



NIGERIAN JOURNAL OF PUBLIC SECTOR MANAGEMENT (NJPSM)

An Evaluation of the Impact of the Implementation of Free Trade Zone Policy on Human Capital Development in Nigeria

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The study evaluated the implementation of free trade zone policy in Nigeria. The policy was introduced to diversify the nation's economy from oil and provided an enabling environment that is conducive for the growth and development of industries, inflow of investment and expansion of domestic production capacity, promoting rapid industrialisation through administration of fiscal and non-fiscal incentives to increase private sector participation in free zone businesses. The study covered a period of ten years (2012 -2021) and relied on documentary evidence to critically assess Free trade zone policy in terms jobs creation and promoting human capital/skill acquisition in the seven selected operational zones. The study adopts endogenous growth theory as its framework. Finding from the study shows that Free trade zone policy has attracted foreign direct investment and local direct investment in the selected operational zones in terms of investment and trade. The study conclude that, the implementation of Free trade zones policy in Nigeria have generated employment opportunities, enhanced technology transfer and promote human capital development. Free zone policy has contributed to the economic development in the area of rapid industrialization, employment creation, diversification, export growth, technology transfer and socio-economic improvement. Free zones have provided better opportunities for doing business which provides a mix of fiscal incentives and a one-stop-shop platform that reduces bureaucratic bottlenecks. The study recommended that NEPZA should improve the physical infrastructure within FTZs, including roads, ports, airports, telecommunication and utilities such as electricity and water supply. This will enhance the attractiveness of these zones and make them more competitive in attracting investments. The Authority should identify and develop industry-specific FTZs that cater for particular sectors where Nigeria has a comparative advantage or potential for growth.

Keywords: Evaluation, Free Trade Zone, Policy, Implementation, Human Capital Development, Nigeria**Introduction**

The diversification of the Nigerian economy from oil has provided an enabling environment that is conducive for the growth and development of industries, inflow of investments, and creation of jobs, stimulation and expansion of domestic production capacity in the country. Over the years, the Federal government had introduced a mix of policy measures, plans and strategies to drive the Nigerian economy on a path of economic growth and sustainable development, as well as accelerate industrial development. In particular, the Nigeria Industrial Revolution Plan (NIRP) clearly defined the role of export processing zones/free trade zones as the vehicle for achieving industrial

transformation through the establishment of export processing zones, free trade zones, industrial cities, enterprise parks and other forms of manufacturing hubs.

The Nigeria Export Processing Zones Authority is the federal government Agency under the supervision of the Federal Ministry of Industry, Trade and Investment, established in 1992 pursuant to the provisions of the Nigeria Export Processing Zones Decree No. 63 of 1992 which was later listed as the Nigeria Export Processing Zones Act, CAP N107, Laws of Federation of Nigeria, 2004. It was established primarily to regulate, administer and supervise the

establishment, management and operations of Export processing zones (EPZ) in Nigeria.

In 2002, the scheme was expanded by the Federal government of Nigeria to include other variants of the scheme. Consequently, the term "Export Processing Zones" was changed to "Free Trade Zones" (FTZ) to encompass a broader range of economic activities. This expansion empowered the free zones investors to sell into the domestic economy in addition to manufacturing for export. In line with the global best practices, Special Economic Zone (SEZ) has become the most acceptable generic name for different variants of economic Zones globally.

Government Approval also empowered NEPZA to facilitate the involvement of private investors in the establishment and management of FTZs in Nigeria, subject to regulatory supervision and administration by NEPZA. The pioneer FTZ in Nigeria, the Calabar FTZ, was commissioned in 2002. As at December, 2021 a total number of 46 Zones have been established in Nigeria and now at different stages of development and operation with over 450 licences FZ Enterprises operating in various locations across the country covering all aspects of the economy ranging but not limited to agriculture, tourism, logistics, oil and gas, power generation, food processing, catering and estate development. The legal framework empowered the Authority to handle the responsibility of licensing, regulating, promoting and monitoring the operations of Free zones in Nigeria.

The Authority has the power to approve and grant all licenses to the exclusion of all other agencies and enforce compliance to set rules and regulations. The Authority defines the policy directions on Free zone matters and advises government from time to time on measures and strategies aimed at improving the operations of the scheme.

The overall objective of FTZ Policy in Nigeria, is to create an enabling environment aimed at improving economic growth and development of export oriented manufacturing in the non-oil sector of the economy, as well as diversifying the country's economic base from over dependency on oil,

attract foreign direct investment and local direct investment, create jobs, increase foreign exchange earnings, skill acquisition/technology transfer, human capital development and backward linkages.

In order to fill the research gap, few available literatures were reviewed on the evaluation of the implementation of FTZ policy. It was discovered that, since the introduction of FTZ, studies have focused on assessing challenges and prospect of FTZs rather than evaluating the implementation of the policy in Nigeria. For Instance; Hassan and Garba (2018) examined the implementation policy of free Trade Zones in Nigeria. The study sees Nigeria Export Processing Zones Authority (NEPZA) as one-window agency responsible for licensing, approving, monitoring and regulating the activities of Free Trade Zones (FTZs) in Nigeria.

The study evaluated the implementation of FTZs to find out whether its objectives are attained or not. The research work was carried out on three operational FTZs in the country, comprising of a Public zone, Private and Public private partnership free zone for the period 2012 - 2016. The methodology used for this research was documentary. Benefit-cost analysis was used to analyse the data. The net benefit of the policy was positive. The worthwhile of the policy exceeds the discounted value of the cost. This was comparable to the benefits/cost ratio being greater than one less than zero. The study revealed that the implementation of FTZ policy has made a positive impact on jobs creation and foreign direct investment in Nigeria. It concludes that the policy increase foreign direct investment, foreign exchange earnings, provided jobs. The study recommended that government should encourage the policy implementation of free trade zones in the country. Also, private, public private partnership participation should be encouraged.

Free Trade Practices and Economic Development Trade openness assists in reducing the resources which are eventually wasted in a conflict between countries and also helps in earning gains from international trades (Garfinkel, Syropoulos & Yotov, 2020). Yu (2020) discussed China's Free

Trade Area strategy and its benefits. This strategy has helped China in enhancing trade and economic cooperation with its partners. Moreover, it has improved political as well as economic relationships by addressing the concept of peaceful rise thus providing an opportunity for growth.

Warr (2019) examined the benefits and costs of EPZs in Indonesia, the Republic of Korea, Malaysia, and the Philippines, and the relationship between the welfare effects of EPZs and the host country's economic policies, and concludes that when the domestic economy is distorted, the EPZ confers limited welfare gains, and EPZs are far from the "engines of development" that some countries had initially expected. Gupta (2014) compared a duty-free zone with a non-duty-free zone in a small open economy and found that expanding the duty-free zone policy by reducing import duties on intermediate goods in a sector ultimately lowers the level of output of that sector, raises the level of unemployment, lowers national income (social welfare) and increases economic inequality. However, if the tariff on the final product is reduced in that sector, it produces the opposite result.

Samundengu (2016) conducted a study to examine the association between economic growth and trade openness in Namibia. Different variables like the labour force, GDP per capita, real exchange rate, trade openness, and capital formation were used. The findings indicated that there existed a significant long-run association between economic growth and trade openness. Also, the economic growth in Namibia depends on trade which can be boosted by promoting effective policies in the labour-intensive industrial areas.

Fang, Kuo, and Lee (2019) assessed the influence of talent distribution diversity on the equilibrium of the rate of growth. The study concluded that the growth rate after free trade is influenced by the effect of trade and diversity. Moreover, if the diversity of talent is significant, the practices of opening trade will enhance economic growth. The statement of the problem therefore, is to evaluating the effect of the implementation of FTZs policy in terms of jobs creation and

promoting human capital and skill acquisition in the selected operational Zones in Nigeria.

The broad objective of the study is to establish the level of employment generation and to identify the effect of the implementation of FTZs policy in promoting human capital and skill acquisition in the selected Zones of Nigeria

Conceptual Issues Export Processing Zone

The World Bank (1992) has based its analysis on the premise that "an Export Processing Zone (EPZ)" is an industrial estate, usually a fenced-in area of 10 to 300 hectares that specializes in manufacturing for export. It offers firms free trade conditions and a liberal regulatory environment.

The World Bank uses the following definition: "FTZs are fenced-in, duty-free areas, offering warehousing, storage, and distribution facilities for trade, transshipment, and re-export operations." FTZs are hubs of international trade by the very nature of their activities: transshipment, re-export, international trade, etc. They play a very important role as trade facilitators in globalization. These areas are generally located in or in the immediate vicinity of seaports (known as "free ports") and major airports. They are also present along the main transportation axes (maritime, rail and road), along the development corridors, or in border regions.

The World Bank has proposed the following definition: "Free ports typically encompass much larger areas. They accommodate all types of activities, including tourism and retail sales, permit on-site residence, and provide a broader set of incentives and benefits."

According to Farole (2011), these Zones can be defined through the components of the term itself specially referring to the different regulations applied in the Zone compared to the domestic economy; economic broadly defining the activities the Zone is meant for without limiting them in terms of focus or nature; Zone specifying that it is a physical

space within the domestic country (Farole, Special Economic Zones in Africa, 2011).

In 2015, the World Free Zones Organization (WFZO), the largest federation of Free zone (FZ), proposes the following definition:

A Free zone is an area designated by one or more government(s) where economic activities, whether production or trade, physical or virtual with respect to goods, services or both, are permitted and relieved (totally or partially) from customs duties, taxes, fees or with specific regulatory requirements that would otherwise apply (WFZO (2015).

The European Union, which does not yet use the term SEZs in a generic sense, proposes an even more precise definition of free zones, mostly focused on the issue of customs advantages:

Free Zones are special areas within the customs territory of the community. Goods placed within these areas are free of import duties, VAT and other import charges. Free zone treatment applies to both. Non Community goods stored in the zone are considered as not yet imported to the Customs territory of the Community whereas certain Community goods stored in free zones can be considered as already exported. On importation, FZs are mainly for storage of non-Community goods until they are released for free circulation. No import declaration has to be lodged as long as the goods are stored in the free zone. Import and export declarations have only to be lodged when the goods leave the FZ. In addition, there may be special reliefs available in FZs from other taxes, excises or local duties. These will differ from one zone to another. The FZs are mainly a service for traders to facilitate trading procedures by allowing fewer customs formalities.

Concept of Employment Generation

The concept of employment generation or job creation refers to the process by which the number of jobs or employment in an economy increases. It often refers to

government policies intended to reduce unemployment. Employment is meant as the engagement of a person in some profession, business, trade or occupation, etcetera. Employment is a bond between two parties, usually based on a contract where work is paid for, where one party, which may be a corporation, for profit, not-for-profit organization, co-operative or other entity is the employer and the other is the employee.

"Employment Generation or Job Creation" is the notion that jobs are created in reaction to some sort of occurrence or situation. Theoretically, it's the positive opposite of unemployment. The study sees employment generation as government's policy refers to the concept of employment generation or job creation thereby establishing an agency of government to driver the ship as government intended to reduce unemployment or the creation of a number of employments in the country. It is also, the political expression used to indicate government willingness to create jobs in the state.

Many economists believe that FEZs can achieve industrial development in an efficient and effective way (Zeng, 2010; Lin and Monga, 2010; Meng, 2015a). In particular, investing in them can (1) provide a bundling of public services in a geographically concentrated area; (2) improve the efficiency of limited government funds or budgets for infrastructure; (3) facilitate cluster development, or the agglomeration of certain industries; and (4) enhance urban development by providing facilities conducive to improved living conditions for both basic wage workers and highly-skilled technical workers, taking advantage of economies of scale in the provision of environmental services, such as water treatment plants and solid waste treatment plants. Thus, the zones can be conducive to both job creation and income generation, and potentially, to protecting the environment and promoting both green growth and eco-friendly cities (Lin and Wang, 2014).

As one of the important FEZ types, free trade zones have captured the interest of many researchers. FTZs, if implemented properly, could bring economic and welfare

effects through a more liberalized environment. However, these benefits are not guaranteed due to the negative effects caused by market and trade distortions as well as possible failures. Hamada (2014) used the Heckscher–Ohlin or two countries, two-factor and two-commodities trade model to analyze the economic implications of a duty-free zone, where products are exempted from duties. Grubel (2012) examined the costs and benefits of regulations and suggested that FEZs could act as both a substitute and complement to whatever deregulation or reform is achieved, and improves welfare through the expansion of trade and through specialization, and that it affects the supply of jobs, technology and entrepreneurship. However, he also pointed out that FEZs may reduce welfare through the locational diversion of trade and investment and the generation of negative externalities. Hamilton and Svensson (2012) analyzed the relationship between foreign capital in a host country and in its free zone and found that with regards to sector-specific capital, the flow of capital into the protected sector decreases welfare, and vice versa. Miyagiwa (2016) explored the condition under which the establishment of an FTZ can improve welfare regardless of the relative factor intensity of a zone-based industry. The relative factor intensity of an FTZ is crucial in determining the change in welfare following economic growth and foreign investment.

According to Pawar (2017) in the long run, trade protectionism leads to the weakening of an industry. Free trade cultivates a sense of competition. A lack of competition within the domestic industries results in diminishing innovation. This ultimately results in the production of inferior quality products which are more expensive than the products which the foreign companies offer. The Peterson Institute for International Economics predicted that the income in the US will increase by almost \$500 billion if all the barriers are removed whereas increasing the protectionism practices in the US will additionally slow down its economic growth significantly.

Evenett and Fritz (2017) believe that the liberalization of trade policies proved to have a positive impact on the world economies and closing of the markets would drastically affect the economy on the whole. Furthermore, the increase in trade barriers and tariffs will not only damage the economic growth of the targeted nations but will also impact the global economy. Such practices decrease the real income; increase the prices of domestic goods, the appreciation of currency cancels out the impact on the balance of trade and leads to diminishing productivity. In the worst case, protectionism can also result in trade wars which will lead to the imposition of tariffs, reprisals, and restrictions in some major nations.

Concept Human Capital Development and Skill Acquisition

The concept human capital development and skill acquisition. Schultz (2013), the term “human capital” has been defined as a key element in improving a firm’s assets and employees in order to increase productivity as well as sustain competitive advantage. To sustain competitiveness in the organization, human capital becomes an instrument used to increase productivity.

Human capital refer to processes that relate to training, education and other professional initiatives aimed at increasing the level of knowledge, skills, abilities, values, and social assets of employees, resulting in satisfaction and performance which eventually impacts positively on a firm’s performance.

Rastogi (2010) stated that human capital is an important input for organizations, especially for employees’ continuous improvement mainly on knowledge, skills, and abilities. Thus, human capital is defined as “the knowledge, skills, competencies and attributes embodied in individuals that facilitate the creation of personal, social and economic well-being” Organization for Economic Co-Operation and Development or (OECD), 2011.

Becker (2013) noted that the most valuable of all capital is that invested in human being. Becker distinguishes firm-specific human

capital from general-purpose human capital. Examples of firm-specific human capital include expertise obtained through education and training in management information systems, accounting procedures, or other expertise specific to a particular firm. General-purpose human capital is knowledge gained through education and training in areas of value to a variety of firms such as generic skills in human resource development. Regardless of the application, Becker considers education and training to be the most important investment in human capital.

The word "human capital" is used in modern economic literature in order to classify expenditure on human capital as investment rather than consumption. In this view, human capital is similar to "physical means of production". Investment in human capital means "all activities that influence future real income through the embedding of resources in people". This covers expenditure on education, training, health, information, and labour mobility. Furthermore, investment involves initial costs (direct tuition expenditure, foregone earnings during schooling, and reduced wages during training) in order to gain a return on this investment in the future (Becker, 2014).

For developing countries, however, the effect of human capital development has been rather big and very positive, which holds true particularly in Zones that host knowledge intensive or higher value-added firms (Madani, 2019). Proof for this effect was found by Rhee (2010) through a survey of Zones in the Dominican Republic, which showed a significant increase in labour productivity in a firm first three years of operation. This development is not only beneficial for the companies employing said labour, but also for the employees themselves as it results in an increased income capacity (Madani, 2019). A number of these employees are also trained in more advanced positions, such as managerial jobs or supervisory position and in this way, enhance entrepreneurial capacity of a country. Training that occurred while working in a Zone, has also great value to domestic firms as they are able to hire workers that were previously employed in a Special Economic

Zone and thus profit from an already skilled workforce. Another opportunity that Zone enterprises represent to domestic firms, is the possibility to learn from the way they operate. This includes managerial and production practices, organizational, marketing and negotiation techniques that domestic companies can copy from successful firms located within Zones (Madani, 2019). These effects are in theory very positive, but as most Zones focus on repetitive low skill requirement operations, learning is often limited to workplace discipline and basic training that takes places during the initial phase of the employment. In the long run these basics are an important acquisition for the worker, as it they are required in every industrial workplace (Madani, 2019).

Endogenous growth theory looks at human capital from a different perspective than previous theories. Both Romer (2016) and Lucas (2018) debate that the accumulation of human capital contributes marvellously to countries' achievement of a higher return of growth, through the increase in productivity of workers, accompanied by the innovation of new product design.

FTZs are seen as a vehicle which drives the human capital development of the host country. This is where Nigeria has focused its perception over the last twenty-three (23) years, with the establishment of the premier FTZ at Calabar which has become a pioneer in the area to establish enclave-based FTZs that attract firms who additional jobs and human capital to the country's economy in West Africa sub-region.

The literature on FTZs in Nigeria and the rest of African countries are fairly extensive set of books and articles have been published based mostly on the experiences in Latin America, Asia and the Caribbean. This study excludes and extensive review of the literature. Largely, the literature in economics are mixed based on evaluations which is deeply influenced by neo-classical welfare analysis, descriptive, case studies, cost-benefit approaches as well as policy.

Empirical Review of Previous Studies

Empirical evidence, in Morocco, 22 Zones have created 500 000 new industrial jobs and in Nigeria 10 Zones have created 300,000 new industrial jobs both in Morocco and Nigeria. In 2012 Nigerian FTZs created 40,129 jobs within the period. The cumulative number is not certain, if this represents the number of people employed in all the FTZs locations at the time of the survey. There was no data on the gender composition; it is therefore possible that the 40,129 persons were mostly male. Whatever the case, 40,129 is just 27% of the total 148,363 jobs created in Nigeria in nine months of 2012 (NBS). Ghana Special Economic Zones accounted for 88% employment generated, (Ghana SEZs 2015). The total country employment trend has been either negative or flat for the past few decades, while industrial employment has increased. In Ethiopia, total employment has stayed unchanged since the first SEZ was opened in 2010, however, the share of industrial employment increased by 13% in 2011. Another clear increase took place when Ethiopia opened two SEZs in 2014.

Empirical evidence show that and unreasonable figure compared to the 51.2 million Nigerians that had jobs in 2011 (NBS) (Report of the ministerial committee for the reform of FT/EPZs, 2012). Zones are seen as very effective methods to generate jobs, especially for women entering the workforce. Based on available data, the direct employment effect of Export processing zones appears to be rather small and for most countries zones do not provide a large source of employment. Indirect employment generation on the other hand, could be considerable and range from 9.6 million to 77 million jobs globally (FIAS, 2008). However, for certain countries zones are a substantial source of jobs and play a big role in employment creation. For example, the Philippine zones employ almost 1million workers and the Dominican Republic's zones employment amounts to 200.000. The jobs that are created through zones, are especially important in countries with high rates of unemployment, while the ratios are mostly small, e.g. in the Dominican

Republic 6.2%, zones can help to offset the effects of high unemployment. Zones seem to be more effective in employment creation in smaller countries with populations less than 5 million, for example in Mauritius where the share of zone employment amounts to 24 percent (FIAS, 2008).

From the above reviewed, none of the study was reported carryout in the seven selected operational zones under the supervision of NEPZA and secondly, none the study was carryout from 2012 – 2021. This present study seeks to bridge these gaps. The above studies were however, approached in a qualitative manner. Hence, the need for this documentary exploration to add to understanding the effect of the implementation of Free trade zones policy in Nigeria as references is required to the fill the research gap.

Theoretical Framework

The study adopted Schumpeterian Endogenous growth theory. Endogenous growth theory, is an economic theory, which maintains that economic development is engendered from within a system as a direct result of internal processes.

Romer (1986, 1990), Endogenous growth theory emerged in the 1980s as an alternative to the neoclassical growth theory with a significant contributions by Aghion and Howitt (1992) and Grossman and Helpman (1991), incorporated imperfect markets and R&D to the growth model. The philosophy of endogenous productivity growth was proposed by Vladimir Pokrovskii a Russian economist.

The theory questioned how gaps in wealth between developed and underdeveloped countries could persist if investment in physical capital like infrastructure is subject to diminishing returns and outlined the four basic preconditions for growth as: initial per capital, initial human capital, initial investment and population growth, and put forward the argument that technological change is not just an exogenous by-product of independent scientific developments. The theory sought to prove that government policies, including investment in R&D

and intellectual property laws, helped foster endogenous innovation and fuel persistent economic growth.

The theory, poses a new outlook on a number of important economic issues that relate with economic growth. In his view economic growth in these terms shed new light on a number of key policy issues that affect technological progress. The rest of this illustrates different viewpoint considering the effects of technological progress on six (6) questions: competition policy, patent policy, higher education, globalization, technological revolutions and wage inequality.

Endogenous growth assumes that investment in education and research will not only have positive effect on the firm or individual who is making the involvement, but on others in the entire economy.

Thus, endogenous growth theory is the successful economic development theory. Nevertheless, it is not free from the following limitations:- that it is impossible to validate with empirical evidence and the theory has been accused of being based on assumptions that cannot be accurately measured. It overlooked the important factors that are valid or likely in limited sectors only, because of inadequate institutional structures, poor infrastructure, and imperfect capital goods and markets; also, based on some traditional neoclassical assumptions that are often inappropriate for poorer developing countries' economies. For instance, it only considered single sector of production (agricultural, industrial). Largely, it is concerned with long-run development rather than short-run and mid-run. Though it has some significant limitations, it is still the best and most suitable growth and development theory. It suits well in developed, developing and underdeveloped countries as well.

The study adopts endogenous growth theory as its framework. This adoption to the study is due to the fact that free zone policy is an economic policy aimed at promoting rapid industrialisation through administration of fiscal and non-fiscal incentives including complete tax holidays both federal, state and local taxes and not

limited to free importation of machineries, equipment and component goods, free exportations and 100% repatriation of capital, one-stop-shop. Others are adequate infrastructural facilities like road, port, airport, telecommunication, electricity and water supply and etc. The establishment of NEPZA and other Export Promotion Agencies in Nigeria, is one of the direct internal processes aimed at promoting internal economic growth and will ensure sustainable growth for a long period of time. The framework links trade openness with innovation and growth. It also factors in the connection between free trade and industrial output production within the Nigerian context.

The framework stresses the economic need for government and private sector institutions to boost innovation, thereby creating the right economic environment for private investor(s) and corporate bodies/traders to thrive on innovations. The main point of this framework is that: Technological progress should not be taken as a constant in development model. Government policies such as FTZs can raise a country's growth rate by encouraging competition in the markets and helping to stimulate product and process innovation.

The framework assessed the effect of SEZs policy development which links industrial output production, free trade and a path of other control variables specifically, capital formation, foreign exchange earnings, job creation, dummy variable and human capital stock.

Methodology

The study relied on secondary and primary sources of data collection such as journals, magazines, annual reports and gazette were used from Nigeria Export Processing Zone Authority (NEPZA) which is the agency responsible for the implementation of the policy.

The study was designed and grouped the 45 FTZs in the country into three stages (a) Operational (b) Under Construction (c) Dormant. The operational FZs have components of five to ten (5 – 10)

measurements of activities in the zone, such as FDI/LDI, export and import activities, foreign exchange earnings, employment generation, technology transfer, human capital development, government revenues and so on and so forth. FZs under construction stage have component of two measurements of activities in the Zone namely; investment level and employment generation.

The study was designed to select from the 20 operational zones, out of which seven (7) FTZs are selected, comprising of Public Zones, Private and a combination of Public Private Partnership FTZs. The selected Zones are:- Kano FTZ, which is owned by the Federal Government, Lagos Deep Ocean and Logistic (LADOL) FTZ, Lagos FTZ, Lekki FTZ, Ogun Guangdong FTZ, Newrest Airline Services & Logistics FZ and Snake Island Integrated FTZ, which is a combination of private and public private partnership respectively for easy of analysis.

The study used simple percentages to express the proportions or ratios in a concise and easily understandable format. It was used to analyze and compare data sets. The percentage can be found by dividing the value by the total value and then multiplying the result by 100. The formula used to calculate the percentage is: $(\text{value}/\text{total value}) \times 100\%$.

Data Presentation and Analysis

This shows the analysis or data collected during the study with reference to the research objectives formulated and findings.

Given that no specific quantitative targets were set *ab initio*, the analytical approach was designed to be tread in nature

The first objective of the study is to determine the volume of foreign direct investment in the seven (7) selected operational zones in Nigeria from 2012 – 2021 as indicated in the tables below:

Table: 1.1 Volume of employment generation from the seven selected operational zones in Nigeria 2012 – 2021

Year	Newrest Nig. FZ	Kano FTZ	Lekki FZ	Ogun Guangdong FZ	LADOL FZ	Snake Island FZ	Lagos FZ	Total
2012	13	94	375	155	645	1394	179	2,855
2013	15	98	0	1514	37	873	109	2,646
2014	39	125	0	846	637	890	55	2,592
2015	23	1617	301	3564	0	1106	166	6,777
2016	14	181	79	605	133	198	36	1,246
2017	26	162	0	2935	224	233	92	3,672
2018	18	132	198	2231	145	209	129	3,062
2019	95	91	1204	3039	0	544	252	5,225
2020	9	118	0	2434	0	52	169	2,782
2021	254	43	26	464	144	84	575	1,590
Total	506	2,661	2,183	17,787	1,965	5,583	1,762	32,447

Source: NEPZA Annual Reports 2012-2021

Table 1.1 shows the volume of employment generated from the seven selected operational zone as a result of implementation of FTZ policy in Nigeria. These zones created a total of 32,447 direct

employments. However, if we adopt the World Bank index of multiplier effect of two (World Bank, 2021) a total of 64,894 jobs were created both direct and indirect jobs.

Table: 1.1.1 Annual Level of Employment generated in the seven selected operational zones in Nigeria from 2012 - 2021

Year	Total	Percentage Change
2012	2,855	8.80
2013	2,646	8.15
2014	2,592	7.99
2015	6,777	20.89
2016	1,246	3.84
2017	3,672	11.32
2018	3,062	9.44
2019	5,225	16.10
2020	2,782	8.57
2021	1,590	4.90
Total	32,447	100

Source: NEPZA Annual Reports 2012-2021

From table 1.1.1 the study reveals 32,447 jobs was generated in the last ten years with

Table: 1.1.2 Volume of employment generated in the seven selected operational free trade zones in Nigeria, 2012 – 2021

Zones	Job Creation For Year 2012-2021
Newrest Nig. FZ	506
Kano FTZ	2,661
Lekki FZ	2,183
Ogun Guangdong FZ	17,787
LADOL FZ	1,965
Snake Island FZ	5,583
Lagos FZ	1,762
Total	23,447

Source: NEPZA Annual Reports 2012-2021

Table 1.1.2 shows the volume of employment generation contribution by the selected operational zones in Nigeria. A combination of public private partnership zone, Ogun Guangdong FTZ generated the highest number of 17,787 jobs created, next is Snake Island Integrated FTZ a privately own zone generated 5,583 jobs. Kano FTZ, federal government own zone generated 2,661 jobs. Lekki FTZ generated 2,183, Lagos Deep Ocean and Logistic (LADOL) FTZ 1,965 and Lagos FTZ generated 1,762 jobs respectively.

significant level of success year in year out particularly, in 2012 the level of jobs creation from the seven selected operational FZ in Nigeria is 8.80% and slightly decrease to 8.15% in 2013 and 7.99% in 2014 with a sharp increase to 20.89% in 2015 and decrease to 4.90% in 2021 respectively.

Employment generation apparently increase in the zone if, the zone enterprise(s) are optimally operational and vis-a-vis. Free zones vary in size and operations, as number of operational zone enterprise increased and production level improved, it determined the number of jobs to be so created in the zone. This steady increase and decrease in job creation however, was in connection with political stability, security and global economic meltdown.

However, the success story of these zones, Ogun Guangdong FTZ and Snake Island Integrated FTZ was not unconnected with the provision of adequate infrastructural facilities in the zones. While Kano FTZ a Federal government own zone is on the path of upgrading yet attracted jobs higher than Lekki, LADOL, Lagos and Newrest Nig. FTZs. This might not be unconnected with lack of adequate infrastructural facilities on ground.

The second objective of the study is to identify the effect of implementation of FTZs policy in promoting human capital and skill acquisition in the seven (7) selected operational zone in Nigeria from 2012 – 2021 as indicated in the tables below:

One of the major indicators of FTZs development in promoting Human capital and skill acquisition is considered by level of education, years of experience, level of on-the-job training, employees' know-how, and the use of the learnt education, knowledge and practice. Thus, domestic firms benefit from training and skilled acquired by workers previously employed in Zone firms. Some of the workers also receive managerial and supervisory training, thus enriching the entrepreneurial capital of the host community.

Table 1.1.3 level of promoting human capital and skill acquisition in the seven selected operational zones of Nigeria

Year	Newrest Nig. FZ	Kano FTZ	Lekki FZ	Ogun Guangdong FZ	LADOL FZ	Snake Island FZ	Lagos FZ	Total
2012	0	0	0	0	0	0	0	0
2013	0	0	0	116	10	116	24	266
2014	85	47	0	0	0	208	11	351
2015	21	10	40	0	0	176	28	275
2016	11	43	19	413	13	165	5	669
2017	0	0	0	0	0	0	0	0
2018	0	0	0	0	0	0	0	0
2019	0	4	0	2489	17	328	189	3027
2020	0	1	0	1894	0	60	126	2081
2021	28	1	53	582	136	79	195	1074
Total	145	106	112	5,494	176	1,132	578	7,743

Source: NEPZA Annual Reports 2012-2021

Table 1.1.4 Annual level of promoting human capital and skill acquisition in the seven selected operational zones of Nigeria

The table indicate the annual level of promoting human capital and skill acquisition from the seven selected operational zone in Nigeria.

Year	Total	Percentage Change
2012	0	0
2013	266	3.44
2014	351	4.53
2015	275	3.55
2016	669	8.64
2017	0	0
2018	0	0
2019	3027	39.09
2020	2081	26.88
2021	1074	13.87
Total	7,743	100

Source: NEPZA Annual Reports 2012-2021

From table 1.1.4 shows that in the last ten years, the implementation of FTZ policy promoted 7,743 human capital and skill

From the table 1.1.5 shows that the Zones Management of both Ogun Guangdong and Snake Island Integrated FTZs provided different form of training to 6,626 workers. The seven selected operational Zones trained about 7,743 workers in different fields of training including; on-the-job training, in-house training, and knowledge spill-over. Ogun Guangdong FTZ has over the years trained about 5,494 workers periodically. The Snake Island Integrated FTZ has a training/vocational school whose main

acquisition in Nigeria. The study revealed that, the success story is mixed up particularly from 3.44% in 2013 to 4.53% in 2013 and decrease to 3.55% in 2014 with a sharp increase to 8.64% in 2016 and 39.09% in 2019 with slightly decrease to 26.88% and 13.87% in 2020 and 2021 respectively.

Table: 1.1.5 level of promoting human capital and skill acquisition in the seven selected operational zones of Nigeria 2012 – 2021

The table below shows the volume of data collected on promoting human capital contributed by the selected Zones in Nigeria from 2012 – 2021

Zones	Year 2012-2021
Newrest Nig. FZ	145.00
Kano FTZ	106.00
Lekki FZ	112.00
Ogun Guangdong FZ	5,494.00
LADOL FZ	176.00
Snake Island FZ	1,132.00
Lagos FZ	578.00
Total	7,743.00

Source: NEPZA Annual Reports 2012-2021

activity is shipbuilding/repairs. The Zone's institution offered programs such as; Fabrication engineering; Project Management; Fire service and Security; foundation competency training and others. The duration of the training varies from one week to two years depending on the type and nature of course. The training school has offered training/skills to a total number of 1,132 trainees who have turned out to be fabrication engineers, machine tools technicians, piping and structural technicians and so on. The knowledge transfer realised

from the Free Zone has impacted positively in developing capacity particularly in the area of ship building especially Floating Production, Storage and Offloading (FPSO).

The presence of free zones also makes other domestic companies copy the operations of successful exporters in the zone. These include production and managerial skills and dealing with foreign business contacts.

Discussion of Findings

The findings of this research work revealed that Free trade zones policy have attracted additional employment opportunities and promote human capital/skill acquisition in the selected zones of Nigeria.

1. Finding from the study shows that Free trade zones have the potential to generate employment opportunities in the seven selected operational zones in Nigeria. These zones attracted businesses and encourage job creation. In terms of employment generation the implementation of FTZ policy created 32,447 direct employments. Foreign and domestic enterprises' investment in FTZs established manufacturing plants, warehouses, and distribution centers, leading to job opportunities for the local population. FTZ policies prioritize export-oriented industries to boost international trade. Export-oriented businesses, such as manufacturing, processing, and assembly plants, require a skilled workforce to meet production targets and quality standards, resulting in employment opportunities.
2. Finding from the study shows that FTZs policy have promoted human capital and skill acquisition in the selected zones Nigeria. In terms of promoting human capital and skill acquisition the implementation of FTZ policy trained about 7,743 workers in different fields of training including; on-the-job training, in-house training, and knowledge spill-over. FTZs have encouraged industrial and manufacturing activities by providing infrastructure support, such as reliable power supply, transportation networks, and specialized facilities. These industries require a significant workforce, including skilled, semi-skilled, and unskilled workers, leading to job creation.

With increased economic activity, there is a demand for various services such as logistics, warehousing, banking, insurance, and professional services. These sectors can generate employment opportunities for a wide range of skilled professionals.

FTZ policy can create an environment conducive to the establishment and growth of small and medium-sized enterprises. These enterprises often require a relatively smaller workforce but can collectively contribute significantly to employment generation. To fully utilize the employment opportunities generated by FTZs, it is essential to focus on skill development and training programs. Governments, in collaboration with businesses, can invest in vocational training centers, technical institutes, and apprenticeship programs to develop a skilled workforce that meets the needs of the industries operating within the FTZs.

The presence of FTZs can stimulate the growth of ancillary industries and services that support the activities within the zones. These include suppliers, maintenance and repair services, catering, security, and transportation services, which can generate employment opportunities in the vicinity of the FTZs.

Conclusion

The study conclude that, the implementation of Free trade zones policy in Nigeria have generated employment opportunities, enhanced technology transfer and promote human capital development. Free zone policy has contributed to the economic development in the area of rapid industrialization, employment creation, diversification, export growth, technology transfer and socio-economic improvement. Free zones have provided better opportunities for doing business which provides a mix of fiscal incentives and a one-stop-shop platform that reduces bureaucratic bottlenecks. Nigeria's Free zones are functionally diverse and cover a wide spectrum of sectors ranging from oil & gas to manufacturing, agriculture, services, logistics, ship building, estate development, tourism and so on and so forth.

The implementation of FZ policy has made some impact on the Nigerian economy and this is evident in many ways. The FTZs employment level and skill transfer/human capital development for the period of ten years has revealed the level of implementation policy of FTZ in the country. It's important to note that the success of FTZ policies in attracting jobs creation depends on effective implementation, on-going support from the government, and collaboration with relevant stakeholders. Additionally, the availability of reliable infrastructure, access to finance, and a favourable business climate are also crucial factors for attracting additional jobs in FTZs.

It is important to note that the success of FTZs in generating employment opportunities depends on various factors, including the effectiveness of policy implementation, infrastructure development, regulatory frameworks, and the overall business environment. Continuous monitoring, evaluation, and necessary adjustments to the policies are crucial for maximizing the potential employment benefits of FTZs in Nigeria.

However, it's worth noting that while FTZs have been successful in attracting additional employment opportunities to Nigerians, challenges such as infrastructure

limitations, bureaucratic processes, and security concerns still need to be addressed to fully realize the potential benefits of these zones. Efforts are being made by the Nigerian government to address these issues and further promote job creation in FTZs.

From the employment perspective a total of 32,447 direct employments of young and unemployed Nigerians roaming the streets were created from seven selected operational zones. All things being equal, it is anticipated that when all the seven selected operational zones attend optimal production capacities, the jobs created would reach over 60,000 directly within the next 5 years.

Free trade zone remains one of several possible options among many policy tools for a country to adopt for its economic development. There is no doubt that economic development can be achieved by improving a country's business environment. However, it takes relatively long period for a country to achieve a developed business environment. A country should continue to improve its business environment for the whole country whilst developing a FTZ. FTZ policy would be more useful tool when combined with a sustainable economic development policy.

Recommendations

- i. The NEPZA should improve the physical infrastructure within FTZs, including roads, ports, airports, telecommunication and utilities such as electricity and water supply. This will enhance the attractiveness of these zones and make them more competitive in creating jobs opportunities and promoting human capacity/skill acquisition in the country.
- ii. The NEPZA should encourage a diverse range of industries to set up operations in the FTZs. This can include manufacturing, logistics, technology, and services sectors. By attracting a mix of industries, the FTZs can provide a variety of employment opportunities for different skill sets.
- iii. NEPZA should collaborate with educational institutions and vocational training centers to provide specialized training programs that align with the needs of industries within the FTZs. This will enhance the employability of the local workforce and attract businesses seeking skilled labour.
- iv. The NEPZA should encourage technology transfer from multinational companies operating in the zones to local residents. This can be achieved through training programs, knowledge sharing sessions, and partnerships between multinational companies and local businesses or research institutions.
- v. Development of skill upgrading programs within the FTZs can enhance the capabilities of the existing workforce. Implement policies

that prioritize local employment within the FTZs is imperative. This ensures that job opportunities are accessible to the local

population, fostering skill development and reducing unemployment rates.

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