THE BOKO HARAM TERRORISM AND NIGERIAN ECONOMIC CONTRACTION

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ABSTRACT
Sequel to the paradigm of terrorism activities prevalent in many troubled economies, this study takes a look at the key implications of Boko Haram insurgency on the Nigerian economy and the numerous sectors that have been affected largely by the insurgency. The study uses data from Nigerian GDP contributors in evaluating the effect of the terrorism on the macroeconomy of the nation. It takes each GDP indicators into cognizance looking at their contributions to various economic sectors relatively to growth rate (real GDP), in the years of the terror. Therefore, the methodology used to pinpoint and highlight the adverse effect of terrorism on the generality of the Nigerian economy cum sectors are facts, figures and data with use of images and graphical illustrations from existing secondary data and sources. The evaluation is basically using secondary data gathered from various sources particularly, TheGlobalEconomy.com, Nigerian page as www.theglobaleconomy.com/Nigeria. More so, figures and illustrations from the detailed 2015 and 2018 reports of Global Terrorism Index, GTI published by the Institute for Economics and Peace (IEP) are employed. Additionally, this work justifies that Boko Haram was one of the root causes of the economic recession witnessed in the Nigerian economy through 2016 to second quarter of 2017. The target year of focus for this work is the effect after 2014. Hence, data for economic sectors and contributors are from 1960-2017 while for GDP indicators and contributors span 1980-2017. The study concluded that terrorism has adversely affected the macro-economy of Nigeria, and recommended that apart from the government increasing security and defense, there is need to focus on economic indicators and growth, thereby stipulating that service industry should be enhanced as it can help the economy even in the face of terrorism, also is the need for devaluation of the currency as these can drive the economy to a state of stable growth in the presence of insurgency and attendant terrorism.

KEYWORDS: Macro-economic effects of terrorism, Boko Haram insurgency as the rationale for 2016 Nigerian economic recession, Implications of terrorism on GDP of a nation, terrorism-inflicted nations, terrorism-infested economies.

1. INTRODUCTION
Boko Haram an insurgency eminent in the Nigerian nation state has been a problem to the macro-economy of the country affecting most important sectors and contributors to the growth of the economy of Nigeria. In the latest Global Terrorism Index, GTI 2018, Nigeria is still among the top five countries mostly affected by terrorism, a position which it has maintained since year 2014. This work seeks to evaluate, highlight and pinpoint the implication of the menace on the nation. As it is glaring that terrorism is a global vice infesting country worldwide and many nations are suffering from its infliction. However, it seems from various studies, works and researches particularly from scholars, academics and researchers that most countries that are terrorism-infested seem to have the same economic characteristics. Consequently, as the terror gathers
momentum there is need to confront it, as it is staring the world in the face and many economies are acutely suffering from terrorism-infliction.

This rising phenomenon that was once an emerging paradigm has to be curbed and curtailed, hence the reason for many works and studies on the topical issue. Economies are suffering from its infestation, implications and fatalities in terms of deaths and injuries which are rising daily, although nations affected have displayed some background economic similarities cum features, nevertheless they need help, they have to end the plague and fashion way forward. More importantly, Global Terrorism Index, GTI 2015 and 2018 stipulated that terrorism is mostly found in economies with history of crises or ongoing armed conflicts in their borders and that is why this section of the study would be highlighting history of crises and disputes in Nigeria as touching basically religious crisis as it is known that the Boko Haram organization, like many terrorists organizations across the globe pivot their actions on religious tenet, creed or ideology. As much as it is known that many of them do not abide strictly with their religious ideologies, hence acting outside the tenets. Enders and Sandler, (1996) also stated from their study that the size and capacity of an economy is a determinant to how susceptible the economy can be to terrorism. This is the more reason why this chapter would be looking at the background of Nigeria, the history of Nigerian economy, and the creation of Nigerian state. Lastly, Journal of peace research, 2013 posited that terrorism is actually found in African and Islamic countries with history of internal crises or ongoing, and as it is believed that terrorism easily emanates from such economies disrupting the economic order and affecting the growth cum development. Hence, we shall be examining some of the features of the Nigerian economy like its demography relative to existing tribes and ethnicities; their population, languages, religions cum grievances in time past in this section, and circumstances that have transpired in the economy, the polity and among its populace in the past which may have fostered internal crisis and eventually led to insurgency or terrorism by aggrieved citizens, tribes or ethnics, a paradigm that has come to affect the macro-economy of the nation, its economic contributors, development and growth in particular.

2. METHODOLOGY

Research methodology which are the bases, techniques and representations a study uses to justify its findings, hypothesis or topic. So, this section takes a look at the impact of Boko Haram terrorism on the Nigerian economy and the numerous sectors that have been affected largely by the insurgency. Therefore, the methodology used to pinpoint and highlight the adverse effect of the terror on the generality of the Nigerian economy and sectors are facts, figures and data, with use of graphical representations of existing data. Using data of main GDP components and indicators in Nigeria to enunciate the effect of the terrorism by comparing with the real GDP. This study takes each GDP indicators into observation relatively to the GDP looking at their contributions to economic growth represented by real GDP, its percentage change.

The evaluation is basically using data gathered from various sources by making use of resources more from TheGlobalEconomy.com under the section of Nigerian data, domain as TheGlobalEconomy.com to showcase the acute implication of the insurgency. More so, the methodology employs data from the St. Louis Federal Reserve Bank, Central Bank of Nigeria, including figures and illustrations from the detailed 2015 report of Global Terrorism Index, GTI. The available GTI 2015 study, is the third edition work which provides detailed evaluation and report of key global patterns and trends in terrorist activities spanning the past 15 years (2000-2015) with a critical attention from the year 2014. Published by the Institute for Economics and Peace (IEP), the report is pivoted on information sourced from GTD, Global terrorism Database gathered by the National Consortium for Study of Terrorism and Responses to Terrorism. The data collected are considered the most detailed dataset on terrorism and its activities globally collecting over 140,000 terrorist incidents. Advertently, this section of the study seeks to juxtapose the rationale behind why Boko Haram was declared a terrorist organization in 2014, followed by the implication of the declaration on the economy of Nigeria, even though Boko Haram has had its operation commenced since 2009.

Additionally, this work evaluates the core effect of the Boko Haram terror of 2014 on the economy particularly, its effect which was more pronounced aftermath its declaration as terror group, using data, figures and graphical illustration to back the topical stance. More importantly, it further juxtaposes and enunciates that Boko Haram was one of the main causes of the economic recession witnessed in the Nigerian economy through year 2016 to second quarter of 2017. Justifications used are key sectors, economic and GDP components, indicators and contributors, their percentage contribution to GDP, their value added cum share of GDP mostly in US billion dollars, and the percentage change in the indicators calculated relative to the previous period for proper and effective evaluation of the impact and implication of terrorism on the macro-economy of Nigeria. Also, figures used in all the graphical illustrations are available from the websites mentioned above for record purpose, comparison and verification, more so, the graphs are constructed from the available figures using EViews.
The target year of focus for this work is actually the effect after 2014, but it also evaluates the effect before and from 2009-2010 the start of the terror as an insurgency, but more focus on the effects after the intensity of 2014 Boko Haram operations.

### 2.1 1.3 Rationale Behind Boko Haram Being Declared a Terror Organization

As stated in the Global Terrorism Index of 2015, which was a detailed study on terrorism aftermath the terror witnessed globally by various terror groups around the world. The GTI report is known to provide a comprehensive critical analysis and evaluation of the changing trends and patterns in terrorism from year 2000 for about 162 nations. The study investigates the changing trends of the terror by modes of attack, organizations carrying out attacks, national economy affected, the geographical location cum activity and the political interests if any. The GTI has been evaluated alongside range of socio-economic variables to determine factors that correlate statistically to terrorism. It also highlights how terrorism is on the rise. Pinpointing that absolute number of deaths in 2014 due to terrorism rose to 32,685 comprising an 80% increase from the preceding year of 18,111 death casualties, making it the highest ever attained, most of which about 78% occurred in just five countries, Syria, Afghanistan, Iraq, Pakistan and Nigeria. 2013 was first seen as a year of terror until when all the terrorists’ organizations unleashed terror in their various places of operations targeting military and civilians. Consequently, this was part of the reason why the IEP conducted a comprehensive evaluation and study with implication of their attacks and operation on the economy of their various targets and domicile nations.

Though, some nations experienced more attacks while few experienced upsurges in the insurgency and some economies were lucky to witness reduction in terror activities. But, Nigeria as a country was one of the countries where terrorism experienced an upsurge in operation of its domicile and resident terror organization, Boko Haram, which has also spilled into neighboring countries sharing border with the Northeastern part of Nigeria, witnessing frequent attacks, causing casualties and deaths tolls skyrocketing mainly in the core north where their operations and activities are based. The increase in their nefarious activities was what spurred key nations which have earlier relented on declaring the organization a terror group due to long pacification by the Government of Nigeria, but took the step to the effect because of the broadcasted activities of the terror group. The aftermath of the declaration of Boko Haram as a terrorist organization was what actually affected the Nigerian state and it witnessed a serious economic setback due to the fact that most countries that declared the insurgents a terror threats are key global players and important trade partners with Nigeria. And this has had adverse effect on the economic growth of Nigeria, with the economy plunging into recession in 2016 which actually started with a downturn from 2015 from the aftermath of the declaration. 2016 was the worst hit from what has actually commenced since the end of 2014 into 2015, which eventually caused Nigeria a dive into economics recession for the 2016 fiscal year which spanned the...
whole financial year into the second quarter of 2017, when the country exit recession. Up till the end of 2017 Nigeria was still battling with economic growth which has been very slow and lagging. Below is an illustration of one of the important indications of the terror unleashed by terrorists around the world, pinpointing, the actual date, the terrorist group responsible for the attack, the exact location and country, with the number of victims (fatalities) and the description of the attacks, Nigeria had almost 50% of the occurrences from its border.

<table>
<thead>
<tr>
<th>DATE</th>
<th>COUNTRY</th>
<th>CITY</th>
<th>FATALITIES / VICTIMS</th>
<th>GROUP</th>
<th>DESCRIPTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/05/14</td>
<td>Iraq</td>
<td>Baghdad</td>
<td>670 / 0</td>
<td>ISIL</td>
<td>Assassins stormed a prison, released the summit inmates and killed 170 Shi'ite prisoners.</td>
</tr>
<tr>
<td>03/08/14</td>
<td>Iraq</td>
<td>Tikrit</td>
<td>500 / -</td>
<td>ISIL</td>
<td>Assassins attacked Tikrit civilians in similar terms. At least 106 people were killed and 700 women were kidnapped in the incident.</td>
</tr>
<tr>
<td>02/15/14</td>
<td>Nigeria</td>
<td>Gombe</td>
<td>915 / -</td>
<td>Boko Haram</td>
<td>Assassins attacked residents and buildings with firearms and explosive devices in Gombe State town. At least 465 people were killed, an unknown number were injured, and numerous buildings were destroyed in the attack.</td>
</tr>
<tr>
<td>12/01/14</td>
<td>Syria</td>
<td>Palmyra district</td>
<td>310 / -</td>
<td>ISIL</td>
<td>Assassins attacked National Defense Force soldiers and the Anglo-Swiss Gas Field in Homs governate. In addition to 169 hostages, 295 people were killed. An unknown number were taken hostage during the attack.</td>
</tr>
<tr>
<td>12/01/14</td>
<td>Ukraine</td>
<td>Harkove</td>
<td>236 / -</td>
<td>Donetsk People's Republic</td>
<td>Assassins launched a surface-to-air missile at a Malaysian Airlines aircraft traveling from Amsterdam to Kuala Lumpur city, near Harkove village. 294 passengers were killed. The Donetsk People's Republic claimed responsibility for the incident.</td>
</tr>
<tr>
<td>15/03/14</td>
<td>South Sudan</td>
<td>Bentiu</td>
<td>297 / -</td>
<td>Sudan People's Liberation Movement in Opposition (SPLM-IO)</td>
<td>Assassins attacked a mosque being used as a civilian shelter and abducted a number of people in Bentiu town. This was one of five attacks in Bentiu town on this day.</td>
</tr>
<tr>
<td>14/03/14</td>
<td>Nigeria</td>
<td>Maiduguri</td>
<td>212 / -</td>
<td>Boko Haram</td>
<td>Assassins attacked the Ghana Army Barracks and a University of Maiduguri hostel in Maiduguri city. An unknown number of prisoners, who were being held at the base, were freed as a result of the attack.</td>
</tr>
<tr>
<td>12/09/14</td>
<td>Nigeria</td>
<td>Konduga</td>
<td>207 / -</td>
<td>Boko Haram</td>
<td>Assassins attacked Konduga town, Borno state, Nigeria. At least 207 assailants were killed in the attack.</td>
</tr>
<tr>
<td>12/06/14</td>
<td>Nigeria</td>
<td>Katsina</td>
<td>200 / -</td>
<td>Boko Haram</td>
<td>Assassins attacked residents and buildings in Katsina State village. Residents repelled the attack, killing approximately 200 assailants.</td>
</tr>
<tr>
<td>06/04/16</td>
<td>Nigeria</td>
<td>Bad轴</td>
<td>200 / -</td>
<td>Fulani militants</td>
<td>Assassins opened fire on community leaders and residents that were meeting in Galmima village. At least 200 people were killed and an unknown number were injured in the attack. Sources attributed the attack to Fulani assailants.</td>
</tr>
</tbody>
</table>

**The Twenty Most Fatal Terrorist Attacks in 2014**

**Image 2: Showing twenty most fatal terrorist attacks in 2014. (Source: Global Terrorism Index, GTI 2015 pages 12 & 13)**
Nigeria alone accounted for 50% of the events that took place in 2014 and both Nigeria and Iraq are responsible for 53% of the total death from terrorism, mainly from Boko Haram and ISIL insurgency. Boko Haram which has pledged allegiance to ISIL, which is also known as Daesh, are both two most deadly terrorists’ group, with Boko haram claiming 6,644 death to top ISIL with 6,074 which makes Boko haram the deadliest terror group ahead of ISIL from Iraq, in 2014 alone. The world is witnessing this and it is broadcasted putting them in the global scene. The more reason why nations concerned have decided to tag the insurgency a terror.

<table>
<thead>
<tr>
<th>CITY</th>
<th>COUNTRY</th>
<th>DEATHS FROM TERRORISM</th>
<th>POPULATION</th>
<th>RATE PER 100,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Baghdad</td>
<td>Iraq</td>
<td>2,654</td>
<td>5,673,000</td>
<td>43</td>
</tr>
<tr>
<td>Maiduguri</td>
<td>Nigeria</td>
<td>431</td>
<td>1,112,000</td>
<td>39</td>
</tr>
<tr>
<td>Mosul</td>
<td>Iraq</td>
<td>510</td>
<td>1,746,000</td>
<td>29</td>
</tr>
<tr>
<td>Peshawar</td>
<td>Pakistan</td>
<td>304</td>
<td>1,219,000</td>
<td>25</td>
</tr>
<tr>
<td>Donetsk</td>
<td>Ukraine</td>
<td>102</td>
<td>1,025,000</td>
<td>10</td>
</tr>
<tr>
<td>Kabul</td>
<td>Afghanistan</td>
<td>206</td>
<td>3,044,000</td>
<td>6</td>
</tr>
<tr>
<td>Kano</td>
<td>Nigeria</td>
<td>184</td>
<td>3,626,000</td>
<td>5</td>
</tr>
<tr>
<td>Odessa</td>
<td>Ukraine</td>
<td>46</td>
<td>1,002,000</td>
<td>5</td>
</tr>
<tr>
<td>Karachi</td>
<td>Pakistan</td>
<td>374</td>
<td>11,624,000</td>
<td>3</td>
</tr>
<tr>
<td>Kaduna</td>
<td>Nigeria</td>
<td>46</td>
<td>1,582,000</td>
<td>3</td>
</tr>
</tbody>
</table>

Image 3: Showing the ten cities with the highest number of fatality rate arising from terrorism in 2014. (Source: Global Terrorism Index, GTI 2015 page 32)

Nigeria actually accounts for three cities out of all the ten cities throughout the world with highest fatalities in 2014 from global terrorism. The nation has seen Boko Haram putting it on the frontline of danger zone. Which means Boko Haram is responsible for 33.3% of cities plagued with fatalities arising from terrorism. As a result of terrorist’s events, economic agents face impacts arising from losses in human and physical costs, wherefore, through their instant responses to shocks from terrorism, they may be affecting the economy negatively.
The total estimated number of killed in year 2000 resulting from terrorist activities rose from 3,329 to 32,685 in 2014, in accordance with an estimation by the institute for Economics and Peace in November 2015. Much of the deaths are concentrated in five countries in which Nigeria ranks the second most affected, but took the number one position for 2014. More than 50% of the incidents are attached to Boko Haram and ISIS, also known as Islamic State or ISIL.
Boko Haram’s operations and attacks have witnessed an increased intensity, making it the deadliest organization overtaking ISIL, number of deaths attributed to the group alone increased to 6,644 in 2014 by 317%, while ISIL accounts for 6,073 deaths by terrorism. Both groups are responsible for half the deaths approximately 51%. In 2014, Nigeria experienced the largest increase in deaths out of 7,512 fatalities from terrorism. More so, Nigeria harbors two out of the five most popularly dangerous groups, Fulani militants and Boko Haram. Boko Haram has actually succeeded in placing Nigeria in every group of danger list. Sequel to all these occurrences and happenings in 2014, as obviously reflecting from the above illustrations from GTI study reports, were the reasons why after the earlier tagging of Boko haram as a terror group, firstly, by New Zealand in 2012 followed by United Kingdom and United states together in 2013, three more key global players moved towards the purpose including United Nations as an organization, as shown in the table below. Bearing in mind that these countries are the sources and repatriating homes to most of the globally renowned transnational cum multinational corporations, (TNCs, MNCs), known for foreign direct investments which cut across all nations worldwide, while some of the declaring nations are also major trade partners of Nigeria. UK is Nigeria’s biggest trading partner in Europe, while USA is the Nigeria’s most important oil trading country. Though, India is said to be replacing US as Nigeria’s largest oil buyer. With exceptions to China and other world powers which are yet to name the organization a terror group, China is a major Nigerian trade partner in Asia after India. Therefore, these moves by this league of nations significantly impacted a negative effect on Nigeria’s economic stability and growth and this is reflective in the following years with economic downturns after 2014, reflecting in trade relationships and evident in trade balances relative to imports and exports paradigm, which saw decline in value added, even in their contributions to the GDP of Nigeria after 2014. This work will be pinpointing this effect which actually commenced in 2015 and translated into economic recession in 2016. The resultant effects of the declaration are the rationale for the recession and the detrimental effects on the economy.

### Table 1: Showing dates when nations and organizations designated Boko Haram as a terrorist organization

<table>
<thead>
<tr>
<th>Country/Organization</th>
<th>Date Boko Haram was declared Terror Group</th>
</tr>
</thead>
<tbody>
<tr>
<td>New Zealand</td>
<td>2012, August 20th</td>
</tr>
<tr>
<td>United Kingdom</td>
<td>2013, July 10th</td>
</tr>
<tr>
<td>United States of America</td>
<td>2013, November 14th</td>
</tr>
<tr>
<td>Canada</td>
<td>2013, December 24th</td>
</tr>
<tr>
<td>United Nations</td>
<td>2014, May 22nd</td>
</tr>
<tr>
<td>Australia</td>
<td>2014, June 26th</td>
</tr>
<tr>
<td>United Arab Emirates</td>
<td>2014, November 15th</td>
</tr>
</tbody>
</table>

(Source: Wikipedia; Boko Haram; International Responses)

If the declaration comes from UN;

1. The WTO and nations will stop all forms of trade with the country including sales of arms and weapons and this includes China.
2. All forms of financial aid from organizations like IMF, World Bank will stop.
3. Restrictions would be imposed by various nations on their respective citizens to visit the tagged country, thereby affecting the tourism industry of the troubled nation.
4. Flow of international financial aid from all quarters would be terminated. With no trade, aid or support, terrorist-inflicted economy may collapse or contract in due time.
5. Multinational and Transnational Corporations (MNCs, TNCs), foreign direct investment’s intentions or ventures may experience forfeiture or withdrawal.

If the declaration comes from a Nation;

1. All trades with the target country will cease, although, the country will experience some loss financially but the loss on terror-troubled country would be much.
2. No visa will be issued either for tourism or medical purpose. There will be absolute stop for visits to and from target country. They may close their embassy in the country and may send back their diplomats too.
3. The declaring government will halt all the flow of financial and economic help that has been provided to the inflicted country.

### 2.2 The Implication of Boko Haram Tagged as a Terrorist Group

The impact of war and terrorism is always detrimental to an economy, the resultant destruction is the more reason why, viable economic resources that could have generated valuable goods and services would be destroyed, more so, important
resources therefore are diverted from constructive or productive use in fortifying military, security and defense. These does not create wealth, income or add to living standard of the citizenry of terrorist-infested nations. The wars in Iraq and Syria have devastated both economies causing a colossal amount of damages to key infrastructures, causing high unemployment, labour migration and inflation. GTI submitted that, the trend may likely continue in both nations unless stability is achieved. Although, Enders and Sandler (2008), from their studies of the effect of terrorism on economies postulated that terrorism does not affect economy of a nation, particularly, developed nations belonging to the league of OECD, but studies from Global Terrorism Index, GTI 2015, illustrates that Iraq one of the most affected country by terrorism lost a lot due to the resident terrorism in its domain. Advertently, from studies conducted by Institute for Economics and Peace, IEP, enunciated that Iraq lost amount totaling US$159 billion dollars from 2005 in GDP, PPP to 2014 due to terror in its border, as shown below.

![Image](https://via.placeholder.com/150)

Image 7: showing Iraq lost a lot to terrorism in its economy to the tune of US$159 billion as GDP, PPP from 2005 to 2014. (Source: Global Terrorism Index, GTI 2015 page 66).

Substantial costs are incurred relative to terrorism, as the activities not only cause tangible and intangible cost for the victims, but instigates local and national governments in spending billions on detection and prevention of terrorism, more so, on prosecuting and punishment of insurgents. GTI posits that the cost of curbing terrorism is significantly higher to the direct costs of the terror. Figures from IEP totals about US$117 billion expenditure on global security. These expenditures are targeted at counter-terrorism and to provide support for other forms of global security measures by various national security agencies. Globally, economic costs in 2014 consequent to terrorism reached the highest value ever attained at US$52.9 billion, indicating a 61% rise from the prior year, and from year 2000 to same 2014, the cost was upped ten times. These expenditures are solely on defense and not on economic productivity. The Iraq economic loss paradigm, is a reflection of what has transpired in Nigeria’s economic front, as a terrorism-troubled nation, experiencing significant drop in economic growth and eventual recession.

2.3 Implication of Boko Haram on Nigerian Economy

Global Terrorism Index reported that for nations facing frequent terrorist attacks and violence, the long-term economic effects can be visible and critical, this impact overtime in an economic system can have severe implications on the economy of terror-affected nations. The overall implication of terrorism on an economy can actually be understood when it is determined as to how the economy would perform without experiencing terrorism. Study by Blomberg et al (2004), in illustrating these differences, reached a conclusion that the implications of terrorism on the growth of an economy are statistically significant but little for developing or less-developed countries but, not so for developed economies.

However, in advanced countries, terrorism is not likely to impact tangible long-term economic implications. Market systems in prosperous, viable economies have the characteristics to regain stability quickly due to rational consumer behaviour and resilience in the economy which overwhelm immediate disruptions. In actual fact, direct cost of terrorism on stable market economies like the Europe and United States may be small and insignificant. Economic trend indicates that markets of advanced countries, where security and stability are prevalent, are able to withstand resultant shock after terrorist attacks. As most terrorists attack are sudden and this actually cause economic shocks, an example is the New Zealand attack
of March 2019, although it is envisaged not to result in an ongoing terrorism infection in the economy, Huseyin et al (2019), which posits that terrorism will not see the light of the day in the New Zealand realm.

Consequently, GTI 2015 posits that reduced FDI inflows were consequent to terrorist activities in the 1980s and 1990s in the case of Greece and Spain, they were tantamount to US$500 million to both countries. Same paradigm applies to Nigeria with substantial implication of terrorism on FDI in Nigeria, estimates highlighted that in 2010, FDI flows dropped by US$6.1 billion due to Boko Haram atrocities, representing a 30% decline from the year before. This is said to be further backed by a recent study from GTI 2015, which discovered that the most affected top ten countries had reduction in GDP growth rates ranging within 0.51 and 0.8%, where investment growth rate reduced around 1.3% to 2%. Similarly, like IEP calculated using statistical methodology to show Iraq lost US$159 billion GDP, PPP since 2005. Sequel to this, explains the sharp decline in GDP in Nigeria from 2014 to economic recession of 2016 as illustrated in figure 1 below, indicating Nigeria’s nominal GDP in current and constant US billion dollars from 1960 to 2017.

Actually, Boko haram has not had much of negative impact on the Nigerian economic sectors since the inception of its terror operation in 2009 due to the fact that their targets are basically political causing casualties in the death of civilians and military personnel, as they do not attack economic structures which can cause a serious disruption in economic activities as compared to 9/11 attack which saw America and the world losing a percentage of its GDP but was able to bounce back economically as a stable economy, Enders and Sander (2009). As the material and immaterial effects of terrorism are obvious, the long term or indirect economist costs of terrorism is insignificant on most economies, however, a complicated society security will probably have negative impacts on the growth or development of national economies as unproductive expenditures increase, hampering its significant economic growth. As indicated in year 2014 from figure 3 below, showing the rate of change of real GDP, economic growth in Nigeria from 1960 to 2017.

The secondary or indirect economic effect of terrorism is the outcome of cross-dependent economic system in which terrorist attacks lead to the disorder of economic structures which are not direct targets of the attack. Frey et al (2004). Therefore, we will be examining every component, indicators and contributors of GDP and how terrorism and declaration from key trade partners have imparted the Nigerian economy, especially after the Boko Haram terror of 2014, looking at the relationship and the contribution of each GDP components immediately after the last declaration which occurred in November towards the end of the fiscal year 2014. And we shall be seeing the immediate effect of this declaration. But in these evaluations, we shall be seeing the effects of terrorism and the declaration in economic indicators and contributory sectors, relative to GDP and economic growth. Therefore, we shall be examining relative decline in the contributions of different sectors to GDP and particularly the effects of the insurgency on these sectors and the overall economy of Nigeria by comparing every GDP contributors, components and indicators, their value added to and share of GDP, percentage contributions to GDP, growth rate cum percentage change, to illustrate the effects which took place after 2014 and showing overall economic reductions in 2015 to recession of 2016, and the gain in the economic growth by the second quarter of 2017 financial year.

2.4 Boko Haram Insurgency, one of the Root Causes of Nigerian Economic Recession in 2016

This work which also seek to justify and juxtapose that Boko Haram was one of the causes of Nigerian economic recession of the fiscal year 2016. Although, Some scholars have argued that Nigerian economic recession was caused by the global fall in the price of crude oil products, but a critical look at the pattern of GDP and economic indicators with the use of a graphical interpretation for better illustration and evaluation of the economic indicator’s behaviors show vividly with figures and existing data that Nigeria economic problem started aftermath the 2014 terror and tagging of Boko Haram as a terrorist organization, which actually was in the same year 2014 when the world experienced a fall in global oil price. Nigeria was pictured overtaking South Africa in the value of its nominal GDP to become the largest economy in Africa and in the league of countries like Australia due to the value of the 2014 nominal GDP to take the position of the largest market economy in Africa by nominal GDP in the same year when global oil price actually started dropping mid-year. But that seemed to be the highest point Nigerian economy would reach before plunging into a decline then to recession. Actually, the fall in global oil price as captured by the Brent organization started in June 2014 lasting till December 2014 and then another percentage fall in 2015. But with the drastic reduction in the oil market globally from middle of the year Bruce (2015), Nigeria still reached the potential of overtaking a stable economy like that of South Africa in the same year to the position of largest economy by GDP, PPP. This is illustrative in the Nigerian nominal GDP in current and constant US billion dollars spanning the period 1960 to 2017 from figure 1 below.
Economic recession as defined by NBER, National Bureau of Economic Research is a significant reduction in economic activities reflective across an economy and its sectors exceeding few months, which can be visible through whole-retail sales, industrial production, employment, real income and gross domestic product Afimia (2017). Economic recession is basically a decline more than two-quarters of a financial year. Generally, the economic recession is characterized by a long-lasting increase in unemployment, drop in the stock market, and negative growth of real GDP, as shown in figure 3 below.

The above definition shows economic recession is not only a function of trade (in oil products) or trade transactions, but taking into account all volatile sectors of an economy which can be affected by terrorism as stated by Urban Securipedia (n.d), in their studies conducted. This shows why even though there was fall in oil prices and in the contribution of its percentage to Nigerian GDP, firstly, Nigeria reached a remarkable position as number one economy in Africa by GDP in 2014, before GDP and its contributors plummeted, also affected were non-oil sectors like manufacturing, industry, agriculture, services and the stock markets which all comprise the GDP of Nigeria, and international trade relative to imports and exports which saw decline from 2014 and part of which (not all though) was due to fall in oil prices, the main source of income for Nigeria. However, not all sectors can be affected by reduction in oil prices, but in these evaluations, we shall be seeing the effects of terrorism and the declaration in non-oil sectors relative to GDP and economic growth as an aftermath of the tagging of Boko Haram as a terrorist organization by important trade partners. An example below is the illustration of non-oil trade outlook in Nigeria from 2004 with a projection to 2019, showing reduction in non-oil transactions from 2014 with a steady decline through 2015 to negative value in 2016 before gaining increase in 2017, which indicates that sectors, industries and trades in goods or commodities which are not related or dependent on oil were on decline outside fall in global oil price, which is expected not to have significant direct impact on them. Obviously, the decline must have been caused by factors non-related to the falling oil price, hence, the attendant presence of terrorism and the increase in the operations of Boko Haram in 2014 was responsible for the trade contraction.
Nigerian exports were not only in decline due to oil sales but importation also saw a degenerating volume due to trade with these countries being severed. All these are illustrated in this work subsequently in this section of the study to show the impart of terrorism in a volatile sector and economy, with the illustrations of key GDP components and contributors, some of which are non-oil sectors, experiencing a decline in their value added and percentage contribution to the GDP of Nigeria, as one of the developing nations and a non-member of OECD. More importantly, Blomberg et al. (2010), in addition to Enders and Sandler (2004), have posited that developing nations not in the league of OECD can be affected by terrorism because they possess a non-stable economy, but with presence of long-term terrorist operations.

However, economic recession which is a decline of the gross domestic product for two months or two consecutive quarters of a fiscal year, and as GDP, which is the market price of all goods created within a country, takes into account new products that have not been produced before. More so, Nigeria experienced economic recessions because of a significant decrease in GDP value in the first and second quarters of 2016. Therefore, GDP data indicates a decline of 0.36% in the first quarter, while the second quarter saw -1.5% drop. Though, it gained some growth in the fourth quarter of 2016 at 0.8% but Nigeria did not exit recession until second quarter of 2017 as represented in figure 11 in chapter three, demonstrating the rate of change of real GDP, which is Nigeria’s economic growth, for the years 1960-2017. Therefore, we shall be examining each GDP components, contributors and indicators, more so, are different sectors in the economy and how Boko Haram terrorism has adversely affected and imparted a negative effect on them relative to GDP and economic growth, particularly after 2014 with a more critical look for the effects which are obvious from 2015, the year which is both succeeding 2014 when Boko Haram was tagged a terrorist organization and preceding the year of recession 2016, to the exit of recession in 2017, evaluating the impact of the terror on the overall Nigerian economy (macroeconomy), in these financial cum fiscal years.

2.4.1 Effects of Boko Haram on National Income, Growth and GDP

In a study of the relationship between economies and terrorism conducted but published by Journal of Peace Research in 2013, evaluated how terrorism affects growth of an economy, submitted that terrorism is discovered to adversely affect Islamic and African economies after the cold war period due to factors like attendant high levels of unstable polity, low levels of transparency in the polity, poor economic order and acute terrorism in those countries.

While from GTI, terrorism seem to have effect on economic output, it is actually obvious in nations witnessing several attacks. Terrorism usually surfaces in countries with poor and low level of growth, capacity building and economic structure. In such economic stance, terrorism can have substantial impact on performance, national income, investment capacity and growth. Economies infested by terrorism are said to have their FDI, GDP and economic growth inflicted, but little effect experienced in other countries. This is said to be further backed by recent study of GTI 2015 which uncovered that most negatively impacted nations particularly those in the first ten witnessed GDP growth rate decline around 0.51% and 0.8%, whereby investment growth capacity reduced by say 1.3% to 2%. Similarly, IEP also submitted that Iraq since 2005 lost a lump sum amount of US$159 billion in GDP, PPP to terrorism.

![GDP, % increase rate](image-url)
The figure 3 above is for Nigeria from 1961 to 2017 showing yearly percentage increase rate of GDP at market prices relative to constant local prices revealing growth in Nigeria’s economy, the percentage change in GDP measuring if production increased or decreased and by how much, for the period. As the economy goes through recessions and expansions from year to year, the average value for Nigeria during the period was 3.99% with the lowest value ever of -15.74% in 1967 and highest of 33.74% in 2004. Looking at the figure it is obvious that economic growth has been growing positively since 2000. From the graph, clearly after rising from 4.28% in 2012 to 6.31% in 2014 it experienced a sharp decline in 2015 to 2.65% and a negative growth of -1.61 in 2016 depicting recession but regained a minimal growth of 0.81 in 2017. This is showing a reduction in the value of total goods added by general resident producers in Nigeria and a decline in economic output cum growth from 2015 to recession in year 2016.

2.4.2 Effect of Terrorism on GDP per capita

Experts say that the Israel’s per-capita GDP would have been 8.6% higher between 1994 and 2003 if there was no violence, as Israel is a nation that is constantly beset with the fear of violence, Tsiddon and Eckstein. (2004). GDP per capita which is the sum total of all gross value added by average resident producers in Nigeria including product taxes and net subsidies which is not included in the value of the products, is calculated without deduction for depreciation of assets or resource depletion and degradation. The percentage change in GDP per capita is the rate of change in GDP divided by mid-year population. It is the change in the sum of gross value added by all domicile manufacturers in the economy plus any product taxes and subtracting subsidies not included in the value of the products. It is actually calculated without deductions for depreciation of fabricated assets or depletion cum degradation of natural resources.

![Real GDP per capita, increase rate (%)](image)

Figure 4: Percentage increase in GDP per capita from 1961 to 2017. (Source: Constructed based on Nigerian data of Real GDP per capita income from The Global Economy)

The data are in percentages, the average value for Nigeria during the period 1961 to2017 was 1.40% with a minimum of -17.55% in 1967 and a maximum of 30.36% in 2004. From the graph, showing a rise from 1.52% in 2012 to 3.52% in 2014 after which it experienced a reduction in 2015 to -0.02% then to -4.16% and a negative rise to -1.77% in 2016 and 2017 respectively. An indication of the fall after 2014 in the sum total of gross value added by average resident producers in Nigeria.

2.4.3 Boko Haram and Foreign Direct Investment (FDI)

Enders and Sandler, (1996) discovered that countries such as Spain and Greece experienced decrease in foreign direct investment, FDI spanning period 1975-1991 resulting from several terrorist incidents. Also, the implication on FDI in the three European powers, Italy, Germany and France though, was zero, indicating that the effect of structural terrorism on FDI depend more on the economy size. However, Nigeria as a developing economy is said to be affected by terrorism and it experienced a massive decline in FDI flows to the tune of US$6.1 in 2010 due to terror events estimated as a 30% decrease from previous year. Nations most affected by terrorist activities are bound to have their economic growth and FDI adversely
affected. Since Boko Haram started its fatal operation in 2010, FDI flows into Nigeria has witnessed decline, due to political instability in the nation which is not good for foreign direct investment. In 2013, World Investment Report, WIR submitted that FDI in Nigeria reduced by 21.3% in 2011 from US$8.9 billion to US$7 billion in 2012. Such a significant drop over a year has many consequences for the economy. Firstly, FDI has direct implication on trade to foster progression in economic growth, more so, FDI inflow buttress the available resident capital by instigating productivity of local investments. Lastly, is the high interaction between the inflow of FDI, Nigerian petroleum sector and GDP. A study by Salami et’ al (2012) is said to posit that an increase in a unit of FDI flows into Nigerian oil and gas sector will increase GDP by 16 units, showing the Nigerian petroleum sector, the mainstay of the economy has a high dependency rate on foreign direct investment.

![Figure 5: The foreign direct investment, FDI in billion US dollar and percentage of investment contribution to GDP of Nigeria, 1970-2017. (Source: Constructed based on Nigerian FDI data from The Global Economy)](image)

Consequently, for a company to be classified as foreign investment, it must have or be equal to 10% foreign ownership of the value of the company or production facilities. This can be investment in either manufacturing, services, agriculture or any sector in form of acquisition, partnership or green field (new) investment. FDI which is the total sum of equity capital, reinvestment of various earnings, short term or long-term capital in the balance of payment is reported on annual basis as how much of new investment was received in Nigeria. Generally, it shows new investment inflows less disinvestment (net inflows) from foreign investors in Nigeria and divided by the value of GDP. It is usually within 2 to 3 percent of the magnitude of an economy relative to the gross domestic product. When FDI exceeds 5 to 6% of the GDP in a year shows significant success, the average value for Nigeria during the period of 1970 to 2017 was 2.54% with a minimum of -1.15% in 1980 and maximum value of 10.83% in 1994. Nevertheless, from the figure above, it shows a drastic reduction of FDI flows in Nigeria in 2009(US$8.55B)(5.05%) to 2010(US$6.03B)(1.63%), the year marking the beginning of Boko Haram insurgency, a sharp decrease both in value and contribution to GDP respectively, then a little rise in 2011 (US$8.84B)(2.15%) simultaneously, followed by a steady reduction after 2011 spanning year 2015, even though both FDI indicators have been on decline since 2011, it further fell in 2014(US$4.65B)(0.82%) to 2015(US$3.14B)(0.655%), with a slight increase in 2016(US$4.45B)(1.1%) and a further reduction in 2017(US$3.5B)(0.93%) in such trend both in FDI value of billion US dollars and percentage of GDP simultaneously, showing effect of terrorism on FDI flow and indicators vividly in Nigeria, since the beginning of terrorism to 2016, year of recession.

2.4.4 Effect of Boko Haram on Unemployment

The percentage of unemployment in Nigeria alongside the percentage change in real GDP shows a correlation between a rise in unemployment and reduction in economic growth. Unemployment rate which seldom declines below 4% and 5% even during boom period as workers move between sectors and cities. But when economy goes into recession, then unemployment reaches higher number as much as double digits.
Same as above, the average value for the period of 1985 to 2017 was 25.45% with a minimum of 1.9% in 1995 and maximum of 37.3% in 2017. From the figure, unemployment after gaining momentum reduced in 2012 from 27.4% to 24.7% in 2013, and a slight increase in 2014 with the value of 25.2% and has maintained increase since 2014 simultaneously with reduction in economic growth. Hence in 2016, when Nigeria plunged into recession, unemployment skyrocketed from 26.8% in 2015 to the value of 33.15% and 37.3% in 2016 and 2017 respectively. Showing a relationship between economics recession and rise in unemployment in Nigeria from 2014 aftermath of Boko Haram tagged as terror organization from increase in their operations in the same year 2014.

Effect of Boko Haram on Inflation and Consumer Price Index, CPI.

The international standard is to keep inflation between 2 to 3% per year, which is good for households and too low to create any problem for businesses and also away from negative value, a case of deflation. Inflation in Nigeria and generally, is a measure of the percentage change in the consumer price index, which is the prices paid by average urban consumer reflecting the annual percentage change rate in the cost for acquiring a basket of goods and services that is either fixed or changed at specific intervals such as yearly to the average consumer.

The average value from 1960 to 2017 for Nigeria was 16% with minimum of -3.7% in 1967 and a staggering maximum of 72.8% in 1995 for inflation rate. From the above figure, comparison of inflation, percentage CPI and percentage change in inflation, 2013 witnessed a reduction to single digit of 8.48%, a reduction from double digits of 11.36% in 2012 and a single digit was maintained in 2013 through 2015, but with a fall in 2014(8.06%) and slight increase in 2015(9.01%), after which inflation skyrocketed to a double digit of 15.68% in 2016 and a further increase in 2017 (16.52%) which is also captured by the percentage rate of change in inflation from 2015, rising through 2016 but fell in 2017 as shown in the figure below. For percentage change, the average value from 1960 to 2017 for Nigeria was -16.37% with huge minimum of -2216.67% in 1969 and a staggering maximum of 382% in 1988. It indicates that inflation increased drastically after 2014 the year of terror.
2.4.5 Effect of Boko Haram on Exchange rate

The official exchange rate refers to the rate calculated as total yearly average based on monthly average, from end of the day transaction exchange rate in units of Nigerian Naira to US dollar determined by national authorities or legally sanctioned exchange market. The average value for Nigeria within 1980 to 2017 was 52.98 Naira to US dollar with a minimum of 0.55 Naira per dollar in 1980 to a maximum of 305.79 Naira to one dollar in 2017. While the average value for percentage change within 1980 to 2017 was 16.06% with a minimum of -8.33% in 1980 to a maximum of 321% in 1999.

A side by side comparison of exchange rate to its percentage change shows that from a stable 3-year (2012-2014) rate (averagely 157.5N/US$), Naira to dollar experienced a drastic increase from 158.55 Naira to dollar in 2014 to 192.44N/US$ in 2015, percentage change in exchange rate increased from 0.79% in 2014 to 21.37% in 2015 and 31.72% in 2016 the year
of recession with 253.49 Naira to one dollar. Ever since then, the rate of change has been increasing, though the percentage reduced in 2017(305N/US$) (20.63%). If not for the intervention of the Central Bank of Nigeria and the Federal Government through dollar buy back measure to stabilize the rate at 305, the exchange rate once reached 450N/US$ officially and in black market. It indicates exchange rate skyrocketed after 2014 terror.

2.4.6 Effect of Boko Haram on Interest rate

Although, the rates, terms and conditions attached to prevalent lending rates differ from countries, but real interest rate is the lending interest rate that is adjusted for inflation and calculated using GDP deflator as bank lending rate minus inflation. From data available and represented in the figure below, from 1981 to 2017, the average value for lending rate was 17.77% with a minimum of 8.92% in 1981 and a maximum of 31.65% in 1993, while the average value for real interest rate was 0.06% with a minimum of -43.57% in 1995 and a maximum of 25.28% in 1998.

![Graph showing bank lending interest rates and real interest rates for Nigeria from 1981 to 2017.](source)

The graph shows a slight decrease in bank lending rate from 2009(18.36%) to 2010(17.59%) but a huge decrease in the real interest (23.27%) to (-42.31%) respectively. Although, lending interest rate maintained a 16% rate from 2011(16.02%) to 2016(16.87%), but the real interest rate reached its maximum rise of 13.6% in 2015 after the year 2014(11.36%) before dropping in 2016(6.69%) and further in 2017(5.82%), but lending rate still maintained its increase but at an insignificant rate. Indicating lending and real interest rates were affected, although minimally for lending rate which was increasing while real interest increased after 2014(11.36%) to its maximum in 2015(13.6%), and plunged into decline, in that period of recession and terror dispensation.

2.4.7 Implication of the insurgency on Investment

Apart from macroeconomic stability, political stability is also an important factor generally known to determine investments in an economy. Hence, not only the amount of investments are influenced by terrorism, but investment composition also, particularly, capital investments in machinery and equipment. The fear of terrorist activities in Nigeria especially in the Northeastern Nigeria, Borno, their base of operation has affected the minds of investors making investments drastically inflicted and reduced to minimum, Ovaga (n.d) on the socio-economic effect of the terrorism.

Capital investment measured as the purchases of new plant and equipment by firms as percentage of GDP, a higher value is advantageous for long term economic growth because current investment translates to larger future production. While Capital investment in US billion dollars is gross capital formation consisting additions to fixed assets of the economy plus net changes in inventory level. Fixed assets include all land improvements, purchase of equipment, plant and machinery, also construction of social amenities and infrastructures. While inventories are stocks of goods held by firms for temporary and unexpected fluctuations in sales, production, and work in progress.
For capital investment as percent of GDP, the average value for 1981 to 2016 in Nigeria was 12.66% with minimum of 5.47% in 2005 and maximum of 34.02% in 1981. Wherefore, for capital investment in billion US$, the average value for Nigeria from 1981 to 2016 was US$19.14 billion and a minimum of US$2.02 billion in 1995 with a maximum of US$89.84 billion in 2014 before declining. The side by side evaluation of both data in the graph above depicts that there was a visible steady increase in capital investment in US billion dollars from 2010(US$63.81B) to 2014 of US$89.84B, but maintained steady and low decrease in its share contribution to GDP from 17.29% to 14.9% from 2010 and 2013 respectively, but after 2014(US$89.84B)(15.8%), capital investment has been witnessing clear-cut reduction from US$74.52B in 2015 to US$62.07B in 2016, same as its percentage contribution to GDP, but very minimal, 15.49% to 15.34% in 2015 and 2016 respectively following the 2014 terror paradigm. This shows both components were not affected at the start of the insurgency but were both affected after 2014 with more impact on the total value added in US$ billion.

2.4.8 Effect of Boko Haram on Agriculture and its Contribution to GDP

Agriculture generally includes cultivation of crops and livestock production, fishing, hunting and forestry. It shows from below that productivity which is the measure of value added per worker in US dollar in the sector has been increasing steadily since 1981 to 2017 with exceptions to 1984. The data which is in thousand US$, was divided by 100 for easy evaluation, comparison and graphical illustration in this work.

Figure 11: The agriculture productivity, value added and share of GDP from 1981 to 2017. (Source: Constructed based on data of Nigerian agriculture productivity, value and share of GDP from The Global Economy).
The average value added per worker from 1981 to 2017 was US$3,837.27 in thousand with a minimum of US$1,193.92 in 1984 and a maximum of US$8,906.66 in 2016. But value added by agriculture as percentage share of GDP in Nigeria has been witnessing irregular trend. The average value added as share of GDP from 1981 to 2017 was 30.8% with a minimum of 19.99% in 2014 and a maximum of 47.1% in 2002. From the graph, the sector has also been affected even though value added per worker has been increasing, but percentage contribution of the sector to GDP reduced sharply from 2009(36.4%) to 2010(23.52%) the years indicating the start of insurgency, to stable low decline till 2014(19.99%) with a slight increase in 2015 (20.63%) and 2016 (20.98%) but a minute decline in 2017(20.85%). Affected most is the value added in billion US$, whereby it is the net output in agriculture after addition of total output and subtracting the intermediate inputs without making deductions for depreciation of assets and natural resources degradation. The average value added from 1981 to 2017 was US$35.84 billion and a minimum of US$5.12 billion in 1993 but a maximum of US$113.64 in 2014 the target year, after which value added has been reducing drastically till 2017 with a value of US$78.33 billion compared to US$113.64 billion in 2014.

2.4.9 Effect of Boko Haram on Manufacturing and value added to GDP

As it is known that manufacturing is a function of industry, investment and FDI, therefore, the manufacturing industry has also seen the impact of terrorism both from aftermath of its 2009 terror inception and from being tagged a terrorist group in 2014, both of which reflect on the graph in 2010 and 2015 respectively, in both its percentage contribution to GDP and value added in billion US dollars. The average percentage for value added to GDP from 1981 to 2017 was 23.89% with a minimum of 6.45% in 2010 and a maximum of 54.21% in 1982. Whereas, the average value added in billion USD from 1981 to 2017 was US$17.8 billion, a minimum of US$4.88 billion in 1993 and a maximum of US$54.78 billion in 2014.

![Figure 12: The manufacturing’s valued added and percentage contribution to GDP, 1981 to 2017. (Source: Constructed based on data of Nigerian manufacturing value and share from The Global Economy)](image)

Although, valued added of the sector increased, but percentage contribution experienced a sharp decrease from 2009(US$21.29)(12.56%) to 2010(US$23.81)(6.45%) respectively at the start of insurgency, but the two components of the manufacturing sector side by side increased from 2010(US$23.81B)(6.45%) to 2014(US$54.78B)(9.64%), after which they both plummeted into reduction from 2015(US$45.36)(9.43%) through 2016(US$35.12B)(8.68%), with further visible reduction in value added, but different in its contribution to GDP, which increased slightly in 2017(US$32.85B)(8.74%), showing effect of terrorism from 2014 in the sector.

2.4.10 Effect of Boko Haram on Industry and its share of GDP

The value added by a sector is the net output of the sector after adding up all outputs and subtraction of the intermediate inputs, though calculated without deductions for depreciation of fabricated assets or depletion of natural resources. The source of value added of the industrial sector is determined by ISIC, International Standard Industrial Classification. The Nigerian industrial sector, same as all industries, comprises of value added in mining, construction, manufacturing, water, electricity and gas industries.
For the period of 1981 to 2017, the industrial sector was experiencing an irregular increase in value added in US billion dollars, but its percentage contribution to GDP, however had irregular decrease for the period, the average percentage contribution of the sector was 49.8% with a minimum of 18.17% in 2016 and a maximum of 104.64% in 1981. Wherein, value added average for the period was US$45.31 billion and a minimum of US$9.04 billion in 1993 with a maximum of US$140.1 billion in 2014. The percentage share witnessed impact of terrorism with a decrease while value added increased from 2009(35.7%)(US$60.5B) to 2010(24.93%)(US$91.99B) respectively, years indicating genesis of terrorism in Nigeria, they both increased in 2011(28.02%)(US$115.37B), however after that, adversely, percentage contribution experienced reduction while the value added increased respectively till 2014(24.64%)(US$140.1B). After 2014 when value added reached its maximum value, both components of industry witnessed decrease alongside each other which is more glaring in value added but lasted till 2016(18.17%)(US$73.54B), after which they both increased in value for 2017(22.32%)(US$83.87B) respectively, the year when Nigeria exit recession. Pinpointing how terrorism affected the sector particularly after 2014 from 2015.

2.4.11 Effect of Boko Haram on Services and its Value Added to GDP

Services contribution comprises value added in professional, financial, government, transport, whole and retail trade which includes restaurants and hotels, personal services such as healthcare, education and real estate services. Most of these industries have FDI inflow, also included in the sector value added are import duties, imputed bank service charges, and all service components noted by national compilers, are calculated as net output after adding up all the output less intermediate inputs without deductions for assets depreciation or natural resources degradation in constant 2010 US dollar.
For the Nigerian services sector, for the period 1981 to 2017, the average percentage contribution to GDP was 81.77% with a minimum contribution of 48.8% in 2011 and maximum value at 155.5% in 1982. While for value added in US$ billion, the average value from 1981 to 2017 was US$91.32 billion with a minimum of US$12.23 billion in 1993 and maximum value of US$307.86 billion in 2014. The sector’s value added has been witnessing increase in amount since its minimum point in 1983, while percentage contribution to GDP has been following an irregular trend but was maintaining steady increase in contribution to GDP from 2003 to 2009. Consequently, after that it witnessed a sharp decrease from 2009 at a value of 93.72% to 50% in 2010, the beginning of terrorism in Northeastern part of Nigeria, with a further but little decrease in 2011(48.18%), then it maintained a low and steady increase in contribution to GDP between 2011(50%) and 2016(59.79%), with a higher increase from 2014(54.15%) to 2015(58.12%) reaching 59.79% value in 2016 before a reduction in 2017(55.8%). However, as much as percentage share of services sector to GDP was not affected after 2014, services value added witnessed steady decline after reaching its maximum value in 2014 (307.86US$B) through 2015(279.61US$B) to 2017(209.68US$B) with a very large reduction in values. This shows terrorism had impact at the beginning of its operation on services industry’s contribution to GDP but not after 2014 even in recession, while value added was not affected at the start of terrorism but was affected vividly after its terror intensity and being tagged a terrorist in 2014.

2.4.12 Effect of Boko Haram on National Savings and its Contribution to GDP

According to Simon and Frey (2003), consumption and savings rates may be inflicted by activities of terrorism, but it is not clear if the effect is negative or positive. However, for Nigeria, the effect is negative, savings share of GDP which is calculated as difference between income and consumption but expressed as percentage of GDP has an average of 18.03% from 1981 to 2016 with a minimum value of -5.6% in 1998 and maximum of 38.93% in 2006. While total savings value in US$ billion dollars calculated as gross national income minus total consumption plus net transfers from 1981 to 2016 has an average value of US$29.08 for the period, a minimum of US$-1.79 billion in 1998 and a maximum value of US$153.71 billion in 2012. After 2012, both total savings and its share of GDP declined in 2013(US$99.04B)(19.23%) from increases they both have maintained since 2009(US$24.85B)(14.66%) respectively, however, they simultaneously gained increase in 2014 with the value (US$126.62B)(22.27%), being the next to the maximum value in amount ever achieved in 2012, after which both components plunged into a decrease from 2015(US$82.53B)(17.16%) till 2016(US$63.99B)(15.81%) as shown in the graph below. Showing that terrorism has had a negative impact on savings, its total value and share of GDP in Nigeria.

![Savings in Nigeria in US$ billion and its percentage share in GDP, 1981 to 2016. (Source: Constructed based on data of Nigerian savings from The Global Economy)](image)

2.4.13 Implication on Government Spending, Expenditure (Budget)

This this compares economic losses from direct terrorism and the costs borne by the government in controlling and containing future violence from terrorist activities. As terrorism is on the increase, insecurity within the societies will be on the rise, whereby government respond by increasing spending on national security agencies, enforcements and on military. The macroeconomic costs of terrorism tend to be more reflective in tourism, trade, and in a nation’s net foreign direct investment, Enders and Olson, (2004). Small-open economies are usually highly concentrated in those sectors. Macroeconomic growth costs of terrorism are visible in the increased counter-terrorism policies designed to prevent
subsequent attacks. Hence, this causes increased government spending which acts to crowd out private and public sector investment. Terrorism results in greater spending on unproductive activities like expanded counter-terrorism measures, increasing police forces cum military and their funding, and stricter border control, Eme and Ibietan (2012). The funds diverted to policing, security and extra surveillance instead of being put to effective use in trade balancing and investment eventually, may impose a drag on economic growth. Maximino and Ordway (2015). Government spending which is known as general government final consumption expenditure or as general government consumption involves all current expenditures for purchases of goods and services including compensation of workers as employees, and most expenditures on security and national defense, but excluding military expenditures that are part of government capital formation. Meanwhile, the size of a government or an economy is measured by the total government spending as percentage of GDP.

Figure 16: Government’s spending and percentage of GDP in Nigeria, 1981 to 2016. (Source: Constructed based on data of Nigerian government spending from The Global Economy).

For the period 1981 to 2016, the average percentage of Nigerian government spending was 9.3% of GDP with a minimum value of 4.83% in 1991 and a maximum value of 17.94% in 1994. While the value of government spending in US billion dollars has an average value of US$10.98 billion with a minimum value of US$1.03 billion in 1993 and maximum of US$37.8 billion in 2012. Consequently, from the figure above, government spending on capital formation as percentage of GDP which has been gaining momentum from 2004(6.73%) to 2009(12.96%), immediately Boko Haram operation began, it experienced a sharp decline in 2010(8.71%) which continued steadily but slowly till 2016(5.38%) showing that the government was spending more on military and defense which is not appropriated for in expenditure budget, rather than on capital formation expenditures, which explains the reductions, while the total value of government spending in US$ billion which was increasing from 2010(US$32.15B) reached its maximum in 2012(US$37.8B) followed by a slight reduction to 2014(US$36.75B), then a sharp reduction after 2014 the target year to 2015(US$28.55B) and 2016(US$21.79B). This shows that government general consumption expenditures which does not include military expenditures as part of capital formation started declining, as the government increased spending on unproductive expenditures like security, military and national security agencies, some of which are not accounted for in general consumption expenditure, as there has been reduction in spending for purchase of goods cum services, and capital formation expenditures. This supports the steady decline in spending as share of GDP and in the monetary value from 2014. Whereas as capital formation is affected, investment, trade and productive activities will suffer.

2.4.14 Effect of Boko Haram on International Trade, Imports and Exports

Nitsch and Schumacher (2004), illustrated that nations which are targets of or inflicted by terrorism will trade less with one another rather than countries that are not affected by terrorist activities. Consequently, the impacts are significant, as a doubling of the number of terrorist events were found to reduce the bilateral trade flows by 4%. Terrorism not only increases the sense of uncertainty and insecurity for foreign traders, it will also increase transaction costs, due to enhanced security measures and can cause destruction of export goods, an example is oil pipes. Below is an evaluation of the implication of terrorism on the Nigerian trade with a look at the export and import market, and trade balance.


2.4.14.1 Implication on Import

Import normally estimated as the sum of total value of goods and services produced abroad but sold at home and reported as percentage of GDP to evaluate their volume relative to size of the economy.

If the value is about 15% or less of GDP, the economy is considered closed economy, where most small European countries import over 40% of products they consume, they are considered more open to international trade. Import represents the total amount of all goods and other market services received from the rest of the world in form of merchandise, freight, insurance, travel, transport, license fees, royalties and services such as construction, financial communication, information, personal, business and government services, but excluding employee compensation, transfer payments, and investment income also known as factor services. From 1981 to 2016, the total average value of export in US$ billion for Nigeria was US$23.87 billion with minimum value of US$2.13 billion in 1986 and a maximum of US$88.38 billion in 2011 while its percentage contribution from the same period has an average of 20.61% with a minimum of 7.9% in 1984 and maximum of 36.48% in 1998. From the figure, looking at the value added of imports and its percentage share of GDP side by side, both fell from 2014(US$70.78B)(12.45%) to 2015(US$51.31B)(10.67%) respectively, but at higher rate for the value added, while in 2016(US$46.55)(11.5%) value added further declined while share of GDP gained increase. Showing terrorism affected Nigerian import for the years in focus with decreasing volume and less-significant share of GDP.

2.4.14.2 Effect on Export

The exports of Nigeria like other countries are calculated as the sum total value of goods and services produced locally and sold abroad. Just like import, they are reported as percentage of GDP to evaluate its volume to size of the economy. A 15% value or less shows closed economy, many small European countries export above 40% of their products, shows they
are open to trade. Export comprises all value of goods and market services provided for the rest of the world from trade and industrial sectors as mentioned in import above. The annual growth rate of export based on constant local currency and aggregated on constant 2010 US dollar, is to show percentage growth of export. The value-added data are in US$ billion for Nigeria and from 1981 to 2016, the average amount was US$34.05 billion with a minimum of US$2.76 billion in 1986 and maximum value at US$144.92 billion in 2012 while for growth rate, the average was 6.35% with a minimum of -30.7% in 2009 and maximum of 60.22% in 2006. Whereas export as share of GDP for the period has an average of 29.65% with a minimum of 9.22% in 2014 and maximum of 51.73% in 2000. From the graph, at the start of terrorism in 2009, export value and growth rate witnessed an increase, but the impact reflected on all the three export indicators after an increase from 2013 (18.05%)(US$92.95B)(-21.74%) to 2014 (18.44%)(US$104.8B)(24.09%), in percentage share of GDP, export value and growth rate respectively, with a sharp fall in Nigerian export market to 2015(10.67%)(US$51.31B)(0.37%) and a further fall in percentage share of GDP and much in amount value, but huge increase gained in growth rate in 2016 (9.2%)(US$37.3B)(11.53%). Indicating how terrorism impacted Nigerian export market from 2014 to 2016 with a steady decline where only export growth rate gained a remarkable increase in 2016.

1.6.15.3 Impact on Trade balance

![Figure 19: Trade balance values in US$ billion, as percentage of GDP and terms of trade in Nigeria, from 1981 to 2016.](Source: Constructed based on data of Nigerian trade terms and balances from The Global Economy)

Trade balance in Nigeria and other nations are calculated as the difference in exports and imports amount of goods cum services, and also as percentage share of GDP. Also known as resource balance or external balance on goods which equals export minus import of goods and services, or nonfactor services. Terms of trade compares the value of the export as percentage to value of imports, it indicates how a country can afford to buy more of imports with revenue from exports. For oil exporting countries, in which Nigeria is one of them as a member of OPEC, an increase in price of oil improves terms of trade. The terms of trade index is estimated as percentage ratio of export unit of value indexes to import unit of value indexes, measured relative to the base year 2000.

The unit value indexes are based on information reported by individual countries that indicates consistency under standard international trade quality control with estimates using trade values of previous year. The terms of trade data used in this work which are originally in percentages, are divided by 10 for effective comparison with other trade indicators. From 1981 to 2016 in Nigeria, trade balance as percentage share of GDP has an average value of 9.03% with a minimum of -6.79% in 1998 and maximum of 32.08% in 2000, whereas balance of trade value in US$ billion from same period has an average value of US$5.28 billion with minimum value of US$-23.64 in 2015 and maximum value of US$24.37 billion in 2005, while for the period, terms of trade average was 133.85% with a minimum of 43.88% in 1998 and a maximum value of 269.68% in 2012 as original data, but divided by 10 in this work for easy graphical illustration and comparison. From the graph, all the three components, trade balance, its percentage share of GDP and terms of trade from their values in 2014 (US$-1.83B)(5.99%)(257.3%) respectively declined drastically in 2015 (US$-23.64B)(0.37%)(158.7%) with further decline in 2016 in terms trade(128.7%) and trade balance share of GDP(-2.29%), while its total value (US$-8.55B) increased after a huge decline but was still negative in value i.e. a positive increase. The decline in all the components from 2014 to 2015 is large and visible, this indicates that Nigeria experienced a decline in trade in the years immediately after Boko Haram terror causing trade balance deficit which increased drastically from 2014(US$1.83B) through 2015(US$-23.64B) to positive increase in 2016(US$-8.55B), year of recession. Nigeria was importing more than it was exporting, although there was fall
in global oil price in half of the year 2014 (June to December), Nigeria still witnessed deficit in 2015 when oil price had regained stability, and in 2016 but with a negative rise. The terms of trade remained positive but was declining as Nigeria was getting revenue from oil demand as an exporting country.

2.4.15 Effect of Boko Haram on Main Source of Income, Petroleum

Nigeria’s main source of income is petroleum, while most petroleum firms’ operation have been hampered by the presence of the terror and their nefarious activities. Although, there is no oil field or oil wells in the Northeastern part where their operations are based, but there are lots of petroleum services and sales stations across the Northeastern states. More so, before Boko Haram insurgency, there has been problem of Niger Delta militants clamouring for resource allocation as most of the oil sourcing and productions are from the Niger Delta area. Therefore, expatriates have been killed and kidnapped by militants for ransom. So, this scares oil firms and expatriates from the news of the terror of Boko Haram as they witnessed the militancy which actually affected oil firms, their production and workers, as stipulated by the work of Nwanego and Odigbo (2013).

![Figure 20: The oil revenues as percentage of GDP and oil production in thousand barrels per day divided by 100, from 1981 to 2017. (Source: Constructed based on data of Nigerian oil revenues and production from The Global Economy)](image)

Oil production in Nigeria includes production of crude oil, natural gas plant liquids, other petroleum products or liquids and by-products, including lease condensate, and refinery processing gain, measured in thousand barrels per day, but divided by 100 in this work for easy comparison with oil revenue. As oil rents or oil revenue is the difference between the total values of crude oil production at global price and total cost of production. For the period 1981 to 2017, the average value for Nigeria was actually 2,002.1 barrels per day with a minimum of 1,241 thousand barrels/day in 1983 and maximum of 2,627 thousand barrels/day in 2005. While oil revenue as percentage of GDP, from 1981 to 2016 has an average of 23.59% with a minimum value of 54.11% in 1993. From the graph, oil production which has maintained an irregular trend saw a decline from 2014(2,397b/d) to 2015(2,216b/d) which continued to 2016(1,919b/d) but picked up slightly in 2017(1,996b/d), while oil revenue as percentage of GDP was reduced in 2010(12.14%) from 2009(14.91%) but saw an increase in 2011(16.6%), after which it has been on decline till 2015 with more vivid decline from 2014(8.5%) to 2015(3.02%). Although, oil revenue as percentage share of GDP gained little increase in 2016(3.55%) but production was on decline to achieve small rise in 2017 as stated in values above and from the graph. This is as opposed to the paradigm of Global oil prices reduction of June to December of 2014 which was said to cause Nigerian recession of 2016, as oil revenue share of GDP has been falling since 2012 from an increase gained in 2011 and maintained a decline till 2015, with a further but significant decline from 2014 to 2015 before gaining increase in 2016 the year of recession, the increase was as a result of contraction in total GDP, so percentage contribution rose. While production was still in decline in the year of economic recession, 2016 when oil price was stabilizing, but gained slight increase in 2017 when Nigeria exit recession. This shows that terrorism explains reduction in the petroleum sector and Nigerian economic recession as opposed to the sole rationale of fall in global oil prices, Robert (2015), between the ends of 2014 to 2016 year of recession.
2.4.16 Effect of Boko Haram on Stock Market

The impact of terrorism activities on volatile financial markets is said to be a popular phenomenon. In as much as share prices, in theory reflect expected future profits or gains of a company, terrorists’ incidence will negatively influence the share prices, since expected gain will decrease if security and defense measures increase the production and trade costs, consumers will decrease their consumption. The risk premium will rise due to increased uncertainty about a firm’s prospect in the market. Conversely, as a sensitive and volatile stock market, share prices already reflect and take into account expected terrorist events before any actually occurs. Therefore, the submission is that only single unexpected incidents like 9/11 or an unexpected intensification will lead to negative effects, Schneider et al (2010). However, in the case of Nigeria, it is a case of unexpected intensification, as the terrorists sometimes go into silence for months or few days before their next attack, and the military are their targets as witnessed recently in the second half of 2018, particularly since July, this can portray danger to Nigerian stock market as a result of lack of ability to monitor unexpected terrorist attacks. We shall be examining the effects of terrorism on all components of the Nigerian Stock Market to see how they are inflicted by the terror particularly from 2014.

2.4.16.1 Impact on Stock Market Capitalization, its Percentage Share of GDP and Turnover Ratio

The Stock market capitalization is a key measure of the size and strength of a nation’s stock market. It is calculated as the number of traded shares on the stock exchange multiplied by their prices, and reported as percentage of GDP to evaluate size of an economy with its stock market. Though a value of about 50% of GDP indicates a well-developed stock market, however, most countries where stock market rarely exists, the value is close to zero. Large stock market capitalization does not necessarily mean the stock market is active, as it could comprise of a few large companies whose shares are rarely traded. Whereas, market capitalization also known as market value in US billion dollars is the share price multiplied by the number of shares outstanding and their several classes for listed domestic corporations. Excluded are unit trusts, investment funds and stock brokers or firms whose sole business aim is to hold shares of other listed companies. End of the year values are used. Nigerian stock market turnover is the total value of all stock market trades, the market value of all listed companies showing how active the stock market is, it is the value of domestic shares traded divided by their market capitalization, however, a nation may have large number of listed local companies but minimal trades or vice versa, as it is not actually a true reflection of how active a stock market is. Monthly average is multiplied by 12 to annualize values for the stock market turnover.

![Figure 21: The stock market capitalization values, percentage of GDP and market turnover ratio in Nigeria, from 1993 to 2017. Source: Constructed based on data of Nigerian stock market capitalization and turnover from The Global Economy.](image-url)

Although data is missing for year 2000, 2001 and 2003, more so 2002, 2012 and 2013 for turnover ratio. For Nigeria, from 1993 to 2017, stock market capitalization’s percentage share of GDP had an average value of 18.93% with a minimum value of 4.02% in 2002 and maximum value at 51% in 2007, and for the same period, the average value for stock market capitalization in US$ billion was US$31.64 billion, a minimum of US$2.14 billion in 1993 and a maximum of US$84.89
billion in 2007. Whereas for turnover ratio from 1993 to 2017, the average turnover ratio was 8.8% with a minimum of 1.07% in 1995 and maximum of 34.79% in 2008.

From the figure above, the stock market was not really affected after inception of Boko Haram’s operation in 2009, although they all achieved their maximum values in the years (2007 and 2008) preceding 2009 as stated above, both stock market capitalization’s percentage share of GDP and turnover ratio declined together from 2009(19.01%)(13.94%) to 2010(13.7%)(10.1%) respectively, and further declined simultaneously in 2011(9.48%)(9.92%), but market capitalization value in this period was rising and falling. But, from 2014 to 2016, all the stock market components followed same pattern, though the decline started in 2013 with data of turnover ratio missing, but in 2014 capitalization’s percentage of GDP, the value added and turnover ratio which were already in decline, together in 2014 (11.04%) (USD62.77) (8.18%) fell further to 2015 (10.39%) (USD49.97) (8.17%) respectively, the year after Boko Haram was tagged, then declining further alongside each other in recession of 2016 (7.36%) (USD29.77) (5.36%) with higher values as compared to previous years before Nigeria was in recession. While in 2017, when Nigeria exit recession, they all gained increase side by side each other at values (9.9%), (USD37.22) and (5.87%) respectively. This indicates that although, Nigerian Stock Market faces irregular trend, but it was further affected by terrorism from 2014 through year of recession and bounced back when recession ended.

2.4.16.2 Implication on Stock Market Return and Stock Market Value Traded as Percentage of GDP

Figure 22: Stock market values traded as percentage of GDP and Stock Market percentage return in Nigeria, 1999 to 2016.
(Source: Constructed based on data of Nigerian stock market’s value traded and returns from The Global Economy)

The Stock market return is the percentage growth rate of the annual average stock market index. Where annual average stock market index is calculated by estimating the average of the daily available stock market indexes at the end of daily transaction from Bloomberg. For period 1999 to 2016, the average value was 13.5% with a minimum value of -55.02% in 2009 and a maximum of 71.52% in 2007. Wherely, the stock market value traded as percentage of GDP is the value of total shares traded both domestic and foreign times respective matching prices. Companies which are admitted to listing and trading are included, end of the year values are used and figures are single-counted. Although, data are missing for year 2000, 2002 and 2003, but for 1999 to 2017, the average value was 2.19% with minimum of 0.31% in 1999 and maximum of 10.43% in 2007. From the graph, both value traded and stock market returns attained their maximum values in 2007, and were following same trend from 2004(61.38%)(1.91%) with more obvious and larger changes in values of the stock market’s return till 2009(-55.02%)(2.65%) respectively, then returns increased and value traded reduced in 2010(5.43%)(1.38%), both also reduced in 2011(-4.61%)(0.94%), wherefore value traded decreased further while returns increased but still negative in 2012(-1.44%(0.89%), after that, both components started following same trend, they both increased in 2013(54.26%)(1.21%) then decreased in 2014(9.56%)(0.9%), after which they further decreased simultaneously in 2015(-21.5%)(0.85%) the year after Boko Haram terror, but value added decreased further while stock returns gained increase but was still negative in 2016(-13.71%)(0.37%) in year of recession, then valued added increased in 2017 to 0.59% when Nigeria exit recession. These show the effect of terrorism on stock market returns and value traded especially, aftermath 2014 when both components decreased in 2015 however, stock market returns gained increase but still negative in 2016, the year of recession while value added decreased but gained increase in 2017 when recession ended.
3. SUMMARY, CONCLUSION, RECOMMENDATION AND IMPLICATION OF STUDY

3.1 Summary

According to Global Terrorism Index, GTI 2018, Nigeria is still the third most terrorized country globally coming after Iraq and Afghanistan. More so GTI 2015, stipulates that many nations which have high terrorism infliction are also infested with significant internal armed conflicts, therefore, it is said that effects of terrorism differ from country to country. Nations in the category of terrorized and facing ongoing armed conflicts make it difficult to reach conclusion on the definite impact or cost of terrorism, as there will be overlapping or mixed implications from both terrorism and armed conflict thereby making conclusion on effects of terrorism complicated as it will be complex to separate the cost and implication of terrorism from armed conflict.

More so, as nations with ongoing conflict make it hard to draw conclusions of the economic impact of terrorism on its structures, it is therefore said that growth and output or income of an economy can be adversely affected by activities of terrorism, however, there is no general conclusion among nations inflicted by terrorism. Existing work indicates that many determinants are significant to the cost and effect of terrorism and they are security, nature of the terrorism itself and strength of the economy in the face of trouble. However, results across countries are mixed, not correlated and contradictory, but the mentioned are germane in the determination and conclusion.

As such, Enders and Sandler (2008 and 2009), have posited in their various studies about terrorism and examining relatively many economies and nations cutting across leagues of nations in all strata of development from the less-developed to developing and developed countries, they submitted that most countries infested by terrorism are those with long history of economic disorder, civil cum domestic war or upheaval resident in their economies. Work from Journal of Peace Research (2013), have enunciated that most economies affected are those countries that fall into the category of resident economic issues prevalent in their polity, a troubled state as with their history and particularly, most of them were colonies or once protectorates of super-powers, which justify the paradigm of low level of developmental rate and uprising in their borders.

More importantly, capacity of an economy is also a significant determinant of the effects and implications of terrorism (Blomberg et al, 2004) in its bordered-land. For economies that run on its full capacity and potential, having remarkable growth, with existing structures of capacity building will not have much consequences from terrorist attack. GTI 2015, further enunciated that countries may not be affected significantly by terrorism, but nations witnessing frequent attacks are likely to have their economies and growth affected. Enders and Sandler (1996), posited that for terrorism not to have impact, it depends on the size of the economy, how large and steady its growth. Countries with large capacity or huge economy may therefore not be affected. Advertently, is why the work of Ozdeser et al (2019), stated categorically that terrorism will not suffice in the realm of New Zealand or adversely affect such steady economy. The figures below show the summary drawn from this work's methodology, the graphs with multiple plots is an imposition of all the GDP components, indicators, contributors and sectorial valued added as share of GDP of Nigeria from the methodology section without percentage changes of the indicators, the GDP values, GDP per capita and sectors’ value added in values of US$ billions. Bellows are summary of findings from impositions of all data in a graph, to draw conclusion and make recommendations.

3.1.1 Summary 1: The Imposition of the percentage changes in the values for sectors, contributors and indicators of GDP.

From the figure below, it is obvious that all the indicators declined simultaneously from 2014 to 2015 in percentage change of the values as indicated by the arrow pointing at year 2014 and the declines to year 2015, in the Nigerian economy.
Figure 23: The imposition of the percentage changes in the values of all GDP indicators, components, contributors and sectors’ value added as percentage share of GDP, from 1981 to 2017. (Source: Constructed based on data of percentage changes in Nigerian GDP components, contributors and indicators from The Global Economy)

3.1.2 Summary 2: The imposition for the year differenced of all percentage changes in the values for sectors, contributors and indicators of GDP.

Figure 24: Imposition for the year differenced of all percentage changes in the values of all GDP indicators, components, contributors and sectors’ value added as percentage share of GDP, 1981-2017. (Source: Constructed based on data of year differenced of Nigerian GDP components, contributors and indicators from The Global Economy)
Where,
Arrows from top are;
First arrow; Exchange rate
Second arrow; Services value added
Third arrow; Unemployment rate.

From the figure, it is obvious that most of all the indicators declined simultaneously from 2014 to 2015 in year differenced of percentage changes. Although, there have been declines before 2014 in the economy, but the fall of the variables in year 2014 are simultaneous, clear-cut and indicative. First arrow is indicating exchange rate while, second arrow is services value added and third arrow is unemployment rate. The exchange rate drastically increased from 2014, while services value added was already on the decrease but further declined in 2014, however it was positive in value and higher than all other variables, whereas unemployment from 2014 saw an increase but was at a lower value. Inadvertently, all the three variables saw sharp decrease in 2016, the year of recession. The implication is that during contraction arising from aftermath of 2014, unemployment was on the rise, but in the prevalent condition of economic reduction, services value added and exchange rate were on the rise in the values for percentage of year differenced. This shows further devaluation in exchange rate of the Nigerian naira relative to US$ and positive values in the services sector percentage from previous years, but they however declined in the year of recession, 2016.

3.1.3 Summary 3: Imposition of all actual values of data for sectors, contributors and indicators of GDP

![Graph showing GDP indicators]

Figure 25: The imposition of the actual values of all GDP indicators, components, contributors and sectors’ value added as percentage share of GDP from 1981 to 2017. (Source: Constructed based on data of Nigerian GDP components, contributors and indicators from The Global Economy).

Where,
Horizontal arrows from top are;
First arrow; Exchange rate, Naira/U$
Second arrow; Services value added as share of GDP (US$)
Third arrow; Agriculture productivity (US$)
Fourth arrow; Services sector as percentage of GDP (%)
Fifth arrow; Rate of unemployment (%), and
The vertical arrow is indicating year 2014, the declines and increases in the year 2014.

From the figure as indicated by the vertical and horizontal arrows, the vertical cuts across all the variables to show declines and increases from year 2014. While the horizontal arrows are indicating variables that are rising in the prevalent condition marking the beginning of economic decline, with first arrow from up is indicating exchange rate, second arrow is showing services value added as share of GDP in US billions, third arrow is agricultural productivity while fourth is services sector as percentage share of GDP and the fifth arrow is rate of unemployment. It is obvious that most of all the indicators declined simultaneously from 2014 to 2015 in actual values, except for services, agriculture productivity, exchange rate and unemployment that were on the rise. However, as it is known that economic contraction causes increase in unemployment, as both have significant direct relationship in an economy and that justifies the increase in unemployment, but the rise in the exchange rate from 2014 was drastic and it sustained an increase from that year, agricultural productivity has maintained steady increase from inception which continued even in recession while the services sector experienced an increase from same year 2014, although it declined in both components in 2016 the year of economic recession. These form the implication for policy recommendation that Nigeria needs to be more agrarian and service oriented, improve on the sectors to achieve an agricultural- and service-intensive economy, also is the need for devaluation of naira relative to US$ necessary for economic growth as the variables; agriculture productivity, services sector and exchange rate were increasing despite economic downturn arising from 2014.

3.2 Conclusion

Frey et al (2004) in their study postulated that countries affected by terrorism are actually economies that would not perform beyond their existing economic capacities if terrorism was not present in their domain. Which means they are implying from their studies that the effect of terrorism on an economy is a function of how productive or how large the economy is. More so, it was further stipulated that implications of terrorism on an economy is not the actual reduction in the performance of the economy, but how such economy would have performed without terrorism prevalent in the system. (Blomberg et al 2004), the determinant of terrorism impact in an economy is also posited to be dependent on the development rate or level of an economy, and this paradigm can be seen in the case of France and United States aftermath the French attack and 9/11 incidents respectively, it was said that these economies were able to regain their economic stabilities soon after the terrorist events, that was why Enders and Sandler, (2008) stipulated that most developed economies regain economic order in quick periods after terrorist attack.

However, Schneider et al (2010), opined, terrorism can have hard cum acute infliction on economy, if the country comes under frequent attacks which can disrupt economic activities, hence the rationale behind the postulation by Odebola (2019), that the New Zealand mosque attack of 15th March 2019, will not have negative effect on the renowned peaceful and stable economy. More importantly, it is said that terrorism can have grave effect if it is targeted at capital structures, economic facilities or production infrastructures and amenities meant for capital formation like the case of World Trade Centre when it came under terrorist attack, in that case it was recorded by economists and from economic analysis that the United States’ GDP dropped relatively by 1% for days following the attack as direct cost of terrorism, but soon recovered due to the status of the economy before the attack. This is the paradigm with terrorism and developed economies.

Conversely, the case is different with LDCs or developing economies, from the archives of Journal of Peace Research’s library, Daniel Meierrieks and Thomas Gries. (2013). Termed “Causality between terrorism and economic growth”, enunciated that terrorism have tough implications on countries in Africa and in the league of Islamic countries, because these economies have problems with transparency and orderliness in their polity, more so, that has been the prevailing condition in those countries. This shows categorically, that terrorism paradigm as described to affect countries with some certain economic characteristics, of which Nigeria possesses most, and falls in the categories of economies described to be vulnerable to acute or adverse effects and implications of terrorism, these are the rationale that put the Nigerian economy at risk of the impacts. Nigeria was once a protectorate and then a colony of the British empire, the country has history of internal crises, it has witnessed civil war in years immediately following its independence from British administration of indirect rule, more so, the country has seen trends of religious and tribal disputes, and more importantly, as much as the economy is large and an emerging market nation, rich in abundant petroleum resources as one of the largest exporter of the products globally, the
country has not successfully translated these attendant opportunities to a viable development or have a stable economic growth. One of the main reasons why there have been ongoing armed conflicts in Niger Delta oil rich area in immediate cum successive periods prior to Boko Haram insurgency outset, Ewetan, and Urhie (2014), where the natives turned to armed militancy to request for proper resource allocation from oil proceeds to favour their indigenes and local communities.

All the above features herein highlighted are the germane factors considered and submitted by scholars of terrorism specialty to inflict negative effects from terrorism, if a country of such circumstances were to be infested by terrorists and not only that, most of those prevailing conditions are some of the root causes of insurgency or terrorism in a nation, as aggrieved citizens take to insurgency to showcase their grievances. Therefore, Nigeria does not only fall into the category of the league of terrorized countries to experience hardened effects of terrorism, Ogochukwu (2013), but also in the class of those economies that have the likelihood of having terrorism spring up from its domain. This is the paradigm with Nigeria and Iraq’s case, two countries out of the five most terrorism-plagued nations which share some economic features, they are both oil-rich but terrorism-infested economies, and GTI 2015 stipulates that terrorism has inflicted Iraq such that it lost US$159 billion in GDP, PPP for the period 2005 to 2014. If terrorism can make Iraq lose the ability to earn at full-capacity which is a form of contraction, therefore, terrorism can affect Nigeria significantly. However, the imposed data for the indicators shows that terrorism was one of the rationale behind Nigerian economic downturn, recession, drastic reduction in GDP, income and economic growth from aftermath of Boko Haram terrorism and more so, from the intensification of their operations in 2014 making them the deadliest terrorist organization in the world and putting Nigeria in the forefront of one of the most terrorized economies, hence the negative implications on the macro-economy of Nigeria. However, for solutions to the imminent economic problem, there is need for Nigeria as a nation to employ certain approaches; increase its potential and capacity as an agrarian cum service-intensive economy and to devalue its currency, as enunciated below.

3.3 Recommendations and Implication of Study

Global Terrorism index (GTI 2015), recommended that aside improving security and welfare of citizens, it is necessary for authorities and private sectors in terrorism-infested nations to be fully aware of the damages, costs and effects of terrorism in an economy as that would help in allocating resources to sectors and sections of the economy that can alleviate direct and indirect costs that can arise from terrorism and consequently lead to improved economic condition. The vertical arrow in the figure 50 above is pointing to year 2014 to indicate the point of declines, as it shows decreases in all the variables from 2014 to the year 2015. From the graphs, as the economic indicators were declining, so also are their value added and percentage share of GDP, in actual figures, their percentage year differenced and percentage changes, however, as the economic components were decreasing, exchange rate was increasing, also is agriculture productivity, services and its valued added to GDP, more so, inflation and unemployment were on the rise, as it is known that recession causes increase in inflation and unemployment, as both have significant or direct relationship in a prevailing economic contraction.

Furthermore, from the figures above, as the arrows are pointing to indicate declines and increases, more importantly are the arrows indicating agriculture productivity, services share of the economy and its value added to GDP were positive and increasing, this shows that, as though it is normal when all productive cum economic activities are declining with the national income, which is seen as recession or economic contraction, it is significant for unemployment, inflation and exchange rate to be on the increase, same as in Nigeria case as all those variables were increasing, however the arrows imposed for indication also show that agricultural productivity was steadily increasing in the imposition of all actual figures, while services sector was positive in value for percentage in year differenced while in actual value it was increasing, although, at a steady rate while exchange rate increased sharply, this therefore shows that, Nigeria need to take cognizance of its agriculture and service sectors as the important sectors, industries and factors that can lead to economic growth and buoyancy even in the face of terrorism, this then means the services sector is one sector the nation should invest more and encourage FDI to make it further formidable and as such can deliver the country from the grip and implication of the insurgency even as recommended by scholars, hence the need to be a more service-intensive economy or nation, as it can be a recourse to the imminent effects of attendant terrorism in a prevailing condition.

Sequel to above, the agricultural sector is also a significant sector that can drive the economy, serve as solution to terrorism and push the economy to a stable and steady economic growth. The economy of Nigeria has to look beyond solely relying on its petroleum resources abundance, which has actually made a once agrarian economy to forfeit its agriculture sector's ability to achieve full capacity or attain its full potential of driving the economy forward. More so, as seen in the figures, in the years differenced and percentage changes, as other factors were plummeting, the exchange rate is seen to have a sharp rise, from the year 2014 when Nigeria economy was said to achieve a remarkable growth overtaking South Africa as the largest economy in Africa with the largest GDP, before decline and consequent recession in 2016, this shows therefore
that devaluation of Naira can have positive effect on Nigerian economy and its growth, as it will make export cheaper, import expensive and thereby increase income from trade, enhance trade balancing, balance of payment, prevent trade deficit thereby increasing foreign exchange earnings, national income, GDP and all these will translate to economic growth.

3.4 Limitations and Future Directions for Research

In actual fact, this study was not without limitations, as there was problem with quantitative analysis of crisis theoretically due to inconsistent data, hence the reason for the qualitative methodology, the data on victims or casualties from crises are not sequential, that is, not following sequential order like most data, but the qualitative method employed was used to appropriate the outcome. Further researches can employ the quantitative analysis method for recent years. More importantly, the study is to show that the Boko Haram crisis has actually affected the investment level, reduce output and national income and made futile the inflation-curbing measures if not increased the level of inflation in Nigeria. This work pinpointed the areas overlooked or oblivious to the Nigerian government, central bank, the academics and populace that the Boko Haram crisis has actually been contributory to reduction in GDP cum national income and more importantly rendered inflation-control and currency exchange measures insignificant or less effective, by looking at government spending, investment, inflation, GDP, unemployment, exchange rate and output level for the period of insurgency till date, as their activities still persist but at a minimal cum reduced rate. Therefore, it is expected that government and the academics should focus on the possible ways to alleviate these drawbacks through future policies and researches in these particular affected areas of the economy.

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