FULL COLOUR THINKING

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Investigating the impact of Foreign Direct Investment on NTEs and Imports in Zambia

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by

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ABSTRACT

The need for foreign direct investment in Zambia emanated from the country's search for finance to support the diversification agenda backed by the private sector. Sectors that will see a diversified export earning capacity were identified as target areas for foreign direct investment. The expectation from such investments was that the country will see improved production capacities leading to the increase of NTEs and production of products that could only be accessed through the foreign markets. This research therefore aimed at investigating the impact of FDIs on NTEs and imports by category. This is on the theoretical backdrop of both the modernisation and dependency theories which highlights that the effects of FDI on the host country could either be negative or positive. The research looked at time series data for NTEs and imports by category for the period 1994 to 2014. A simple Ordinary least squares regression was used. Besides FDIs, two other variables namely trade openness and real effective exchange rate index were included in the study. The results indicate that FDI have a positive effect on both NTEs and all the four categories of imports. The magnitude of the impact on NTEs was as high as that of imports in all the four categories. The implication is that much as FDI can be said to contribute to the increased NTEs, its impact on imports are equally the same and therefore has not necessarily improved the countries overall trade performance during the periods under consideration.

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GLOSSARY OF TERMS

BOZ	Bank of Zambia
FDI	Foreign Direct Investment
GDP	Gross Domestic Product
TO	Trade Openness
REER	Real Effective Exchange Rate
NTEs	Non-traditional exports
EBZ	Export Board of Zambia
ZIC	Zambia Investment Centre
ZDA	Zambia Development Agency

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1 INTRODUCTION

1.1 Research Area

In recent years, the international community drastically changed its strategy in supporting economic growth of developing countries from offering aid to promotion of investments on account of aid fungibility. Developing countries have equally realised the importance of foreign capital inflows in economic growth. The change in strategy has seen the growing importance of Foreign Direct Investments (FDI), in fostering economic growth in many developing countries. FDI is defined herein as a category of cross-border investment associated with a resident in one economy having control or a significant degree of influence on the management of an enterprise that is resident in another economy (world bank, n.d). In addition to providing capital financing supplies, FDIs are said to have spill over effects which include employment creation, technology transfer and skilful human resource through training. It is from this background that developing countries have improved their investment climate to attract more FDIs such that the inflows into developing countries has quadrupled from less than $20 billion in 1981-1985 to average of $75 billion in the years 1991-1995 (United Nations, 1999).

In Zambia, the change in government in 1991 brought about the change in the management of the economy, from a state controlled economy to one where the private sector was supposed to play a key role. This policy shifts allowed private sector participation in economic management of the country to fast track diversification of the economy. Realising the need to diversify, the country introduced various reforms aimed at promoting investments in sectors presumed to have high earning potential to boost exports. In addition to domestic investment, the country identified FDIs as means of financing the diversification agenda. Thus, the government established institutions to promote investment and trade in the country. The institutions established included the Export Board of Zambia (EBZ), Zambia Investment Centre (ZIC), and the Zambia Privatisation Agency (ZPA). In a bid to improve the efficiency and effectively fast track the diversification processes the government, through an act of parliament, brought together the three institutions and established the Zambia Development Agency (ZDA) whose mandate was to foster economic growth and development by promoting trade and investment through a private sector led economic development strategy.

1.2 Problem Statement

It is without a doubt that the country's mining sector has tremendously benefited from the influx of FDI, but what is not clear is how the other sectors are benefiting from such reforms. Institutions charged with the responsibility of investment and trade promotion have however been making blanket statements such as those linking the growth of Non-traditional exports (NTEs) with FDI inflows, NTEs being all exports excluding cobalt and copper. Conversely, studies conducted in various countries and regions seem to indicate that it is not always the case. Available literature reveals that the impact of FDI on host country can be explained using the modernisation and dependency theory. In this case, there is a possibility that FDI could either positively affect the country trade performance by increasing exports and reducing imports (modernisation theory) or negatively affect the country's international trade by stagnating exports while increasing imports from the country of origin (dependency theory). It is therefore vital that time and again the country takes inventory of the impact of such policy adjustments in relationship to the intended objectives within the boundaries of known theoretical frameworks.

1.3 Purpose and Significance of the Research

The study is aimed at providing empirical evidence on the impact of FDIs on NTEs and imports in Zambia. Included NTEs are items such as Portland cement, cane or beet sugar, maize seed, cotton, sulphur, soaps, other minerals, non-alcoholic beverages, prepared explosives, electric conductors, iron/steel bars, magnesia and other magnesium oxide, slake lime, among others. The reforms instituted by Zambia Development Agency (ZDA) and other relevant government institutions have seen friendlier policies and regulations to FDIs. The reforms have provided incentives that include regulations that allow repatriation of profits, tax holidays and zero import duties among others. Additionally, the country has identified sectors with high potential to increase exports and domesticate most of the imports whether it be finished or intermediate goods. The introduction of the stated incentives has affected the country's revenue collection capability negatively. This is on the theoretical backdrop that FDIs have a positive impact on economic growth through its interlinkages with various economic sectors. One of the interlinkage propagated by the many researchers and adopted in the country's investment and trade policy is that it has a positive impact on trade. It is from this angle that institutions charged with the responsibility of attracting FDIs are now linking the growth in the country's NTEs with the increase in FDIs.

Therefore, there is need to establish that FDIs have positively impacted on the trade component variables, especially given the fact that it's impact on the host country's economy can either be negative or positive. The country could also benefit from a holistic view of FDI impact on imports given her direction to diversify the economy. An empirical analysis on the effect of FDI on both exports and imports is necessary, as it will provide evidence on the role of FDI on intended policy objectives. It should be reemphasised that the country needs to be alive to fact that FDI can either have positive or negative effects on trade. This is premised on the theoretical preposition of the modernisation and dependency theories. Additionally, FDI has differing effects and that it has been more productive in some regions than others (Adams, 2009).

1.4 Research Questions and Scope

The research is therefore aimed at providing answers to following question;

What is the impact of FDIs on NTEs and imports by category in Zambia?

Consequently, the objectives of the study were:

i. To find out the impact of FDIs on NTEs
ii. To find out the impact of FDIs on imports by category

1.5 Research Assumptions

It is assumed that FDIs have a direct impact on NTEs and imports in Zambia. This is in line with the available literature that provides that FDIs have direct or indirect effects on exports and imports, (WTO, 1994). Additionally, it is assumed that the data used in this is correct.

The result of the study is intended to give credence to inferences (that FDIs that it has positively impacted on NTEs) by institutions mandated to promote FDIs. The study will give results on imports which will provide evidence of support to the diversification agenda. More importantly, it will add to available literature on the impact of FDIs in sectors that are not considered to be major export earners, in addition to contribution on its impact on imports.

2 LITERATURE REVIEW

This chapter discusses relevant literature on FDIs within the boundaries of the modernisation and dependency theories. The chapter further highlights facts on trade and investment in Zambia.

2.1 Introduction

The resource gap which is apparent in the developing countries has led to policy shift and innovations in resource mobilization for development by governments. Various forms of capital aimed at developing underdeveloped economic sectors are being promoted and integrated in policy frameworks, among which is the promotion of FDIs as a source of funding to support economic growth. The world bank defines FDI as value of inward direct investment made by non-resident investors in the reporting country. According the World Trade Organisation (WTO), FDI occurs when an investor based in one country (home country) acquires an asset in another country (host country) with the intent of managing that asset. WTO highlighted that it is the management dimension that distinguishes FDI from portfolio investment in stocks, bonds and other financial instruments. Generally, FDI come in the form of equity capital, reinvested profits and short or long term borrowing between the parent company and an affiliate. The stake of equity capital should be such that the parent company has controlling rights in an incorporated or unincorporated enterprises. Mergers and acquisition are one source of FDI in developing countries. Reinvested earnings reflect income or equity or direct investors share of net profit not distributed as dividends by the enterprise (Bank of Zambia, 2001).

Researchers have different classification of FDI depending on the objective. It is vital that a researcher understands the different classifications as the direction of FDI impacts on the variables of interest depends on the type. British economist Dunning (1994) established the following classification to emphasise the importance of understanding the different classification, which was supported by Fruman (2016):

- Natural resource-seeking investment- motivated by investor interest in accessing and exploiting natural resources;
- Market-seeking investment- motivated by investor's interest in serving domestic and regional markets;
- Strategic asset-seeking investment- motivated by investor interest in acquiring strategic assets (brands, human capital, distribution networks, etc) that will enable a firm to compete in given market. This takes place through mergers and acquisitions; and

- Efficiency-seeking investment- FDI that comes into a country seeking to benefit from factors that enable it to compete in international markets.

It is from such an angle that promotion of FDI in many developing countries premised on its inter-linkages with growth of targeted economic sectors. Regardless of the type, the importance of FDI in economic development has always been debatable. On one hand there is an argument that FDI has a positive effect on the economic growth and productivity increases in the economy as a whole and hence contributes to differences in economic growth and development performance across countries, but on the other hand stress the risk of FDI destroying local capabilities and extracting natural resources without adequately compensating poor countries (Willen-te-Velde, 2006). The role of FDI in the economic development is now discussed within the boundaries of Modernisation and Dependency theories. Adams in 2009 (as cited by Saqib, et al, 2013) asserted that the theoretical link between FDI and economic growth can be found in modernisation and dependency theories. It is therefore vital that one has thorough understanding of the two theories before discussions on the variables of interest.

2.2 Modernisation Theory

The theory has its origins in the rich and prosperous nationals of Europe and United States of America. The theory can be traced back to the 'age of enlightenment', 18th Century, (Valenzuela & Valenzuela ,1978). The idea was that technological advancements and economic changes can cause changes in the moral and cultural values. Taking the concept, neoclassical economists developed the proposition that real gross domestic product (GDP) per capita grows because technological progress which increases the productivity of capital and labour leading to investment demand, including a level of saving and investment that makes capital per grow. The growth in technology and capital per hour of labour combine to increase productivity and real GDP per capita (Ocra, 2012). According to the pioneers of the theory, it is the general prescription for developing countries to grow their economies. The underlying assumption is that the political, economic structures that developing countries follow do not guarantee development hence the need for them to adopt western style structures which have delivered development.

The theory is based on the fact that economic growth requires capital investments. Modernisation theory suggests that since economic growth requires capital investments, FDI could serve as the engine to the economic growth (Saqib, 2013). The rationale is that economic growth as measured by the GDP is the composite of private consumption, gross investment, government investment, government spending and exports less imports. Therefore, by

increasing the investment component, the GDP will increase as well. Zaman, Ali shah, Khan, M. & Ahmad, (2011) explain that the theoretical premise in favour of FDI inflows remains quite straight forward; that FDI is a composite bundle of capital stocks, technical know-how and technology. It supplements local capital stock, expand market access, provides positive technological spill overs for local industries and helps accumulate and improve human capital, thereby promoting domestic economic development. In developing countries, the spill over effect of technology from FDI is essential for economic growth as they lack the needed knowledgeable and skilful human capital, free markets, social and economic stability that derives innovation and creativity to increase productivity and advance growth (Maitah, et al, 2015). Emphasising the importance of transfer of technology, Bengoa and Sanchez, (2003) further state that the transfer of technology through FDI in developing countries is especially important because most developing countries lack the necessary infrastructure in terms of an educated population, liberalised markets and social stability that are needed for economic growth.

According this theory, FDI may boost the productivity of all firms-not just those receiving foreign capital. This transfer of technology through FDI may have substantial spill over effects for the entire economy. The successes in most emerging countries such as China, India and Brazil in growing the economy, as a result of increased foreign capital inflows, has given strength to the underlying principles of the theory. In supporting the theory, Kumar and Pradlan (2005) noted that apart from technology and capital, FDI usually flows as a bundle of resources including organizational and managerial skills, marketing know-how and market access through the marketing networks of multinational enterprises (MNEs). It is from this perspective that Nath (2005) suggests that FDI plays a twofold function, by contributing to capital accumulation and increasing total factor productivity.

However, it is worth noting that while evidence exists that support the positive impact of FDI in developing countries' economy, the magnitude of the effect depends on the availability of human capital in the host country. Developing countries with high illiteracy levels may not benefit from the spill over effects of FDI in terms of training. According to the WTO (1994) this is consistent with the idea that in order for spill overs to occur, the host economy must have trained people who are able to learn from multinational firms and to apply their knowledge to local firms.

2.3 Dependency Theory

In contrast to the modernisation theory, the dependency theory which was developed by Latin American economist and political philosophers, debate that foreign investment is anticipated to have a negative impact on economic growth. The theory is believed to have been developed by Raul Prebisch who was the United Nations Economic Commission's Director for Latin America (Love, 1990). The proponents of theory were troubled by the fact that poor countries remained underdeveloped while industrialised nations prospered. The consensus was that the industrialised nations were exploiting underdevelopment nations. The theory was first defined by Sunkel (1969) who defined it as an explanation of the economic development of a state in terms of the external influences on national development. According to Shah, et al (2011) dependency theorists argue that dependence on foreign investment is expected to have a negative effect on growth and the distribution of income. The reason given according to Amin (as cited in Khan, et el, 2011) is that foreigners will control the domestic economy and would not lead to original development because the multiplier effect that causes demand in one area to generate demand in another area of a country is weak and consequently showing slow growth in the developing countries.

Sornarajah (2010) highlights that since most investment is made by multinational firms which have headquarters in developed countries and operate through subsidiaries in developing countries, the proposition is that the subsidiary devises it's policies in the interest of its parent company in the home state, as a result the multinational firm serve the interest of its shareholders and home state. Working within the boundaries of the dependency theory with focus on the linkage between periphery (host country) and mature economies Cardiso (1977) stated that FDI stymie development through facilitating access of foreign capital to periphery markets, while the periphery is faced with closed markets. He further stated that technology transfers which take place within this unequal relationship tend to be in the interest of the core rather than the periphery, as technology inappropriate to the periphery conditions is imported, producing profits for the core and debts in the periphery. Thus Te Velde (2012) brings out a vital point that validates the dependency theory in this day and era, which is that while governments have become more favourable towards FDI and have liberalised their FDI regime accordingly, there is no comprehensive framework at multinational level. Meaning that, the exploitative tendencies in investment frameworks of foreign investors exhibited in the past may still be prevailing.

Sornarajah (2010) concluded that the dependency theory has relevance in the movement in that it symbolises a way in which local interests could be protected against the interest of multinational corporations.

2.4 FDI and Trade in light of the Modernisation Theory

The benefits of FDI stems from the fact that foreign firms have a comparative advantage in knowledge, markets, size and efficiency. It is these attributes that are invested in the domestic markets and therefore improve the local market. FDI is very often associated with secondary benefits through the diffusion of technology to firms in the host country. This diffusion may be deliberate or it can be in form of technological spill over which occurs when activities of the foreign firm yield benefits for local economic agent beyond those intended by the foreign firm (WTO,1994). The WTO further highlights that FDI may also produce unintended efficiency enhancing effects, because local rivals are forced to upgrade their own technological capacities as a consequence of competitive pressure for the local affiliate of the multinational firm. In whatever the case, the expectation from the superior technology and expanded market infused in the local markets bring about improved production capacities with high productivity that will in turn have a positive impact on exports and imports. There is also a chance that goods that were only available across boarders would be available on the local market and therefore reduce the imports. Highlighting the link between productivity brought about by FDI and imports, Jayakumar (2014) explains that increased imports of consumer products encourage domestic import substituting firms to innovate and restructure themselves in order to compete with foreign rivals.

Many research conducted in both developed and developing regions have conclusions that support the modernisation theory. A study conducted by Radulescu and Serbanescu (2012) on the impact of FDI on exports in central and eastern Europe concluded that FDI inflows contributed to higher supply capacity in all those countries, leading to more exports. Similar results were obtained from China which showed that there exists a positive relationship between FDI and exports (Chanial (1997); Zhang (2005). It is worth noting that despite the different regulatory environment in the two areas the results were the same.

Radulescu and Serbanescu (2012) suggested that in order to predict the macroeconomic effect of FDI on exports, one needs to know the type of the majority of FDI projects, whether they are market or resource seeking. According to Root (1994), factor/resource seeking FDIs includes multinational enterprises' behaviour aimed at gaining access to raw materials and low-cost locations. He further explained that FDI motivated by the quest for raw materials is used to

produce goods with natural resources that are lacking or under supplied in the home country and as a result increases exports from the host nation to the home country as well as other third countries.

It is against this background that research such as the one conducted by Heliso (2014) on common market for eastern and southern Africa's countries concluded the impact of FDI on export performance was significantly positive. The idea is that multinational enterprises invest in the domestic industries with the aim of exploiting the natural resources. This means that they set up production capacities in the host country which converts the natural resources into finished products which are later exported. Such type of investments may also mean that some of the goods that may only have been available in other countries will be produced locally, hence reducing or eliminating importation of such products.

Another theory that is explained within the boundaries of the modernisation theory is the export led growth strategy. The tiger nations (South Korea, Hong Kong, Taiwan and Singapore) popularized the theory as they recorded significant economic improvements following the implementation of the strategy. The key in this strategy was acquisition of technology which was facilitated by favourable investment policies that encouraged and promoted FDIs. This is in line with the WTO (1997) observation that FDI can be a source not only of badly needed capital, but also of new technology and intangibles such as organisational and managerial skill, and marketing networks. It can also provide a stimulus to competition, innovation, savings and capital formation and as a result lead to job creation and economic growth. Further Radulescu and Serbanescu (2012) suggests that FDI can contribute to higher exports by increasing supply capacity and through FDI-specific effects as multinational enterprises may have better knowledge about foreign markets, superior technology, lower production costs and better ties to the supply chain of the parent firm than do local firms. It is the improved industrialisation base in terms of knowledge and skilful human capital among other attributes associated with FDI that is the cornerstone of the export led growth strategy.

Commenting on the impact of FDI on imports, Hailu (2010) noted that the elasticities of both export and import are positive and significant, with larger elasticities noted for exports relative to imports. This resonates with WTO (1997) that a weaker but still positive relation holds between FDI and host country's imports. The implication is that there is little evidence to show that FDI significantly increases imports in host country. However, the WTO (1997) notes that some studies indicate that the impact of inward FDI on host country's imports is either nil or just slightly reduces the level of imports.

In summarising the effects of FDI which are aligned to the modernisation theory, Zhang (2005) lists the expected effects which may be beneficial to exports as: (a) augmenting domestic capital for exports, (b) helping transfer technology and new products for exports, (c) facilitation of access to new and large foreign markets and (d) provision of training for the local workforce and upgrading technical and management skills.

The theory is however without critics. The WTO (1996) summarise the critics of the modernisation theory as follows:

- Balance of payments- the theory argues that while the initial impact of an inflow on the host country's balance of payments may be positive, the medium term impact is often negative as multinational corporations' increases imports of intermediate goods and services and begins to repatriate profits.
- Domestic Market Structure- because foreign firms generally have economic power than local firms, it is argued that they are able to engage in wide variety of restrictive practices in the host country which lead to higher profits, lower efficiency and barriers to entry.

2.5 FDI and Trade in light of the Dependency Theory

A point to note when discussing FDI in relation to trade is that proponents of the dependency theory suggest that the superiority of multinational firms in terms of efficiency, supply chain networks and technology makes it impossible for the local enterprises to compete resulting in crowding out of local entrepreneurs. In a short term, FDI may seem to positively impact the country's trade performance but with the crowding out of local firms, the long term trade prospects are likely to suffer. Multinational firms tend to create high market entry barriers which limits local investments. The result is dependence on developed countries for development and investment requirements.

Prebich (1956), developer of the dependency theory as quoted by Tabb (1996) explained that as long as poor countries exported primary commodities to developed countries which are then manufactured in into finished products (value addition) and sold back to poor countries at higher value, poorer countries would always have higher import value as compared to their export value. The view of the dependency theorist is that FDI is resource seeking rather than efficient seeking. The implication is that the technology that is brought in the host country is such that it only allows for knowledge in the extraction of those resources while processing of the raw materials is in the home countries. In other words, the technology that is transferred to host countries by the multinational firms is inappropriate to utilize fully the raw materials.

Therefore, while output of the raw materials exports might be higher, the value of imports is such that it surpasses the value of exports hence causing a trade deficit.

The UNCTAD in 2008 (as cited in Prasanna, 2010) gave another dimension of how FDI negatively affect trade for the host country. They suggest that FDI may lead only to a short lived hump in export performance. One of the negative contributions of FDI to the host country is a possibility of worsening the balance of payments through limiting exports and promoting imports and out-competing indigenous firms that export more and import less. This is highly likely to happen if the FDI that is coming in to the country is market seeking. By encouraging imports, locally produced products would be out competed as they be of low quality as compared to foreign products which have been produced with improved technology. Because the local firms cannot restructure to compete with the multinational firm due to limited capital, they would be taken out of business consequently reducing the country production capabilities. Furthermore, Hailu (2010) observed that FDIs which follow demand by penetrating foreign markets with promising sales potential have a negative impact on host country's trade balance. Therefore, the motivations for foreign nationals and corporations have a serious bearing on the impact of FDI on the country's trade performance.

FDIs are said to increase imports in terms capital and intermediate goods. This is expected especially in the initial stages of the investment. The reason is that these items will not be available in the host country and therefore the WTO (1996) suggests that inward FDI tends to increase the host country's imports. The inarguable explanation to this according to Jayakumar (2014) is that FDI companies have high propensities to import capital and intermediate goods and services that are not readily available in the host country.

The above reasons are likely to affect the growth of the domestic industry negatively by flooding the market with imports and out competing local firms. In highlighting the potential effects of FDI that support the dependency theory, Zhang (2005) gives the following potential impact of FDI negating trade performance of the host country: (a) lowering or replacing domestic savings and investments (b) transfer technologies that are low level or inappropriate for the host country's factor productions (c) targeting primarily the host country's domestic market and thus not increase exports (d) inhibit growth of indigenous firms that might become exporters and (e) not developing the host country's dynamic comparative advantages by focusing solely on local cheap labour and raw materials.

Both theories have strong arguments that cannot be ignored. What comes out is that input nature, output type, productivity spill-over and types of relationship with other role players in the industry determine the direction of the effect of FDI on imports and exports of a host country. Heliso (2014) therefore noted that a middle path theory that incorporated both the classical and dependency theories was created. FDI can be regulated in a way that benefit both host country and multinational corporations (Sornarjah, 2005). Policy therefore, plays a critical role in determining the direction of the impact of FDI on the variables of interest. Research has shown that policy plays a critical role in ensuring that the country benefits from the foreign investments. According to the WTO (1994) there can be policy-based linkages between FDI and host country exports. Performance requirements that require multinational corporations affiliates to export a part of their productions, and FDI incentives that are limited to or favour export-oriented sectors, are examples of policies that can produce (or strengthen) a positive correlation between inflows of FDI and exports. Therefore, open policies on FDI that are formulated without targeting specific exported oriented sectors, are unlikely to improve the host country's export performance. Radulescu and Serbanescu (2012) observed that impact of FDI on exports is dependent on the type of the FDI, if the FDI is market seeking it would have positive influence on imports into the host economy and no effect on exports while resource seeking FDIs increase exports leaving imports unaffected. The relationship which is established by the policies is key in directing the effects of FDI on both the imports and exports.

As earlier stated, various regions and countries have different experiences with FDI. While the tiger nations and China have a more positive outlook, the same cannot be said on Latin American countries such as Mexico. The different effects can be explained by various factors including, human capital and infrastructure. There is evidence that the amount of technology transferred through FDI is influenced by various host country industry characteristics such as more competitive conditions, higher levels of local investments, fixed capital, education and less restrictive conditions imposed on affiliate firms (WTO, 1996).

2.6 Facts on FDI and Trade in Zambia

2.6.1 FDI in Zambia

In 1991, Zambia’s drive for a private sector-led market economy led to economic reforms aimed at promoting and facilitating both local and foreign investments. But overtime, there was a realisation that the country needed more development finance to promote and sustain the private sector led free market economy as the country was unable to raise sufficient investments locally. This called for the promotion of foreign capital such that in 1992, the Zambia Government

established the Zambia Investment Centre (ZIC) to promote, implement, co-ordinate and facilitate investment programmes and policies. In attracting foreign capital flows, ZIC provided information to prospective investors on the country's investment climate. In a bid to create a favourable environment for both local and foreign investment, the country, through ZIC, introduced a number of tax and investment incentives. This included investors paying One-seventh of the normal 35 percent corporate income tax rate in its first 5 years of operation for rural enterprises; income tax allowance on buildings used for manufacturing, mining or hotels which qualify for a wear and tear allowance of five percent of the cost, plus an initial allowance of 10 percent of the cost in the year in which the building is first used; Income tax deduction on expenditures on research, technical education, or any further training related to a company's specific business activity; 15 percent income tax on NTEs instead of the 35 percent corporate tax. Others are tax incentives on agricultural and manufacturing on related equipment such as providing 15 percent income tax on farming profits and substantial depreciation rates which allowed for farming machinery to be written off against tax. The country went further by entering into double taxation agreements with a number of countries including the united states, United Kingdom, France and other neighbouring countries which allowed for foreign tax payable by the investor to other country be treated as credit for that investor against Zambian tax in respect of the foreign income. Firms listed on the Lusaka Stock Exchange were equally provided with incentives among which is the reduction of corporate income tax to 33 percent form 35 percent, no capital gains tax and removal restrictions on foreign ownership and shareholding levels.

As for investment incentives, the country removed all price and exchange controls, privatised most state owned enterprises, allowed for repatriation of profits, removed investment restrictions on virtually all the economic sectors and liberalised interest rates. The reforms saw the birth of institutions such as Zambia Privatisation Agency, Export Board of Zambia and Zambia Investment Centre which were charged with the responsibility of promoting investments. As a result of the reforms, the Country saw increased foreign capital inflows though not at the rate that would impact on economic growth especially in non-traditional sectors. Encouraged by the results of the incentives and reforms made in the early 90s, the country established Zambia Development Agency (ZDA) through act of parliament in 2006. This was aimed at improving the country's investment climate, improving code and regulatory framework and further encourage private sector investment in infrastructure. The ZDA Act provides for special investment incentives to promote diversification away from the traditional copper mining. The incentives can be accessed by investing in priority economic sectors

identified by government as high potential for export (Bank of Zambia, 2014). Table 1 below shows the tax incentives under the ZDA act of 2006.

Table 1: General Taxes applicable against ZDA incentives

Taxes	**General**	**Mining**	**Agric & NTEs**	**ZDA Incentives**
Corporate Tax	35%	30%	15%	0% - for 5 years 50% of tax- year 6 to 8 75% of tax- year 9 to 10 Full tax afterwards
Withholding Tax	15%	0%	15%	Nil
Value Added Tax	16%	16%	16%	Option for deferment on capital and machinery
Dividends				0% for 5 years

In protecting investments, the country through the ZDA act provides for protection of investments against expropriation except by an act of parliament. Where property is expropriated, the government compensates the investor at a fair market value and convertible at the prevailing exchange rates. The country is also party to the World Bank's Multilateral Investment Guarantee Agreement which guarantees investment protection against non-commercial risks. Likewise, the country is a member of the International Centre for the Settlement of Investment Disputes. In promoting and facilitating impactful FDIs, the country signed Investment Protection and Promotion Agreements (IPPA) with about 36 private companies as at 2008.

As a result of the reforms, the country witnessed an increase in the inflow of FDI during the period under consideration. The country's FDI increased from only US$40 Million in 1994 to US $ 1,488.6 Million in 2014. Like the eastern Europe which underwent various structural reforms including opening up trade and privatisation, the country received increasing foreign capital inflows though most of it was in the mining industry. On average, for the period 2010 to 2014, 57% of the annual FDI was in the mining sector. This resulted in the rapid development of the mining sector which saw increased production output of copper ore while other sectors remained underdeveloped. It is from such experiences that the country started considering FDI as a tool to finance development and further realised its role to contribute to the country's trade performance. This was seen in recent policy formulation of the country's trade policy and the Zambia Development Agency Act of 2006 which emphasised the need to attract foreign capital

inflows with the aim of improving production capacities. Table 2 below highlights FDI by sector for the period 2010 to 2014.

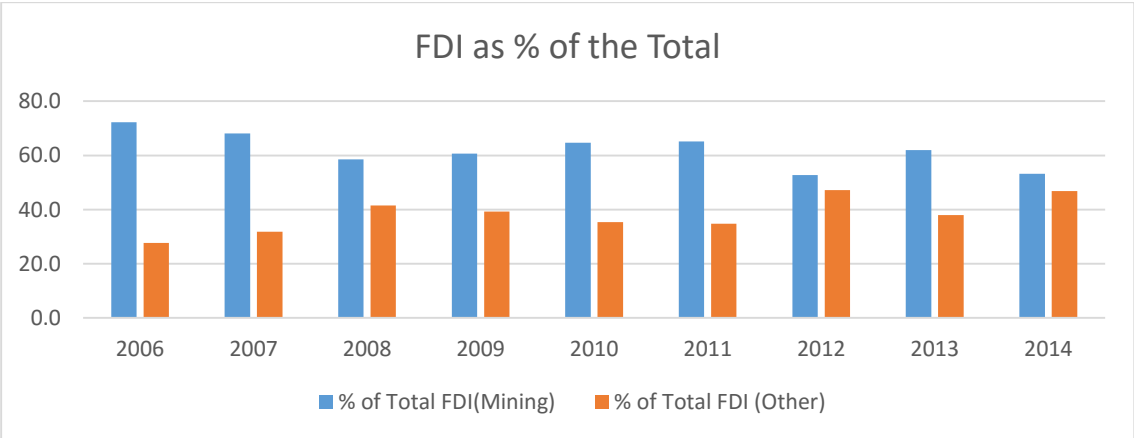
Table 2: FDIs by Sector-US $ Millions

SECTOR	2010	2011	2012	2013	2014
Accommodation and Food	4.3	13.8		- 4.5	- 0.6
Administrative and support services activities				1.7	0.7
Agriculture, forestry and fishing	13.2	31.7	28.3	86.3	39.2
construction	17.4	39.2	54.6	- 0.2	90.5
Deposit Taking Corporation	- 11.2	71.1	184.4	196.4	87.5
Electricity, gas, steam		13.3	6.5	- 46.8	- 24.5
Information and communication	179.3	41.6	- 18.4	- 3.1	- 77.7
Insurance and other Financial Intermediations			9.2	1.5	40.9
Manufacturing	373.9	- 178.8	469.6	444.2	199.1
Mining and Quarring	1,141.3	955.6	933.7	1,375.5	994.2
Other service activities	17.8	1.6	0.8		
Professional,scientific and technical activities				0.8	1.8
Real estate activities	- 4.5	42.8	4.9	23.0	- 3.6
Transporation and storage			19.7	- 5.0	- 83.9
Wholesale and retail trade	- 2.2	76.6	38.3	30.5	225.0
Grand Total	**1,729.3**	**1,108.5**	**1,731.6**	**2,099.9**	**1,488.6**

Source: Bank of Zambia

Recent trends indicate that other priority areas such as the agriculture sector, manufacturing and tourism recorded significant increase in the inflow of FDI. The composition of FDI in other sectors has shown significant increase. For instance, the composition of FDI in other sectors to the total annual FDI for the period 2006 to 2014 rose from 27 to 48.7 percent as illustrated in the figure below.

Figure 1: % of FDI in Mining and that of Other Sectors to total FDI



Source: Researcher's from the data given by ZDA on sectoral FDIs in Table 2

While FDIs in the mining sector has continued to dominate, investments in other sectors have shown an upward trajectory in the recent past. This trend is expected to continue given the prevailing policy frameworks instituted to support the diversification agenda, such as the reintroduction of the Industrial Development Corporation (IDC).

2.6.2 Trade in Zambia

Zambia is an original member of the WTO in addition to being party to regional and preferential agreements such as the Common Market for Eastern and Southern Africa (COMESA) and the Southern African Development Community (SADC). Despite the country being an original member of the WTO, the period before 1991 had various trade restrictions and bans on most goods. This resulted in the country's poor trade performance in the 1980's following the slump in copper prices and critical shortage of essential items. The country still imposes bans on exportation of agricultural products especially on maize, citing food security. It is against this background that the country has over the years made significant progress in the reduction of tariff and non-tariff barriers to trade. Since 1991, the country has been reducing her tariff structure from the maximum of 100% down to 25% to strengthen export competiveness.

The country now applies Most Favoured Nation (MFN) tariff rates that range from zero to 25%. In a bid to support export oriented firms, tariffs on imported raw materials have been lowered and currently stand between zero percent and 5%, that of intermediate goods at 15% and for capital and finished goods at 25%. According to the Bank of Zambia (2004) about 60% of all tariffs imposed bear rates of 15 or 25%, while some 20% of lines have zero percent rates. Categories of imports to which the zero percent rate applies are raw materials (including natural rubber, Sulphur and gypsum), productive machinery and certain merit goods including books, fertilizers and surgical instruments.'.

Despite all these efforts, the country was ranked 161 by the world bank's doing business in Africa on trading across borders as at 2015. This was on account of longer time taken to process export or import documentations on boarders. However, using merchandise trade as percentage of GDP as proxy of trade openness, the world bank records that the country scored 72.5%. The Heritage Foundation (as quoted by the global economy, 2014) which uses this index as proxy for trade openness indicated that the country recorded a score of 85% on trade freedom. Trade Freedom is a composite measure of the absence of tariff and non-tariff barriers that affects imports and exports of goods and services.

The country has in the past years signed various treaties and agreements on trade albeit with little effort in terms of policy framework to benefit from such agreements. However, the last decade has seen various policy formulations aimed at promoting trade in the country, chief of which is the formulation of the Commercial, Trade and Industry policy of 2010 (CTI) of 2010 whose overall vision is to develop an enabling economic environment which supports private investment and development of domestic productive capacities, and contributes to the expansion of Zambia's international trade. The policy aims to:

i. stimulate and encourage value-addition activities on primary exports as means of increasing national export earnings and creating employment opportunities;

ii. transform the economy into a diversified and competitive economy that is well integrated into the international trading environment;

iii. stimulate investment flows into export-oriented areas in which Zambia has comparative advantages as a strategy for including innovation and technology transfer in the national economy;

iv. support the effective development and utilisation of domestic productive capacities to increase output and expand employment opportunities;

v. facilitate the acquisition of modern technology to support value addition and industrial process by domestic firms;

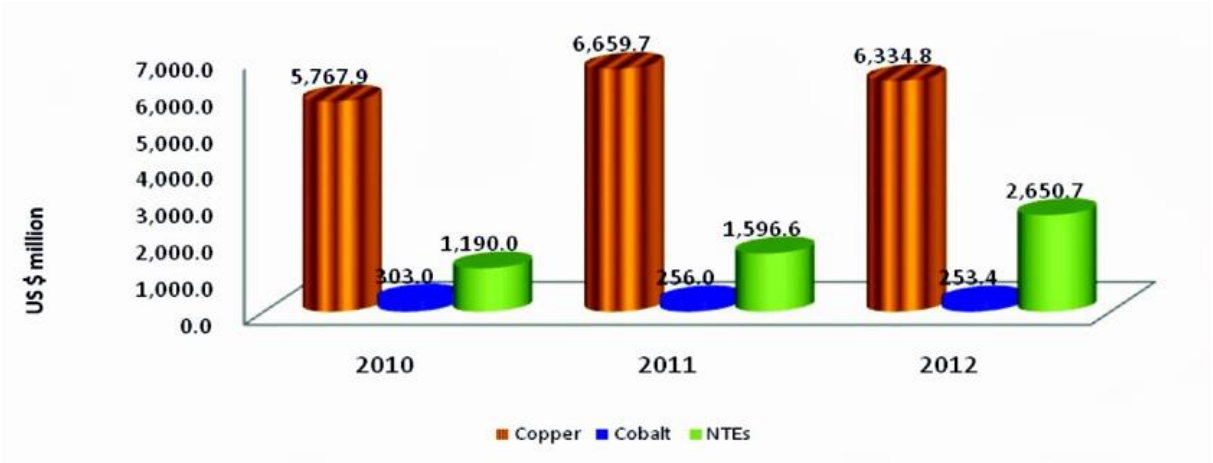
vi. facilitate public and private investment in infrastructure to support improvements in the quality and standards of Zambian products; and

vii. assist domestic firms to increase their levels of efficiency and competiveness, and therefore withstand increasing completion in domestic and international markets.

Zambia's trade policy is premised on the assumption that stimulated investment flows into export oriented areas would improve production capacities which results in increased exports and reduction of imports. The country therefore launched a rigorous campaign selling the country to would-be investors and introducing favourable conditions for foreign investments such as introduction of tax exemptions. According to the country's trade policy, it was expected that trade performance would improve. This is in line the modernisation theory where FDI is considered as the engine for growth. The improvement of the country's net exports and domesticating consumption was expected to result in growth of GDP. Recent reports have

linked the growth of NTEs to that of FDI. As a result of such policies, the country witnessed improvements in her trade performance. Performance of NTEs against traditional exports increased steadily. While according to the WTO's Trade Policy Review on Zambia (2015), trade in goods and services grew steadily during the period 2009 to 2014 from US$ 8 billion to US $ 21 billion the component of NTEs was of particular importance as it gave indication of the diversification process. The World Bank (2014) indicated that the country did well on exports; non-copper merchandise exports grew (22% per annum during the period 2002-2012) alongside copper exports 29%. Agriculture exports which are considered to be NTEs have been growing at the rate of 27% since 2000. Additionally, the World Bank observed that number of exporting firms, products and destinations has also grown fast. Figure 2 highlights the growth of nontraditional exports in comparison to the traditional exports for the period 2009 to 2014.

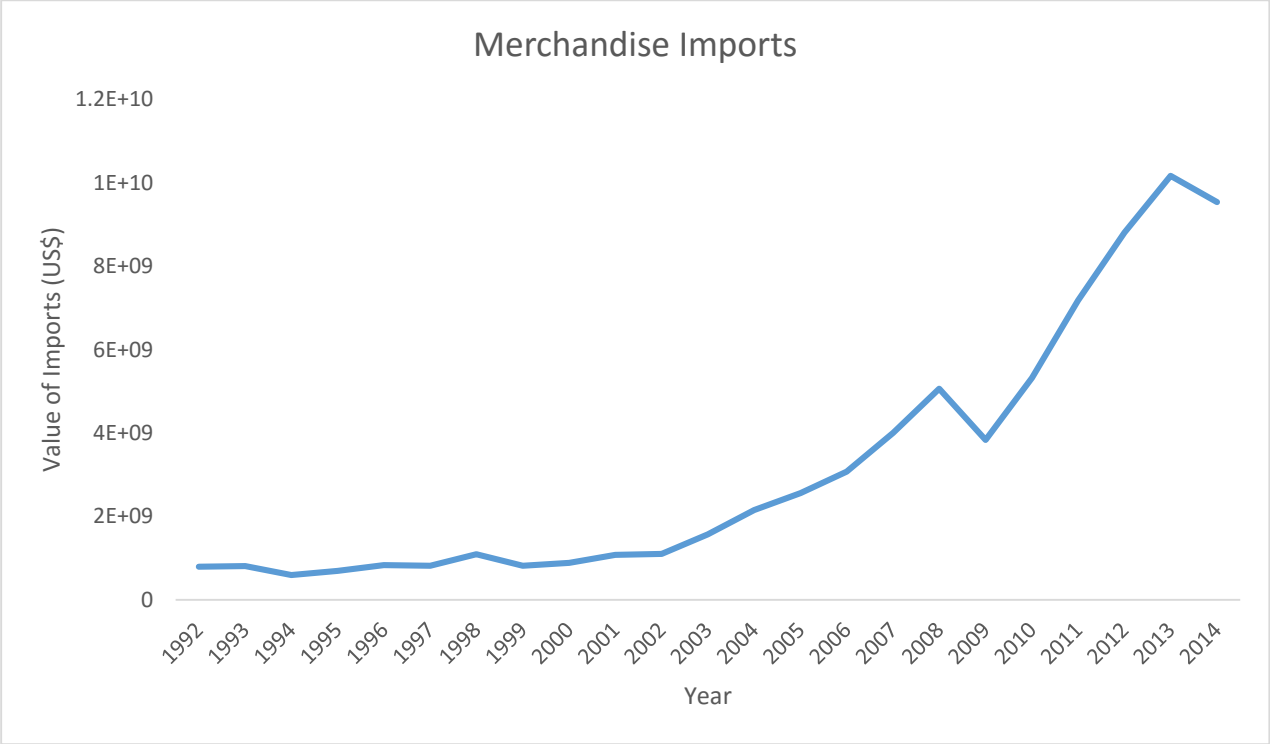
Figure 2: Export Earnings 2010-2012, (in US $ million)



Source: Bank of Zambia, 2013

Likewise, the country saw a surge in the value of imports during the period 1992 to 2014. According to the Observatory of Economic Complexity (n.d), by the year 2014, Zambia imported US$9.6 billion, making it the 106th largest importer in the world. They further highlighted that during the period 2009 to 2014 the imports of Zambia increased at an annualised rate of 19.9 percent, from US$3.87 billion to US$9.6 billion. Figure 3 below shows the trend of imports for the 1992 to 2014.

Figure 3: Zambia's Imports 1992 to 2014



Source: Observatory of Economic Complexity (n.d)

Generally, the country has witnessed an increase of both exports and imports in the last 20 years. The number of trading partners for exports has significantly increased from 64 to 129, and those for imports have equally increased from 106 to 170. While the number of imported products recorded steady adjustments for the entire period from 1995 to 2014, the number of exported products tripled from 757 to 2176 in 2009. Table 2 below shows the numbers of export/import partners and number of import/export products for the period 1995 to 2014.

Table 3: No. of Export/Import Partners and No. Import/export products

Year	No. Of Export partners	No. Of Import partners	No. Of Import products	No. Of Export products
2014	109	160	3984	1886
2013	125	170	4033	1972
2012	129	163	4041	2012
2011	125	139	3995	1876
2010	129	140	3959	2003
2009	125	137	3884	2176
2008	119	138	3923	2162
2007	108	128	3995	2008
2006	92	120	4041	1732
2005	94	120	3969	1468
2004	89	125	3978	1400

2003	94	117	3886	1236
2002	92	123	3903	1168
2001	100	132	3997	1053
2000	104	135	3882	1165
1999	104	121	3900	1516
1998	89	111	3957	1239
1997	67	108	3914	789
1996	68	94	4109	843
1995	64	106	3894	757

Source: World Intergraded Trade Solution, (n.d)

3 RESEARCH METHODOLOGY

3.1 Research Approach and Strategy

The study was conducted through a quantitative research approach and analysed data from 1994 to 2014. The focus of the research was on FDIs, NTEs and imports by category. The results will be used to disapprove or approve current investment policy that assumes that FDI has a positive effect on the said parameters.

3.2 Data Collection, Frequency and Choice of Data

The empirical analysis uses panel data over a span of 20 years (1994 – 2014) for NTEs and 17 years (1997-2014) for imports by category. The time period was chosen taking into consideration the country's economic liberisation where private sector participation in the management of the economy was emphasised which resulted in the promotion of FDIs. Data for first three and six years after the liberisation was not available for NTEs and imports by category. Unless otherwise started, data for NTEs, imports and FDIs was obtained from Bank of Zambia, Zambia Development Agency and Central Statistics of Zambia. The data for proxy for trade openness and Real Effective Exchange Rates was obtained from the World Bank.

3.3 Sampling

Given the time period under consideration the study used 20 observations for analysis of FDIs and NTEs and 17 observations for the analysis of FDIs and imports by category. The imports were as categorised by the Central Statistics of Zambia and these are: Raw Materials, Consumer Goods, Capital Goods and Intermediate Goods.

3.4 Data Analysis Methods

This paper focuses on the strength of the FDI effects on NTEs and imports by category. Since the research is focussed on the relationship between the variables of interest, the ordinary least square (OLS) regression is ideal tool that can be used to explore or explain the pattern in the variables. OLS regression is a linear modelling technique that may be used to model a single response variable which has been recorded on an interval scale (Craven & Islam, 2011). This model is similar to the one Heliso (2014) used in investigating the impact

of FDI on exports of Common Market for Eastern and Southern Africa member countries. The focus of the study is to find the impact of FDI on NTEs and Imports by category in a macroeconomic framework where FDI is an independent variable while NTEs and Imports as dependent variables. The research used the following model specifications:

Model 1: FDI effect on Non Traditional Exports(NTEs)

$XNT = \beta_0 + \beta_1 FDI_{t-1} + \beta_2 R_t + \beta_3 TO_t + \varepsilon$

Model 2: FDI effect on Consumer Goods Imports

$XCG = \beta_0 + \beta_1 FDI_{t-1} + \beta_2 R_t + \beta_3 TO_t + \varepsilon$

Model 3: FDI effect on Raw Materials Imports

$XRM = \beta_0 + \beta_1 FDI_{t-1} + \beta_2 R_t + \beta_3 TO_t + \varepsilon$

Model 4: FDI (Manufacturing Sector) effect on Capital Goods Imports

$XCG1 = \beta_0 + \beta_1 FDI_{t-1} + \beta_2 R_t + \beta_3 TO_t + \varepsilon$

Model 5: FDI effect on Intermediate Goods Imports

$XIG = \beta_0 + \beta_1 FDI_{t-1} + \beta_2 R_t + \beta_3 TO_t + \varepsilon$

Where XNT, XCG, XRM, XCG1 and XIG are total NTEs, Consumer goods imports, Raw materials imports, Capital goods imports and intermediate goods imports, respectively. The subscripts t-1 and t refers to Lagged and unlagged variable respectively. Foreign Direct Investment is denoted by FDI. Lagged FDIs is used in analysing data to cure reverse causality. R is the real exchange rate index and TO is trade openness while ε is the error term.

3.4.1 Dependent Variables

3.4.1.1 Non Traditional Exports (NTE)

The first dependent variable was NTEs, which are all exports excluding copper and cobalt. It is without a doubt that the mining sector has benefited greatly from FDIs. Because all major mining investments are FDIs and the impact can easily be observed as the country has recorded significant increase in the exportation of copper ores. What is yet to be proven is FDIs' impact on the underdeveloped economic sectors. A good proxy to see how FDI has impacted on the underdeveloped sectors is increased NTEs which will give an indication of the country's increased production capacities. Therefore, only considered NTEs when it comes to exports as this enabled the explanation of the impact of FDI in sectors targeted by relevant policies.

3.4.1.2 Imports

According to the Central Statistics of Zambia (CSOZ), the country's imports are divided into four categories which are; Consumer goods, Raw Materials, Capital Goods and Intermediate Goods. FDIs can either increase the country's imports or reduce them. Depending on which type of imports is affected, we can be able to have an indication on whether the investments inflows are those which encourage importation of finished goods and therefore negating the growth of the domestic industry or that which contributes to the growth of the domestic industry.

3.4.2 Explanatory Variables

3.4.2.1 Foreign Direct Investment

The main explanatory variable was FDI because the main purpose of the research was to find out how it impacts the NTEs and Imports in Zambia. According to the Foreign Private Investment and Investor Perceptions Survey (2013), foreign investment inflows are divided in different sectors, of particular relevance to this research are FDIs was to be those from the following sectors; Manufacturing, Wholesale and retail trade and Agriculture. FDIs from the said sectors can be directly linked to the NTEs and imports. However, during data collection it was discovered that recording of FDI by sector only commenced in 2010 and therefore this research used annualized FDI. Most NTEs required processing into finished products or came from various agriculture activities and therefore, foreign investments inflow can be linked to the performance of NTEs. In analysing NTEs and imports by category, lagged FDI was used to cure the reverse causality problem.

The control variables used in this study were the Real Effective Exchange Rate and Trade openness.

3.4.2.2 Real Effective Exchange Rate

It is well established that the value of the currency relative to other currencies can affect imports and exports. The rationale is that if the domestic currency is stronger relative to that of the trading partners; foreign currency will appear very inexpensive to the market. The result will be that it will be more attractive to buy products from abroad than locally. Therefore, a stronger domestic currency is said to increase imports. Likewise, it is expected that a stronger currency will have a negative impact on exports. In a bid to control for exchange rate volatility, Real Effective Exchange Rate (REER) as compiled by the world bank was used. REER is the nominal effective exchange rate (a measure of the value of a currency against a weighted average of several foreign currencies) divided by a price deflator

or index of costs. An increase in REER implies that exports became more expensive and imports become cheaper and therefore, an increase indicates a trade loss in trade competitiveness (IMF, n.d). Zambia has seen considerable foreign exchange fluctuations of its currency in the past decade. The result is that imports or exports might have been affected by the strengthening or weakening of the currency. Therefore, not taking into consideration the effect of foreign exchange, fluctuations will reduce the accuracy of the results. Additionally, since the calculation of real exchange rate imbeds in it inflation, the model will take into consideration the effect of inflation which has changed dramatically in Zambia and therefore, further improve the accuracy of the research.

3.4.2.3 Trade Openness

As stated in the literature review, policy plays a key role in determining the direction of trade. Countries have adopted protectionist or restrictive trade policy to encourage use of locally produced goods or restrict exportation of product that is in short supply. Given the role that trade policy plays in international trade, a variable to control for policy was included. Trade Openness (which is a ratio of exports plus imports to GDP) index was used as a proxy for trade policy. The research used the trade openness index which was compiled by the World Bank. According to Heliso (2012) this is good proxy because it measures the degree of domestic companies' dependence on foreign markets and the degree of dependence of consumers on foreign products. Low degree of openness could mean the country does not have high trade due to high tariffs or non-tariff barriers. It should be pointed out that there are various measures of trade openness. The selected measure was purely on the basis of data availability and the fact that the world bank uses it as a proxy for trade openness.

3.5 Research Reliability and Validity

Relevant legislative provisions on FDIs were introduced in the early 1990s but implementation and structuring of responsible organisations was only seen in the middle 1990s and early 2000s. For instance, ZIC was operational in 1993 through an act of parliament and therefore, the data collection period is representative of the population. Additionally, the data is collected from relevant institutions charged with the responsibility of not only attracting FDIs but also monitoring the country's trade performance and thus, the research used official validated data.

3.5.1 Test for Collinearity in the independent Variables

To test for collinearity, the Variance Inflation Factor was used. The Variance Inflation Factor (VIF) measures how much the variance is inflated because of the existence of correlation among the predictor variables. It is given by the formulae:

$VIF_n =$ 1/ 1-R_n-Squared

Where R_n-Squared is the R^2 value obtained by regressing the n^{th} independent variable on the remaining independent variables. The general rule of thumb is that VIF exceeding 4 warrant investigation, while VIFs exceeding 10 are signs of serious multi collinearity requiring correction (Pardoe, 2016).

3.6 Limitations

The research could have benefited from having data covering the whole period since the liberalisation of the economy especially FDI by sector. Data on FDIs by sector could only be found for the period 2010 to 2014.

4 RESEARCH FINDINGS, ANALYSIS AND DISCUSSION

4.1. Test for Collinearity

The results of the test showed no evidence of collinearity. The rule of thumb is that if the VIF is less than 3, then there is no problem of collinearity. All the calculated VIF ranged from 1.5 to 2.7.

4.1.2 Impact of FDI on NTEs and Imports by category

The research results were estimated according to data results as follows:

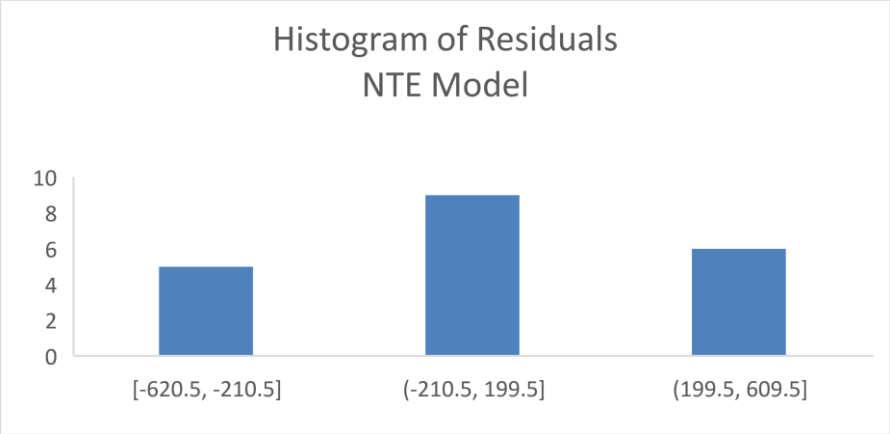
4.1.2.1 Impact of FDI on NTEs

The equation that represents the impact of FDI on NTEs in Zambia was as follows.

$$XNT = -2499.64 + 0.62\ \beta_1 + 38.98\beta_2 + 13.19\beta_3$$

The Variance Inflation Factor (VIF) was used to detect the presence of multi collinearity in the model. VIF is a measure of the ith independent variable's collinearity with other independent variables in the analysis and is connected directly to the variance of the regression coefficient associated with this independent variable (O'Brien, 2007). According to O'Brien a VIF of 10 will mean that the variance of the ith coefficient is 10 times greater than it would have been if the ith independent variable had been linearly independent of the other independent variable in the analysis. Thus, it tells us how much the variance has been inflated by lack of independence. The rule of thumb is that VIF less than 4 gives an indication of no collinearity. From the results the VIF for all variables is less than 2, therefore, there is evidence to infer multi collinearity in the model. In validating the model, normality and non-independence of the error was checked using the histogram and Durbin-Watson test. The histogram revealed that the error was normally distributed as represented in figure 3 below.

Figure 3: Histogram of Residual (NTE)



Source: Researchers from Excel

Using the tabular results of the Durbin-Watson statistic with α = 0.05, n =20 and K =3 the following are the statistic: $d_u = 0.97$ and $d_L = 1.68$. Therefore, the test for autocorrelation with the following hypothesis: $H_{o:}$ there is no first order autocorrelation; H_1: there is positive first order correlation, reviewed that there was no evidence to reject the null hypothesis, given that the calculated d = 1.699 which is greater than $d_{u.}$

Using results of the T-test in the table 3, the coefficients of the constant, trade openness and FDI were significant. There is sufficient evidence at 5% significance level to infer that the two variables were linearly related to NTEs. There was however, weak evidence to infer that REER and NTEs were linearly related at 5% significant level. Therefore, the REER variable is statistically insignificant to explain the variation in the dependent variable in this model.

Table 4: Impact of FDI, Trade Openness, REER on NTEs					
	Coeff	*Std Error*	*t Stat*	*P-value*	*VIF*
Intercept	-2499.64	852.171	-2.933	0.010	
FDI	0.624412	0.263	2.374	0.030	4.41
TO	38.97579	15.168	2.570	0.021	2.95
REER	13.19211	6.306	2.092	0.053	2.55

Source: Researchers from Excel

By reference to the values of the estimated coefficients, the positive impact of FDI is evident, where the results show that the elasticity of FDI (0.62) is positive indicating that one-unit increase in FDI result in US$0.62 increase in NTEs. Likewise, there is a positive impact of trade openness where the results show that the elasticity of trade openness (38.97) is positive

as one-unit increase in variable result in US$38.97 increase in NTEs. Additionally, there is a positive impact of REER (13.19) is positive as one-unit increase in the variable result in US$13.19 increase in NTEs.

The overall equation is statistically significant with a considerable high 'F' ratio and adjusted R-squared of 0.61 indicating that the overall predictive power of the equation is satisfactory.

Table 5. ANOVA variance analysis for impact of FDI on NTEs

	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	16513682.26	5504561	45.42906	4.71958E-08
Residual	16	1938692.364	121168.3		
Total	19	18452374.62			

Source: Researchers using Excel

In this model, the result show that FDIs are positively correlated with NTEs because the coefficient is significant. The result can be accommodated within the boundaries of the modernisation theory. Theoretical studies highlights success stories in China, Central and Eastern Europe and other developing countries such as India and Pakistan. The studies suggested that FDI is a great instrument to promote exports. The study conducted by Heliso (2014) on COMESA countries on the impact of FDI on exports had the same conclusion. These theories are aligned to the modernisation theory where it is expected that investment brought in to the domestic market with spill over effects of technology and knowledge improves the countries 'production capacities in such a way that positively impact export performance.

The study shows support to the literature on the modernisation theory that argue that there is a positive relationship between FDI and exports in general. The result gives an indication of one of the possible reasons to increased exports of non-copper merchandise goods.

It is however important to note that the country does not receive a lot of FDI in sectors identified as high potential sectors as compared to the mining industry. Given that, of the total foreign investments that the country received between the periods 2010 and 2014, sixty percent was in the mining sector, the assumption can hold true for the entire period under consideration. According to Radulescu and Serbanescu (2012 the amount of FDI stock accumulated over time matters for the positive FDI-specific effects on exports. They showed that EU countries that received the larger amount of FDI relative to other transition economies were able to better take advantage of FDI-specific effects than the rest of the countries, leading to more exports. Therefore, to extrapolate FDI inflows in 2010 to 2014 to the entire period under consideration,

the country need to do better in creating a friendly environment for foreign investment and intensify investment promotion activities in key sectors that will support the diversification process.

Results between NTEs and trade openness reviewed that trade openness was a major contributor to explaining variations in NTEs. The opening up of the markets through various bilateral trade agreements has helped in creating demand for non-traditional products.

According to the world bank's Investing-Across Sectors (2015), Zambia is one of the most open economies to foreign equity ownership. This, in additional to various policy reforms and bilateral/multilateral trade agreements such as the African Growth and Opportunity Act (AGOA), can help to explain the positive impact that trade openness has on NTEs. According to the results, trade openness has made significant contribution in opening up markets for domestic products and hence increased the value of NTEs. The opening up of markets which was done through regional trade agreements including making commitments to WTO stance on reduction of nontariff barriers has opened up the market. In 2014 the country's top export destinations for NTEs were countries in the SADC and COMESA region.

In this model however, the appreciation of the domestic currency was seen to have a positive contribution on NTEs performance. It is an accepted theory that a stronger currency negatively affects exports and encourages imports. In this model however, a stronger currency has a positive impact on NTEs. The probable explanation is that most NTEs are price inelastic due to little competition or since when analysing data what was looked at was the value of NTEs and not volume or quantity, the value of NTEs goes up as the currency appreciates.

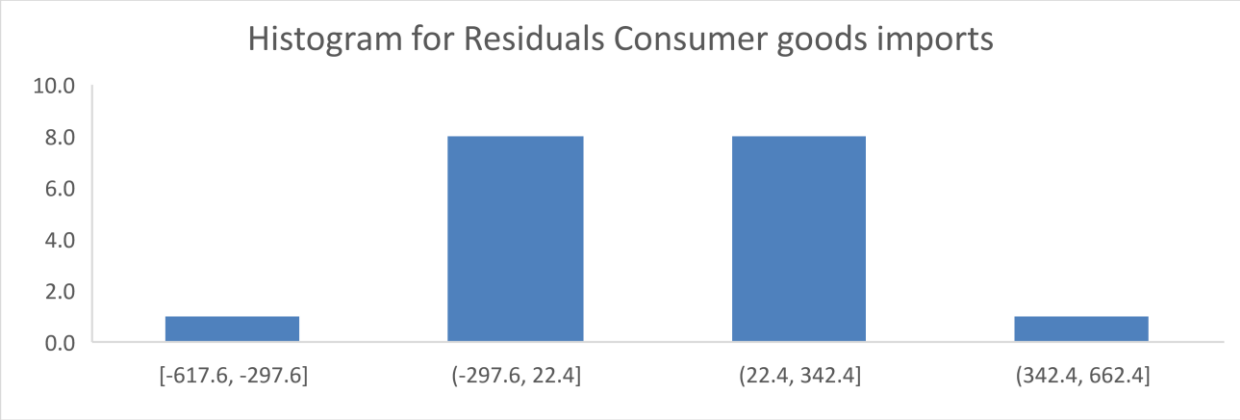
4.1.2.2 Impact of FDI on Imports by category

i. Consumer Goods

The impact of FDI on consumer imports is represented by the following equation.

$$XCG = -798.7 + 0.76\beta_1 + 0.82\beta_2 + (-2.64)\ \beta_3$$

Since the VIF for all three independent variables is less than 4, collinearity among independent variables in this model cannot be inferred. The histogram below shows that the error is most likely normally distributed.



The test for Durbin-Watson was inclusive as the d = 1.56, and lies between the d_L and d_u which were equal to 0.67 and 1.68 respectively. In this model, the results show that the P-value for trade openness and REER are not significant at 5 percent significant level. Unlike the two variables FDI is significant as it's P-value result is 0.00026 at 5 percent significant level. Table 5 below shows the results of the regression on consumer imports.

Table 6: Impact of FDI, Trade Openness and REER on Consumer Goods Imports					
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*VIF*
Intercept	-798.692	538.3277368	-1.483653316	0.160062647	
FDI	0.77587	0.160165238	4.844183831	0.00026008	2.64
TO	9.479482	7.66316924	1.237018498	0.236428876	1.67
REER	7.2251	5.260118638	1.37356216	0.191174278	2.47

Source: Researchers from Excel

The overall model is significant considering the high 'F' ratio and adjusted R-squared of 0.867. Meaning the 86 percent of the variation in value of consumer goods imports can be explained variations in the independent variables.

Table 7. ANOVA variance analysis for impact of FDI on Consumer Goods imports					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	7789667.429	2596555.81	38.04360877	5.55532E-07
Residual	14	955529.2601	68252.09001		
Total	17	8745196.69			

Source: Researchers from Excel

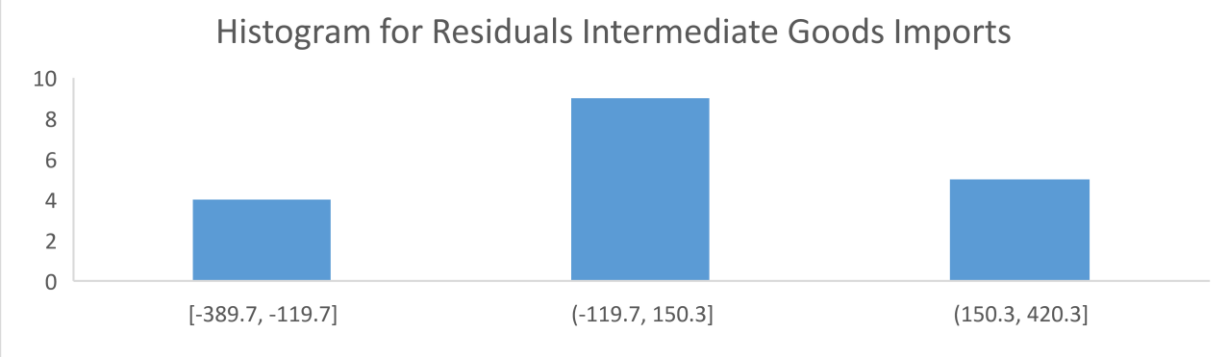
Commenting on the possible effects of FDI on the host country's imports Jayakumar (2014) observed that increased imports of consumer goods encourage domestic import substitution forms to innovate and restructure themselves in order to compete with foreign rivals therefore imports enhance productive efficiency. But this blanket statement cannot hold true in most cases, the possibility that the local firms have limited capital to venture into such restructuring is very high. Literature reviewed that the spill over effect of FDI in terms of productivity is what drives exports or imports in a certain direction. This technology usually is associated with high tech equipment whose cost is beyond the reach of most local producing companies. Therefore, if the kind of FDI attracted is that which is market seeking, the possibility that it will out compete local firms is very high because the local producers will not have the necessary funds to restructure and acquire the necessary high tech capital. Nonetheless, the statement holds true in some sectors of the industry in Zambia. Take for instance production of cleaning materials and beverages, at the beginning of the 21st century the country depended on the neighbouring countries to supply the commodities, over the years this has changed, most chain stores will have considerable locally produced products. Government policy and FDI in wholesale and retail trading sector has contributed to this development. At the beginning of their investment, chain store owners sourced all supplies from their home countries citing poor quality of locally produced goods. This made local producer to restructure and innovate and consequently start to produce high quality items that are acceptable in retail shops.

ii. Intermediate Goods

The equation representing the model on intermediate goods is as follows:

$$XIG = -1{,}687.2 + 0.56\beta_1 + 21.6\beta_2 + 7.48\beta_3$$

The model used the same independent variables as the model for consumer goods imports. Therefore, the decision on collinearity made in the consumer goods imports stands. The histogram below shows that the error was normally distributed.



The test of Durbin-Watson showed the existence of independence between the residuals where there is no self-correlation among them, as from the result Durbin-Watson = 2.96 which was greater than the d_u (1.68). Unlike the model for consumer goods, trade openness and FDI coefficients are significant. The P-values for the trade openness and FDI are 0.004 and 0.001 respectively at 5 percent significant level. According to this model $1 investment in the country will cause intermediate goods imports to increase by $0.56 while a unit increase in trade openness will cause intermediate goods imports to increase by $21.60.

Table 8. Impact of FDI on Intermediate goods imports					
	Coefficients	*Standard Error*	*t Stat*	*P-value*	*VIF*
Intercept	-1687.25	451.5915	-3.73624	0.002213	
FDI	0.559978	0.134359	4.167767	0.000948	2.64
Trade Opennes	21.60228	6.428467	3.36041	0.004666	1.67
Reer	7.476047	4.4126	1.69425	0.112337	2.47

Source: Researchers from Excel

The 'F' statistic of 49.4 with corresponding P-value of 1.08E-07 means that the model is a good fit for the data. The adjusted R squared for the model is 0.87. Meaning that 87 percent of the total variation in intermediate goods imports can be explained by variations in the three independent variables, whereas 13 percent remains unexplained.

Table 9. ANOVA variance analysis for impact of FDI on Intermediate Goods imports					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	7118485	2372828	49.40289	1.0778E-07
Residual	14	672422.1	48030.15		
Total	17	7790907			

Source: Researchers from Excel

Literature reviewed that in the first phases of an FDI, there is likely be more of intermediate goods imported. The results are therefore accommodated within the findings of Jayakumar (2014) who highlighted that FDI companies have high propensities to import capital and intermediate goods and services that are not readily available in the host country. Empirical evidence linking FDI to intermediate and capital goods imports gives an indication of growth and improved productivity in the local industry. As it is assumed that capital and intermediate

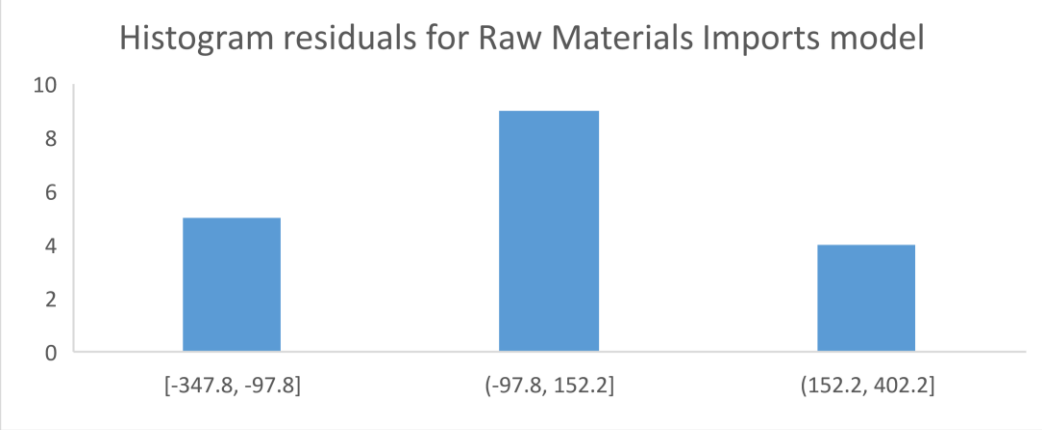
goods will be used in setting up production capacities or improve the productivity of existing production facilities which will positively affect exports in the near future.

iii. Raw Materials Goods

The impact of FDI on raw materials imports is represented by the following equation.

$XIG = -900.90 + 0.80\beta_1 + 14.15\beta_2 + (-1.49)\ \beta_3$

The test for auto correlation using the Durbin-Watson test showed the existence of independence between the residuals as from the result, Durbin-Watson = 1.867 which was greater than the tabular d_u of 1.68. The histogram below indicates that the error is normally distributed.



Like the model for intermediate goods, the p value for FDI and trade openness is significant at 5 percent significant level. The FDI coefficient is higher than that of Intermediate goods while the trade openness coefficient is lower at 0.80 and 14.15 respectively. This gives an indication that a unit increase in the value of FDI is likely to increase the raw materials imports biyUS$0.80 while unit increase of trade openness will increase exports by US14.15.

Table 10: Impact of FDI on Raw materials materials imports

	Coeff	*Std Error*	*t Stat*	*P-value*
Intercept	######	426.372	-2.113	0.053
FDI	0.804	0.127	6.338	0.000
TO	14.154	6.069	2.332	0.035
REER	-1.493	4.166	-0.358	0.725

Source: Researchers from Excel

With the adjusted R-squared for this model is 0.89, 89 percent of the variation in raw materials imports can be explained by variations in the regresses for this model. The 'F' statistic for this model is statistically significant. As can be seen from the ANOVA analysis below. Therefore,

variations in the dependent variable can reliably be explained by variations in FDI and trade openness. With the D.W statistic of 1.96, we concluded that there is no evidence to infer auto correlation at 5 percent significant level in this model.

Table 11: Anova variance analysis for impact of FDI on raw materials					
	df	SS	MS	F	Significance F
Regression	3	6096707	2032236	47.46507	1.389E-07
Residual	14	599415	42815		
Total	17	6696122			

Source: Researchers from Excel

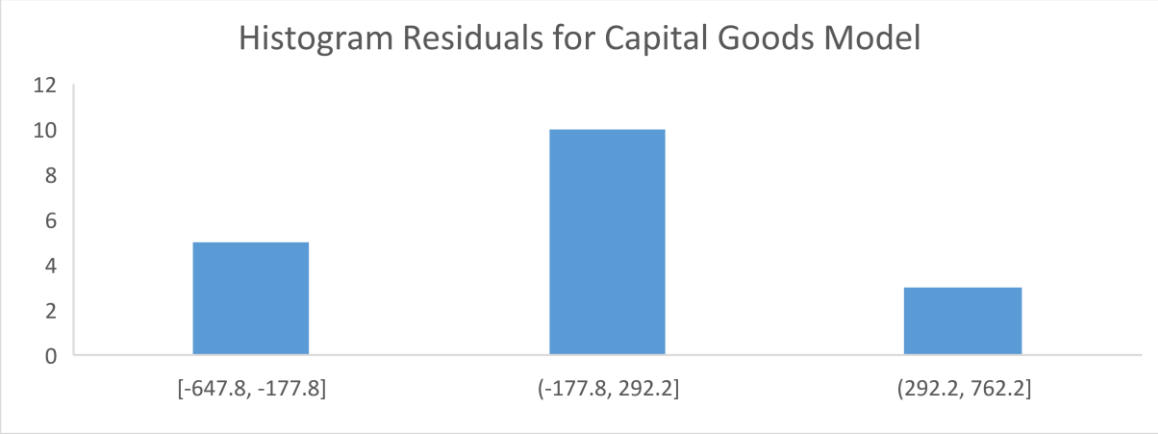
According to literature, FDI that relies on imported inputs like raw materials increases the country's imports. The result therefore gives an indication of FDI reliance on foreign inputs for production. The ideal situation especially for country that wants to diversify is to attract FDI that utilises the local inputs. That way, there is promotion of value addition to the raw materials which will have an effect on the value of exports. The country should attract more of FDI in sectors where they have comparative advantage.

iv. Capital Goods

The model equation for the capital goods imports is as follows:

$$XCG = -2902.51 + 1.08\beta_1 + 36.29\beta_2 + 713.82\beta_2$$

With the decision made on collinearity by the preceding models, normality was checked. Using the histogram, the residuals revealed that the error is normally distributed as shown by the figure below.



The test for auto correlation using the Durbin Watson test showed the existence of independence between the residuals, there was no self-correlation among them. The calculated

Durbin-Watson was 1.82, which is greater than the tabular d_u of 1.68. Therefore, there is not enough evidence to infer auto correlation in this model.

Table 12. Impact of FDI on Capital Goods imports					
	Coeff	*Standard Error*	*t Stat*	*P-value*	*VIF*
Intercept	-2902.52	801.6183863	-3.620820134	0.002781	
FDI	1.085484	0.238500436	4.551286689	0.000453	2.64
TO	36.29387	11.41114778	3.180562887	0.006674	1.67
Reer	13.821	7.832789443	1.764505313	0.099443	2.47

Source: Researchers from Excel

Capital goods has the highest FDI coefficient among the four types of imports at 1.08. Like the other models on imports, when you consider the t test and the P-value, FDI and trade openness are significant at 5 percent significant level while REER index is not. The adjusted R-squared for this model is 0.901. Meaning that 90 percent of the variations in capital goods imports can be explained by variations in the independent variables for this model. A unit increase in FDI will increase capital imports by US$1.08 while a unit increase in trade openness will increase capital imports by US$36.29.

Table 13. ANOVA variance analysis for impact of FDI on Capital Goods imports					
	df	*SS*	*MS*	*F*	*Significance F*
Regression	3	24278955.02	8092985.008	53.47502	6.50183E-08
Residual	14	2118779.763	151341.4116		
Total	17	26397734.79			

Source: Researchers using Excel

Given the results of the ANOVA analysis above, the ‘F’ statistic shows that the model is valid.

It is expected that FDI will cause capital goods imports to increase especially in the initial stages of the investment, because of procurement of new production equipment to facilitate improvement or setting up of new production lines. The findings are therefore accommodated within the findings of WTO (1996) that most of inward FDI tends to increase the host country’s imports in the sense that multinational firms have a high propensity to import intermediate inputs, capital goods and services that are not readily available in the host country. The significant high coefficient of FDI in this model gives an indication that FDI is contributing in improving the country’s supply capacity that will lead to further increased exports and may also

lead to reduced imports as goods that might have been produced in the home country of the investor will now be produced locally.

The coefficient of trade openness is equally the highest among the four categories of imports. This can be explained by friendlier tariffs and taxes on capital equipment meant for production purposes. Among the tax incentives are suspension of import duty on machinery, equipment and capital goods for assembling of motor vehicle, bicycle and trailer, Value Added Tax(VAT) deferment on importation of some agricultural equipment and machinery and no import duty on irrigation equipment. Other than the administrative procedures, there are no Non-tariff barriers on the importation of capital equipment.

The results for imports show that FDI has a positive impact on imports. In all the four models FDI and trade openness were statistically significant in explaining changes in the dependent variable. Likewise, the model for raw materials indicates that FDI has positive impact on raw material imports, this is synonymous with market seeking type of FDI. In line with what was reviewed in literature that FDI companies have high propensities to import capital and intermediate goods that are not readily available in the host country, the models for intermediate and capital goods imports show the impact of FDI is positive.

5 RESEARCH CONCLUSIONS

Literature reviewed various studies that estimated the impact of FDI inflows on export performance, many of which were aligned to the modernisation theory, which is of the notion that FDI contributes to economic growth. The conclusions from these researchers was that FDI was said to contribute to high export performance of the host country by increasing domestic production capacities and/or through FDI specific spill over effects in form knowledge of global markets, superior technology and operational efficiency which lowers the production cost.

Unlike other studies which looked at exports as whole, this study's focus was on NTEs. This was on the basis that it is an inarguable fact that FDI has immensely contributed to the country's traditional exports which are copper and cobalt. Regardless of the fact, the result of this study affirm the proposition that FDI inflows contribute to high supply capacity of the host country, leading to increased exports. This was established by the positive coefficient in the model. Whether the increase in NTEs is as a result of foreign investment directly increasing the country's production capacities by setting up new production facilities or it is through spill over effects resulting in high productivity among local firms, remains to be seen. What this study establishes is empirical evidence that FDI positively affects NTES in Zambia. The implication is that the country's diversification policy might be on track albeit at a slow rate. Copper remains the country's major export earner and still accounts for 70 percent of export revenue as at December, 2015. The country's exposure to commodity market instabilities is still high 20 years after setting up the diversification agenda. Evidence from Honduras shows that FDI played a key role in the diversification of exports in just over a decade. It is estimated that exports in insulated wire multiplied from 0.3 percent of total exports in 1995 to 8 percent in 2014, representing a total export value of US$624 million. Mexico's aerospace products is one other example where the sector grew into a US$ 5 billion export industry in just 15 years. It is therefore not good enough to establish that FDI positively affects non tradition exports but translating this fact in to investment promotion activities that will see increased inflow of FDI into high potential sectors becomes key in effectively diversifying the export industry. It was established in literature that increased FDI inflow assists in leveraging the benefits accrued to foreign investments. The country might be one of those open economies for foreign equity investments, however more needs to be done especially in providing stable and predictable investment policy frameworks.

Furthermore, by establishing that FDI positively contributes to increased NTEs it is expected that the country will double it efforts in ensuring that it creates a more favourable environment to attract more investments, but this should not be done in isolation. FDIs should always be complementary to domestic investments. The literature under the modernisation theory reviewed that it is the spill over effects of FDI that differentiates it from other sources of finance for development such as portfolio investment or bonds. FDIs are associated with secondary benefits through transfer of technology to the local industry. The positive externalities associated with FDI such as upgrading of technological capabilities of local companies conducting business with the multinational firms must be fully captured in the country's investment strategy. Therefore, lack of a well-established, functioning and stable local industry diminishes the positive impact of FDI. The World Bank in the third Zambia Economic Brief (2014) expressed concern over the very low survival rate of exporting firms despite an increase in non-copper exports over the years. The is need for the country to vigorously promote and mobilise domestic investments into productive sectors.

On imports, the results show that FDI has a positive impact on all the four categories. While under the modernisation theory, it is expected that FDI will have a positive impact on intermediate and capital goods as the results indicate, the results for consumer goods imports give an indication of elements of the dependency theory in the local industry. Especially that the FDI coefficient in the model for NTEs in comparison to that of consumer goods, the later has a higher coefficient as compared to the former. The results give an indication that the country still imports more of consumer goods than it exports. The results for raw materials and consumer goods imports shows evidence of market seeking FDI which is said to increase imports and affecting the country's balance of payment negatively. Taking into consideration the results on NTEs and imports, the net effects of FDI on the local industry is negative in this study. This does not necessary mean that the country has not benefited from the increased inflow of FDI but it is not helping to develop the economy organically but rather growing it in a disarticulated manner. While the mining sector has developed, other sectors of the economy with higher potential to contribute to export earning capacity of the country still remain underdeveloped 20 years after realisation of the need to diversify.

The implication to the underlying theory of modernisation and dependence theories in this model is that the country is not benefiting from FDI in other sectors but it is not account of which theory applies but more to do with the policy and investments strategy. Table 2 in the literature review shows that the mining sector is the major beneficially of FDIs as a result the

mining sectors has developed significantly while other sectors remain underdeveloped. GDP growth is dependent on the interactions among its individual components. Using FDI as finance for development entails targeting specific sectors that will increase net exports and promote import substitution in such a way that improves the country GDP. Increasing exports should not be in one sector but in all potential areas where the country is deemed to have a comparative advantage.

Trade openness seems to be the major contributor of variations to all the dependent variables. The result is well aligned with the country's favourable import regulations and tariffs for items deemed to be used for production in addition to bilateral and multi-lateral trade agreements entered into. The whole essence of signing trade agreements should be to have markets for domestically produced goods. The fact that trade openness is the major contributor to variations in NTEs means that the current foreign investments in the domestic market have not done much to improve the production capacities of the country, rather performance of NTEs is largely dependent on trade openness. Taking a leaf from the country's commitment to trade openness, the country has in the last decade signed various trade agreements including the American Growth Opportunity Act (AGOA), Economic Partnership Agreements and other bilateral trade agreements. This is in addition to being a member of the World Trade Organisation (WTO), Southern African Development Corporation (SADC) and Common Market for Eastern and Southern Africa (COMESA) which are all trading blocks. According to the World Bank the country's trade openness index in 2015 was as high as 82%. With such commitments, it is not surprising that the trade openness had a high coefficient in the analysis. Same commitments should be made in attracting FDI to specific sectors that promote NTEs. The low coefficients of FDI in comparison to that of trade openness in capital and intermediate goods imports show the low level of investments in production facilities which are the determinates of the country's domestic production capacities. Policy makers and institutions charged with the responsibilities of attracting FDI should align their implementation programs to specific industries with specific objectives that positively affect net exports and the country's consumption with the aim of improving the country's GDP as this is what it entails to use FDI as a tool for development. The country's reliance on imports for consumer goods including many of the products that can be produced locally make a good case for targeted FDI attraction.

The low level of FDI in sectors that promote NTEs and may affect import substitution for those products that can be produced locally makes it difficult to conclude that either the modernisation or the dependency theory applies in the Zambian case, however, given the results

of the NTEs and consumer goods imports models and low coefficient of FDI variable on the capital goods model, the trajectory is that dependency theory might be applicable during the period of the study. As highlighted in the literature review, policy plays key role in the direction of FDI, the silence in our policies and implementation frameworks on what areas need to be targeted to promote the diversification agenda may lead to disarticulated development of the economy whereby only one sector is developed which exposes the country to instabilities in that particular market.

6 RECOMMENDATIONS FOR FUTURE RESEARCH

Establishing that FDI positively affects NTEs and imports is only but the beginning of more research on its interactions with the domestic industry. Literature established that FDI was the most effective way of technological transfer from developed to underdeveloped countries. Therefore, it is at the centre of the modernisation theory which advocates for developing countries to adopt western structures in order to develop. The WTO emphasised the need for policy makers and implementers to focus more on the auxiliary benefits of FDI in form of spill overs effects. This was after concluding that FDI exerts a positive effect on the productivity of local firms through introduction of new technology and enhanced skills. The positive interaction of FDI with the local industry is vital to the improvement and stabilisation of the country's production capacities which will in turn lead to improved trade performance. Therefore, it is vital that study on the spill over effects of FDI on the local industry is conducted. The results of such a research will assist in establishing the sustainability of FDI positive effects on trade performance. Diffusion of new technology and enhanced skills into the local industry will mean that the local firms will not only be able to compete internationally but will also be able to fill the void left by a multinational firm in the case of divestment and therefore assist in sustaining the country's improved trade performance.

REFERENCES

Bengoa, M., & Sanchez-Robles, B. (2003). Foreign direct investment, economic freedom and growth: new evidence from Latin America. *European journal of political economy*, *19*(3), 529-545.

Cardoso, F. (1977). The Consumption of Dependency Theory in the United States. *Latin American Research Review*, *12*(3), 7-24. Retrieved from http://www.jstor.org.ezproxy.uct.ac.za/stable/2502466

Craven, B.D., & Islam, S. M. (2011). Ordinary least-squares regression (pp. 224-228). Sage Publications.

Dunning, J.H. (1994). Re-evaluating the benefits of foreign direct investment. Transnational Corporations, 3 (1), 23-51.

Foreign Assets, Liabilities and Investor Perceptions in Zambia. (2001, April). Report: Zambia. Bank of Zambia, Central Statistical Office of Zambia, Zambia Investment Centre.

Fruman, C. (2016, June 6). The false debate: choosing between promoting FDI and domestic investment [Web log post]. Retrieved from http://blogs.worldbank.org/category/tags/foreign-direct-investment

Giasul Hag, S. (2007). *Impact of FDIs on Exports: A case of Pakistan.* Sarhad university of Science and Information Technology, University Town, Peshawar. Retrieved from http:// www.iises.net/download/Soubory/soubory-puvodni/Haq.pdf

Hailu, Z. (2010). Impact of Foreign Direct Investment on Trade of African Countries. International Journal of Economics and Finance, 2(3).

Heliso, S.O. (2012). The impact of FDIs on exports in COMESA Countries (Masters Thesis, Department of Economics, University of Ottawa, Canada). Retrieved from https://www.ruor.uottawa.ca/bitstream/10393/31124/1/Heliso_Omega%20Simon_2014_researchpaper.pdf

Iain Pardoe, (2016). Lesson 12: Multi collinearity and other regression pitfalls. Retrieved from Pennstate Eberly College of Science Portal: https://onlinecourses.science.psu.edu/stat501/node/2

IMF (n.d). What is real effective exchange rate (REER)? Retrieved from http://datahelp.imf.org/knowledgebase/articles/537472-what-is-real-effective-exchange-rate-reer

Jayakumar, K. (2014, January). Impact of FDIs, Imports and Exports. International Review of Research in emerging markets and Global Economy Retrieved from http://globalbizresearch.org/files/irrem_a-jayakumar_kannan-l_anbalagan-g-4815.pdf

Kumar, N., & Pradhan, J. P. (2005). Foreign direct investment, externalities and economic growth in developing countries: Some empirical explorations. In *Multinationals and foreign investment in economic development* (pp. 42-84). Palgrave Macmillan UK.

Love, J.L. (1990). The orgins of dependency analysis, Journal of Latin America Studies, 22(1-2), 143-168.

Maitah, F., Hodrab, R., Tonsik, P., & Benesova, E. (2013). Impact of Foreign Direct Investment, Domestic Investments and Imports on Palestinian economic growth. Review of European Studies, 7(11), 252. doi:10.5539/res. v7n11p252

Observatory of Economic Complexity. (n.d). Zambia's Imports. Retrieved from http://atlas.media.mit.edu/en/profile/country/zmb/#Imports

Ocran, M. (2015). Issues in Development Finance: Mcomm 2015 (Course Handbook). Cape Town SA: University of Cape Town, Graduate School of Business.

Prasanna, N (2010). Impact of Foreign Direct Investment on Export Performance in India. Bharathidasan University. Retrieved from: http://krepublishers.com/02-Journals/JSS/JSS-24-0-000-10-Web/JSS-24-1-000-10-Abst-PDF/JSS-24-1-65-10-632-Prasanna-N/JSS-24-1-65-10-632-Prasanna-N-Tt.pdf

Radulescu, M. & Serbanescu, L. (2012). The impact of FDIs on Exports and Export Competitiveness in Central and Eastern Europe. Retrieved from http://www.scientificpapers.org/wpcontent/files/1244_Radulescu_Serbanescu_Impact_of_FDI_on_exports_in_CEE_countries.pdf

Saqib, D., Masnoon, M., & Rafique, N. (2013). Impact of foreign direct investment on economic growth of Pakistan.

Sunkel, O. (1969). National development policy and external dependence in Latin America. *The Journal of Development Studies*, *6*(1), 23-48.

Valenzuela, J., & Valenzuela, A. (1978) Modernisation and Dependency: Alternative Perspectives in the study of Latin American Underdevelopment. Comparative Politics, 10(4), 535-557. doi: 10.2307/421571

Willem te Velde, D. (2006, January). Foreign Direct Investment and Development an Historical perspective. Background paper for world economic and social survey for 2006.

Retrieved from https://www.odi.org/sites/odi.org.uk/files/odi-assets/publications-opinion-files/850.pdf

World Intergrated Trade Solution, (n.d). Zambia's Profile. Retrieved from http://wits.worldbank.org/CountryProfile/en/Country/ZMB/Year/2014/Summarytext

World trade Organisation. (1996, October 9). Trade and FDIs. Retrieved from: http://www.wto.org/english/news_e/pres96_e/pr057_e.htm

Zamak, K. Ali shah, I. Khan, M. & Ahmad, M. (2011). Macroeconomic factors determing FDI impact of Pakistan's growth. 1, 79-95. Doi: 10.1108/20454454451211207598.

Zambia Development Agency (2015). FDI and NTE Trends 2001- 2012. Retrieved fromwww.zda.org.zm/?q=download/file/fid/66

Zhang, K. H. (2005, June). How does FDI affect a host country's export performance? The case of China. In *International conference of WTO, China and the Asian Economies* (pp. 25-26).

APPENDICES

Non-tradition Exports (NTEs)/FDIs (FDI)/Trade Openness (TO) and Real Effective Exchange rate index (REER)

YEAR	NTEs	FDI	TO	REER
1995	**227.00**	40.00	45.704	50.19
1996	263.50	107.00	52.04	54.83
1997	248.70	127.10	40.3	63.43
1998	311.80	217.40	60.27	59.17
1999	321.80	238.00	55.37	59.29
2000	368.40	86.00	49.44	60.72
2001	313.39	121.70	50.54	69.41
2002	404.50	145.00	49.09	71.14
2003	685.00	298.40	52.1	62.81
2004	884.90	347.00	59.92	64.92
2005	975.80	364.00	52.42	79.33
2006	1,072.40	356.90	53.66	103.77
2007	1,052.60	615.80	61.35	95.62
2008	1,369.80	1,323.90	56.72	110.11
2009	1,768.86	938.60	53.13	94.50
2010	1,976.00	694.80	61.78	100.00
2011	2,508.89	1,729.30	68.96	97.38
2012	2,793.30	1,108.50	71.25	100.57
2013	3,324.45	1,731.50	74.01	104.25
2014	2,576.88	2,099.90	70.86	100.02

Appendix B

IMPORTS BY CATEGORY (US$ Million) 1997 - 2014				
Year	**1:Consumer goods**	**2:Raw materials**	**3:Intermediate goods**	**4:Capital goods**
1997	327.52	58.97	211.44	404.05
1998	377.83	64.97	183.84	460.87
1999	253.70	55.52	139.75	275.96
2000	318.51	57.64	180.13	328.19
2001	346.32	49.79	250.42	433.64
2002	366.30	64.45	230.36	436.53
2003	500.37	71.89	383.66	615.99
2004	778.81	87.74	468.92	815.46
2005	860.01	107.80	566.23	1,034.66
2006	930.34	182.65	637.73	1,397.83
2007	956.20	229.70	870.72	1,926.72
2008	1,385.49	633.46	986.54	1,926.84
2009	1,116.27	520.55	845.67	1,361.25
2010	1,161.88	932.13	1,340.68	1,882.69
2011	1,428.58	1,339.35	1,582.85	2,940.10
2012	1,884.81	1,296.60	1,928.50	3,686.65
2013	2,582.32	1,818.42	2,226.25	3,930.11
2014	2,439.46	1,752.78	1,805.06	3,554.01