquiry, the level of researcher participation, the stage of knowledge in the region, the data collection time, and the nature of the analysis are all determined by the choice of the study design. This design was suitable as it enabled examination of the interplay between multiple variables and predict an outcome of one variable using knowledge of another variable. Because of its potential to capture significant characteristics of a population in their natural settings and improve the reliability of the results and conclusions, the design is extensively employed in studies that analyse the relationship between variables (O'Sullivan and Abela, 2007).

3.4 Study Population

The firm was the principal unit under investigation. The condition for inclusion was the standing of the firm and these were that the firm must be registered with the Kenya Association of Manufacturers and must have been established through foreign direct
investment or be a recipient of the same. The study population was made up of objects that the researcher wanted to use to extrapolate the research's conclusions (Mugenda and Mugenda, 2003). It consisted of all manufacturing firms registered with KAM in Kenya that have over 10% foreign investment. There were 100 enterprises with more than 10% foreign investment registered with KAM at the time of the study.

The firms with a 10% level of foreign investment were considered suitable for this study, as they have documented management systems and by extension are ready to be subjected to external scrutiny, which is crucial for the study. Besides, these firms are required to report their financial performance to the satisfaction of the foreign investors and have good access to capital raised from foreign investors. Moreover, there is reason to expect that these firms are likely to attract skilled employees. This is critical in the study considering that management of the organization and reliability of the financial and operational performance data is an area of interest.

Manufacturing firms are also preferred because they are diverse and categorized by sector. The Kenya Association of Manufacturers has categorized the Kenya Manufacturing firms into twelve sub-sectors according to the different types of raw materials used or products manufactured. These subsectors are; Food, Beverages and Tobacco, Energy, Elect and electronics, Leatherworks and footwear, Metal and allied, Automotive and Accessories, Construction and Allied, Paper and Board, Plastics and Rubber, Pharmaceuticals and Medical equip, Textiles and apparels, Timber, wood and furniture, and Chemicals and allied (KAM, 2014). In addition, the manufacturing sector contribute a lot of income to the
Kenya’s economy. The study used all the companies, as the population was small. Appendix iv has a list of the target population.

3.5 Data Collection Method

First-hand data was gathered with the help of a survey questionnaire attached to this study (Appendix iii) developed through an extensive survey of existing literature. The data was gathered from one member of the top administration preferably the CEO or the finance and strategy director. The target respondents were knowledgeable about the issue under investigation; as such, they were the key informants. Their choice is consistent with similar research conducted by Shabarati, Jawad, and Bontis (2010), Cabrita, and Bontis (2008) who asserted that top managers are knowledgeable about organizational characteristics.

There are five sections to the questionnaires. The first section contained general information about the interviewee as well as organizational characteristics. Sections 2, 3, 4, and 5 considered foreign direct investment, absorptive capacity, business environment and performance respectively. The researcher made telephone calls to book an appointment with the relevant respondent. A research authorization from the National Commission for Science, Research, Technology, and Innovation (NARCOSTI) as well as a letter of recommendation from the Doctoral Studies Office, Faculty of Business and Management Sciences, University of Nairobi were submitted to the firms in order to increase cooperation (Appendix 1). As per the guidelines given by Cooper and Schindler (2014), the investigator administered the survey tool with the assistance of competent research assistants to improve the response rate and value of information collected.
To gain access to respective organizations and respondents, the researcher set up appointments with target people and, on the material day, explained items in the questionnaire to respondents either over the phone or in person, and then left the questionnaire for the respondent to fill out and return for later collection. The self-administered questionnaire method is ideal where respondents require time to carefully examine their responses (Cooper and Schindler, 2014). Where the forms were not ready for collection within three weeks from the time they were issued to respondents, the researcher made follow-up efforts using telephone calls or physical visits. This improved the study response rate.

3.6 Pilot Testing

Bryman and Bell (2011) submitted that the merit of a survey is hinged on the quality of its research instruments. The pilot study was conducted with 10 companies that had similar features to the target population. The findings of this study were utilised to fine-tune the research instrument to ensure that it met the requirements for reliability and validity. Respondents who took part in the pilot testing of the research tools were excluded from doing the final survey to avoid biases caused by prior exposure to the research instrument's content. The pilot test's final purpose was to determine the questionnaire's effectiveness in obtaining the desired data and to refine the questionnaire (Mugenda and Mugenda, 2003). Because it was more convenient, the study used the interview approach to pre-test the instruments. The survey participants were requested to give a summary of their responses to the study measurements queries.
3.7 Reliability and Validity Tests

3.7.1 Reliability Test

The study had four variables namely foreign direct investment, absorption capacity, business environment, and firm's performance. Cronbach Alpha Coefficient was employed to assess the internal consistency. The Cronbach's alpha, $\alpha$ (or coefficient alpha), is a commonly used metric for assessing the reliability of a multiple-item scale with a range of 0 to 1. The study variables were tested for reliability and the outcome is presented in table 3.1. Researchers agree that for a scale to be valid, it must have real-world value and must be dependable (Peterson, 1994).

The researcher pointed out that there is no consensus on what defines a reliable instrument's as a variety of cut-off points have been put forward by experts in researcher. The lowest acceptable dependable coefficient, according to Nunnally (1978), should be between 0.6 and 0.7. A Cronbach alpha of less than 0.6 is not acceptable, according to Murphy and Davidscofer (1988), however Sekaran and Bougie (2013) state that coefficient values between 0.5 and 0.8 are acceptable. The study adopted a cut-off point of acceptability of 0.6 which is in agreement with Nunnally (1978), Murphy and Davidscofer (1998), and Sekaran and Bougie (2013), Table 3.1 presents Cronbach Alpha values.

Table 3.1: Reliability Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>Number of Items</th>
<th>Cronbach’s Alpha</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Direct Investment</td>
<td>18</td>
<td>.637</td>
<td>Reliable</td>
</tr>
<tr>
<td>Absorption Capacity</td>
<td>20</td>
<td>.835</td>
<td>Reliable</td>
</tr>
<tr>
<td>Business Environment</td>
<td>16</td>
<td>.834</td>
<td>Reliable</td>
</tr>
<tr>
<td>Manufacturing Performance</td>
<td>7</td>
<td>.649</td>
<td>Reliable</td>
</tr>
<tr>
<td>Overall</td>
<td>61</td>
<td>.810</td>
<td>Reliable</td>
</tr>
</tbody>
</table>

Source: Field Data (2017).
Table 3.1 indicates the lowest coefficient was linked to the FDI scale at 0.637 with the highest alpha being absorption capacity, which was 0.835, and overall alpha was 0.810. The measurement scale was consistent and the finding shows that the study variables were reliable as provided for by Nunnally (1978), Murphy and Davidsofer (1998), and Sekaran and Bougie (2013).

3.7.2 Tests of Validity

The extent to which a data-gathering instrument assess what it was intended to assess is referred to as validity (Cooper and Schindler, 2014; Zohrabi, 2013). Cohen, Manion, and Marrison (2018) suggest that the research specialist should ascertain the validity of the research tool. In view of this, the study tool was discussed with the three supervisors and knowledgeable researchers in the Faculty of Business and Management Sciences to assess face validity of the instrument and evaluate its exactness and adequacy. These experts thoroughly checked the representativeness of research instruments at face value.

Chant, Rajiv, and Paul, (2015) identified three genres of validity, namely; face, construct, and content validity. When an indicator looks to be a reasonable measure of its fundamental construct "on its face," it is said to have face validity. The study measurement scales were thought to have face validity because they captured key issues in foreign direct investment, absorptive capacity, business environment, and Performance of Manufacturing Firm. The content validity of a scale is determined by whether the scale items correspond to the content realm of the idea being measured. Content validity, according to Bollen (1989), as stated in Drost (2011), is a subjective type of validity in which the realm of the idea is made apparent and the expert decides whether the measures wholly symbolize the domain.
Construct validity on the other hand assesses whether a research tool exemplifies the thing we are interested in evaluating. The objective of this was to ensure each measure sufficiently evaluated the constructs it was supposed to evaluate. Construct validity was achieved by structuring the questionnaire into key sections. Each section contained a specific variable and this was also achieved through the pilot survey and consultation with experts to endorse that the theoretical dimensions emerge as conceptualized for this research.

3.8 Operationalization of Variables

The operational definition of variables is discussed in this section. The research assessed the views of respondents on key questions regarding the foreign direct investment, absorptive capacity, business environment, and performance of manufacturing firm of manufacturing firms. Specific responses were sought regarding foreign direct investment and performance. The variable of capital, technology, marketing, and management were all used to evaluate foreign direct investment. The variables are operationalized using structured questions seeking specific answers on foreign direct investment. In total 18 items developed from the literature were used to help evaluate the extent to which firms benefited from foreign direct investment.

The mediating variable absorptive capacity was measured using four dimensions namely exploitation, transformation, assimilation, and acquisition, all measured using five items each developed from literature to measure the manufacturing enterprise’s receptivity to technology change, propagating of new knowledge, and use of technology. A five-point likert scale has distinct advantages in that it is based on short, easy-to-understand questions.
and allows for quick evaluation of unique viewpoints (Bollen, Vergauwn, and Schieders, 2005). The score was calculated on a scale of 1 to 5, with 1 indicating "not at all," 2 indicating "to a small extent," 3 indicating "to a moderate extent," 4 indicating "to a large extent," and 5 indicating "to a very large extent."

The moderating variable business environment was measured using five items of financial constraint, five-item of government regulations, and six items of the physical infrastructure to evaluate the facilitative effect of business setting dynamics in the transfer of benefits of foreign direct investment to local firms. The researcher used a five-point likert scale to assess the degree to which respondents agreed with statements on the variables for absorption capacity and business environment. The score was done on a likert scale of 1-5 with one signifying "no obstacle to" and five "as an extreme obstacle".

The dependent variable of this research was the firm's performance and was assessed using two items of financial (profitability and ROE) and two items of non-financial (capacity utilization and employees productivity) indicators of performance to establish the output of the three variables foreign direct investment, absorptive capacity and business environment. The hypothesis testing behind the scale is that a company that is high on any given dimension will be high on all other dimensions. Table 3.2 illustrates details on how the variables of interest were operationalized and source of literature used.
Table 3.2: Variable Description

<table>
<thead>
<tr>
<th>Variable</th>
<th>Operational Definition.</th>
<th>Construct/ Indicators</th>
<th>Supporting Literature</th>
<th>Questionnaire Item</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Direct Investment Capital flow</td>
<td>The extent to which manufacturing firms have benefited from foreign capital through better access to finances.</td>
<td>Muhammad and Kashif, (2013), Leman and Ismet, (2015)</td>
<td>Section 2A: i-iv</td>
<td></td>
</tr>
<tr>
<td>Advanced Production Technology</td>
<td>New technology, technical support, collaborative research, access to modern machinery, and better process technology.</td>
<td>Muhammad and Kashif, (2013), Leman and Ismet, (2015)</td>
<td>Section 2B:v-ix</td>
<td></td>
</tr>
<tr>
<td>Assimilation</td>
<td>Capacity to incorporate external knowledge into normal working conditions in a way that helps to improve the competitive advantage of a firm.</td>
<td>Cohen and Levinthal (1990), Zahra and George (2002), Lenart (2014)</td>
<td>Section 3B:19-23.</td>
<td></td>
</tr>
<tr>
<td>Variable</td>
<td>Operational Definition.</td>
<td>Construct/ Indicators</td>
<td>Supporting Literature</td>
<td>Questionnaire Item</td>
</tr>
<tr>
<td>------------------</td>
<td>-------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>----------------------------------------------------------------------------------------</td>
<td>-------------------</td>
</tr>
<tr>
<td>Physical Infrastructure</td>
<td>Insufficient labor, technical skills, raw materials, and small domestic markets</td>
<td>Dethier, Hirn and Straub (2010), Sprenger and Lazareva, 2016), Hodud et.al (2014)</td>
<td>Section 4C:44-49.</td>
<td></td>
</tr>
</tbody>
</table>

Source: Author (2017).

3.9 Data Analysis Techniques

The data was cleaned after it was collected to remove any inaccuracies, irrationalities, or gaps. The data was subsequently processed, coded, and summarized using the Statistical Package for Social Sciences (SPSS, Version 20). This helped to correct flaws that had gone undiscovered, as well as improve the quality of the data utilized in the investigation.

The use of descriptive and inferential statistics was invoked. Descriptive statistics are used to illustrate broad data and specific characteristics of a company (Kothari, 2014). The amount to which one variable (predictor variable) was linearly related to the other variable (predicted variable), as well as the direction and strength of the relationship, was determined using correlation analysis. Correlation analysis, according to Tabachnick and Fidell (2013), analyses the amount and direction of the relationship between two constructs.

A series of regression models were also fitted to the data in order to assess the association between the independent and dependent variables, as well as mediating and moderating
effects, and hypothesis testing to determine whether the outcomes were significant or not. Positivistic methodology guided the data analysis of this study. According to Cooper and Schindler (2014), positivism advocates for utilizing quantitative tools to evaluate hypotheses with the goal of rejecting or accepting the null hypothesis. The analytical processes are summarized in Table 3.3.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypothesis</th>
<th>Hypothesis Test</th>
<th>Analytical model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 1: Establish the effect of FDI on performance of manufacturing firms.</td>
<td>H1: FDI has no significant effect on performance of manufacturing firms.</td>
<td>Simple regression analysis: $FP = \beta_0 + \beta_1 FDI + \epsilon$ …Where $FP$ = Performance of manufacturing firm $\beta_0 =$ Constant (intercept), $\beta_1 =$ Regression coefficient for FDI $FDI =$ Foreign direct investment composite index $\epsilon =$ Error term.</td>
<td>Coefficient of determination (adjusted $R^2$) the value will show the percentage of performance of manufacturing Firm explained by FDI. The regression coefficient will show the amount of change and direction of the influence.</td>
</tr>
<tr>
<td>Objective 1a: Establish the effect of capital flow on performance of manufacturing firms.</td>
<td>H1a: Capital flow has no significant effect on performance of manufacturing firms.</td>
<td>Simple regression analysis: $FP = \beta_0 + \beta_1 CF + \epsilon$ …where $FP$ = Performance of manufacturing firm $CF =$ Capital flow, $\beta_0 =$ Constant (intercept), $\beta_1 =$ Regression coefficient for capital flow, $\epsilon =$ Error term.</td>
<td>Coefficient of determination (adjusted $R^2$) the value will show the percentage of performance of manufacturing firm explained by capital flow. The regression coefficient will show the change in performance of manufacturing firm due to a unit change in Capital flow.</td>
</tr>
<tr>
<td>Objective 1b: Establish the effect of advanced production technology on performance of manufacturing firms.</td>
<td>H1b: Advanced production technology has no significant effect on performance of manufacturing firms.</td>
<td>Simple regression analysis: $FP = \beta_0 + \beta_1 APT + \epsilon$ …where $FP$ = Performance of manufacturing firm $APT =$ Advanced production technology $\beta_0 =$ Constant (intercept), $\beta_1 =$ Regression coeff. for advanced prod. techn. $\epsilon =$ Error term.</td>
<td>Coefficient of determination (adjusted $R^2$) the value will show the percentage of performance of manufacturing firm explained by advanced production technology. The regression coefficient will show the change in performance of manufacturing firm due to a unit change in advanced production technology.</td>
</tr>
<tr>
<td>Objective 1c: Establish the effect of marketing expertise on performance of manufacturing firms.</td>
<td>H1c: Marketing expertise has no significant effect on performance of manufacturing firms.</td>
<td>Simple regression analysis: $FP = \beta_0 + \beta_1 ME + \epsilon$ …where $FP$ = Performance of manufacturing firm $ME =$ Marketing expertise, $\beta_0 =$ Constant (intercept), $\beta_1 =$ Regression coefficient for marketing expertise, $\epsilon =$ Error term.</td>
<td>Coefficient of determination (adjusted $R^2$) the value will show the percentage of firm performance of explained by the marketing expertise The regression coefficient will show the change in performance of manufacturing firm due to a unit change in marketing expertise.</td>
</tr>
<tr>
<td>Objective 1d: Establish the effect of management knowhow on performance of manufacturing firms.</td>
<td>H1d: Management knowhow has no significant effect on performance of manufacturing firms.</td>
<td>Simple regression analyses: $FP = \beta_0 + \beta_1 MK + \epsilon$ …where $FP$ = Performance of manufacturing firm $MK =$ Management knowhow, $\beta_0 =$ Constant (intercept), $\beta_1 =$ Regression coefficient for management knowhow, $\epsilon =$ Error term.</td>
<td>Coefficient of determination (adjusted $R^2$) the value will show the percentage of firm performance explained by management knowhow The regression coefficient will show the change in performance of manufacturing firm due to a unit change in management knowhow.</td>
</tr>
</tbody>
</table>

Coefficient of determination (adjusted $R^2$) the value will show the percentage of performance of manufacturing Firm explained by FDI. The regression coefficient will show the amount of change and direction of the influence.
<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypothesis</th>
<th>Hypothesis Test</th>
<th>Analytical model</th>
</tr>
</thead>
<tbody>
<tr>
<td>Objective 2: Determine the mediating role of absorptive capacity on the relationship between FDI and performance of manufacturing Firm.</td>
<td>H2: Absorptive capacity has no significant mediating effect on the relationship between FDI and Performance of manufacturing Firm.</td>
<td>Mediation Methodology: (Baron &amp; Kenny, 1986). Hierarchical regression analysis Step 1: ( FP = \beta_0 + \beta_1 FDI + \varepsilon ) Step 2: ( FP = \beta_0 + \beta_1 FDI + \beta_2 AC + \varepsilon ) Where, ( \beta_0 = \text{Constant}, \beta_1, \beta_2 = \text{Regression coefficient} ) ( FDI = \text{Performance of manufacturing firm} ) ( AC = \text{composite index of absorptive capacity} ) ( \varepsilon = \text{Error term.} )</td>
<td>The value of adjusted ( R^2 ) will show variation in firm’s performance explained by FDI. F ratio will show the overall robustness and significance of the model Reject ( H_0 ) if ( p &gt; 0.05 ) Some form of mediation is supported if FDI is no longer significant when AC is controlled.</td>
</tr>
<tr>
<td>Objective 3: Determine the moderating role of business environment on the relationship between FDI and performance of manufacturing firms.</td>
<td>H3: Business environment has no significant moderating effect on the relationship between FDI and Performance of manufacturing firms.</td>
<td>Regression analysis (process analysis method) as suggested by Baron &amp; Kenny (1986). Step 1: ( FP = \beta_0 + \beta_1 FDI + \varepsilon ) Step 2: ( FP = \beta_0 + \beta_1 FDI + \beta_2 BE + \varepsilon ) Where ( \beta_0 = \text{Constant}, \beta_1, \beta_2, \varepsilon = \text{Regression coefficient} ) ( FP = \text{Firm’s performance} ) ( FDI = \text{Foreign direct investment composite index} ) ( BE = \text{composite index of business environment} ) ( \varepsilon = \text{interaction term} )</td>
<td>( R^2 ) determines variation in the dependent variable that is accounted for by independent variables. A significant change in adjusted ( R^2 ) on the interaction of moderating variable confirms moderating effect. F-test evaluates the general significance of a model. Beta (( \beta )) expresses the contribution of individual independent variables to the model's significance. P-value, which in this case will be 0.05, evaluates whether steps one to 3 are statistically significant.</td>
</tr>
<tr>
<td>Objective 4: Establish the joint effect of FDI, absorptive capacity and business environment on performance of manufacturing firms.</td>
<td>H4: The joint contribution of FDI, absorptive capacity and business the environment on the performance of manufacturing firms is not significant.</td>
<td>Multiple regression analysis ( FP = \beta_0 + \beta_1 FDI + \beta_2 AC + \beta_3 BE + \varepsilon ), Where ( \beta_0 = \text{Constant}, \beta_1, \beta_2, \beta_3 = \text{Regression coefficient} ) ( FP = \text{Performance of manufacturing firm} ) ( FDI = \text{Foreign direct investment composite index} ) ( AC = \text{composite index of absorptive capacity} ) ( \varepsilon = \text{Error term.} )</td>
<td>( R^2 ) evaluates the variation in dependent variable that can be accounted for by independent variables. F-test evaluates the general significance of a model. Beta(( \beta )) determines the statistical significance of individual variables P-Value &lt; 0.05 to check on statistical significance.</td>
</tr>
</tbody>
</table>

H1 entailed examining the association between foreign direct investment and a performance of manufacturing firms. Capital, technology, marketing, and management were all considered when calculating foreign direct investment. The combined index of performance of manufacturing firm was also computed. Simple regression analysis was invoked in evaluating this proposal.

H1a entailed confirming the linkage between capital flow and performance of manufacturing firm. A composite index of capital flow and performance of manufacturing firm was computed. Simple regression analysis was adopted in testing this proposition.

H1b focused on finding the interplay between advanced production technology and performance of manufacturing firm. Advanced production technology and performance of manufacturing firm were computed as a composite index. To test the hypothesis, a simple regression analysis was used.

H1c set to establish if there was a link between marketing skill and performance of manufacturing firms. A composite index was created using marketing expertise and performance of manufacturing firms. Simple regression analysis was applied to evaluate the hypothesis.

H1d entailed establishing the linkage between management knowhow and performance of manufacturing firm through the adoption of simple regression analysis. Management knowhow and performance of manufacturing firms were computed as a composite index.
H2 sought to examine whether or not the intervening forces of absorptive capacity were operative in the link between FDI and performance of manufacturing firms. Interrogation of this hypothesis was made possible with the aid of hierarchical regression. This analysis was embedded in the Baron and Kenny (1986) approach. This approach encompasses several steps. In step one, the link between FDI and performance of manufacturing firm was established. Step two entailed regressing FDI on absorptive capacity. Finally, the third step entailed regressing absorptive capacity on performance of manufacturing firm. Manifestation of intervening forces of absorptive capacity was verified if each step produced significant results.

H3 set out to examine whether or not the moderating implications of the business environment were operative in the link between FDI and performance of manufacturing firm. Interrogation of this hypothesis was effectuated through hierarchical regression. This analysis was also embedded in the Baron and Kenny (1986) approach. This approach encompasses several steps. In step one, the link between foreign direct investment and performance of manufacturing firm was established. Step two entailed regressing FDI and business environment. Finally, the third step entailed FDI, business environment, and their interaction on performance of manufacturing firm. Manifestation of intervening forces of absorptive capacity was verified if the third step generated significant results.

H4 assessed the joint implications of foreign direct investment, absorptive capacity, and business environment on performance of manufacturing firm. In order to test this hypothesis, researchers used multiple linear regression approach to help to deduce the contributory influence of the three predictor variables.
3.10 Pretesting for Regression Assumption

To safeguard against possible violations of the classical linear regression model assumption, the researcher tested the five assumptions before undertaking linear regression. Brooks, (2008) posited that we run the risk of inefficiency, bias, and inconsistent parameter if the regression preconditions are infringed upon. The data was tested for normality, multicollinearity and homoscedasticity before regression analysis was done (Cooper and Schindler, 2014).

To assess if the data acquired was properly modelled by a normal distribution, histograms and the Kolmogorov-Smirnov test was used to test the normality of the data. Data were assumed to be normal if histograms appeared symmetrical meaning that the majority of the scores fell within the middle region whereas fewer scores were on both extremes. Andrey Kolmogorov and Nikolai Smirnov created the Kolmogorov-Smirnov normalcy test in 1933 (Arnold & Emerson, 2011). According to Sekaran and Bougie (2013), the test has the ability to detect data variation from normalcy due to skewness, kurtosis, or both, and is best suited for samples larger than 50. As a general rule, if the values range from -1 to +1, or if the total of all positive and negative departures from the mean, mode, and median equals zero, the variable is assumed to be reasonably normal.

Multicollinearity occurs when the predictors are significantly linked, making it difficult to determine the real contribution of any individual predictor on the variance in the predicted variable. The Variance Inflation Factor (VIF) and tolerance statistics were used to evaluate multicollinearity. These statistics assisted in determining whether or not independent variables have a strong linear association with other variables. A VIF of 10 and above,
posed concerns to the researcher (Hair, Anderson, Tatham, and Black, 2008). For us to conclude there is no multicollinearity, the VIF value must lie between 1 and 10. However, where the values lie below 1 or above 10, then we can conclusively say there is multicollinearity. Dormann, Elith, Bacher, Buchmann, Carl, and Carre, (2013) noted that for a good test, the variables should not have multicollinearity.

According to Jin-Guan and Bo-Cheng (2003), heteroscedasticity is the situation in which the divergence of the explanatory variables is largely dissimilar across a range of predicted values (Cooper and Schindler, 2014). Both the graphical method and Levene's test of homogeneity of variance were done. Homogeneity is the assumption that dependent variables have the same variance across all independent variable values (Hair et. al., 2008). Levene test of homogeneity of variance was employed to test for homoscedasticity and heteroscedasticity. If the variability is demonstrated to be constant, then that is an indication of heteroscedastic data.

3.11 Chapter Summary

The section has discussed the philosophical orientation taken by the study, which is a positivistic approach. Further, the researcher has outlined the appropriate research design for the study. Finally, the chapter has outlined the population of the study, the data collection methods, pilot testing, validity and reliability tests, operationalization and measurements of constructs, data analysis, analytical models, and pretesting for regression assumption.
CHAPTER FOUR
DATA ANALYSIS, RESULTS AND DISCUSSIONS

4.1 Introduction

This section is split into four parts. The first section is devoted to a presentation of preliminary results where the emphasis is placed on the study's response rate and preparation and screening of data. In the second section, the focus is diagnostic tests to test the adequacy and appropriateness of data. The third section focus is on descriptive analysis of the data aimed at identifying basic and broad patterns. The fourth section considers a more rigorous treatment of the data where statistical analyses is used to explore the link between the variables of interest. In the fifth section, a brief discussion highlighting points of similarities and variations between this study's findings and the extant empirical evidence is presented.

4.2 Preliminary Results

The section will cover the preparation and screening of data and diagnostic tests. This will help confirms the appropriateness of the data for further analysis.

4.2.1 Response Rate

A comparison of obtained responses and the initially targeted responses was done to assess whether the pool of returned questionnaires offered an adequate basis for data analysis as illustrated in Table 4.1. A total of one hundred (100) questionnaires were given out and only 75 were collected back, thus giving a response rate of 75%. This pool of usable questionnaires was considered adequate for this study as it was in line with Graham's
recommended criterion of above 50%. The response rate is also consistent with Mugenda and Mugenda (2003), who stated that for surveys, a 50 percent response rate is satisfactory, 60 percent is good, and more than 70 percent is excellent. The study response rate of 75% was rated excellent and was credited to the effective data collection processes used, which included notifying possible participants in advance of the proposed survey.

<table>
<thead>
<tr>
<th>Response rate</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Response</td>
<td>75</td>
<td>75%</td>
</tr>
<tr>
<td>Non-Response</td>
<td>25</td>
<td>25%</td>
</tr>
<tr>
<td>Total</td>
<td>100</td>
<td>100%</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

4.2 Preparation and Screening of Data

Examining or categorizing the data, validating it for accuracy, entering it into a computer, changing it, and creating and documenting a database structure that integrates the many metrics are all part of data preparation (Odom, Leslier and Robin, 2002). The details are discussed in the ensuing section.

4.2.2.1 Data Entry Errors

The problem of data entry error occurs when information is input the wrong way. It is common when transcribing words rather than numerical data. Errors in data entry and analysis represent another probable source of error in research (Barchard, Freeman, Ochoa and Stephens 2020). Every data must be checked for typing errors before any statistical analysis is conducted (Kozak, Krzanowskic, Cichockab and Hartleyd, 2015). Data entry errors can fundamentally change the outcomes of the analyzed statistical results. The
investigator double-checked the entered data and certified that the main sources of inexactness were recognized and corrected. Table 4.2 illustrates the results.

**Table 4.2: Data Entry Errors**

<table>
<thead>
<tr>
<th>Statistics</th>
<th>FDICF</th>
<th>FDIAPT</th>
<th>FDIME</th>
<th>FDIMKH</th>
<th>AC</th>
<th>BE</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>N</td>
<td>Valid</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minimum</td>
<td>4.00</td>
<td>5.00</td>
<td>5.00</td>
<td>5.00</td>
<td>46.00</td>
<td>24.00</td>
<td>12.00</td>
</tr>
<tr>
<td>Maximum</td>
<td>12.00</td>
<td>15.00</td>
<td>12.00</td>
<td>15.00</td>
<td>94.00</td>
<td>72.00</td>
<td>29.00</td>
</tr>
<tr>
<td>Percentiles</td>
<td>25</td>
<td>10.0000</td>
<td>11.0000</td>
<td>8.0000</td>
<td>11.0000</td>
<td>69.0000</td>
<td>37.0000</td>
</tr>
<tr>
<td></td>
<td>50</td>
<td>11.0000</td>
<td>11.0000</td>
<td>10.0000</td>
<td>13.0000</td>
<td>77.0000</td>
<td>43.0000</td>
</tr>
<tr>
<td></td>
<td>75</td>
<td>12.0000</td>
<td>13.0000</td>
<td>12.0000</td>
<td>15.0000</td>
<td>84.0000</td>
<td>53.0000</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

From frequency table 4.2 above, it is evident that the data set has no data entry errors. Capital flow has no missing data, which implies that all the data collected was fit for analysis i.e. valid 75 and missing 0. For advanced production technology, the valid responses were 75 respondents while no data from respondents was missing. Marketing expertise had 75 valid responses with no missing responses from the respondents. Management knowhow had 75 valid responses while no respondents had missing data. On absorptive capacity, 75 respondents had valid responses while no respondent was missing. The business environment had 75 valid responses with no missing values. Further analysis revealed that manufacturing firm performance also had 75 valid responses and no missing values.

**4.2.2.2 Outliers**

Outliers are data points that appear to be discordant with the rest of the data set (Ben-Gal, 2005). The presence of outliers may affect statistical inference and the conclusions drawn about the original population. According to Shiffler (1988), absolute z values greater than
3 are considered to have outliers. From the output, the z values of each variable are less than 3, which shows that there are no outliers in the variables and all the data is within range. Table 4.3 shows this information. For each of the different construct, the table shows the highest and least Z score values.

Table 4.3: Outliers

<table>
<thead>
<tr>
<th>Construct</th>
<th>N</th>
<th>Minimum</th>
<th>Maximum</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zscore(FDICF)</td>
<td>75</td>
<td>-4.00465</td>
<td>.77227</td>
</tr>
<tr>
<td>Zscore(FDIAPT)</td>
<td>75</td>
<td>-3.33000</td>
<td>1.73592</td>
</tr>
<tr>
<td>Zscore(FDIME)</td>
<td>75</td>
<td>-2.49402</td>
<td>1.21522</td>
</tr>
<tr>
<td>Zscore(FDIMKH)</td>
<td>75</td>
<td>-2.88521</td>
<td>1.05633</td>
</tr>
<tr>
<td>Zscore(AC)</td>
<td>75</td>
<td>-2.97525</td>
<td>1.76199</td>
</tr>
<tr>
<td>Zscore(BE)</td>
<td>75</td>
<td>-1.84652</td>
<td>2.49823</td>
</tr>
<tr>
<td>Zscore(FP)</td>
<td>75</td>
<td>-2.70416</td>
<td>1.63816</td>
</tr>
<tr>
<td>Valid N (listwise)</td>
<td>75</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

4.2.2.3 Range Values

The Range value indicates the basic details about the spread of a set of data. The range depends on only two of the observations lowest and highest and is most useful in representing the dispersion of small data sets. The difference between the lowest and highest values in a dataset is the most visible indicator of dispersion. It gives a rough idea of how widely spread out the most extreme observations are by giving the variance between the lowest and highest scores of a set of data (Fernando and Quintao, 2015). The range value are presented in Table 4.4.

Table 4.4: Range Values

<table>
<thead>
<tr>
<th></th>
<th>FDICFav</th>
<th>FDIAPTav</th>
<th>FDIMEav</th>
<th>FDIMKHav</th>
<th>ACav</th>
<th>Beav</th>
<th>FPav</th>
</tr>
</thead>
<tbody>
<tr>
<td>N Valid</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>Missing</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>Minimum</td>
<td>1.00</td>
<td>1.00</td>
<td>1.25</td>
<td>1.00</td>
<td>2.30</td>
<td>1.50</td>
<td>1.50</td>
</tr>
<tr>
<td>Maximum</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>3.00</td>
<td>4.70</td>
<td>4.50</td>
<td>3.63</td>
</tr>
</tbody>
</table>

Source: Field Data 2019.
The descriptive output in Table 4.4 indicates the average spread of values for each of the variables. The spread for the independent variables ranged between 1 and 3 on the likert scale used. The intervening, moderating, and dependent variable's likert scale was set to a five-point scale, implying that the range of values should be between 1 and 5.

As evident in Table 4.4, the capital flow values ranged from 1 to 3. The marketing expertise scores ranged from 1.25 to 3; management knowhow values from 1 to 3; absorptive capacity from 2.3 to 4.7; business environment values from 1.5 to 4.5 and performance of manufacturing firm scores from 1.5 to 3.63. The variable with the highest spread is business environment, followed by absorptive capacity, followed by performance of manufacturing firm.

4.2.2.1 Missing Data

This is a common problem in research and is a root cause of statistical problems. It is a type of measurement mistake that can both skew the sample and reduce sample size, according to Little and Rubin (1987). Appropriate management of omitted data should be undertaken in all arithmetical studies, and the procedures to be employed is contingent on the omitted mechanism. Table 4.5 elucidates this point.

**Table 4.5: Missing Data**

<table>
<thead>
<tr>
<th></th>
<th>Valid</th>
<th></th>
<th></th>
<th>Missing</th>
<th></th>
<th></th>
<th>Total</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
<td>N</td>
<td>%</td>
</tr>
<tr>
<td>FDICF</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDIAPT</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDIME</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDIMKH</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AC</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>BE</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FP</td>
<td>75</td>
<td>100.0%</td>
<td>0</td>
<td>0.0%</td>
<td>75</td>
<td>100.0%</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
Of the 100 questionnaires issued, 75 were filled and returned. These questionnaires were subjected to preliminary tests of missing values. From the Table 4.5, all the 75 questionnaires were valid with no questionnaire having missing values. The 75 questionnaires were cleared to be subjected to further statistics analysis.

4.2.3 Diagnostic Tests

In order to proceed with regression analysis, the underlying regression model must be checked for adequacy. The model must meet a series of conditions, which include normality, multicollinearity, and heteroscedasticity. Violation of these assumptions puts the researcher at the risk of producing misleading estimates (Brooks, 2008). The results of these tests are presented in the proceeding section.

4.2.3.1 Normality Tests

A normality test is used to assess whether data matches a normal distribution. Variables that exhibit significant deviations from normality are likely to alter relationships. McCabe, Moore and Craig (2014) submitted that the test for normalcy is critical in determining whether or not the data was appropriately described by a normal distribution. Normality of data was established using histograms and the Kolmogorov-Smirnov normality test. Normal distribution was an important precondition for carrying out regression analysis. Miot (2017) observed that good and decent data for study is that which is normally dispersed.
The output Table 4.6 was used to check how normal the distributions of scores are. A non-significant result of \(p \geq 0.05\) (at a 5% significance level) implies a normal distribution. In this case, the sig. value is .000 for each of the FDI variables. The variable of the business environment and firm’s performance had a significant value of 0.024 and 0.001 correspondingly. This implies that FDI constructs, business environment and Performance of manufacturing firm had not violated the normality requirement. Absorptive capacity, on the other hand, had a value of 0.200, which was significant at the 5% level. This imply that the premise of normalcy was violated by absorptive capacity, which is typical in large samples (Pallant, 2005). The outcomes are displayed in Table 4.6.

### Table 4.6: Normality Test Statistics

<table>
<thead>
<tr>
<th>Variable</th>
<th>“Kolmogorov-Smirnov” Statistic</th>
<th>df</th>
<th>Sig.</th>
<th>Shapiro-Wilk Statistic</th>
<th>df</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDI CF</td>
<td>.273</td>
<td>75</td>
<td>.000</td>
<td>.771</td>
<td>75</td>
<td>.000</td>
</tr>
<tr>
<td>FDI APT</td>
<td>.186</td>
<td>75</td>
<td>.000</td>
<td>.938</td>
<td>75</td>
<td>.001</td>
</tr>
<tr>
<td>FDI ME</td>
<td>.175</td>
<td>75</td>
<td>.000</td>
<td>.890</td>
<td>75</td>
<td>.000</td>
</tr>
<tr>
<td>FDI MKH</td>
<td>.192</td>
<td>75</td>
<td>.000</td>
<td>.876</td>
<td>75</td>
<td>.000</td>
</tr>
<tr>
<td>AC</td>
<td>.064</td>
<td>75</td>
<td>.200</td>
<td>.972</td>
<td>75</td>
<td>.093</td>
</tr>
<tr>
<td>BE</td>
<td>.110</td>
<td>75</td>
<td>.024</td>
<td>.967</td>
<td>75</td>
<td>.049</td>
</tr>
<tr>
<td>FP</td>
<td>.142</td>
<td>75</td>
<td>.001</td>
<td>.953</td>
<td>75</td>
<td>.007</td>
</tr>
</tbody>
</table>

*: This is a lower bound of the true significance.  
*a. Lilliefors Significance Correction*

Source: Field Data (2019).

The data was investigated further for normality using histogram graphs. The findings of the distribution of the scores were presented graphically as shown in histograms presented in figures 4.1 to 4.4. The results are presented in the proceeding section.
4.2.3.1.1 Histogram Graphs for Normality of Responses

i) Foreign Direct Investment

Figure 4.1 displays a symmetrical histogram, an indication that foreign direct investment was normally distributed. Specifically, the variable followed a normal distribution with a mean of 2.46 and a standard deviation of 0.311. As such, it was concluded that the foreign direct investment variable met the normality condition.

![Figure 4.1: Histogram of Foreign Direct Investment](image)

Source: Field Data 2019.

ii) Absorptive Capacity

Figure 4.2 is an asymmetrical histogram indicating that the mediating variable, absorptive capacity, was normally distributed. Absorptive capacity as a mediating variable provided responses whose distribution was normal, or bell-shaped, with a mean equal to 0.81 ($SD=0.507$). It was thus concluded that the absorptive capacity variable fulfilled the normality pre-condition.
iii). Business Environment

The business environment variable was investigated for normality using a histogram and the outcomes are presented in figure 4.3;

Source: Field Data 2019.

Figure 4.2: Histogram of Absorptive Capacity

Source: Field Data 2019.

Figure 4.3: Histogram of Business Environment

Source: Field Data 2019.
From figure 4.3 above, the business environment as a moderating variable provided responses that upon exploring for normality showed that the distribution of responses for the variable was normally distributed and the histogram was bell-shaped with a mean equal to 2.78 \((SD=0.69)\). Therefore, it was concluded that the normality precondition of the parametric evaluation was not violated, and as such, the data can be subjected to regression analysis.

iv) Performance of Manufacturing Firm

The performance of manufacturing firm variable was investigated for normality using a histogram and the outcomes of the analysis are presented in figure 4.4 below:

Figure 4.4: Histogram of Performance of Manufacturing Firm

Source: Field Data 2019.

Figure 4.4 is an asymmetrical histogram indicating that the independent variable performance of manufacturing firm was normally distributed. Performance of
manufacturing firms as a dependent variable provided responses that upon exploring for normality showed that they were normally distributed and the histogram was bell-shaped about a mean equal to 2.77 ($SD=0.52$). As such, there is evidence to conclude that the data for firm performance did not deviate from normality and can be subjected to regression.

### 4.2.3.2 Multicollinearity Test

Multicollinearity occurs when multiple explanatory variables exhibit a high degree of correlations (Mugenda & Mugenda, 2003; Zhang & Ibrahim 2005; Zientek, Kim & Amanda, 2016). To check for this precondition, the variance inflation factor (VIF) test was invoked. Based on this test, a VIF exceeding 10 is indicative of multicollinearity (Hair et al., 2008). The outcomes of this test is displayed in Table 4.7.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Collinearity Statistics</th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Tolerance</td>
<td>VIF</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>.984</td>
<td>1.016</td>
</tr>
<tr>
<td>Absorption Capacity</td>
<td>.988</td>
<td>1.012</td>
</tr>
<tr>
<td>Business Environment</td>
<td>.986</td>
<td>1.014</td>
</tr>
</tbody>
</table>

Table 4.7: Collinearity Statistics

Source: Field Data (2019).

Table 4.7 indicates that for the three variables of interest, the VIF ranged from 1.012 to 1.016. The values being more than 1 and less than 10 indicate that there was an absence of multicollinearity. Additionally, the tolerance values for all the variables ranged from 0.984 to 0.988 further confirming the non-violation of the precondition. This demonstrates that regression analysis can be performed on the data.
4.2.3.3 Homogeneity Tests

A homoscedacity test is done to examine whether the different values of responses have the same variances regardless of the values of the predictor variable. The supposition of homoscedasticity states that the standard deviation and variance of errors about the regression line are constant for all explanatory variables (Tabachnick and Fidell, 2013), and that the residuals have rectangular distribution around the anticipated dependent variable, with a concentration near the center (Pallant, 2005). The Levene test was used to assess this precondition. The test examines whether or not the null hypothesis that there is no equality in the variances of two populations, is true (Hair et al., 2008). For this study, this test was grounded on a 5% significance level. The outcomes are listed in Table 4.8.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Levene Statistic</th>
<th>df1</th>
<th>df2</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Foreign Direct Investment</td>
<td>2.733</td>
<td>12</td>
<td>58</td>
<td>.005</td>
</tr>
<tr>
<td>Absorption Capacity</td>
<td>2.510</td>
<td>12</td>
<td>58</td>
<td>.037</td>
</tr>
<tr>
<td>Business Environment</td>
<td>2.487</td>
<td>12</td>
<td>58</td>
<td>.011</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

Levene's test for the three variables of foreign direct investment, absorptive ability, and business environment was significant, according to Table 4.8. The coefficients for foreign direct investment, absorption capacity, and business environment had significance of 0.005, 0.037, and 0.011, respectively. The levene test statistics for the three constructs were significant as they were less than 0.05 and therefore we fail to reject the three null hypotheses. This imply that the variances for foreign direct investment, absorptive capacity, and business environment were not significantly different, meaning that the homogeneity of variance supposition was not broken. This makes the data suitable for regression analysis.
4.3 Descriptive Findings

The goal of this part is to identify the profile of the participating manufacturing enterprises that have affiliation with the Kenya Association of Manufacturers. These included the position held, job tenure, the year the firm was established, the sector of economic activity the firm engaged in, the ownership structure of the firm, foreign investor(s) country of origin, means of entry into the nation, and when foreign direct investment was received. These characteristics are important as they help us to appreciate the nature and size of the firm and the applicability of the construct of interest to this research.

The computation of frequencies, percentages, averages, standard deviations, and coefficients of variation are example of relevant descriptive statistics. Descriptive statistics condense and deduce some of the characteristics of a set of data (sample) but do not deduce the attributes of the population from which the sample is extracted (Kaisen, 1974). They are used to describe the elementary attributes of a data set in a manner that offers a summative snapshot of the sample. Furthermore, they present quantifiable descriptions in a manageable form by sensibly simplifying large amounts of data. The standard deviation is a more precise and comprehensive approximation of dispersion since it aids in gauging how widely dispersed data scores are from the mean of the data set (Tronchin and Tarabusi, 2006). The coefficient of variation (COV) is another measure of dispersion. It is superior to standard deviation as it is unitless (it is a ratio) and is more precise and dependable than the standard deviation. The descriptive findings statistics are presented in the following sections.
4.3.1 General Information

4.3.1.1 Length of Service

The aim of the researcher was to establish how long the participants had been in their current jobs. This was significant since it indicated the participants' level of definite understanding. The number of years spent working for a company correlates with competency and, as a result, performance (Sanjeev and Santhi, 2018). The outcomes are summarised in Table 4.9.

<table>
<thead>
<tr>
<th>Period</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Less than 5 years</td>
<td>26</td>
<td>34.7</td>
</tr>
<tr>
<td>5 year to 10 years</td>
<td>23</td>
<td>30.7</td>
</tr>
<tr>
<td>Over 10 years</td>
<td>26</td>
<td>34.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

More than half of the participants (65.4%) had worked in their present stations for a period of more than 5 years. The duration an individual has worked in a particular company is a quality indicator of how much that person knows and understands the company. The longer the person's tenure, the more knowledge they have about the company. Therefore, these results demonstrate that most of the participants had served for a lengthy period as to able to provide credible data about the operations and developments of their firms.

4.3.1.2 Level of Foreign Ownership

A crucial point of departure for this study was that not all manufacturing firms have 100% domestic ownership. For some of the firms, it is joint ownership between foreigners and the locals. To this end, the researcher endeavoured to find out how much of these firms were in a joint ownership arrangement and the amount of stock that was owned by the
foreigners. Codjoe (2012) noted that restrictions imposed on foreign involvement allowable in any joint venture reduce technology and skills transfer. The results illustrating the level of foreign ownership in the firms are conveyed in Table 4.10.

Table 4.10: Level of Foreign Ownership

<table>
<thead>
<tr>
<th>Level of ownership</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>20% - 50%</td>
<td>61</td>
<td>81.3</td>
</tr>
<tr>
<td>Over 50%</td>
<td>14</td>
<td>18.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The outcomes illustrate that 81.3 % of the firms had a level of foreign ownership of between 20 % and 50 %. In addition, 18.7 % of the firms had a level of foreign ownership of more than 50 %. This implied that all the respondent firms studied had some sizeable amount of foreign direct investment. According to Bruno and Cipollina (2014), the proximity of foreign enterprises to domestic firms can result in more knowledge and marketing experience being transferred to domestic firms.

4.3.1.3 Sector of Economic Activity

In essence, manufacturing companies produce products that serve the needs of specific industries or economic sectors. To obtain a holistic and descriptive picture of the surveyed firms it was thus important to classify the firms on a sectoral basis as shown in Table 4.11.
Table 4.11: Sector of Economic Activity

<table>
<thead>
<tr>
<th>Sector</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Food, Beverages, and Tobacco</td>
<td>13</td>
<td>17.3</td>
</tr>
<tr>
<td>Leatherworks &amp; Footwear</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td>Automotive &amp; Accessories</td>
<td>9</td>
<td>12.0</td>
</tr>
<tr>
<td>Paper and Board</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Pharmaceuticals &amp; Medical Equipment</td>
<td>12</td>
<td>16.0</td>
</tr>
<tr>
<td>Timber, Wood &amp; Furniture</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td>Energy, Elect &amp; Electronics</td>
<td>10</td>
<td>13.3</td>
</tr>
<tr>
<td>Metal and Allied</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td>Construction &amp; Allied</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>Plastics &amp; Rubber</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td>Textiles &amp; Apparels</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td>Chemicals And Allied</td>
<td>3</td>
<td>4.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The results show that the firms studied were evenly distributed in all the key subsectors of manufacturing. This implies that the study involved the diverse subsectors of the Kenya manufacturing firms, covering a range of economic activities. This affirms that the sample we took exhibits comparable characteristics to other surveys of other manufacturing firms.

4.3.1.4 Source of Foreign Direct Investment

On the source of the foreign direct investment, the study established that the source countries are diverse with European Union contributing 30.7%, the Asia region contributing 29.3%, and Africa at 22.7%. North America and the Middle East contributed 12% and 5.3% of the foreign direct investment inflows respectively into the Kenya manufacturing industry. Traditionally, most foreign direct investment comes from European nations such as the Britain, German, and France because of colonial ties. However, this is changing with a substantial amount of foreign direct investment coming
from Asia and Africa. Our findings are consistent with the World Bank (2010) which established the prominence of non-traditional sources of foreign direct investment inflows to developing nations with FDI flows from Asia to Africa becoming a key part of Inter-regional flows towards developing countries. Similarly, Codjoe (2012) demonstrated similar trends in his study of foreign direct investment in Ghanian Manufacturing an indication of the increasing role of Asia continent as a source of FDI to Kenya. Table 4.12 illustrate a breakdown of the sources of FDI to the Kenya Manufacturing firms used in the survey.

**Table 4.12: Source of Foreign Direct Investment**

<table>
<thead>
<tr>
<th>Region of investor</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Africa</td>
<td>17</td>
<td>22.7</td>
</tr>
<tr>
<td>Asia</td>
<td>22</td>
<td>29.3</td>
</tr>
<tr>
<td>European Union</td>
<td>23</td>
<td>30.7</td>
</tr>
<tr>
<td>Middle East</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td>North America</td>
<td>9</td>
<td>12.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

### 4.3.1.5 Mode of Entry into the Country

An enquiry was made to establish the mode used by foreigners investing in the Kenyan manufacturing sector. The enquiry revealed that 40% of the FDI was through partnerships with Kenya entrepreneurs while 32% of the foreign direct investment was through the full or partial acquisition of an existing private firm. Additionally, 28% of the foreign direct investment was through Greenfield investment. The study findings are consistent with Leen and Shy study (as cited in Codjooe, 2012) who noted that foreign investors use modes such as the establishment of a subsidiary, joint ownership or full acquisitions. The finding is also consistent with the UNIDO report (2007) that identified brownfield investment as
an emerging form of FDI in Sub-Sahara Africa. Table 4.13 shows a breakdown of the firms by their mode of entry.

Table 4.13: Mode of Entry

<table>
<thead>
<tr>
<th>Mode of Entry</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>“New Investment (Greenfield Investment)</td>
<td>21</td>
<td>28.0</td>
</tr>
<tr>
<td>Acquisition of Existing Private Firm</td>
<td>24</td>
<td>32.0</td>
</tr>
<tr>
<td>(Brownfield Investment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Partnership with Kenyan Entrepreneur(s)</td>
<td>30</td>
<td>40.0</td>
</tr>
<tr>
<td>(Brownfield Investment)</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

4.3.1.6 Time of Foreign Direct Investment Receipt

Considering the results of the time the foreign direct investment was received, a sizeable numbers of the firms surveyed (28 %) received foreign direct investment on establishment (Greenfield investment) while 32% of the firms received foreign direct investment after establishment (brownfield investment). It was further established from the interviews that 40% of the firms that were initially established by local investors have witnessed increased equity participation by foreign investors (brownfield Investment). Subsequently, the equity structure has altered from being an exclusively local owned firm to a joint venture with foreign investors. This reflects increased interest by foreign investors in Kenya due to economic changes driven by policies geared to make the country acquire a newly industrialised status by 2030 (KNBS, 2020). Table 4.14 present the percentage ratio of the firms by the time of foreign direct investment receipt.
### Table 4.14: Time of Receipt of Foreign Direct Investment

<table>
<thead>
<tr>
<th></th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>On Establishment</td>
<td>24</td>
<td>32.0</td>
</tr>
<tr>
<td>After Establishment</td>
<td>51</td>
<td>68.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

#### 4.3.2 Foreign Direct Investment

In this study, foreign direct investment was conceptualised using four variables, namely: capital flow, advanced production technology, marketing expertise and management knowhow. This operationalization was guided by Muhammad and Kashif (2013), Leman and Ismet, (2015) and Asuantri and Yasmin (2017) who propounded that FDI inflows results to substantial capital growth, technology upgrade, marketing expertise and managerial knowhow acquisition.

To gather data on the different constructs of foreign direct investment, descriptive statements formulated from a wide assessment of literature review done on the study variables. The participants were required to respond by indicating if foreign direct investment introduction led to certain activities associated with the four variables of foreign direct investment in their organizations. The findings are presented in the subsequent subsections.

#### 4.3.2.1 Capital Flow

The foreign direct investment serves as a vital source of investment for developing countries that have over the years been characterized by low levels of domestic savings and investments. Asuantri and Yasmin, 2017 posited that foreign direct investment has
enabled recipient countries to accumulate capital thereby promoting their economic growth. Further, Leman and Ismet (2015) asserted that foreign direct investment inflows are among the best ways of closing capital deficiencies in developing countries.

Capital flow represented the extent to which manufacturing firms had benefited from foreign capital through better access to finances. To establish the benefit of capital flows to the local manufacturing firms, descriptive statements were presented to the respondents. The statement scoring by respondent is shown in Table 4.15.

**Table 4.15: Capital Flow**

<table>
<thead>
<tr>
<th>Benefits of Capital Flow</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Solved firm’s capital constraints</td>
<td>75</td>
<td>2.64</td>
<td>0.75</td>
<td>0.56</td>
<td>0.28</td>
</tr>
<tr>
<td>Assisted firm to have better access to financial resources</td>
<td>75</td>
<td>2.79</td>
<td>0.60</td>
<td>0.36</td>
<td>0.22</td>
</tr>
<tr>
<td>Improved support from various financing institutions</td>
<td>75</td>
<td>2.64</td>
<td>0.71</td>
<td>0.50</td>
<td>0.27</td>
</tr>
<tr>
<td>Improved the firms working capital Position</td>
<td>75</td>
<td>2.64</td>
<td>0.73</td>
<td>0.53</td>
<td>0.28</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>2.68</td>
<td>0.70</td>
<td>0.49</td>
<td>0.26</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

Overall, it is noticeable that the capital flow items were highly ranked given that the aggregated average score for the construct fell above 2.5 scores. The highest-ranked statements were that capital flow assisted the organization to gain better access to finance with a mean score of 2.79. However, improved support from a financial institution, improved capital position and solutions to the firms' capital constraints had high mean scores of 2.64 each.
The statement “assisted your organization to have better access to financial resources” had the least Coefficient of Variation (CV) of 0.22. This meant the respondents agreed that foreign direct investment afforded firms better access to financial resources. The statements with the highest variability were foreign direct investment solved problems of firms’ financial constraints and improved their working capital position (CV = 0.28) an indication that there was inconsistency among respondents in regards to the degree to which capital flow is linked to foreign direct investment alleviated capital constraints. The statements that capital flow associated with foreign direct investment improved support from various financing institutions had a coefficient of variation of 0.27 indicating that there was incongruence. The findings affirm the earlier assertion by Temiz and Aytac (2014) that foreign direct investment inflows enable developing countries to accumulate capital and close capital deficiencies. The findings also support Nadide and İbrahim's (2014) affirmation that foreign direct investment contributes to economic development by increasing capital buildup which in turn increases the performance of firms. Further the findings agrees with Leman and Ismet (2015) who argued that foreign direct investment inflows provide deficient financial capital to developing countries.

4.3.2.2 Advanced Production Technology

Onyekwena (2012) established that foreign direct investment is a viable attractive source of advanced production technology when equated to other types of investments like portfolio equity and debt flow or even domestic investment. It is more resistant to the instability of financial crises when compared to other forms of investments. Hymer (1960) the proponent of the Hymer-Kindleberger theory argued that foreign direct investment is
concerned with worldwide movement of proprietary and intangible assets—technology and that its existence is solely a result of the defectiveness of the global markets for these assets.

Advanced production technology indicated the scope to which the introduction of foreign direct investment lead to the transmission of better production technologies to the local manufacturing firms. To establish the extent of transmission of production technology attributable to foreign direct investment activities in the local manufacturing firms, descriptive statements were presented to the respondents. The statements depicted improvement in products, production technologies and availing of license or patent. The respondents were to indicate if they agreed or disagreed with each of the statements. A summative analysis of the reactions is displayed in Table 4.16.

<table>
<thead>
<tr>
<th>Benefits of Technology Transfer</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Improved an existing product</td>
<td>75</td>
<td>2.60</td>
<td>0.77</td>
<td>0.59</td>
<td>0.30</td>
</tr>
<tr>
<td>Developed a new product</td>
<td>75</td>
<td>2.04</td>
<td>0.99</td>
<td>0.98</td>
<td>0.49</td>
</tr>
<tr>
<td>Improved an existing production process</td>
<td>75</td>
<td>2.67</td>
<td>0.72</td>
<td>0.52</td>
<td>0.27</td>
</tr>
<tr>
<td>Introduced new production technology</td>
<td>75</td>
<td>2.40</td>
<td>0.89</td>
<td>0.78</td>
<td>0.37</td>
</tr>
<tr>
<td>Provided the firm with license or patents.</td>
<td>75</td>
<td>1.87</td>
<td>0.93</td>
<td>0.87</td>
<td>0.50</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>2.31</td>
<td>0.86</td>
<td>0.75</td>
<td>0.38</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The average scores for the advanced production technology construct ranged from 1.87 to 2.67. This means that the respondents agreed that advanced production technology had taken root in their firms and that a lot of improvement had taken place because of this. The statement that advanced production technology improved an existing production process
had the highest average rating of 2.67 (SD=0.72) an indication that the firms surveyed had improved production processes for the better.

The overall coefficient of variation was 0.38, an indication that respondents generally agreed on the usefulness of foreign direct investment in advanced technology transfer to Kenyan Manufacturing firms. The highest variability was that the advanced production technology associated with foreign direct investment provided the organisation with licenses or patents (CV=0.50) thus suggesting high variation amongst the participants in connection to the provision of patents. The item with the lowermost variability was that FDI improved an existing production process (CV= 0.27) indicating that there was consensus amongst the respondents on the degree to which the companies’ existing production processes were improved. The statement with the second highest mean score (mean =2.60, SD = 0.77) was that the foreign direct investment improved an existing product. This was a pointer that manufacturing firms have managed to leverage working efficiency in boosting their performance. The statement that foreign direct investment aided in the introduction of a new product received the second-lowest average score of 2.04 (SD=0.99), indicating that most companies prioritised improving existing products over generating new ones.

The above findings affirm the earlier assertion by Muhammad and Kashif (2013) that foreign direct investment inflows enable developing countries to acquire new technological practices that help improve their levels of innovativeness. The study findings also agree with Leman and Ismet (2015) who observed that foreign investments are key sources of new technologies new products and production processes, new patents and speeding up of
innovation activities within the host country. The study findings contradict the findings by Diyamett and Mutambla (2014) who found that very few local firms indicated that their source of knowledge for technology capabilities achieved was from foreign direct investments.

4.3.2.3 Marketing Expertise

Marketing expertise is the ability to create and correctly interpret marketing information. It is the ability to sell products across international boundaries. Both domestic and international trade can be referred to by this term. In this context, marketing expertise was conceptualized by the introduction of new marketing methods, the development of the new market in Kenya and overseas as well as training offerings. To assess the level of Marketing expertise realised from the activities of FDI, respondents were required to rate whether FDI activities lead to improvement of marketing activities in their firm. To establish the extent of transfer of marketing expertise to the local manufacturing firms, descriptive statements were presented to the interviewees who were required to indicate whether these statements were truly reflected in their firms as displayed in Table 4.17.

<table>
<thead>
<tr>
<th>Value of Marketing expertise</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>C.V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Introduced new marketing techniques</td>
<td>75</td>
<td>2.69</td>
<td>0.70</td>
<td>0.49</td>
<td>0.18</td>
</tr>
<tr>
<td>Developed a new market(s) overseas</td>
<td>75</td>
<td>2.27</td>
<td>0.95</td>
<td>0.90</td>
<td>0.40</td>
</tr>
<tr>
<td>Developed a new market in Kenya</td>
<td>75</td>
<td>2.39</td>
<td>0.90</td>
<td>0.81</td>
<td>0.34</td>
</tr>
<tr>
<td>Formal training for Kenyan staff on foreign marketing techniques</td>
<td>75</td>
<td>2.36</td>
<td>0.91</td>
<td>0.83</td>
<td>0.35</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>2.43</td>
<td>0.86</td>
<td>0.76</td>
<td>0.31</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
Marketing expertise had a global mean score of 2.43, indicating that the matter had a moderate ranking. Introduction of new marketing techniques had the utmost ranking (mean score = 2.69), the development of a new Kenyan market ($M = 2.39$) closely followed, then the provision of formal marketing training to Kenyan staff ($M = 2.36$) with the lowest ranking being the development of the new market(s) overseas ($M=2.27$). The statement with the highest variation was the development of new overseas markets ($CV= 0.40$), an indication that there was divergence amongst interviewees on whether FDI resulted in expansion to new markets in foreign countries. The statement with the lowest variation was the introduction of new marketing techniques ($CV= 0.18$) indicating there was a homogenous opinion among interviewees on the statement. The overall coefficient of variation was 0.31, meaning that respondents agreed on the utility of foreign direct investment in marketing expertise transfer to the Kenyan manufacturing firm as it had low variations among firm responses.

The findings are in line with Leman and Ismet (2015) who submitted that multinational companies a key FDI vehicle invest heavily in R&D laboratories spread across the world making them a key source of new products and new patents in the world. It also agrees with the International Monetary Fund (2018) and the Government of Qatar (2014) findings that FDI offers host countries with chances to market their products in the international market. Further, Adams (2009) submitted that technology transfer by multinational companies include not only scientific processes but also marketing skills.


4.3.2.4 Management Knowhow

The management knowhow manifestation in manufacturing companies was also examined. Hymer (1960) affirmed that foreign direct investment encompasses the transfer of not only business-oriented skills but skilled human assets as well. Management knowhow represents one of the critical resources instrumental in the elevation of a company's competitive edge. The variable of management knowhow was operationalised as staff training, mentorship by foreign staff and new quality management systems. Interviewees were required to appraise whether the introduction of foreign direct investment improved the management knowhow of their firms. The responses were subjected to descriptive analysis and a breakdown of the outcomes is displayed in Table 4.18.

<table>
<thead>
<tr>
<th>Improvement of Management Knowhow</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>In-house training programme for Kenyan staff</td>
<td>75</td>
<td>2.48</td>
<td>0.86</td>
<td>0.74</td>
<td>0.30</td>
</tr>
<tr>
<td>Trained Kenyan staff on operational or production management</td>
<td>75</td>
<td>2.51</td>
<td>0.86</td>
<td>0.74</td>
<td>0.30</td>
</tr>
<tr>
<td>Trained Kenyan staff on organizational management</td>
<td>75</td>
<td>2.36</td>
<td>0.91</td>
<td>0.83</td>
<td>0.35</td>
</tr>
<tr>
<td>Employees are mentored by international employees within the firm.</td>
<td>75</td>
<td>2.43</td>
<td>0.89</td>
<td>0.79</td>
<td>0.32</td>
</tr>
<tr>
<td>Learned about new quality management system</td>
<td>75</td>
<td>2.55</td>
<td>0.78</td>
<td>0.60</td>
<td>0.24</td>
</tr>
<tr>
<td>Overall</td>
<td>75</td>
<td>2.46</td>
<td>0.86</td>
<td>0.74</td>
<td>0.30</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

Overall, there was a moderate ranking regarding how foreign direct investment led to management knowhow in manufacturing companies in Kenya ($M =2.46$, $SD= 0.86$, $CV=0.30$). The statements foreign direct investment have made staff learn about the new
quality management system had the highest mean (mean = 2.55), and the lowest variations in responses (CV=0.24), an indication that the interviewees from the different organisation agreed with the statement. The item that foreign direct investment provided formal instruction for Kenyan workforce on operational or production management received a mean of 2.51 and the manufacturing business implemented an in-house training programme for Kenyan employees received a mean of 2.48. The statement with the lowest mean in this category was that manufacturing firms provided formal training for Kenyan staff on organizational management at a mean of 2.36.

The findings are in line with Nyeadi (2022) who observed the connection between foreign direct investment and firm value in Sub-Saharan Africa and established that it has positive significant influences attributable to, among other benefits; management, innovation and skills transfer to host firms. Keshab and Vipin (2020) who established that foreign direct investment comes with superior management skill that is instrumental in improving the productivity of local firms also support this.

4.3.2.5 Summary of Overall Scores for Measures of all the Variables

The mean ratings for the variables for measuring foreign direct investment variables (capital flow, advanced Production technology, marketing expertise, and managerial knowhow) ranged from a minimum of 1.00 to a high of 3.00. The table shows the overall mean scores for capital flow, Advanced Production technology, marketing expertise, and managerial knowhow. The results are displayed in Table 4.19
In summary, table 4.19 shows that capital flow had the highest mean (M=2.68, coefficient of variation = 0.26) followed by management knowhow (Mean=2.46, coefficient of variation = 0.30), followed by Marketing expertise (Mean= 2.43, coefficient of variation = 0.31) and lastly advanced production technology (Mean= 2.31, coefficient of variation = 0.38). The average combined mean score was 2.47 and a coefficient of variation = 0.31 suggesting that the respondents viewed the introduction of foreign direct investment to have improved the operations of the firm.

The above findings affirm the earlier assertion by Zou (2010), Muhammad and Kashif (2013) that foreign direct investment is a source of managerial skills and transfers managerial skills to local firms. The findings also agree with Javorcik (2008) who noted that foreign direct investment is a personification of superior management systems to host economies and workers who move from foreign direct investment firms to local firms can transfer new management techniques to these firms. The study also supports Osabutey, Williams and Debrah's (2014) findings that firm value is likely to surge as foreign direct investment flows results to efficiency and large-scale productivity as a consequence of technology transfer, embracing of improved managerial practices and upsurge in capital flow.
4.3.3 Absorptive Capacity

This represents a company's dynamic ability to acquire, assimilate, convert, and use external knowledge to improve their innovative practices (Andrea and Carlos, 2015). Onyekwena (2012) argues that this capacity is critical for the successful transmission of knowhow from industrialized nations to less developed countries. Lau and Lo (2015) noted that the absorptive capacity of an organization determined by the magnitude of resources invested in the innovativeness. Furthermore, activities intended to elevate absorptive capacity can be seen as attempts that serve as useful guides for tapping as much value from the skillset of a company (Blalock & Gertler, 2004).

Absorptive capacity was postulated as the mediator in the model and was measured using four variables, namely acquisition, assimilation, transformation and exploitation. The constructs were assessed using five items each developed from literature to assess the manufacturing firm’s receptivity to technology change, propagating of new knowledge and use of technology. The score was done on a five-point Likert scale of 1-5. The results for each absorptive capacity variable i.e. acquisition, assimilation, transformation and exploitation are presented in the following subsections.

4.3.3.1 Acquisition

Acquisition refers to recognizing, valuing new external knowledge, dealing with several prior investments, prior knowledge, intensity, speed, and direction components (Zahra & George, 2002). It represented the degree to which manufacturing firms were able to recognize useful external information. The participants were given a list of statements and
asked to rate how much of each statement was reflected in their own businesses. As shown in Table 4.20, the replies were subjected to a summative analysis.

### Table 4.20: Acquisition

<table>
<thead>
<tr>
<th>Acquisition Ability</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff systematically undertake regular technological awareness surveys</td>
<td>75</td>
<td>3.48</td>
<td>1.07</td>
<td>1.14</td>
<td>0.33</td>
</tr>
<tr>
<td>Firm frequently conducts market research to be aware of customers’ needs</td>
<td>75</td>
<td>4.09</td>
<td>0.89</td>
<td>0.79</td>
<td>0.19</td>
</tr>
<tr>
<td>R&amp;D budget is spent on subcontracted research teams from outside the firm</td>
<td>75</td>
<td>3.32</td>
<td>1.35</td>
<td>1.82</td>
<td>0.55</td>
</tr>
<tr>
<td>Firm is well aware of the technologies being developed by competitors</td>
<td>75</td>
<td>3.99</td>
<td>1.01</td>
<td>1.01</td>
<td>0.25</td>
</tr>
<tr>
<td>Firm consults other bodies for fresh ideas for new products introductions.</td>
<td>75</td>
<td>3.63</td>
<td>1.28</td>
<td>1.64</td>
<td>0.45</td>
</tr>
<tr>
<td>Overall</td>
<td>75</td>
<td>3.70</td>
<td>1.12</td>
<td>1.28</td>
<td>0.35</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The overall average score for the entire acquisition construct was 3.7, indicating that the respondents largely agreed with the items. The statement, "Our firm frequently conducts market research to be aware of customers' needs," had the highest mean score and the lowest CV, 4.09 and 0.19, respectively. This implies a convergent of opinion about the favourable utility among the participants. Other indicators of absorption with high scores included "firms were well aware of the innovations being introduced by competitors (M = 3.99; SD = 1.01, CV =0.25), and that firms consulted other bodies on fresh opportunities to present new products (M= 3.63; SD= 1.28, CV =0.45).

The statement “our staff systematically undertake regular technological awareness surveys” received a moderate rating (M = 3.48). However, the variability of the responses
was low (coefficient of variation = 0.33) signifying that there was less disagreement among the interviewees on a systematic undertaking of a regular technological awareness survey. The statement with the highest variability was "our research and development allocation is spent on outsourced research group external to the firm" with a coefficient of variation of 0.55. The implication of this is that there was incongruence among respondents on subcontracting of research teams from outside the firm. The statement also had the lowest mean ($M = 3.32$). The findings concur with Adrea and Carlos (2015) who noted that innovative organisations tend to join forces with external actors in the process of acquiring new knowledge.

4.3.3.2 Assimilation

Absorptive capacity was further measured using assimilation, which reflected the capacity to incorporate external knowledge into normal working environments in a way that helps to elevate the competitive edge of a firm. The interviewees were requested to specify to what degree the statement on assimilation reflected the position of their respective firms.

It is shown that the statements the firms invested a great deal of resources in training their staff and innovating by improving competitors' products and processes had mean scores of 3.99 and 3.89 correspondingly. The two statements also had the lowest variability as evidenced by a coefficient of variation of 0.23 and 0.26 respectively. The results also indicate that firms were innovative due to research and development activities carried out within the organization (Mean score= 3.71) having the greatest variability among the respondents (CV = 0.44). The lowermost mean score was on the statement that the firm can adapt to other firms' technologies at a mean score of 3.53, suggesting that the capacity
was rated as moderate. The overall mean value of 3.76 indicates that assimilation was adopted to a large extent by manufacturing firms. A summative breakdown of the reactions is exhibited in Table 4.21.

**Table 4.21: Assimilation**

<table>
<thead>
<tr>
<th>Assimilation Capacity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We invest a great deal of resources in training our staff</td>
<td>75</td>
<td>3.99</td>
<td>0.95</td>
<td>0.91</td>
<td>0.23</td>
</tr>
<tr>
<td>We innovate by improving on competitors’ products and processes</td>
<td>75</td>
<td>3.89</td>
<td>1.01</td>
<td>1.02</td>
<td>0.26</td>
</tr>
<tr>
<td>We are normally ahead of our competitors in launching new products</td>
<td>75</td>
<td>3.67</td>
<td>1.11</td>
<td>1.23</td>
<td>0.33</td>
</tr>
<tr>
<td>We have the capacity to adapt other's firm's technologies</td>
<td>75</td>
<td>3.53</td>
<td>1.06</td>
<td>1.12</td>
<td>0.32</td>
</tr>
<tr>
<td>We innovate as a result of R&amp;D activities carried out within our firm</td>
<td>75</td>
<td>3.71</td>
<td>1.27</td>
<td>1.62</td>
<td>0.44</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>3.76</td>
<td>1.08</td>
<td>1.18</td>
<td>0.32</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

**4.3.3.3 Transformation**

The study used transformation as the third indicator of the mediating variable absorption capacity. According to Lenart (2014), transformation is the ability of an existing firm to convert its current capabilities or formulate new ones by using the external knowledge gained. In terms of transformation, interviewers were asked to rate how accurately certain assertions reflected their firm's absorptive potential. Table 4.22 presents the outcomes relating to transformation and absorptive capacity.
Table 4.22: Transformation

<table>
<thead>
<tr>
<th>Transformation Capacity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Our firm’s structure includes a large number of managerial posts</td>
<td>75</td>
<td>3.52</td>
<td>0.99</td>
<td>0.98</td>
<td>0.28</td>
</tr>
<tr>
<td>There is a very high level of coordination between the various activities in our firm</td>
<td>75</td>
<td>4.11</td>
<td>0.73</td>
<td>0.53</td>
<td>0.13</td>
</tr>
<tr>
<td>Our firm has staff with a wide range of training and educational backgrounds</td>
<td>75</td>
<td>3.91</td>
<td>0.87</td>
<td>0.76</td>
<td>0.19</td>
</tr>
<tr>
<td>Our payment for R&amp;D employees is linked to their innovation contribution</td>
<td>75</td>
<td>3.44</td>
<td>1.33</td>
<td>1.76</td>
<td>0.51</td>
</tr>
<tr>
<td>Development projects for new products are carried out by multi-disciplinary teams</td>
<td>75</td>
<td>3.56</td>
<td>0.90</td>
<td>0.82</td>
<td>0.23</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>3.71</td>
<td>0.96</td>
<td>0.97</td>
<td>0.27</td>
</tr>
</tbody>
</table>

Source Field Data (2019).

The overall mean score for the transformation construct was 3.71, suggesting that the transformation elements were predictable to a great extent, according to the outcomes in Table 4.22. The statement "The level of coordination among the numerous undertakings executed by our firm is very high" had the highest mean rating of 4.11 and the dispersion (CV=0.13) demonstrated high concurrence that transformation was more predictable. Other scores were organization's structure includes a large number of administrative positions at a mean score of 3.52; our organisation has a workforce with extensive training and educational credentials at a mean score of 3.91; development of new products are undertaken by multidisciplinary groups had an average rating of 3.56. The responses were highly heterogeneous for the statement that payment to research and development employees is linked to their innovative contribution (CV = 0.51). One can deduce that in most of the firms, the payment to research and development employees is not linked to their innovative contribution.
4.3.3.4 Exploitation

Exploitation refers to knowledge internalization, processes improvement, discovering new solutions, and adapting to environmental and technological evolutions (Cohen & Levinthal, 1990; Zahra & George, 2002; Lenart, 2014). To explore the manifestation of this construct, the participants were supplied with a list of statements and requested to rate the extent to which they reflected the situation of their corresponding companies. These outcomes are displayed in Table 4.23.

Table 4.23: Exploitation

<table>
<thead>
<tr>
<th>Exploitation capacity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>We have invested heavily in efforts aimed at developing new products</td>
<td>75</td>
<td>3.91</td>
<td>0.89</td>
<td>0.79</td>
<td>0.20</td>
</tr>
<tr>
<td>We have been able to achieve maximum product quality</td>
<td>75</td>
<td>3.65</td>
<td>1.05</td>
<td>1.09</td>
<td>0.30</td>
</tr>
<tr>
<td>We have undertaken many programmes for improving existing products</td>
<td>75</td>
<td>4.21</td>
<td>0.81</td>
<td>0.66</td>
<td>0.16</td>
</tr>
<tr>
<td>Have undertaken a lot of efforts to maintain and improve our firm’s brand image</td>
<td>75</td>
<td>4.35</td>
<td>0.80</td>
<td>0.63</td>
<td>0.15</td>
</tr>
<tr>
<td>We have undertaken a number of activities aimed at reducing cost</td>
<td>75</td>
<td>4.20</td>
<td>0.94</td>
<td>0.89</td>
<td>0.21</td>
</tr>
<tr>
<td>Overall</td>
<td>75.00</td>
<td>4.06</td>
<td>0.90</td>
<td>0.81</td>
<td>0.20</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The outcomes of the descriptive analysis on responses regarding exploitation illustrate that a majority of the participants felt that they were willing to internalize (mean score = 4.06) and adapt to environmental and technological evolutions. In connection with their efforts to sustain and elevate their company’s image, the respondents were in general agreement...
that this was so to a great extent (mean score = 4.35 and coefficient of variation of 0.15).
The respondent also specified that they undertake many programmes for improving existing products ($M=4.21; CV=0.16$) and for reducing costs ($M=4.2, CV=0.21$).

The lowest average score was associated with the statement that there was the inability to achieve maximum product quality and investment at 3.65 with a coefficient of variation of 0.30 and 3.91 with a coefficient of variation of 0.20 respectively. The variation of 0.30 in investment aimed at achieving maximum quality indicates that there was great variability amongst the respondents concerning this construct when compared with others in the category.

4.3.3.5 Summary of overall scores for Measures of all the Variables

The outcomes in Table 4.24 indicate that the mean scores for the variables ranged from a minimum of 3.70 to a maximum of 4.06. The score for acquisition, assimilation, transformation and exploitation are highlighted in the preceding section.

The findings in Table 4.24 demonstrates that had the highest mean score was exploitation capacity (mean score of 4.06, coefficient of variation = 0.20), followed by assimilation capacity (mean score of 3.76, coefficient of variation = 0.32), followed by transformation capacity (mean score of 3.71, coefficient of variation = 0.27) and, lastly, acquisition ability (mean score of 3.70, coefficient of variation = 0.35). The high score in exploitation capacity was attributed to the efforts undertaken by firm to maintain their brands, cost reduction activities, and programs for improving existing products. The overall combined mean score was 3.81 with a coefficient of variation = 0.29 suggesting that absorptive capacitive was found operative. This is illustrated in table 4.24 below.
Table 4.24: Absorptive Capacity

<table>
<thead>
<tr>
<th>Absorptive Capacity</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Acquisition Ability</td>
<td>75</td>
<td>3.70</td>
<td>1.12</td>
<td>1.28</td>
<td>0.35</td>
</tr>
<tr>
<td>Assimilation Capacity</td>
<td>75</td>
<td>3.76</td>
<td>1.08</td>
<td>1.18</td>
<td>0.32</td>
</tr>
<tr>
<td>Transformation Capacity</td>
<td>75</td>
<td>3.71</td>
<td>0.96</td>
<td>0.97</td>
<td>0.27</td>
</tr>
<tr>
<td>Exploitation capacity</td>
<td>75</td>
<td>4.06</td>
<td>0.90</td>
<td>0.81</td>
<td>0.20</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>3.81</td>
<td>1.02</td>
<td>1.06</td>
<td>0.29</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The outcome corresponds with the results of Lau and Lo (2015) who established that absorptive capacity is considered a crucial part of the learning system as it provides the potential to transform the knowledge base of an organization through acquisition, assimilation, reshaping and capitalization processes giving the firm real adaptive capacity.

### 4.3.4 Business Environment

Khondoker and Kaliappa, (2010), observe that a sizeable number of developing economies across the world receive a significant amount of FDI by creating a business-friendly environment and embracing a more external driven trade strategy. It has also been established that countries with friendly business environments like affordable skilled labour, electricity and energy and good infrastructure tend to draw a higher flow of FDI. Dethier, Hirn and Straub, (2010) defined a business environment as a setting built to facilitate day-to-day business operations and includes the physical structures, financial accessibility, safety and regulatory frameworks. It is also noted that the assessment of the business environment includes factors such as steadiness of legal regulations, tax policy, infrastructure, business registry system and labour relations (Alam & Shah, 2013).
The business environment was hypothesized to have a moderating influence on the link between FDI and manufacturing performance of manufacturing firm. The results of the descriptive arithmetical computation of the business environment is highlighted in the next sub-sections. Three variables evaluated various aspects of the business environment, operationalized as financial access, government regulations and physical infrastructure. The next subsection discusses results of each construct of the business environment.

4.3.4.1 Financial Access

A conducive business environment with profitable opportunities and low risks (Hodud et al., 2014) attracts foreign investors. Financial constraint one of the variables of the business environment is a key impediment to firms’ development, especially in emerging markets, in particular cost, and access to finance (Sprenger & Lazarevaa, 2016). Kamran, Chor and Manova (2016) claim that host countries that have good financial markets normally attract more MNCs than their counterparts with undeveloped financial markets do.

Financial access centers on high-interest rates on loans, collateral requirements of banks or financial institutions, bank paper work/bureaucracy, need for special connections with the financial institutions and bank lack of money to lend. The respondents were to report on the extent each of the items mirrored the status quo of their firms. The responses were captured on a likert scale and later subjected to descriptive statistical analysis as displayed in Table 4.25.
Table 4.25: Financial Access

<table>
<thead>
<tr>
<th>Financial Access</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Variance</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>High-interest rates on loans</td>
<td>75</td>
<td>2.20</td>
<td>1.10</td>
<td>1.22</td>
<td>0.50</td>
</tr>
<tr>
<td>Collateral requirements of the bank/financial institution’s</td>
<td>75</td>
<td>2.72</td>
<td>1.27</td>
<td>1.61</td>
<td>0.46</td>
</tr>
<tr>
<td>Bank paperwork/bureaucracy</td>
<td>75</td>
<td>2.87</td>
<td>1.23</td>
<td>1.52</td>
<td>0.42</td>
</tr>
<tr>
<td>Need for special connections with the financial institutions</td>
<td>75</td>
<td>2.81</td>
<td>1.31</td>
<td>1.72</td>
<td>0.46</td>
</tr>
<tr>
<td>Banks lack the money to lend (credit rationing)</td>
<td>75</td>
<td>2.96</td>
<td>1.52</td>
<td>2.31</td>
<td>0.51</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>2.71</td>
<td>1.29</td>
<td>1.68</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

The aggregated average rating for the financial access construct was 2.71 considered a moderate obstacle. This denotes that overall; the interviewees discerned that access to finance had not been favourable to their firms. The statement that financial institutions lack money to lend had the highest mean score of 2.96 (Std. Deviation =1.52, coefficient of variation = 0.51). This revealed that credit rationing had been an obstacle even though to a reasonable degree in comparison to the other items. However, there was no unanimity amongst the participants concerning the degree of the obstacle of the credit rationing as the item had the highest CV of 0.51. High interests on loans recorded very low mean scores of 2.20 indicating that high borrowing costs were a small obstacle to companies in the manufacturing sector.

The manufacturing firm’s assessment of collateral requirements of the financial institutions was moderate with an average rating of 2.72 and a CV of 0.46. The assessment of bank paperwork/bureaucracy requirements had an average rating of 2.87 and a CV of 0.42 indicating it was a moderate obstacle. On whether one required special connections with
the financial institutions to access credit, the responses had a mean scores of 2.81 with a coefficient of variation = 0.46 indicating it was a moderate obstacle.

4.3.4.2 Government Regulations

Government regulations focused on licensing, trade regulations, labour regulations, environmental regulations and tax regulations. Information on these facets were captured using descriptive statements premised on a five-point likert scale.

It is apparent that “environmental regulations" was the top-rated item ($M=2.92; CV=0.46$) followed by business licensing (mean score 2.87, coefficient of variation = 0.49). These imply that environmental regulations and business licensing were viewed as a moderate obstacle to the business environment. The item linked the least divergence in opinion was labour regulations (CV=0.45). The item with the highest divergence was tax regulations and administrations (CV=0.58) implying an absence of consensus among interviewees on the magnitude to which this measure was an obstacle to the business environment. The item tax regulations and administrations also had the lowest mean score (2.25), which corresponded with a small obstacle. The average combined mean score (Mean 2.66) suggests that the respondents viewed government regulations to have presented a moderate obstacle to the business. The outcomes are displayed in Table 4.26.

<table>
<thead>
<tr>
<th>Government regulations</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Variance</th>
<th>C.V</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business licensing</td>
<td>75</td>
<td>2.87</td>
<td>1.41</td>
<td>1.98</td>
<td>0.49</td>
</tr>
<tr>
<td>Country foreign trade regulations</td>
<td>75</td>
<td>2.53</td>
<td>1.20</td>
<td>1.44</td>
<td>0.47</td>
</tr>
<tr>
<td>Labour regulation</td>
<td>75</td>
<td>2.71</td>
<td>1.23</td>
<td>1.51</td>
<td>0.45</td>
</tr>
<tr>
<td>Environmental regulations</td>
<td>75</td>
<td>2.92</td>
<td>1.34</td>
<td>1.80</td>
<td>0.46</td>
</tr>
<tr>
<td>Tax regulations and administrations</td>
<td>75</td>
<td>2.25</td>
<td>1.31</td>
<td>1.71</td>
<td>0.58</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td><strong>75</strong></td>
<td><strong>2.66</strong></td>
<td><strong>1.30</strong></td>
<td><strong>1.69</strong></td>
<td><strong>0.49</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
4.3.4.3 Physical infrastructure

Hallward-Driemeier and Mengistae’s study (as cited in Hodud et al., 2014) identified infrastructure as an influential factor in firm growth. They identified power outages and custom delays as some of the issues that affect a company performance negatively. The Kenya Government has invested heavily in building infrastructure including expansion of roads connectivity, upgrading of railway networks, modernization and expansion of airports, and expanding energy and telecommunication infrastructure. The thinking of the government bureaucrats is that this will spur economic growth and transform Kenya to join the league of the newly industrialized countries (KNBS, 2016).

The study operationalized physical infrastructure using the variables of roads departments/public works, electric power company services, water/sewerage services, telephone/internet services, railway department/agency services and port department/agency services. Information on these facets was captured using descriptive statements premised on a likert scale. The outcomes obtained from the summative scrutiny of the reactions are displayed in Table 4.27.

<table>
<thead>
<tr>
<th>Physical infrastructure</th>
<th>N</th>
<th>Mean</th>
<th>Std. Dev</th>
<th>Variance</th>
<th>CV</th>
</tr>
</thead>
<tbody>
<tr>
<td>Roads departments/public works</td>
<td>75</td>
<td>2.81</td>
<td>1.19</td>
<td>1.42</td>
<td>0.42</td>
</tr>
<tr>
<td>Electric power company/services</td>
<td>75</td>
<td>2.90</td>
<td>1.33</td>
<td>1.76</td>
<td>0.46</td>
</tr>
<tr>
<td>Water/sewerage services</td>
<td>75</td>
<td>3.00</td>
<td>1.29</td>
<td>1.68</td>
<td>0.43</td>
</tr>
<tr>
<td>Telephone/Internet services</td>
<td>75</td>
<td>3.61</td>
<td>1.39</td>
<td>1.94</td>
<td>0.39</td>
</tr>
<tr>
<td>Railway department/agency services</td>
<td>75</td>
<td>2.71</td>
<td>1.23</td>
<td>1.51</td>
<td>0.45</td>
</tr>
<tr>
<td>Port department/agency services</td>
<td>75</td>
<td>2.52</td>
<td>1.22</td>
<td>1.50</td>
<td>0.48</td>
</tr>
<tr>
<td><strong>Overall</strong></td>
<td>75</td>
<td>2.93</td>
<td>1.28</td>
<td>1.64</td>
<td>0.44</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
The findings in Table 4.27 point out that telephone/internet services had the utmost mean (3.61, coefficient of variation = 0.39) followed by water/sewerage services (M=3.00, CV=0.43). This implies that telephone/Internet services and water/sewerage services were viewed to be efficient. The statement with the lowest divergence was telephone/internet services (CV = 0.39) meaning there was unanimity among the interviewees on the degree to which telephone/internet services were efficient. The statement with the highest variability was port department/agency services (CV = 0.48) implying a lack of consensus among interviewees on the degree this measure was efficient to the operation of their firm. Port department/agency services also had the least mean score of 2.52 corresponding with efficiency. The average combined mean score was 2.93 suggesting that the respondents viewed physical infrastructure to have presented an inefficient obstacle to the firm.

4.3.4.4 Summary of Overall Scores for Measures of all the Variables

The outcomes in Table 4.28 indicated the overall mean for the construct used to evaluate the variables of business environment. The score for financial access, government regulations and physical infrastructure are tabulated in Table 4.28:

Table 4.28: Business Environment

<table>
<thead>
<tr>
<th>Business Environment</th>
<th>N</th>
<th>Mean</th>
<th>Std. Deviation</th>
<th>Variance</th>
<th>Coefficient of Variation</th>
</tr>
</thead>
<tbody>
<tr>
<td>Financial Access</td>
<td>75</td>
<td>2.71</td>
<td>1.29</td>
<td>1.68</td>
<td>0.47</td>
</tr>
<tr>
<td>Government Regulations</td>
<td>75</td>
<td>2.66</td>
<td>1.30</td>
<td>1.69</td>
<td>0.49</td>
</tr>
<tr>
<td>Physical Infrastructure</td>
<td>75</td>
<td>2.93</td>
<td>1.28</td>
<td>1.64</td>
<td>0.44</td>
</tr>
<tr>
<td>Overall</td>
<td>75</td>
<td>2.77</td>
<td>1.29</td>
<td>1.67</td>
<td>0.47</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
The findings in Table 4.28 point out that the highest mean was physical infrastructure (mean 2.93, coefficient of variation = 0.44), followed by financial access (mean 2.71, coefficient of variation = 0.47), and lastly government regulations (mean 2.66, coefficient of variation = 0.49). The overall combined mean score was 2.77 with a coefficient of variation of 0.46 suggesting that the business environment was moderate.

The findings imply that the various reforms undertaken by the Kenya government to improve the Kenya business climate are yielding positive results. These reforms pertain to launching a firm, obtaining building licenses, obtaining credit, paying taxes, safeguarding minority investors, and resolving insolvency. The KNBS (2016) report further noted that an enabling business environment is a precondition for business prosperity and the policy maker's role is to develop policies that facilitate businesses to operate sustainably.

4.3.5 Performance of Manufacturing Firm

Venkatraman and Ramanujam (1986) affirm that there is no consensus on performance techniques as scholars conceptualize the construct as specific to their area of bias. The extant literature indicates that a firm's performance is a multidimensional variable as such no single index can offer a comprehensive understanding therefore it is imperative to consider multiple measures. A combination of qualitative or accounting and qualitative or market indicators have been used as the two broad measures of performance when studying its relationship with a multiplicity of independent variables (Frank, Kessler & Fink, 2010).

The research sought to evaluate the degree to which firms had attained manufacturing performance measures. Performance of the manufacturing companies was considered from
two angles, that is, financial and non-financial outcomes. For the financial aspect, profits and return on equity were considered. On the other hand, non-financial outcomes involved production capacity utilization and employee productivity.

4.3.5.1 Financial Performance

The financial performance of the surveyed firms was gauged in terms of how much profits they had attained in 2018 as well as their reported return on equity.

4.3.5.1.1 Profit Achieved in 2018

Respondents were requested to identify the profit in millions the firms had realized in the year 2018. The results are displayed in Table 4.29.

<table>
<thead>
<tr>
<th>Profit per year in Kenya Shillings Million (2018)</th>
<th>Frequency</th>
<th>%</th>
</tr>
</thead>
<tbody>
<tr>
<td>Losses</td>
<td>5</td>
<td>6.7</td>
</tr>
<tr>
<td>0 to 100 Million</td>
<td>12</td>
<td>16.0</td>
</tr>
<tr>
<td>Above 100 Million to 200 Million</td>
<td>41</td>
<td>54.7</td>
</tr>
<tr>
<td>Above 200 Million to 300 Million</td>
<td>15</td>
<td>20.0</td>
</tr>
<tr>
<td>Above 300 Million</td>
<td>2</td>
<td>2.7</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

It is apparent that 6.7 % of the companies made losses. During the same period, 16 % of the firms attained profits of up to Kshs 100 million, 54.7 % attained profits of between Kshs 100 million and 200 million, 20 % had profits of between Kshs 200 million and 300 million while 2.7 % of the firms had profits exceeding Kshs 300 million. The results imply that a large proportion of the FDI manufacturing firms were profitable. This is consistent with Ilboudo's (2014) study that established that FDI positively contributes to an upsurge in the efficiency of local firms.
### 4.3.5.1.2 Return on Equity

The research additionally sought to establish the firm's return on equity and the interviewees were required to indicate the level in 2018. The analysis of data shows that 49.3% of the surveyed companies had a return on equity of between 4% and 8% in the year. Another 25.3% had ROE of between 8-12%, 9.3% had an ROE of above 12%, and another 9.3% had a return of between 0-4% and 6.7% had a negative ROE. These results were consistent with the KAM manufacturing barometer report that had projected growth rates of between 1 to 11% (KAM, 2018). The outcomes are displayed in Table 4.30 below.

<table>
<thead>
<tr>
<th>Return on Equity (2018)</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Negative</td>
<td>5</td>
<td>6.7</td>
</tr>
<tr>
<td>0 – 4 %</td>
<td>7</td>
<td>9.3</td>
</tr>
<tr>
<td>Above 4 % to 8%</td>
<td>37</td>
<td>49.3</td>
</tr>
<tr>
<td>Above 8% to 12 %</td>
<td>19</td>
<td>25.3</td>
</tr>
<tr>
<td>Above 12%</td>
<td>7</td>
<td>9.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

### 4.3.5.2 Non-Financial Performance

Kaplan and Norton (1992) affirmed that the non-financial aspect of performance is critical as it covers key elements that are not captured by financially oriented indicators. Non-financial performance was measured using 2 items, which included capacity utilization and employee productivity. The findings are discussed in the next section.

#### 4.3.5.2.1 Production Capacity Utilization

The production capacity utilization was measured by establishing the percentage of the production facility utilized in 2018. Participants were obligated to report on the level to which their capacity was utilized in 2018 and the findings are discussed in the preceding...
section. From the data analysis, it is apparent that 40% of the companies utilized more than half of their installed capacity. A further, 36% of the firms were operating at about 60% of the installed capacity and another 17.3% operated at near full capacity. Capacity utilization was thus an indication of the level of manufacturing performance. These findings agree with the KAM (2018) report that revealed that the majority of manufacturers operated above half of their installed capacity. The outcomes of capacity utilization are displayed in Table 4.31.

<table>
<thead>
<tr>
<th>Capacity Utilization</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Stated</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>0 to 20%</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td>Above 20% to 40%</td>
<td>30</td>
<td>40.0</td>
</tr>
<tr>
<td>Above 40% to 60%</td>
<td>27</td>
<td>36.0</td>
</tr>
<tr>
<td>Above 60% to 80%</td>
<td>12</td>
<td>16.0</td>
</tr>
<tr>
<td>Above 80% to 100%</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

**4.3.5.2.2 Employee Productivity**

The study further sought to determine the companies' employee productivity and the interviewees were requested to rate their company's employee productivity. The outcomes are highlighted in table 4.32.

<table>
<thead>
<tr>
<th>Employee Productivity</th>
<th>Frequency</th>
<th>Per cent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Stated</td>
<td>4</td>
<td>5.3</td>
</tr>
<tr>
<td>0 to 20%</td>
<td>1</td>
<td>1.3</td>
</tr>
<tr>
<td>Above 20% to 40%</td>
<td>11</td>
<td>14.7</td>
</tr>
<tr>
<td>Above 40% to 60%</td>
<td>24</td>
<td>32.0</td>
</tr>
<tr>
<td>Above 60% to 80%</td>
<td>29</td>
<td>38.7</td>
</tr>
<tr>
<td>Above 80% to 100%</td>
<td>6</td>
<td>8.0</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>75</strong></td>
<td><strong>100.0</strong></td>
</tr>
</tbody>
</table>

Source: Field Data (2019).
It is apparent that 1.3% of the companies had employee productivity ranging from 0-20%. 14.7% of the firms had employee productivity of between 20-40%, 32% of the firms had employee productivity of between 40-60%, 38.7% of the firms had employee productivity of between 60-80%, 8% of the firms had employee productivity of above 80-100%. However, 5.3% of the firms did not indicate their employee productivity.

4.3.6 Relationships between Predictor and Criterion Variables

The intended goal of this research was to ascertain whether the underlying components of FDI and performance are interrelated. To this end, Pearson correlation analysis was employed to determine the strength and the direction of the variables' interrelationships. The correlation coefficient (R) is a measurement of the linear linkage between two construct without stating that one causes the other (Crossman, 2020). The correlation coefficients range between -1 and +1. In positive linearity, a correlation coefficient of +1 indicates that two variables are perfectly correlated. A correlation value of -1 shows a negative linear relationship between two variables, while a correlation coefficient of zero (0) shows no linear link between two variables (Wang & Zhao 2012). Additionally, a zero correlation coefficient means that the predictor variable cannot account for the change in the dependent variable as the two are linearly independent (Cooper & Schilder, 2011).

Based on the output, it is notable that performance was significantly correlated with the four facets of FDI, namely; capital flow ($r = 0.167$, $p < 0.05$), advanced production technology ($r = 0.092$, $p < 0.05$) management knowhow ($r=0.245$, $p < 0.05$) and Marketing expertise ($r=0.236$, $p < 0.05$). The outcomes of this investigation are displayed in Table 4.33.
Table 4.33: Correlation Analysis

<table>
<thead>
<tr>
<th></th>
<th>FDICF</th>
<th>FDIAPT</th>
<th>FDIMA</th>
<th>FDIMKH</th>
<th>FP</th>
</tr>
</thead>
<tbody>
<tr>
<td>FDICF</td>
<td>Pearson Correlation</td>
<td>1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>75</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDIAPT</td>
<td>Pearson Correlation</td>
<td>.203</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.081</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>75</td>
<td>75</td>
<td></td>
<td></td>
</tr>
<tr>
<td>FDIMA</td>
<td>Pearson Correlation</td>
<td>.263*</td>
<td>.314**</td>
<td>1</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.023</td>
<td>.006</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td></td>
</tr>
<tr>
<td>FDIMKH</td>
<td>Pearson Correlation</td>
<td>.344**</td>
<td>.192</td>
<td>.455**</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.003</td>
<td>.098</td>
<td>.000</td>
<td></td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
<tr>
<td>FP</td>
<td>Pearson Correlation</td>
<td>.167</td>
<td>.092</td>
<td>.236*</td>
<td>.245** 1</td>
</tr>
<tr>
<td></td>
<td>Sig. (2-tailed)</td>
<td>.0153</td>
<td>.0431</td>
<td>.042</td>
<td>.034</td>
</tr>
<tr>
<td></td>
<td>N</td>
<td>75</td>
<td>75</td>
<td>75</td>
<td>75</td>
</tr>
</tbody>
</table>

*. Correlation is significant at the 0.05 level (2-tailed).
**. Correlation is significant at the 0.01 level (2-tailed)

Source: Field Data (2019).

The correlation coefficients in Table 4.33 show that the association between capital flow and manufacturing firm performance is positive, significant, and strong \((r=0.167)\), implying that manufacturing firms are likely to improve their performance through capital inflows. The strength of the relationship is higher than that of advanced production technology but weaker than that of marketing expertise and management knowhow. This is consistent with Osabutey, Williams, and Debrah's (2014) findings that, at the company level, FDI flows lead to an increase in capital flow, inducing efficiency and large-scale productivity.

Nevertheless, the current study contrasts Gui-Diby (2014) findings that foreign direct investment inflow produces a negative effect on economic growth of a country subsequently affecting the performance of firm. The premise that foreign direct investment enhanced efficiency growth in domestic enterprises in Mexico was refuted by Muhammad and Kashif's (2013) study. This was because seventy-one (71%) of FDI was meant for
purchasing already existing Mexican companies and did not necessarily lead to capital formation.

Second, advanced production technology shows a weak but significant positive relationship with manufacturing firm performance ($r=0.092$). The strength of the relationship is weaker than that of capital flow, marketing expertise and management knowhow. The association means that foreign direct investment confers benefits of advanced production technology to local firms which in turn improve their performance. The findings support earlier findings by Nyeadi, Kumbuor and Ganaa, (2018) that established that both product and process innovation have a robust positive association with firm output. It also agrees with Osabutey, Williams, and Debrah's (2014) study, which found that FDI flows lead to the transfer of technology, resulting in increased efficiency and large-scale production. However, the findings are inconsistent with Diyamett and Mutambla's (2014) study on Tanzanian firms that established that very few firms acknowledged FDIs as their sources of knowledge for technological abilities attained.

Marketing expertise was correlated against performance of manufacturing firm and the results was moderate ($r=0.236$) with a significant coefficient of 0.042. The strength of the relationship is weaker than that of management knowhow but stronger than capital flow and Marketing expertise. The association means that foreign direct investment confers the benefits of marketing expertise to local firms thereby improving their performance by attracting foreign investors. The findings indicate a significant improvement in firm’s performance attributed to the presence of FDI.
Management knowhow was correlated with the firm's performance and the results was moderate ($r=0.245$) with a significant coefficient of 0.034. Management knowhow has the strongest relationship among the four variables of FDI. The strong association means that FDI confers the benefits of management knowhow to local firms thereby improving their performance. This is in accordance with the findings of Osabutey, Williams, and Debrah's (2014) study, which found that as FDI flows lead to the transfer of improved managerial practices and subsequent rise in firm value.

4.4 Test of Hypotheses

In this section, the hypotheses are tested. The study's main purpose was to look into the relationship between FDI and manufacturing firm performance. It was stated that the impact of FDI on performance is affected by a set of other factors, which this study identified to be absorptive capacity and business environment. Specifically, it was hypothesized that absorptive capacity mediates the link between FDI and performance of manufacturing firm while the business environment moderates it.

In the evaluation of the hypotheses, regression analyses was conducted at 5% level of significance. Specifically, simple linear regression was employed in the testing of the first hypothesis. In connection to the second hypothesis, hierarchical regression analysis was adopted. Stepwise regression was invoked for the third hypothesis and multiple regression analysis for the fourth hypothesis. The results derived from each of these analyses are presented in this section.
4.4.1 Foreign Direct Investment and Performance of Manufacturing Firms

The initial purpose was to investigate how foreign direct investment affects the performance of manufacturing enterprises in Kenya. In addressing the purpose, the influence of each foreign direct investment component on performance was evaluated which resulted in four sub-hypotheses. These sub-hypotheses are identified as follows;

Hypothesis 1a: Capital flow has no significant relationship with the performance of manufacturing firms in Kenya.

Hypothesis 1b: Advanced production technology has no significant relationship with performance of manufacturing firms in Kenya.

Hypothesis 1c: Marketing expertise has no significant relationship with the performance of manufacturing firms in Kenya.

Hypothesis 1d: Management knowhow has no significant relationship with the performance of manufacturing firms in Kenya.

The sub-hypotheses were investigated using simple linear regression. A construct index for each of the foreign direct investment components was regressed on performance of manufacturing firm. A series of regression models were also fitted to the data in order to assess the association between each construct of FDI with performance of manufacturing firm to determine whether the outcomes were significant or not. The summary of results are shown in Table 4.34.
Table 4.34: Regression Results for Capital Flow, Advanced Production Technology, Marketing expertise and Management Knowhow on Performance of Manufacturing Firm’s

<table>
<thead>
<tr>
<th>Model</th>
<th>ANOVA</th>
<th>Coefficients</th>
<th>Resulting model</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td></td>
<td></td>
<td>FP=2.231+0.161CF</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Capital flow</td>
<td>0.039</td>
<td>2.996</td>
<td>0.038</td>
</tr>
<tr>
<td>2</td>
<td></td>
<td></td>
<td>FP=2.147+0.060APT</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Advanced production technology</td>
<td>0.006</td>
<td>0.459</td>
<td>0.0450</td>
</tr>
<tr>
<td>3</td>
<td></td>
<td></td>
<td>FP=1.843+0.211ME</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Marketing expertise</td>
<td>0.053</td>
<td>4.104</td>
<td>0.046</td>
</tr>
<tr>
<td>4</td>
<td></td>
<td></td>
<td>FP=1.766+0.252MK</td>
</tr>
<tr>
<td>(Constant)</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Management knowhow</td>
<td>0.066</td>
<td>5.144</td>
<td>0.026</td>
</tr>
</tbody>
</table>

Predictors: Capital flow (CF)  
a. Predictors: Advanced production technology (APT)  
b. Predictors: Marketing expertise (ME)  
c. Predictors: Management knowhow (MK)  
d. Dependent Variable: Performance of Manufacturing Firm’s (PMF)  
Source: Field Data (2019).

It was found that capital flow accounted for 3.9 % of the variation in performance (R²=0.039). The model capturing the link between capital flow and performance was also found to be statistically significant (F=2.996, P<0.05) as well as the coefficient of the explanatory variable (β=0.161, t=1.731, P<0.05). Advanced production technology accounted for 0.6% of the deviation in performance of manufacturing firm (R²=0.006). The model exploring the link between advanced production technology and performance was also significant as well as the coefficient of the explanatory variable (β=0.060, t=0.677, P<0.05). Marketing Access (R²=0.053) accounted for 5.3 % variation in Performance of Manufacturing Firm. The corresponding model was statistically significant (F=4.104, P<0.05) and the distinct factors were statistically significant (β=0.211, t=2.026, P<0.05). Management knowhow explained 6.6 % of the variation in performance (R²=0.066). The
corresponding model was also found to be significant (F=5.144, P<0.05) as well as the coefficient for management knowhow (\(\beta=0.252, t=2.268, P<0.05\)).

As illustrated in figure 4.5, management knowhow had the largest input to the performance of the companies (\(\beta=0.252, p<0.05\)), followed by Marketing expertise (\(\beta=0.211, p<0.05\)), capital flow (\(\beta=0.161, p<0.05\)) and advanced production technology (\(\beta=0.060, p<0.05\)). Overall, the study conclude that all the foreign direct investment components had a favorable influence on the performance of the companies.

**Figure 4.5: Summary of Resultant Findings**

![Diagram showing the influence of foreign direct investment components on performance](image)

Source: Field Data (2019).

Further analysis was undertaken to establish the combined influence of the foreign direct investment components on performance as illustrated by the following hypothesis.

**H01:** There is no statistically significant influence of foreign direct investment on the performance of manufacturing firms in Kenya.
To test the hypothesis, a composite score for foreign direct investment that combined its four components was first computed and then regressed on the performance index of the manufacturing firms. From the results, when foreign direct investment is taken as the sole regressor, only 7.9% of the variation in performance could be accounted for. The results also demonstrate that the explanatory power of the model was significant ($F (1, 73) = 6.28$, $p < 0.05$). Additionally, the model furnished a significant coefficient for the foreign direct investment variable ($\beta=0.467$, $p<0.05$). Since the coefficient was positive, the implication is that a unit increment in FDI would boost performance by 46.7%. The results further substantiate the proposition that the combined effect of FDI components on performance outweighs the individual effects of capital flow, advanced production technology, marketing expertise, and managerial expertise. The outcomes are displayed in Table 4.35.

**Table 4.35: Foreign Direct Investment on Performance of Manufacturing Firm**

<table>
<thead>
<tr>
<th>Model Summary (Goodness-of-fit)</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>R</td>
<td>R Square</td>
<td>Adjusted R Square</td>
<td>Std. The error in the Estimate</td>
</tr>
<tr>
<td>1</td>
<td>.281$^a$</td>
<td>.079</td>
<td>.067</td>
<td>.49882</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>ANOVA</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Sum of Squares</td>
<td>Df</td>
<td>Mean Square</td>
<td>F</td>
</tr>
<tr>
<td>Regression</td>
<td>1.563</td>
<td>1</td>
<td>1.563</td>
<td>6.282</td>
</tr>
<tr>
<td>Residual</td>
<td>18.164</td>
<td>73</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td>Total</td>
<td>19.727</td>
<td>74</td>
<td>.249</td>
<td></td>
</tr>
<tr>
<td>Sig.</td>
<td>.014$^b$</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Coefficients</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td>Unstandardized Coefficients</td>
<td>Standardized Coefficients</td>
<td>t</td>
<td>Sig.</td>
</tr>
<tr>
<td></td>
<td>B</td>
<td>Std.Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>(Constant)</td>
<td>1.618</td>
<td>.467</td>
<td>.462</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>.467</td>
<td>.186</td>
<td>.281</td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of Manufacturing Firm
b. Predictors: (Constant), Foreign Direct Investment
Source: Field Data (2019).
4.4.2 The Mediating Role of Absorptive Capacity on Foreign Direct Investment and Performance of Manufacturing Firm

In terms of the second objective, the intention was to look into whether the intervening force of absorptive capacity would be found operative in the link between foreign direct investment and performance of manufacturing firm. A corresponding hypothesis was put forward.

H\textsubscript{02}: Absorptive capacity does not have a statistically significant mediating influence on the relationship between foreign direct investment and the performance of manufacturing firms in Kenya.

The absorptive capacity's mediating role was examined through hierarchical regression models. In the first model, the link between foreign direct investment and performance of manufacturing firm was established. The second model assessed whether or not the combined effect of foreign direct investment and absorptive capacity on performance was statistically valid. Manifestation of the intervening forces of absorptive capacity would be attested if the change in R\textsuperscript{2} would be found to be significant.

The coefficients of determination for the first and second models were 0.079 and 0.086, respectively. The implication is that foreign direct investment alone accounted for 0.079 and foreign direct investment together with absorptive capacity accounted for a 0.086 change in performance of manufacturing firm. The associated change in R\textsuperscript{2} was thus 0.007, which was significant. The results also demonstrate that the overall significance of the model with mediating effects had a p-value of 0.039, which was less than 0.05, indicating that H\textsubscript{02} not supported and that the study has thus rejected this hypothesis. As a result, absorption capacity was found to have a statistically significant mediating effect on the
connection between foreign direct investment and manufacturing firm performance. As such, the findings suggested that the absorptive capacity intervenes between foreign direct investment and manufacturing firm performance. The results of these models are illustrated in Table 4.36.

Table 4.36: The Mediating Role of Absorptive Capacity on Foreign Direct Investment and Performance of Manufacturing Firm

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>R</td>
<td>Square</td>
<td>Adjusted R Square</td>
<td>Std. Error of the Estimate</td>
<td>R Square Change</td>
<td>F Change</td>
</tr>
<tr>
<td>1</td>
<td>.281&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.079</td>
<td>.067</td>
<td>.49882</td>
<td>.079</td>
<td>6.282</td>
</tr>
<tr>
<td>2</td>
<td>.293&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.086</td>
<td>.060</td>
<td>.50047</td>
<td>.007</td>
<td>.521</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Foreign Direct Investment
b. Predictors: (Constant), Foreign Direct Investment, Absorption Capacity

Table 4.37 gives a breakdown of the regression coefficients for the two models. The coefficient for foreign direct investment was positive and significant ($1 = 0.467$, p-value = 0.014) in the model reflecting the link between foreign direct investment and performance, as shown in the table. This was an indication that a unit increment in foreign direct investment would improve performance by 0.467. In connection to the second model, the coefficients associated with the contributory factors of foreign direct investment and absorptive capacity were 0.479 ($p < 0.013$) and -0.83 ($p < 0.047$), respectively. These
results suggest that controlling for absorptive capacity, there would still be a positive and significant link between foreign direct investment and performance, where a unit increment would elevate performance of manufacturing firm by 0.479.

**Table 4.37: Regression Coefficients of Foreign Direct Investment and Absorptive Capacity**

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1 (Constant)</td>
<td>1.618</td>
<td>.462</td>
<td>3.500</td>
<td>.001</td>
</tr>
<tr>
<td>Foreign Direct Investment</td>
<td>.467</td>
<td>.186</td>
<td>.281</td>
<td>.014</td>
</tr>
<tr>
<td>(Constant)</td>
<td>1.905</td>
<td>.611</td>
<td>3.117</td>
<td>.003</td>
</tr>
<tr>
<td>2 Foreign Direct Investment</td>
<td>.479</td>
<td>.188</td>
<td>.289</td>
<td>.013</td>
</tr>
<tr>
<td>Absorption Capacity</td>
<td>-.083</td>
<td>.115</td>
<td>-.082</td>
<td>-.722</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Firm Performance

Source: Field Data (2019).

**4.4.3 The Moderating Influence of Business Environment on Foreign Direct Investment and Performance of Manufacturing Firms**

To investigate for the moderating influences of the business environment in the link between foreign direct investment and firm performance, the following hypothesis was set forth.

H$_{03}$: The business environment has no significant moderating effect on the relationship between foreign direct investment and performance of manufacturing firms in Kenya.

The Baron and Kenny (1986) approach was invoked to draw inferences about the possible moderating influence of the business environment. Implementation of this approach entailed a three-step procedure as shown in figure 4.6.
The Baron and Kenny (1986) approach proceeded in three (3) stages. In the first stage, foreign direct investment was regressed on performance. In the second, the business environment was included in the model as an explanatory variable. Finally, the model was updated to include an interaction term between foreign direct investment and the business environment. According to the scholars, moderation effects are apparent if the entire model with the interaction term produces significant results.

Table 4.38 reveals that model one has an $R^2$ of 0.079, whereas model three has a marginally higher $R^2$ of 0.102. There was also a marginal positive increase in the strength of the relationship from 0.281 to 0.320. The results further show that the model with the interaction term had a $p$-value of 0.05, which was equal to or less than the set $p$-value of 0.05. The study, therefore, rejected the null hypothesis and concluded that the business environment had a moderating and significant role in the association amongst foreign direct investment and manufacturing performance of manufacturing firm. The outcomes of applying this approach are displayed in Table 4.38. The coefficients of moderation are displayed in Table 4.39.
Table 4.38: Moderating Effect of Business Environment

<table>
<thead>
<tr>
<th>Model Summary</th>
<th>Model</th>
<th>R</th>
<th>R Square</th>
<th>Adjusted R Square</th>
<th>Std. Error of the Estimate</th>
<th>Change Statistics</th>
<th>ANOVA</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>.281&lt;sup&gt;a&lt;/sup&gt;</td>
<td>.079</td>
<td>.067</td>
<td>.49882</td>
<td>.079</td>
<td>6.282</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>.297&lt;sup&gt;b&lt;/sup&gt;</td>
<td>.088</td>
<td>.063</td>
<td>.49984</td>
<td>.009</td>
<td>.704</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>.320&lt;sup&gt;c&lt;/sup&gt;</td>
<td>.102</td>
<td>.064</td>
<td>.49943</td>
<td>.014</td>
<td>1.117</td>
</tr>
</tbody>
</table>

a. Predictors: (Constant), Foreign Direct Investment  
b. Predictors: (Constant), Foreign Direct Investment, Business Environment  
c. Predictors: (Constant), Foreign Direct Investment, Business Environment, Moderator

<table>
<thead>
<tr>
<th>ANOVA</th>
<th>Model</th>
<th>Sum of Squares</th>
<th>Df</th>
<th>Mean Square</th>
<th>F</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Regression</td>
<td>1.563</td>
<td>1</td>
<td>1.563</td>
<td>6.282</td>
<td>.014&lt;sup&gt;a&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>18.164</td>
<td>73</td>
<td>.249</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.727</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regression</td>
<td>1.739</td>
<td>2</td>
<td>.870</td>
<td>3.480</td>
<td>.036&lt;sup&gt;c&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>17.988</td>
<td>72</td>
<td>.250</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.727</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Regression</td>
<td>2.018</td>
<td>3</td>
<td>.673</td>
<td>2.697</td>
<td>.050&lt;sup&gt;d&lt;/sup&gt;</td>
</tr>
<tr>
<td></td>
<td>Residual</td>
<td>17.709</td>
<td>71</td>
<td>.249</td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>Total</td>
<td>19.727</td>
<td>74</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of Manufacturing Firm  
b. Predictors: (Constant), Foreign Direct Investment  
c. Predictors: (Constant), Foreign Direct Investment, Business Environment  
d. Predictors: (Constant), Foreign Direct Investment, Business Environment, Moderator

Source: Field Data (2019).

Table 4.39: Coefficients of the Interaction between Business Environment and Foreign Direct Investment

<table>
<thead>
<tr>
<th>Coefficients</th>
<th>Model</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
<th>T</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>B</td>
<td>Std. Error</td>
<td>Beta</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td>1</td>
<td>Foreign Direct Investment</td>
<td>1.618</td>
<td>.467</td>
<td>.186</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>1.459</td>
<td>.452</td>
<td>.188</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>Business Environment</td>
<td>.071</td>
<td>.085</td>
<td>.095</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.1438</td>
<td>.432</td>
<td>.188</td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>.098</td>
<td>.088</td>
<td>.131</td>
</tr>
<tr>
<td></td>
<td>3</td>
<td>Moderator</td>
<td>-.070</td>
<td>.066</td>
<td>-.124</td>
</tr>
</tbody>
</table>

a. Dependent Variable: Performance of Manufacturing Firm

Source: Field Data (2019).
Model 1 depicts the independent variable (foreign direct investment) and dependent variable's (performance of manufacturing firm) coefficients, while Model 2 depicts the independent variable (foreign direct investment), moderator (business environment), and dependent variable (performance of manufacturing firm). Model three depicts the independent variable (foreign direct investment), moderator's (business environment) relationship with the interaction term. These relationships are represented in the following equations:

\[
FP = 1.618 + 0.467\text{FDI} \quad \text{.................................................. i}
\]
\[
FP = 1.459 + 0.452\text{FDI} + 0.071\text{BE} \quad \text{.................................................. ii}
\]
\[
FP = 1.438 + 0.432\text{FDI} + 0.098\text{BE} - 0.070 \text{FDI*BE} \quad \text{......................... iii}
\]

Where: FP = Performance of Manufacturing Firm;

FDI = Foreign Direct Investment,

BE = Business Environment.

In Model (i) a unit change in foreign direct investment would result to a 0.467 surge in performance. In Model (ii) a unit change in foreign direct investment would yield a 0.452 improvement in performance while a unit change in the business environment would produce a 0.071 increase in performance. In Model (iii) a unit change in foreign direct investment and business environment would result in 0.432 and 0.098 change in performance, respectively. The results also demonstrate that a unit incremental change in the interaction between foreign direct investment and the business environment would generate a 0.07 growth in the performance of the companies.
4.4.4 Joint Contribution of Foreign Direct Investment, Absorptive Capacity and Business Environment on the Performance of Manufacturing Firms

As pertains to the last objective, the researcher endeavored to examine how foreign direct investment, business environment and absorptive capacity jointly contribute to performance of manufacturing firms in Kenya. Accordingly, a hypothesis was set forth and stated as follows:

$H_04$: The joint contributions of foreign direct investment, absorptive capacity and business environment to the performance of manufacturing firms in Kenya is not significant.

The multiple linear regression was carried out in a procedural manner, with the predictor variables being entered simultaneously into the analysis. The contribution of each of the three variables of foreign direct investment, absorptive capacity and business environment to the variability in the performance of manufacturing firms is explained by fitting the variable into a multiple linear regression model. Table 4.40 presents the output obtained from using multiple linear regression to model the joint contribution of foreign direct investment, absorptive capacity and business environment on performance of manufacturing firms.

The table 4.40 revealed the combined contribution of the three independent variables in the prediction of performance of manufacturing firms. The joint explanatory power of the multiple regression models of the three-predictor variables was 0.096 with a $P$-value of 0.066. As such, we accept the hypothesis that the joint contribution of foreign direct investment, absorptive capacity, and business environment on the performance of manufacturing firms in Kenya is not significant. This imply that when considered jointly,
foreign direct investment, absorptive capacity and business environment had insignificant contribution to the performance of manufacturing firms in Kenya. The contribution of each variables and their significance is also presented.

Table 4.40: Joint Contribution of Foreign Direct Investment, Absorption Capacity, Business Environment on Performance of Manufacturing Firms

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
</tbody>
</table>

ANOVA

<table>
<thead>
<tr>
<th>Model Summary</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: Manufacturing Performance</td>
</tr>
</tbody>
</table>

b. Predictors: (Constant), Absorption Capacity, Business Environment, Foreign Direct Investment

<table>
<thead>
<tr>
<th>Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>1</td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td></td>
</tr>
<tr>
<td>a. Dependent Variable: Manufacturing Performance</td>
</tr>
</tbody>
</table>

Source: Field Data (2019).

It is further observed that when each variable is considered individually, the independent variable foreign direct investment had a contribution of 0.464 with a p-value of 0.016. This means that the contribution of foreign direct investment was significant. Further analysis revealed that absorptive capacity had a mediating contribution of negative (-ve) 0.090 with
a p-value of 0.440 meaning its contribution when acting jointly with the other variables was not significant. The moderating variable business environment had a moderating contribution of 0.075 with a P-value of 0.379 meaning acting jointly with the other variables, the contribution of business environment was not significant.

The implication of the results is that only foreign direct investment had a significant contribution to the Kenya manufacturing firm’s performance. The moderating variables business environment added insignificant explanatory power to the changes in performance of manufacturing firm. The mediating variable absorptive capacity had an insignificant negative contribution meaning it hampered the effect of foreign direct investment on performance of manufacturing firms Kenya.

The Model 1 depict the joint contribution of the independent variables (foreign direct investment) mediating variable (absorptive capacity) and moderating variable (business environment) on dependent variable (performance of manufacturing firm). The relationships is represented in the following equations:

\[ FP = 1.760 + 0.464 \text{FDI} + 0.075 \text{BE} - 0.090 \text{AC} \]

*Where: FP = Performance of Manufacturing Firm;*

\[ \text{FDI} = \text{Foreign Direct Investment}, \]

\[ \text{BE} = \text{Business Environment}. \]

\[ \text{AC} = \text{Absorptive Capacity} \]

The model shows that one (1) unit change in foreign direct investment would result to a 0.464 surge in performance of manufacturing firm. In Model (ii) a unit change in foreign direct investment would yield a 0.452 improvement in performance while a unit change in
the business environment would produce a 0.071 increase in performance of manufacturing firm. In Model (iii) a unit change in foreign direct investment and business environment would result in 0.432 and 0.098 change in performance of manufacturing firm respectively. The results also demonstrate that a unit incremental change in the interaction between foreign direct investment and the business environment would generate a 0.07 growth in the performance of manufacturing firm.

4.5 Discussion of Results

The focus of this research was on the manufacturing industry in Kenya. The key interest of the research was to explore whether or not the performance of the manufacturing companies is attributable to the foreign direct investment and absorptive capacity of the firms as well as the state of the business environment in which they operate. Accordingly, four set of specific objectives was set forth with their corresponding hypotheses. In this section, a detailed discussion of the results from the evaluation of these hypotheses and their connection to the extant empirical base is offered. The discussion is categorized according to the study objectives.

4.5.1 FDI and Performance of Manufacturing Firms

The first objective was to unravel the implications of foreign direct investment on the performance of the manufacturing companies in Kenya. Foreign direct investment was operationalized as consisting of four variables capital flow, advanced production technology, marketing expertise and management knowhow. The reviewed literature has established that scholars have found contradictory findings with some establishing a positive and others a negative association between foreign direct investment and
performance of manufacturing firm. Further, studies on foreign direct investment have not focused on its components, which limits a holistic picture of how the different components of foreign direct investment affect performance of manufacturing firms. As such, there are considerable gaps in our understanding of the unique interplay between capital flow, advanced production technology, marketing expertise and management knowhow. Therefore, the researcher set out to uncover the influence of foreign direct investment components on firm performance. The researcher developed four sub-hypotheses and a simple linear regression analysis was invoked.

The outcome of the test of sub hypothesis established that capital flow (R² = 0.039, F=2.996, β =0.199, t=1.731, p < .05), Advanced production technology (R²=0.006, F=0.459. β=0.079, p<0.05), Marketing expertise (R²=0.053, F=4.104, β=0.231, p<0.05) and Management knowhow (R²=0.066, F=5.144, β=0.257, p<0.05) had significant positive impact on performance of manufacturing firm. The results confirm that each component of foreign direct investment increases the performance of manufacturing firm; implying that firms that attract foreign investors will improve their performance. The association between foreign direct investment and firm performance was found to be significant (R²=0.079, F=6.282, β=0.467, p<0.05) and had an explanatory power of 7.9%. The findings show that the combined impact of FDI on manufacturing firm performance was stronger than the individual impact of capital flow, advanced manufacturing technology, managerial knowhow, and marketing expertise.

These findings tie well with a study by Leman and Ismet (2015) who noted that foreign direct investment introduction lead to an upsurge in new technologies, and production
processes and set the ground for innovation resulting in better performance of firm. The findings also concur with Pedro, Jorge and Jose (2014) study that established that spillover from MNCs is a source of technical progress and thereby adds to aggregate performance of firm. The current study further supports Görg and Strobl's (2001) findings that through the establishment of relationships with local suppliers, multinationals impact the performance of Irish companies positively.

Further, the findings support Nadide and İbrahim's (2014) study that established that foreign direct investment contributes to economic development by increasing capital buildup and technology improvements which in turn increases the performance of firms. The current findings also agree with Wang, Deng, Kafouros, and Chen's (2012) study that established a positive link between a company’s footprint in a foreign country and the productivity of the hosting economy. Additionally, the findings are also in agreement with Lugemwa (2014) who recognized foreign direct investment as a critical aspect when it comes to driving growth of the manufacturing sector.

The study further supports IMF (2018) observation that FDI benefits do not appear as expanded resources that can be invested but also appears in sharing of knowledge and technology. The findings concur with the Government of Qatar, (2014) which observed that foreign direct investment encourage partners to transfer knowhow and technology and provides opportunities especially to host countries to promote their products in the global market giving them marketing expertise. The study is also consistent with Marco and Claudia, (2014) assertion that multinationals invest in low product cost countries and then serve domestic and foreign markets giving these countries access to foreign markets.
The outcomes, on the other hand were contrary to Gui-Diby's (2014) study findings that had earlier established that foreign direct investment inflow produces a reverse effect on economic growth. It also contradicts the study by Diyamett and Mutambla (2014) study on Tanzanian firms that found very few firms acknowledged foreign direct investment s as their sources of knowledge for technological abilities attained, a fact supported by their limited connections with foreign investors. The current findings are also inconsistent with Muhammad and Kashif, (2013) who rejected the hypothesis that foreign direct investment enhanced efficiency growth in domestic firms in Mexico, as seventy-one (71) % of such investment was meant for purchasing already existing Mexican companies and did not essentially result to capital creation.

Nevertheless, the findings add to the burgeoning empirical base on capital flows, advanced production technology, management knowhow and Marketing expertise. The study provides a framework for understanding how foreign direct investment may be appropriately regarded as a predictor of firm performance. The electric theory stressed that foreign firms possess some advantages in form of management skills, marketing skills and technologies that they can use to compete (Hymer, 1960). This was supported Kindleberger (1973) assertion that for foreign firms own certain assets that can take the form of superior technology, strong marketing, superior management systems and economies of scale, among others. Further, local organizations with strong dynamic capabilities and knowledge base are capable of exploiting the presence of foreign firms by appropriating the advantages they possess (Teece and Al-Aali, 2013).
4.5.2 Foreign Direct Investment, Absorptive Capacity and Performance of Manufacturing Firms

A central proposition advanced in this study was that there are intervening forces that could potentially reinforce or inhibit the link between foreign direct investment and the performance of companies. One of the forces identified was absorptive capacity. Against this backdrop, the second objective set out to explore whether or not there was an attestation that the intervening forces of absorptive capacity were operative in the relationship.

The findings on performance of manufacturing firms produced $R^2= 0.086$, $F =6.282$, $\beta=0.479$ $t=3.5$, $p >.05$. This implies that absorptive capacity had a positive significant mediating association with performance of manufacturing firm. Thus, organizations that want to improve their performance by appropriating the benefits of foreign direct investment can invest in their absorptive capacity factors by allocating resources to support acquisition, assimilation, exploitation and maintain the transformation of ideas.

The outcomes of this research is in line with Asuantri and Yasmin (2017) findings that absorptive capacity interaction with foreign direct investment influenced technological innovation and subsequent performance of the firm. The outcome is also consistent with Leman and Ismet (2015) findings that foreign direct investment inflows improve the level of innovation with an upsurge in absorptive capacity in host economies. The current finding is also consistent with Ricardo, Luisa and Simona (2015) who noted that foreign direct investment influenced the outcomes of local firms positively and that the capacity of local firms to absorb fresh knowledge was an important condition for them to benefit from this interaction. The findings are also consistent with Ilboudo (2014) who submitted that the
firms’ ability to capitalize on fresh knowledge and new technology was based on their absorptive capacity. The findings further agree with Pedro, Jorge and Jose (2014) assertion that foreign direct investment had positive spillovers on Spanish domestic manufacturing firms something they attributed to existence of adequate absorptive capacities.

The study findings supports Rueda and Shamsub’s study (as cited in Asuantri & Yasmin, 2017) which observed that countries do not achieve the same level of success exploiting the technologies received from their interaction with foreign firms due to their variations in absorptive capacities. The research also supported the findings of Onyekwena (2012) who observed that the technological spillover effects are enhanced and facilitated by the amount of local capabilities in the host economy. The current findings support earlier findings of Görg and Strobl (2001) that technology spillovers occurred between foreign and indigenous firms in high tech industries and that lack of spillovers in low tech firms is attributed to deficiency of capacity to absorb the new knowledge. The findings are also consistent with Liu and Wang study (as cited in Bonga-Bonga & Guma, 2017) that demonstrated that high foreign direct investment inflow is a good way of expanding the technological capabilities of the hosting economies but noted that this is hampered in an economy with skill shortage. The study also agrees with Allais, (2012); Rasool and Botha, (2011) who asserted that skill shortage exert negative effects on foreign direct investment impact.

The current study also supports Lau and Lo (2015) who affirmed that greater research and development investment enhances absorptive capacity, which in turn supports enhanced adoption of new knowledge resulting in improved performance of manufacturing firm. It
also agrees with Navaretti and Soloaga (2001) study that submitted that pure importation of capital equipment does not lead to automatic technology transfer and that building of technological capacity is pertinent to the effective diffusion of technology. The study also agrees with Kneller and Stevens (2006) who observed that a country need to possess adequate levels of absorptive capacity to benefit from foreign direct investment.

However, the findings contradict Wales, Parida and Patel's (2013) assertion that the link between absorptive capacity and company performance is inverted U-shaped, indicating that both positive and negative outcomes. Wales, Parida and Patel's (2013) drawing on statistics from 285 technology-based small and medium-sized businesses observed that growth in three potential secondary measures of performance begins to decline beyond lower levels of absorptive capacity and even turns negative and damaging beyond intermediate levels. It also disagree with the findings of Zou, Ertug, and George's (2017) that absorptive capacity has a limited impact on business performance when accounting measures are applied, casting doubt on the notion that absorptive capacity influences financial performance. The findings also disagrees with Glass and Saggi study and Kinoshita study (as cited in Damgaard, 2011) observed that organizations require a certain level of absorptive ability acquired by research and development operations in order to recognize the value of new knowledge. They further established that where firms have a high export orientation the significance of interaction with domestic firms is reduced dipping the level of spillover from foreign firms

This research augments the expanding body of evidence linking the absorptive capability of companies and their performance. The dynamic capability theory emphasized the organization’s ability to organize resources, change them as situations require, and adapt
to new environments. The findings of this study further support Blalok and Gertler (2004) who verified that companies that possess a highly qualified set of employees benefit significantly more in their interaction with foreign companies. The study also agrees with Hamida and Piscitello's (2013); Anwar and Nguyen's (2010) study of Swiss and Vietnam manufacturing respectively who noted that companies that demonstrate high-level absorptive capability are more set to benefit from the spillovers emanating from foreign direct investment activities.

4.5.3 Foreign Direct Investment, Business Environment and Performance of Manufacturing Firms

The research pursued to empirically establish whether or not business conditions modified the nature of the link between foreign direct investment and the performance of manufacturing companies. The potential moderating role of business environment conditions was investigated through the Baron and Kenny approach. The findings for performance of manufacturing firm showed that when the moderating variable was included in the model in step 3, the coefficient of determination for the interaction term was statistically significant (adjusted $R^2=0.102$, $F=1.117$, $\beta=-0.098$, $t=-3.628$, $p>0.05$). These outcomes were an indication that the moderating influence of the business environment were operative in the link between foreign direct investment and the performance of manufacturing firms. As a result, hypothesis three (H3) that the business environment has no effect on the association between foreign direct investment and manufacturing firm performance in Kenya was rejected.

The study outcomes are similar to Hodud et al., (2014) who established that good business environments improved productivity and Hallward-Driemeier, Wallsten and Xu’s study (as
cited in Hodud et al., 2014) that established that supportive government regulations improved performance of manufacturing firm. Similarly, the current results are consistent with Hsiang-Feng et al., (2012) study on the moderating role of environmental dynamism that external factors in a business setting affect the innovative activities of a firm and Gui-Diby (2014) who opined that poor business environment results to the negative association between FDI and economic development. The results are also in synch with Hodud et al., (2014) who found that increase in infrastructure efficiency and business regulations support business growth. The findings also agrees with World Bank (2006) that observed that business growth was negatively influenced by the laws passed by a country. Further, the findings agree with World Bank (2009) that submitted that business regulations can be supportive to organizations if their implementation is correctly done.

The current study also supports the findings by Edrees (2015) who asserted that countries with well-laid financial markets benefited positively from foreign direct investment and that there was a negative association between foreign direct investment and economic development across low-income and middle-income strata using variables such as human resource and infrastructure on the economic performance of Sub-Saharan Africa countries. The study further supports the findings by Pradhan and Bagchi (2013) who posited that investment in transport systems minimizes trading costs and consequently improves the competitive advantage of firms. The study also agrees with Alfaro, Chanda, Oscan and Sayek study (as cited in Muhammad & Kashif, 2013) who established that foreign direct investment promoted growth about three times in countries that had more well-developed financial systems than their counterparts did with poor financial systems.
The current study is also in agreement with the results of Rocha's investigation (as cited in Brașoveanu & EvelinaBălu, 2014) that an attractive business environment with appropriate budgetary policies supported the development of local firms. It also agrees with Hodud et al., (2014) who explained that good business environments enabled firms to enter and exit markets easily; hence, improving productivity. Further, the research also supports the findings by Hallward-Driemeier, Wallsten and Xu’s study (as cited in Hodud et.al, 2014) that established that exploitive government regulations affected performance of manufacturing firm negatively and that sales were likely to grow by 42.6 % whereas employment was expected to grow by 46.7 % when regulatory burdens were reduced by one (1) standard deviation.

In addition to the above, the findings by Okeyo (2013) that external business environmental changes had a moderating influence on the performance of firms are affirmed by the current research. The study further affirms that the simultaneous consideration of organizations' performance and business environmental factors is likely to provide a richer understanding when examining a firm’s performance. The study supports the findings by Sprenger and Lazarevaa (2016) which identified financials constraints as one of the key impediments to organization growth, particularly in emerging markets and in particular cost and access to finance. The study findings are also consistent with Kamran, Chor and Manova (2016) who submitted that host economies that possess stable stock markets normally receive more MNCs than their counterparts with undeveloped financial markets.

However, the current study was inconsistent with some earlier researchers like World Bank, (2006) that found no link between the performance of companies and the regulations
enforced by the government. The inconsistencies between the findings of this research and the earlier research could be attributed to differences in conceptualization and measures of the business environment. However, the research adds to the current literature on the business environment and performance of firms. This research presents a framework for understanding how the business environment moderates the association between foreign direct investment and manufacturing firm performance. The results suggest that attracting foreign direct investment and improving the business environment (financial constraints, government regulations and physical infrastructure) improves local firm's performance.

4.5.4 The Joint Contribution of Foreign Direct Investment, Business Environment, Absorptive Capacity on the Performance of Manufacturing Firms

The research was founded on the assumption that the association amongst foreign direct investment and a firm’s performance is not direct but that it is through absorptive capacity and is moderated by the business environment. The research postulated that the joint contribution of foreign direct investment, absorptive capacity and the business environment on performance of manufacturing firm are not significant.

The results show that the joint contribution of foreign direct investment, absorption capacity and business environment have an explanatory power of $R^2$ of 0.096, which was insignificant as it has a P-value of 0.066. The contribution of individual variable was foreign direct investment 0.464, absorption capacity was negative (-ve) 0.090 while that of business environment was 0.075. Additionally, the foreign direct investment had significant results, absorptive capacity had negative insignificant results and business environment had positive but insignificant results.
Therefore, from the research results, the investigator concluded that the joint contribution of foreign direct investment, absorptive capacity and business environment on a performance of manufacturing firms was insignificant. The results also showed that when considered independently only foreign direct investment had a significant contribution to changes in the performance of manufacturing firms. The variables of absorptive capacity had an insignificant negative contribution whereas the business environment had an insignificant positive contribution. The negative absorptive capacity is interpreted to mean that challenges of bureaucratic red tape, poor quality of staff could be hampering manufacturing firm’s ability to transform the spillover knowledge to useable applications hence the negative contribution.

The study findings are similar to Pedro, Jorge and Jose, (2014) that asserted that foreign direct investment is essential in promoting the productivity of local firms as it is a source of technical progress that contributes to overall performance of manufacturing firm. The study also supports the findings by Newman, Rand, Talbot and Tarp (2015) that empirically established that certain gains in productivity were linked directly to the connection between domestic and foreign-owned companies along the supply chain. The study further supports the findings of Laura (2017) who submitted that local conditions were able to hinder the extent to which foreign direct investment benefits could be realized and that efficient policies could eliminate factors that prevented local firms from developing adequate linkages.

The study agrees with the findings by Alfaro and Chen (2018) who empirically established that the positive gains from multinational activities were attributable to technology and
knowledge spillover and that market reallocations explained most of the improvements that came with foreign investment. The current study also agrees with the findings of Rudra, Naville, Yuosre and Bele (2013) that improving the country's infrastructure such as the road transport system and telecommunication services is bound to moderate the cost of doing business and consequently result in the increased competitive advantage of the firms. The study further agrees with Hatani, (2009) who established that the spread of technology from foreign to domestic companies makes them more innovative and effective producers.

The outcomes of this study were contrary to Damgaard's (2011) study that established significant negative productivity spillovers at the collective level but the results vary broadly across organizations. The study also contradicts the findings of Barrios, Görg and Strobl (2006) who found negative and insignificant horizontal spillovers from foreign to local companies in East Central Europe. The study also contradicted the findings of Pavlinek and Zizalova (2014) whose analysis of firm-level qualitative data on linkages in spillover in global production submitted that spillovers posed negative impacts on the performance of the local enterprises.

However, the research adds to the burgeoning empirical base on foreign direct investment, absorptive capacity, business environment and firm performance. This research offers a structure for understanding how the joint variables influence performance of manufacturing firm. The findings suggest that increasing foreign direct investment inflows and improving the business environment (financial constraints, government regulations and physical infrastructure) positively influences a firm's performance. The outcomes of this study further support Laura (2017) who noted that local conditions were able to hinder
the extent to which foreign direct investment benefits could be realized and that efficient policies could eliminate factors that prevented local firms from developing adequate linkages.

Overall, this study found that jointly, the predictor variables (foreign direct investments, absorptive capacity, and business environment) contributed positively though insignificantly to both financial and non-financial performances of manufacturing firms. Individually, the researcher concluded that foreign direct investment was a good predictor of performance of manufacturing firms. However, the absorptive capacity hampered the contribution of foreign direct investment to the performance of manufacturing firms whereas the business environment had positive though insignificant contribution to the effect of foreign direct investment on the performance of manufacturing firms. The application of both measures of performance is consistent with Luliya, Sununta, Yuosre and Chotchai (2013) whose study results support the significance of using both financial and non-financial indicators to predict performance of manufacturing firm.
4.5.5 Chapter Summary

The section includes hypothesis tests and discussion of the findings. The study results indicated that the first hypothesis for foreign direct investment and performance was rejected. This indicates that foreign direct investment significantly influences performance. Further sub hypotheses 1a, 1b, 1c and 1d were all rejected indicating that capital flow, advanced technology, management knowhow and marketing expertise significantly influence performance. The researcher also rejected the second hypothesis and determined that absorption capacity had a statistically significant mediating influence on the association between foreign direct investment and firm performance. In addition, hypothesis three was rejected implying a significant link between foreign direct investment, business environment and performance. Finally, the researcher failed to reject the fourth hypothesis, resulting in the conclusion that the joint contribution of foreign direct investment absorptive capacity and business environment was not significantly bigger than the implications of each component individually. The preceding chapter presents a snapshot of this study’s findings and their implications.
CHAPTER FIVE
SUMMARY, CONCLUSIONS AND RECOMMENDATIONS

5.1 Introduction

In this closing chapter, the intended goal is to provide a snapshot of the principal results that emerged from this inquiry. The conclusions deduced from the findings are supplemented by the recommendations and implications emerging therefrom. Further, the underlying limitations in the present study are highlighted as well as fruitful directions for further research of yet unexplored areas.

5.2 Summary of Findings

The concern of this research was to discern the influence of various combinations of predictor variables (foreign direct investment, absorptive capacity and business environment) on performance of manufacturing firms in Kenya. There were four objectives out of which four hypotheses were developed and tested. The study targeted all the 100 manufacturing firms with over 10% foreign investment and listed with the Kenya Association of Manufacturers. The research achieved a response rate of 75%.

To complete the analysis, the study relied on descriptive statistical and regression tools. To test the quality of the data and ensure that the classical linear regression assumption was met, the data were checked for normality, multicollinearity and heteroscedasticity. Normality was tested using histograms and the Kolmogorov-Smirnov test. The findings of the normality test show that the data met the condition of normal distribution.
The VIF scores tested multicollinearity in the model, and the outcomes indicated that the assumption of multicollinearity was not violated in the study. The results of levene test were FDI 0.011, absorption capacity 0.0370, business environment 0.005. The results for the three variables were significant and the precondition was fulfilled for all the explanatory variables.

The study established that manufacturing firms were spread across all economic sectors and that 81.3% of the companies had a level of foreign ownership ranging from 20% to 50%. On the length of service participants, 65.4% had served at their position for more than 5 years and 34.7% had worked in their current position for less than 5 years.

The study further endeavoured to pinpoint the various sources of the foreign direct investment and established that the source countries of foreign direct investment are diverse with European Union contributing 30.7%, the Asia region contributing 29.3%, and Africa at 22.7%. North America and the Middle East contributed 12% and 5.3% of the foreign direct investment, respectively. On the mode of entry, the results indicated that 40% of the foreign direct investment was through a partnership with Kenya entrepreneurs while 32% of the foreign direct investment was through the full or partial acquisition of existing private firms. Additionally, 28% of the foreign direct investment was through Greenfield Investment. On the timing of foreign direct investment receipt, the majority of the firms surveyed (68%) received foreign direct investment after establishment while 32% of the firms received it on establishment.

The results show a very high ranking concerning foreign direct investment variables. The highest-ranked was capital flow with a score (mean scores above 2.68, standard deviation
of 0.70, variance of 0.49, and CV of 0.26), followed by management knowhow with (mean scores above 2.46, standard deviation of 0.86, variance of 0.74 and CV of 0.30), the marketing expertise with mean scores above 2.43, a standard deviation of 0.86, variance of 0.76 and CV of 0.31) and finally advanced production technology with scores of (mean scores above 2.31, standard deviation of 0.86, variance of 0.75 and CV of 0.38).

The performance of manufacturing firms results show that a large majority of the FDI manufacturing firms were profitable with 16 % of the firms having attained kshs. 100 million, 54.7 % a profit of between kshs. 100 million and 200 million, 20 % profits of between kshs. 200 million and 300 million and 2.7 % of the firms exceeding kshs 300 million profit. However, the study also established that 6.7 % of the firms made losses during the same period. On return on equity, the data shows that 49.3 % of the firms had a ROE of between 4 % and 8 % in the year. A further 25.3 % had a ROE of between 8-12 %, 9.3 % had a ROE of above 12 %, and another 9.3 % had a ROE between 0- 4 %. However, it was also established that 6.7 % had a negative ROE.

On foreign direct investment impact on profit, the bulk of the participant, 68 % were of the opinion that foreign direct investment impacted positively on the profitability of manufacturing firms. However, 18.7 % of the respondents indicated that foreign direct investment resulted in a decrease in profitability, while 12 % indicated there was no change and 1.3 % indicated they did not know.

The capacity utilization results indicate that 5.3 % were operating between 0 % to 20 %, 40 % were operating between 20 % to 40%, 36 % were operating at between 40 % and 60 % of the installed capacity and another 16 % operated between 60 % to 80 %, and a further
1.3% operated between 80% to 100%. However, 1.3% did not state their capacity utilization.

The employee productivity data indicate that 1.3% of the firms had employee productivity of between 0-20%, 14.7% of had employee productivity of between 20-40%, 32% had employee productivity of between 40 - 60%, 38.7% of the firms had employee productivity of between 60-80% and 8% had employee productivity of above 80%.

The study employed Pearson correlation analysis to determine the strength and the direction of the variables' interrelationships. Based on the output, it is notable that performance was significantly correlated with the four facets of FDI, namely; capital flow \((r = 0.167, p < 0.05)\), advanced production technology \((r = 0.092, p < 0.05)\) management knowhow \((r=0.245, p < 0.05)\) and Marketing expertise \((r=0.236, p < 0.05)\).

The hypothesis were formulated on the basis of gaps found in theoretical and empirical studies, and it was tested using regression models. The grounding of the hypotheses was on the relationships among the study variables as conceptualized in the conceptual framework. Regression analysis was done at a 5% level of significance to evaluate the hypotheses. The first hypothesis was tested specifically using basic linear regression. The use of hierarchical regression analysis was made in relation to the second hypothesis. For the third hypothesis, process analysis regression method was used, and for the fourth, multiple regression analysis. Table 5.1 shows the objectives, hypotheses and interpretation.
Table 5.1: Summary of Findings

<table>
<thead>
<tr>
<th>Objective</th>
<th>Hypotheses</th>
<th>Decision</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Objective One</strong>&lt;br&gt;To establish the effect of FDI on the performance of manufacturing firms in Kenya.</td>
<td>$H_{01}$: FDI has no significant effect on performance of manufacturing firms in Kenya</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective One (a)</strong>&lt;br&gt;Establish the effect of capital flow on the performance of manufacturing firms in Kenya.</td>
<td>$H_{01a}$: Capital flow has no significant effect on performance of manufacturing firms</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective One (b)</strong>&lt;br&gt;Establish the effect of advanced production technology on the performance of manufacturing firms in Kenya.</td>
<td>$H_{01b}$: Advanced production technology has no significant effect on performance of manufacturing firms</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective One (c)</strong>&lt;br&gt;Establish the effect of marketing expertise on the performance of manufacturing firms in Kenya.</td>
<td>$H_{01c}$: Marketing expertise has no significant effect on a firm's performance.</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective One (d)</strong>&lt;br&gt;Establish the effect of management knowhow on the performance of manufacturing firms in Kenya.</td>
<td>$H_{01d}$: Management knowhow has no significant effect on performance of manufacturing firms.</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective Two</strong>&lt;br&gt;To determine the role of absorptive capacity on the relationship between FDI and the performance of manufacturing firms in Kenya.</td>
<td>$H_{02}$: Absorptive capacity has no significant mediating effect on the relationship between FDI and performance of manufacturing firms in Kenya”</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective Three</strong>&lt;br&gt;To determine the role of the business environment on the relationship between FDI and the performance of manufacturing firms in Kenya.</td>
<td>$H_{03}$: The business environment has no significant moderating effect on the relationship between FDI and the performance of manufacturing firms in Kenya.</td>
<td>Rejected</td>
</tr>
<tr>
<td><strong>Objective Four</strong>&lt;br&gt;To establish the joined contribution of FDI, absorptive capacity, and business environment on performance of manufacturing firms in Kenya.</td>
<td>$H_{04}$: The joint contribution of FDI, absorptive capacity and business environment on the performance of manufacturing firms in Kenya is not significant.</td>
<td>Accepted</td>
</tr>
</tbody>
</table>

Source: Field Data (2019)
In relation to the first hypothesis, it was discovered that there was a significant association between foreign direct investment and performance of manufacturing firms. Foreign direct investment has a weak but positive relationship with performance ($r = 0.281$). Only 7.9% of the variation in performance could be attributed to foreign direct investment. Capital flow, advanced production technology, marketing expertise and managerial knowhow all had positive and significant effects on performance, according to the results of the sub-hypothesis test.

The second objective of the research was centered on investigating whether or not the intervening forces of absorptive capacity were operative in the link between foreign direct investment and performance of manufacturing firms. The findings confirmed that absorptive capacity did, in fact, influence the relationship between foreign direct investment and manufacturing business performance. Jointly, foreign direct investment and absorptive capacity accounted for 8.6% of the variability in the performance an improvement from 7.9% explained by foreign direct investment alone.

The third goal was to see if the business environment had any moderating effects on the relationship between foreign direct investment and performance of manufacturing firms. The findings did lend credence that the business environment was a moderator in the relationship. When the moderator was introduced to the link between foreign direct investment and of manufacturing firms, the impact of foreign direct investment increased from 7.9% to 10.2%, a 2.3 percent increase.
The fourth objective was to examine the joint contribution of foreign direct investment, absorptive capacity, and the business environment on performance of manufacturing firms in Kenya. Empirical results indicated that the joint contribution of foreign direct investment, absorptive capacity and business environment was insignificant. However, when considered jointly foreign direct investment had positive and significant contribution, absorptive capacity had a negative insignificant contribution and business environment had positive but insignificant contribution. Therefore, these findings lend credence to the fourth hypothesis.

5.3 Conclusion

The relationship between foreign direct investment, absorptive capacity, the business environment, and manufacturing firm performance in Kenya was investigated in this study. A conceptual framework was advanced and formed the grounding for proceeding with empirical testing. The data on various study variables were gathered and used for the testing of the hypotheses.

5.3.1 Relationship between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya.

The first objective was to ascertain the implication of foreign direct investment on the performance of manufacturing firms. It was observed that there was a significant link amid the two construct. Moreover, it emerged that the combinatory effect of foreign direct investment components exceeded that of the individual components themselves. From these results, it is apparent that the joint influence among foreign direct investment
components creates a synergistic effect that led to a higher overall performance of manufacturing firm of manufacturing firms.

5.3.2 Effect of Absorptive Capacity on the Relationship between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya

The study purposed to establish the mediating impact of absorptive capacity on the association amid foreign direct investment and performance of manufacturing companies. Absorptive capacity was operationalized as constituting acquisition, assimilation, transformation and exploitation. The results provided sufficient evidence to infer that there is a link between foreign direct investment and manufacturing firm performance, foreign direct investment and absorptive capacity, absorptive capacity and manufacturing firm performance, and that controlling for the former produced insignificant impacts on manufacturing firm performance. On the grounds of these findings, it is concluded that the intervening forces of absorptive capacity were present in the link between foreign direct investment and performance of manufacturing firm.

5.3.3 Effect of Business Environment on the Relationship between Foreign Direct Investment and Performance of Manufacturing Firms in Kenya

This objective sought to explore whether or not the moderating implications of the business environment could be observed in the link between foreign direct investment and performance of manufacturing firms. The business environment was measured in terms of financial access, government regulations, and physical infrastructure. The findings verified that indeed business environment conditions moderated the effects of foreign direct investment.
5.3.4 The Joint Contribution of Foreign Direct Investment, Absorptive Capacity and Business Environment on Performance Manufacturing Firms in Kenya

The fourth objective was to investigate at the joint contribution of foreign direct investment, absorptive capacity, and the business environment on manufacturing firm performance. The results showed that the amount of explanatory power from joint contribution was positive but insignificant. However, when the contribution of individual predictor variable was considered, foreign direct investment was found to have positive and significant contribution to performance of manufacturing firms in Kenya. The variable absorptive capacity was found to have a negative and insignificant contribution while business environment had positive contribution which was also insignificant.

5.4 Implications of the Study

The goal of this study was to look into the relationship between foreign direct investment, absorptive capacity, the business environment, and manufacturing company performance in Kenya. The business environment was viewed as the moderating variable, whereas absorption capacity was viewed as the mediating variable. The study identified features of foreign direct investment, absorptive capacity, and the business environment as major determinants influencing manufacturing firm performance in Kenya.

5.4.1 Theoretical Implications

The findings enrich the understanding of the eclectic theory, which has helped explain the flow of foreign direct investment. Codjoe, (2012) noted that theories explaining the flow of foreign direct investment can broadly be categorized into the type that endeavors to illuminate foreign direct investment from their investment location decisions and those that
are geared towards assessment of the implications of foreign direct investment on different areas of the hosting region. The findings lend credibility to the burgeoning empirical bases that demonstrate the salience of foreign direct investment in the elevation of developing economies. This implies that developing countries stand to gain more if they put measures geared to attracting foreign direct investment.

It emerged that absorptive capacity mediates the association between foreign direct investment and performance of manufacturing firms. This is in agreement with the dynamic capability theory proposition that prospects arise from the fast-paced changes that happen in the operational setting of a business. The research did not find an empirical study that has examined the potential intervening implications of absorptive capacity on the link between foreign direct investment and performance of manufacturing firms. Thus, the current research provided meaningful evidence to lessen the gap.

The findings of this research also supported the moderating influence of the business environment. This supported the resource dependence theory proposition that the prevailing business environment influences firm performance. The study also supports the tenet of resources dependence theory that performance differentials between firms depend on having a supportive business environment and that performance of the organization is determined by the ability of the organization to adjust to the prevailing business environment. The research findings complement the proposition of the resource dependence theory.

The research assessed the simultaneous effect of foreign direct investment, absorptive capacity, and business environment on performance of manufacturing firms. The results
established that the explanatory power of the combined effect of foreign direct investment absorptive capacity, and business environment exceeded that of the respective variables themselves. This suggests that a proper blend of foreign direct investment, absorptive capacity, and business environment on performance of manufacturing firm results in a higher impact on the local economy than the isolated effect of predictor variables. Thus, countries are better off coming up with numerous interventions to ensure that local economies are better placed to appropriate the benefits of foreign direct investment.

The findings in this study tie well with those of other researchers in the areas of international business management, which introduced explanatory determinants of firm performance. In addition to supporting Pedro, Jorge, and Jose's (2014) results, that participation of foreign capital and spillover from MNEs promote technical progress of local firms. The study also introduced the intervening role of absorptive capacity and moderating role of the business environment. For theory building, absorptive capacities need to be considered in relation to foreign direct investment. The current study supports the prediction of resource dependency and knowledge-based theories, making them useful in global business management.

5.4.2 Policy Implications

The findings of this study support that foreign direct investment improves the performance outcomes of local manufacturing firms. There are several policy implications, which emanate from the literature review and results of the study that can be considered by the government for policymaking. First, the government should enact a policy framework to provide incentives, to encourage foreign direct investments in a bid to attract additional
capital, advanced production technology, management knowhow, marketing expertise to break into local and international markets, particularly for Kenya, a country that wants to achieve newly industrialized status by 2030. The implication of this is that the country should develop a policy framework to attract more foreign direct investment in the sector with the anticipation of improving aggregate productivity for the country's manufacturing sector through spillovers.

Secondly, Kenya being an emerging economy, many of her manufacturing firms have inefficient production technologies and management systems. The government policy should encourage local firms' relationships with foreign firms while advancing their research and development undertakings to improve their absorptive capability which in turn will assist them to gain from likely spillovers in their industry. The local firms stand to gain from policies crafted to help them appropriate advanced production technology, marketing expertise, and management knowhow from the foreign direct investment firms. The government and management of local firms need to formulate a broad range of policy frameworks and guidelines to facilitate foreign direct investment spillovers to local manufacturing firms. Moreover, the relationship and connection between the indigenous and foreign companies should be reinforced and supported by appropriate policies. Thus, the government should come up with policies that make our manufacturing sector attractive to foreign investors.

Thirdly, the study looked at business environment constructs (financial constraints, government regulations, and physical Infrastructure) moderating the effect on the relationship between foreign direct investment and the performance of the manufacturing
firms. The study revealed several foreign direct investment dimensions such as capital flow, advanced production technology, management knowhow, and Marketing expertise that can improve a firm's performance. Thus, the government is required to provide an environment that allows local firms to appropriate the benefits of foreign direct investment firms. In addition, the government should improve the business environment to make Kenya an attractive destination for foreign direct investments.

Absorptive capacity is characterized by acquiring new information, assimilating the information, transforming information, and exploiting the information. The firm and other stakeholders need to put in place measures that stimulate absorptive capacity. The firm can put in place a policy to reward the corporate employee who supports the transfer of new knowledge to come up with innovative systems. The government on the other hand should put in place a policy on intellectual property rights to enable the innovators enjoy their innovations.

5.4.3. Implication for Managerial Practice

The manufacturing sector is a major contributor to economic development in Kenya. As such, the findings of this study will assist the practitioners in decision making. The findings established a statistically significant association between foreign direct investment and performance of manufacturing firms. This indicates that the management of firms should consider capital flows, advanced production technologies, marketing expertise, and management knowhow as they work to improve their firm’s performance. The study affirmed that absorptive capacity intervenes in the association between foreign direct investment and performance of manufacturing firms. The results imply that absorptive
capacity is necessary if a firm is to fully tap the benefits of foreign direct investment, and thus managers should invest in the absorptive capacity of their firms. Firms need strong dynamic capabilities to appropriate existing foreign firms’ resources into usable applications among the local firms. The management of local firms should improve their firm abilities by promoting a learning culture which in turn will support technology and knowledge transfer.

The findings also revealed a significant statistical relationship between the business environment as a moderator of the association between foreign direct investment and performance of manufacturing firms. The moderating influence of business environment factors on performance of manufacturing firms was significant. To managers, this implies that the business environment may be a serious threat to performance of manufacturing firms. This is supported by other researchers who found that poor performance of manufacturing firms might be seen as evidence of a poor business environment. Managers need to work to help their organizations adjust to their prevailing business settings and lobby with stakeholders for improvement in the business environment.

The findings revealed that foreign direct investment elevates the innovativeness of developing countries leading to growth in technological innovation in developing countries. This implies that foreign direct investment generated a positive spillover effect so long as there is sufficient absorptive capacity. The findings demonstrate that both foreign direct investment and absorptive capacity are vital variables in the upgrading of the performance of firms.
From the current study, it is evident that foreign direct investment exerts a positive impact on performance of manufacturing firms and by extension the economic growth of the country. This is true for manufacturing companies registered with the Kenya Association of Manufacturers. Other companies can use companies registered by KAM for benchmarking. Organizations that want superior performance should invest more in building on their absorptive capacity in terms of transforming and exploiting technologies' leadership and resources. This will increase their chances of appropriating the benefit of foreign direct investment. With a strong absorptive capacity, they will manage to appropriate the benefits of foreign direct investment and thus ensure superior performance.

5.5 Contribution to Knowledge

The study finds a significant relationship between foreign direct investment, absorptive capacity, business environment, and performance of manufacturing firms. The study introduced a model linking the independent, mediating, and moderating variables providing the basis for effective performance of manufacturing firms. This demonstrated that performance differential between firms depends on having the right combination of these factors (foreign direct investment, absorptive capacities, business environment, and performance of manufacturing firms. The findings of the study contribute to addressing the knowledge gaps in performance of manufacturing firms.

The study also serves as a reference point for studying the relationship between foreign direct investment and performance of manufacturing firms. Other researchers can test other mediating and moderating variables to this relationship to find out which ones are more significant. Previous empirical research recommended further research on various aspects
of technology transfer and resulting spillover. The current research encourages more research leading to the addition of the body of knowledge.

The study contributed to existing knowledge by empirically establishing that absorptive capacity remains a significant moderator of the association between foreign direct investment and performance of manufacturing firms. The previous research on the foreign direct investment has been done at the macro level in light of developed economies; hence, the findings of these studies may not apply to developing countries due to contextual differences. The findings of this study would, therefore, be more relevant in the Kenyan context. The current study also contributes toward addressing the gaps identified in the previous studies hence facilitating the growth of literature in the subject area and serving as a reference and base for other studies.

5.6 Limitations of the Study

The study adopted a correlational design to evaluate the relationship among study variables. This design was judged the most appropriate owing to financial impediments on the researcher's part. However, upcoming scholars could consider employing longitudinal-oriented designs to allow for uncovering of causal-effect linkage among variables. When longitudinal design studies are carried out prospectively in their purest form, they have abilities to recognize and link certain exposures to specific events, as well as to further define these exposures in terms of their presence, timing, and chronicity.

The study had another limitation, the identification of the respondents. The study collected data from one member of the top administration (key informant) of the company, as they
were knowledgeable about the issue under investigation. Because the subjectivity of their self-report replies cannot be entirely disregarded, key informant methods may be suspect. Furthermore, managers without a doubt do not always represent the concern of all stakeholder groups. Bollen et al. (2005) observed that participants' reactions have the potential to affect their answers. Upcoming researchers should consider the use of multiple participants to be in a position to relate to their opinions.

Another limitation is that many developing countries' firms are known to falsify their data on performance particularly their profit, ROE, productivity and capacity utilization, etc. to evade applicable taxation of their organization. Furthermore, some businesses may not be keeping adequate records that would allow them to evaluate their success. As a result, our conclusions are based on the assumption that these data were correctly evaluated.

The study's primary study variables, some of which are continuous variables, were measured using a Likert scale. The Likert scale suffers from response style bias. Response styles biases are response that respondents display independent of the content of the questions. Response style biases are a systematic tendency to respond to a range of questionnaire items on some basis other than the specific item content. As such, whereas the Likert scale is a useful tool for analyzing data, using it to assess such factors can have an impact on the results.

Further, foreign direct investment may result in another form of spillover effects like quality improvement and export growth that the study may be incapable of divulging. Additionally, foreign direct investment presence may have wider consequences for the whole economy like infrastructure development, better quality of the labor force, and
superior research and development accomplishments of domestic firms, which would have long-standing positive influence.

The study was premised on the manufacturing sector and thus the findings obtained may not be reflective of others industries. As such, future studies ought to target other sectors of the economy. Similar studies could also be replicated in other geographical regions to determine the validity of the results. Nevertheless, despite all the underscored weaknesses, the value and aspiration of the research were not jeopardized.

5.7 Suggestions for Further Research

The focus of this study was on the impact of foreign direct investment, absorptive ability, and the business environment on performance of manufacturing firm in Kenya. This research was based primarily on manufacturing firms that had foreign direct investment. While the study met all its objectives, areas that require further research also arose. Among these is the need for further studies in different sectors of the economy to establish if similar results can be obtained. Future researchers should consider studying other sectors of the economy and other geographical regions.

The current research was only able to interview one respondent per organization. Future researchers should investigate using several respondents to improve their results and eliminate the bias that occurs when only one respondent is questioned. As a result, upcoming scholars should consider involving more participants to circumvent possible biases that may come from the key informant approach.
Moreover, upcoming scholars should consider variables that did not merit inclusion in this study for a complete picture of the variables that shape the performance outcomes of manufacturing firms. Operationalization of variable like absorptive capacity that raised normality concern can be altered to cover variable like human capital and research and development. Becker and Gerhart (1996) postulate that wider, qualitative approaches are required to study the phenomenon.

Methodologically, instead of doing separate regression studies to evaluate the moderating and mediating effects, one analysis might examine both effects using more sophisticated statistical approaches like structural equation modelling. Information is provided on the compatibility of the meditational model with the data by the structural equation modelling study. It is possible to address measurement error, which is a potential issue with mediation testing.

Finally, the cross-sectional methodology used in this study precluded assigning precise causal responsibility for the associations found. Additional research should aim to use longitudinal studies to provide a fuller picture of how foreign direct investment, absorptive ability, and the business environment influences company performance over time. According to the study's findings, performance is a multidimensional variable that is best assessed using both financial and non-financial indicators. Future studies should delve deeper into the factors that affect performance in a multidimensional approach, especially in certain industries that face comparable difficulties.
5.8 Chapter Summary

The chapter provided a summary of the finding with a tabulated outline of the objectives, the hypotheses, and decisions on the outcomes based on the tests of hypotheses. The study conclusions have been drawn based on the study objectives. The chapter consequently enumerated the theoretical, policy, and managerial implications of the study while contribution to knowledge have equally been mentioned. The chapter concludes by emphasizing the limitations and providing suggestions for future research.
REFERENCES


188
https://openknowledge.worldbank.org/handle/10986/16386 License: CC by 3.0 IGO.”


UNIDO. (2007). Industrial Development Board, thirty-fourth session and Budget Committee, twenty-fourth session, Vienna


APPENDICES
Appendix I: Introduction Letter

Dear Sir/Madam,

Re: Foreign Direct Investment, Absorptive Capacity, Business Environment and Performance of manufacturing firms in Kenya

I am a PhD research student at the University of Nairobi's Department of Business Administration, Faculty of Business and Management Sciences. I'm working on a study named "Foreign Direct Investment, Absorptive Capacity, Business Environment and Performance Manufacturing Firm in Kenya."

I would like to request for your consent to gather information from your organization to present a representative finding on the current status on the above topic by completing the attached questionnaire. The participation in the research will essentially involve completing the attached questionnaire. Additionally, the participants or anyone from your institution is welcome to ask for the final research report by providing your name and contact information. Any questions or general concerns regarding the questionnaire can be directed to me.

Your participation is voluntary, and the survey is completely anonymous. The information gathered will only be used for academic reasons.

Thank you for your participation.

Sincerely,

Dishon Munuhe Wanjere
Mobile Telephone Number: 0722-257-246
mdwanjere@gmail.com
Appendix II: Research Permit

Ref No: 304296

Date of Issue: 09/September/2019

RESEARCH LICENSE

This is to certify that Mr. Dishon Wanjere of University of Nairobi, has been licensed to conduct research in Kajiado, Kiambu, Kisumu, Machakos, Mombasa, Nairobi, Nakuru on the topic: FOREIGN DIRECT INVESTMENT, ABSORPTIVE CAPACITY, BUSINESS ENVIRONMENT AND PERFORMANCE OF MANUFACTURING FIRMS IN KENYA for the period ending:
09/September/2020.

License No: NACOSTI/P/19796

 Applicant Identification Number

304296

Verification QR Code

NOTE: This is a computer generated License. To verify the authenticity of this document, scan the QR Code using QR scanner application.

Director General
NATIONAL COMMISSION FOR SCIENCE, TECHNOLOGY & INNOVATION

203
Appendix III: Questionnaire

Part I: Respondent’s and organizational Information

This questionnaire is designed to collect data from manufacturing firms, which will be analyzed to establish the effects of foreign direct investment, absorptive capacity, and business environment on performance of manufacturing firms. Your responses will be utilized for academic purposes only will be treated with utmost confidentiality. Your participation is highly appreciated.

SECTION ONE: GENERAL INFORMATION

1) Name of Organization “(optional)……………………………………………………

2) Please state your position/title…………………………………………………………

3) Number of years worked with the organization………………………………………

4) Year the firm was established…………………………………………………………

5) In what sector of economic activity is your firms engaged? [Tick one]
   i). Food, Beverages & Tobacco [ ]    vii). Energy, Elect & electronics [ ]
   ii). Leatherworks & footwear [ ]    viii). Metal & allied [ ]
   iii). Automotive & Accessories [ ]   ix). Construction & Allied [ ]
   iv. Paper & Board [ ]    x). Plastics & Rubber [ ]
   v). Pharmaceuticals & Medical equip [ ]    xi). Textiles & apparels [ ]
   vi). Timber, wood & furniture [ ]   xii). Chemicals & allied [ ]
   xiii). Others (specify)………………………………………………………………

6) Ownership structure of your firm Indicate at the appropriate boxes

<table>
<thead>
<tr>
<th>Foreign Equity (%)</th>
<th>Local Equity (%)</th>
<th>Other, please specify (%)</th>
</tr>
</thead>
</table>

7. Country of origin of the Foreign Investor(s) Indicate at the appropriate boxes
   A.………………………………………………………………………
   B.………………………………………………………………………
   C.………………………………………………………………………
   D.………………………………………………………………………

8. Mode of entry into the country? (Please tick the appropriate boxes)

| New Investment (Greenfield Investment) |
| Full/Part Acquisition of Existing Private Firm |
| Full/Part Acquisition of Existing Public Firm via Privatization |
| Partnership with Kenyan Entrepreneur(s) |
| Others, please specify” |

9. Was your firm established as a result of Foreign Direct Investment? If Yes, please proceed to Q.11
   Yes [ ]    No [ ]

204
10. If No, did you receive Foreign Direct Investment after the establishment of the firm?  
   Yes [    ]                No [    ]

SECTION TWO: FOREIGN DIRECT INVESTMENT

11. Did introduction of FDI lead to the following activities in section A, B, C and D?

A). On Capital Flow (*tick as appropriate*)
   i). Solved the problem of your firm’s capital constraints  
      Yes [    ]                No [    ]                Not sure [    ]
   ii). Assisted your organization to have better access to financial resources  
      Yes [    ]                No [    ]                Not sure [    ]
   iii) Experienced improved support from various financing institutions  
      Yes [    ]                No [    ]                Not sure [    ]
   iv). Improved the firms working capital position  
      Yes [    ]                No [    ]                Not sure [    ]

B). On Advanced Production Technology (*tick as appropriate*)
   v). Improved an existing product  
      Yes [    ]                No [    ]                Not sure [    ]
   vi). Developed a new product?  
      Yes [    ]                No [    ]                Not sure [    ]
   vii). Changed (Improved) an existing production process  
      Yes [    ]                No [    ]                Not sure [    ]
   viii). Introduced a new production technology in the operations of the firm  
      Yes [    ]                No [    ]                Not sure [    ]
   ix). Provided the firm with license or patents etc.  
      Yes [    ]                No [    ]                Not sure [    ]

C. On Marketing Expertise (*tick as appropriate*)
   x). Introduced new marketing techniques  
      Yes [    ]                No [    ]                Not sure [    ]
   xi). Developed a new market(s) overseas  
      Yes [    ]                No [    ]                Not sure [    ]
   xii). Developed a new market in Kenya  
      Yes [    ]                No [    ]                Not sure [    ]
   xiii). Provide formal training for Kenyan staff on marketing techniques in foreign market(s)  
      Yes [    ]                No [    ]                Not sure [    ]

D. On Management Knowhow (*tick as appropriate*)
   xiv). Introduced an in-house training programme for Kenyan staff  
      Yes [    ]                No [    ]                Not sure [    ]
xv). Provide formal training for Kenyan staff on operational or production management  
Yes [ ] No [ ] Not sure [ ]
xvi). Provide formal training for Kenyan staff on organizational management  
Yes [ ] No [ ] Not sure [ ]
xvii). Provide mentoring of Kenyan staff by foreign staff in the firm  
Yes [ ] No [ ] Not sure [ ]
xviii). Learned about new quality management system  
Yes [ ] No [ ] Not sure [ ]

12. Which categories of staff received training? Please tick the appropriate boxes

13. What impact has FDI had in the operation of your firm?

SECTION THREE: ABSORPTION CAPACITY
Indicate the extent to which the following statements describe your company absorptive capacity. Use the scale from 1 to 5 where; 1=not at all, 2=to a small extent, 3=to a moderate extent, 4=to a large extent, 5=to a very large extent

<table>
<thead>
<tr>
<th></th>
<th>Acquision</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>14.</td>
<td>“Our staff systematically undertake regular technological awareness surveys</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>15.</td>
<td>Our firm frequently conducts market research so as to be aware of customers’ needs</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>16.</td>
<td>Our R&amp;D budget is spent on subcontracted research teams from outside the firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>17.</td>
<td>Our firm is well aware of the technologies being developed by competitors</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>18.</td>
<td>Our firm normally goes to other bodies like consultants, research organization and universities to find out about fresh opportunities for introducing new products.</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Assimilation</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>19.</td>
<td>We invest a great deal of resources in training our staff</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>20.</td>
<td>We innovate by improving competitors’ products &amp; processes</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>21.</td>
<td>We are normally ahead of our competitors in developing and launching new products</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>22.</td>
<td>We have capacity to adapt others’ firm’s technologies</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>23.</td>
<td>We innovate as a result of R&amp;D activities carried out within our firm</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th></th>
<th>Transformation</th>
<th></th>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>24.</td>
<td>Our firm’s structure includes a large number of managerial post</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
25. The level of coordination between the various activities carried out in our firm is very high

26. Our firm has staff with a wide range of training and educational backgrounds

27. Our payment for R&D employees is linked to the contribution they make to innovation

28. In our firm development projects for new products are carried out by multidisciplinary teams

D **Exploitation**

29. We have invested heavily in efforts aimed at developing new products

30. We have been able to achieve maximum product quality

31. We have undertaken many programmes for improving existing products

32. We have undertaken a lot of efforts to maintain and improve our firm’s brand image

33. We have undertaken a number of activities aimed at reducing cost

**SECTION FOUR: BUSINESS ENVIRONMENT**

Indicate your rating for the following as it describes your company business environment

<table>
<thead>
<tr>
<th>A Financial Access</th>
<th>Rate “1” as extreme obstacle to “5” as no obstacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>34. High interest rates on loans</td>
<td></td>
</tr>
<tr>
<td>35. Collateral requirements of the bank/financial institution’s</td>
<td></td>
</tr>
<tr>
<td>36. Bank paperwork/bureaucracy</td>
<td></td>
</tr>
<tr>
<td>37. Need for special connections with the financial institutions</td>
<td></td>
</tr>
<tr>
<td>38. Bank lack the money to lend</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>B Government regulation</th>
<th>Rate “1” as extreme obstacle to “5” as no obstacle</th>
</tr>
</thead>
<tbody>
<tr>
<td>39. Business licensing</td>
<td></td>
</tr>
<tr>
<td>40. Custom foreign trade regulations in your country</td>
<td></td>
</tr>
<tr>
<td>41. Labor regulation</td>
<td></td>
</tr>
<tr>
<td>42. Environmental regulations</td>
<td></td>
</tr>
<tr>
<td>43. Tax regulations and administrations</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>C Physical infrastructure</th>
<th>Rate “1” as very inefficient to “5” as very efficient</th>
</tr>
</thead>
<tbody>
<tr>
<td>44. Roads departments/public works</td>
<td></td>
</tr>
<tr>
<td>45. Electric power company/services</td>
<td></td>
</tr>
<tr>
<td>46. Water/sewerage services</td>
<td></td>
</tr>
<tr>
<td>47. Telephone/Internet services</td>
<td></td>
</tr>
<tr>
<td>48. Railway department/agency/services</td>
<td></td>
</tr>
<tr>
<td>49. Port department/agency/services</td>
<td></td>
</tr>
</tbody>
</table>

207
SECTION FIVE: PERFORMANCE OF MANUFACTURING FIRM

A) Financial Indicators. Please tick the appropriate boxes

50. Profit per year in Million (2018)
   Losses [  ], 0 to 100 [  ], Above 100 to 200 [  ], Above 200 to 300 [  ], Above 300 [  ]

51. What is the impact of FDI on Profit?
   No Change [  ], Decrease [  ], Increase [  ], Don’t know [  ]

52. Return on equity (2018)
   Below 0 [  ], Above 0 - 4% [  ], Above 4% - 8% [  ], Above 8% - 12% [  ], Above 12% [  ]

B) Non-Financial Indicators. Please tick the appropriate boxes

   0 - 20 [  ], Above 20 - 40 [  ], Above 40 - 60 [  ], Above 60 - 80 [  ], Above 80 - 100 [  ]

54. Employees productivity in 2018 (Company turnover divided by the number of employee)
   ………………………………………………………………………………………………………………………………
   ………………………………………………………………………………………………………………………………

55. What is the impact of FDI on Domestic Market?
   No Change [  ], Decrease [  ], Increase [  ], don’t know [  ]

56. What is the impact of FDI on Foreign Market?
   No Change [  ], Decrease [  ], Increase [  ], don’t know [  ]

57. What is the impact of FDI on Employment?
   No Change [  ], Decrease [  ], Increase [  ], don’t know [  ]

End
Thank you for your time.
Appendix IV: Target Population of the Study

1. Allied East Africa Ltd
2. Alpha Medical Manufacturers Ltd
3. Assa Abloy East Africa Ltd
4. Associated Battery manufacturers EA
5. Athi River Mining Ltd
6. Atlantic Ltd
7. Automotive & Industrial Battery (K)
8. Avery East Africa Ltd
9. Bamburi Cement Ltd
10. Basco Products K Ltd
11. BASF EA Ltd
12. Bata Shoe Co. (K) Ltd
13. Baumann Engineering Limited
14. Bayer East Africa Ltd
15. Beiersdorf east Africa Ltd
16. BenMed Pharmaceuticals Limited
17. Beta Healthcare International Ltd
18. Betatrad K Ltd
20. Biopharma Ltd
21. BOC Kenya Ltd
22. British American Tobacco Kenya Ltd
23. C. Dormans Ltd
24. Cardbury Kenya Ltd
25. Central Glass Industries Ltd
26. Chemical & Solvents EA Ltd
27. CMC Motors Group Ltd
28. Coca Cola East & Central Africa Ltd
29. Cooper K-Brands Ltd
30. Cosmos Ltd
31. Crown Paints Kenya Ltd
32. Dawa Limited
33. Del Monte Kenya Ltd
34. East Africa Foundry Works K Ltd
35. East African Breweries Ltd
36. East African Cables Ltd
37. East African Packaging Industries Ltd
38. Edible Oil Products
39. Ellys Chemical Industries Ltd
40. Equator Bottlers Ltd
41. Eveready Batteries
42. Excel Chemicals Ltd
43. Future Garment EPZ Ltd
44. Galaxy paints & Coating Co. Ltd
45. GE East Africa Services Ltd
46. General Motors East Africa Ltd
47. Glaxo Smithkline Kenya Ltd
48. Global Apparels Kenya EPZ Ltd
49. Henkel Kenya Ltd
50. Highland Paper Mills Ltd
51. Holman Brothers EA ltd
52. Interconsumer products Ltd
53. JohnsonDiversey EA ltd
54. Kapric Apparels EPZ Ltd
55. Kenafirc Industries Limited
56. Kenpoly Manufacturers Limited
57. Kenya Grange Vehicle Industries Ltd
58. Kenya Trading EPZ Ltd
59. Kikoy Mall EPZ Ltd
60. Kim-Fay East Africa Ltd
61. L.G. Harris & Co. Ltd
62. L’oreal East Africa Ltd
63. LAB International Kenya Ltd
64. Labh Singh Harnam Singh Ltd
65. Laboratory & Allied Limited
66. London Distillers K Ltd
67. Louis Dreyfus Kenya Ltd
68. Manson Hart Kenya Ltd
69. Marshall Fowler (Engineers) Ltd
70. Mega Garments Industries Kenya EPZ
71. Nampak Kenya Ltd
72. Nestle foods Kenya Ltd
73. Orbit Chemicals Industries Ltd
74. Pan Africa Chemicals Ltd
75. PG Bison ltd
76. Pharmaceutical Manufacturing Co.K ltd
77. PolyChem East Africa Ltd
78. Procter & Gamble East Africa Ltd
79. Proctor & Allan EA Ltd
80. Pwani Oil Products Ltd
81. PZ Cussons East Africa Ltd
82. Reckitt Benckiser EA Ltd
83. Regal Pharmaceuticals Ltd
84. Sadolin Paints EA Ltd
85. Saj Ceramics Ltd
86. Sandstorm Africa Ltd
87. SC Johnson and Son Kenya
88. Sheffield Steel Systems ltd
89. Shin-Ace Garments Kenya EPZ Ltd
90. Socabelec EA Ltd
91. SolvoChem East Africa Ltd
92. Sproxil East Africa
93. Steel Structures Ltd
94. Syngenta East Africa Ltd
95. Tetra Park Ltd
96. The Breakfast Cereal Company K Ltd
97. Toyota EA Ltd
98. United Aryan EPZ Ltd
99. Vivo Energy Kenya Ltd
100. Wildlife Works EPZ Ltd

Source; KAM, 2014.