

IS BOKO HARAM A ‘CHILD’ OF ECONOMIC CIRCUMSTANCES?

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Abstract

This paper empirically investigates the question: 'Is Boko Haram a ‘child’ of economic circumstances?' Using both Ordinary Least Squares (OLS) regressions and descriptive statistics, this paper provides answer to the above question. The OLS regressions result show that Terrorism Incidence and Intensity (TII) and unemployment levels are positively related and statistically significant over the range of the sample. Gross Domestic Products (GDP) and population growth of the country on the other hand have been found to be statistically insignificant with Terrorism Incidence and Intensity (TII). The results from the descriptive statistics show a high and above average Northern Nigeria's economic indexes of poverty, unemployment, population growth and illiteracy rates, and we deduce that economic factors could not be ruled out as possible causes of Boko Haram terrorism.

Keywords: Boko Haram, Terrorism, Poverty, Unemployment, Nigeria

1. Introduction

The factors responsible for the emergence of Boko Haram have remained issues of intense controversy and debate amongst scholars and politicians in Nigeria. While some are of the view that the problem is a symptom of economic factors such as poverty, unemployment, illiteracy and the like, others have a counter perspective and take strong exception to that. A couple of theories and hypotheses were put forward as answers to the fundamental question of *what makes a terrorist*. And a dominant and widespread view echoed in both official and academic circles is that economic factors like poverty, unemployment, illiteracy etc. combine to make a terrorist (see Kahn and Weiner, 2002; Ismail and Amjad, 2014). These, of course, appear to be in agreement with the findings of most literature on economics of conflicts. However, whether or not, and the extent to which terrorism is driven by economic factors is still open to debates among scholars on economics of conflicts and terrorism. It is pertinent to stress that, this paper uses the concept of terrorism as defined by the America's Federal Bureau of Investigation (FBI), defined thus: *'Terrorism is the unlawful use of force and violence against persons or property to intimidate or coerce a government, the civilian population, or any segment thereof, in furtherance of political or social objectives'*.

The advent of this relatively recent security threat to the country has set politicians up against one another in argumentation over what exactly are the causes of Boko Haram insurgency. Some hold the view that Boko Haram is a manifestation of harsh economic realities or conditions, while others maintain that the phenomenon has nothing to do with economics. Though a handful of studies on Boko Haram Terrorism were done such as: Adesoji A. (2010), Onuoha (2010), Adesoji (2011), Achedo and Osumah (2012), Salaam (2012) and Dambazau (2014), these studies mostly tilt towards the socio-political or security aspects of Boko Haram, leaving the economic flank either completely unexplored or casually so. This gap motivates this paper to undertake the task of finding an empirical answer to the question: Is Boko Haram a ‘Child’ of Economic Circumstances? In a nut shell, this paper situates in proper economic perspective, the arguments on the exact cause(s) of Boko Haram terrorism, which has implications on the nature and type of response mechanisms that can be devised to tackle the BH monster.

This paper uses both Ordinary Least Squares (OLS) regression as well as descriptive statistics. The resort to the latter was informed by paucity of data for inclusion for the analysis. Thus, an Ordinary Least Squares (OLS) regression was run with Terrorism Incidences and Intensity(TII) as

the dependent variable while unemployment, population, per capita Gross Domestic Products (GDP) and its quadratic term are used as our explanatory variables.

The results of the regression show only unemployment to be statistically significant and has the expected positive sign. The other three variables are found to be statistically insignificant which is not rationally inexplicable in the case under study. In fact, it has been argued herein that 'mismanagement of population', rather than population explosion/growth per se, is among the major problems facing Nigeria; hence the statistical insignificance of the population variable. And, little wonder, per capita GDP being not quite an unquestionable measure of social welfare is found to be insignificant also. Therefore, this finding when contextualized against the backdrop of extremely high and above average Northern Nigeria's economic indices of poverty, unemployment, population growth and illiteracy rates, could lead us into deducing that economic circumstances appeared to have played some possible roles in bringing about Boko Haram terrorist organisation.

The remainder of this paper proceeds as follows: section 2 captures the literature review; section 3 discusses the methodology and data sources; section 4 presents results and discussion, and section 5 concludes the paper and provides policy recommendation.

2. Literature Review

2.1 Brief History of Boko Haram

The history of *Jama'atu Ahlis-Sunnah Lid-Da'awati wal-Jihad* (henceforth JASLIWAJ) notoriously known as Boko Haram can best be understood when categorised into two phases: (i) 'The Nigerian Taliban' phase and (ii) The 'Boko Haram' phase. Incidentally both names were given to the group by members of its immediate constituencies who view it with derogatory disdain.

(i) The 'Nigerian Taliban Phase':

There is disagreement on the exact year JASLIWAJ was established. But most literature nail the year as 2002. However, what is certain is that it was conceived and cobbled together sometime between the late 1990s and early 2000s under the leadership of one Mohammed Ali. JASLIWAJ appeared as a sect disenchanted with what they saw as the 'corrupt, un-Islamic, unjust and secular' social, economic and political set up in Nigeria, and specifically in the North. It drew its membership mostly from youths who partook in petty trading and menial jobs such as cart-pushing, manicure services, vulcanising, dates and kola nuts hawking, laundry and commercial motor bike services as well as other unemployed young men. The group's spiritual leadership consisted of youths who worshipped at the famous Indimi Mosque in the city of Maiduguri (Walker A., 2012).

In 2003 members of the JASLIWAJ had a bloody confrontation with the police in a dispute involving locals at Kanama, a village they had emigrated to in neighbouring Yobe State. That encounter claimed the lives of the group leader and seventy other sect members (ibid). Survivors of the Kanama battle fled to Maiduguri to pledge allegiance to another Muhammad Yusuf who was a popular face at the Indimi mosque. Thus, from its formation and particularly with the bloody confrontation it had with security forces at Kanama village in Yobe, JASLIWAJ was nick-named 'the Nigerian Taliban' by members of the public.

(ii) The 'Boko Haram' phase:

At the Indimi Mosque, Muhammad Yusuf somewhat deputized his teacher, a popular scholar, Sheikh Ja'afar Mahmud Adam who gave the annual Ramadan commentary on the Quran to hundreds of audience. But Yusuf, who was now left to consolidate JASLIWAJ, was later to part ways with Ja'afar over his (Yusuf's) positions on issues which Ja'afar considered as extreme, nay deviant or out of accord with unanimous views of major scholars. The teacher-student disagreement between the duo was brought to the open after attempts by Ja'afar and other scholars to de-radicalize Yusuf and have him withdraw some of his fatwas considered as dangerously extreme and ideologically unorthodox failed. Thus Yusuf opted to establish his own mosque which he named Ibn Taimiyyah Mosque, near railway station, north of Maiduguri city centre.

At Ibn Taimiyyah, JASLIWAJ was nick-named 'Yan Yusufiyyah (followers of Yusuf) and then later 'Boko Haram' by members of the public because of the sect's anti-Western education

ideology. While at Ibn Taymiyyah, Yusuf recorded some successes in organising BH and expanding its pool of followers across other states partly as a result of his belligerently bellicose anti-state and anti-status quo preachments which went down well with the common folks and partly as a result of welfare hand-outs to able-bodied jobless followers drawn mostly from the economically disadvantaged class.

Whereas Yusuf's moving out of the Indimi Mosque gave him a sort of independence, he still found himself on collision course with the Islamic clergy in the North over his views on issues prominent of which is his fatwa on Boko. For instance, Isah Ali Pantami, the Imam of Abubakar Tafawa Balewa University (ATBU) mosque in Bauchi State, had an interesting debate with Yusuf on the Boko issue. However, all attempts at de-radicalization of JASLIWIS, and especially its spiritual leadership, were not successful and authorities appeared to have, in the view of some, treated the problem with levity, little dexterity and lack of foresight. Eventually, Ja'afar, the first critic of JASLIWAJ and Yusuf's estranged teacher was later gruesomely assassinated in April 2007 while leading the early Morning Prayer in his mosque in Kano metropolis. With the demise of Ja'afar, a big platform for intellectual engagement with BH was lost for obvious reasons, one of which was the authority Ja'afar wielded over Yusuf; being his former teacher. Thus, quite unsurprisingly, fingers of accusations for Ja'afar's murder were much later to be strongly pointed at BH, but it still remains an allegation.

Later in July 2009, BH members reportedly run afoul of traffic laws and were again involved in confrontation with traffic officials on their way to bury the body of one of their departed members in a cemetery in Maiduguri. Accounts of what exactly transpired is hard to objectively come by; however, it was said that a couple of lives were lost mostly on the BH sides. The group leader, Muhammad Yusuf issued sermons threatening 'reprisal attacks' against law enforcement agents, other state targets etc. Coordinated attacks in 2009 on police stations which occurred in Maiduguri, Bauchi, Kano and other places jolted authorities into cracking down on sect members. The sect's Ibn Taymiyyah Mosque came under heavy siege with bloody battles raging for days and heavy fatalities recorded. The BH members broke the siege and had a field day in Maiduguri city slugging it out with security agents. They were eventually subdued and forced to go underground before they later resurfaced and begun waging a guerrilla warfare against both security agents and those they considered as their accomplices.

The group's leader, Muhammad Yusuf, was eventually arrested by soldiers and handed over to the police in whose hands he died in highly controversial circumstances. Floodgates of gruesome bombings, targeted assassinations and kidnappings have since opened with hundreds of lives lost including those of vulnerable women and children. Scholars such as Sheikh Auwal Adam Albani, Sheikh Bashir Gomari, Sheikh Ibrahim Gomari and many others who preached against BH and its ideology paid the price with their lives. The Nigeria state still struggles to tame the tide of this apparently ceaseless cycle of vicious violence.

2.2 A Theoretical Model of Boko Haram

Here a theory establishing the links between terrorism and economic variables or factors is discussed. This theory utilizes the features of both Grossman (1991) static model and Tornell (1998) dynamic model. The model describes not only the links between economic activities and conflict such as terrorism but also the type of conflict involved; that is, whether it is terrorism or civil war. While this model attempts to explain terrorist activities through economic lens, it is worth pointing out, that economics alone cannot and does not entirely explain what exactly the root causes of terrorism are.

According to these models, the economy is conceived to have two organised groups, that is, 'the government' and 'dissidents'. The action of each of this group is dictated by how it views the magnitude of its appropriation or stake in the economy or whether it feels carried along economically or not. Both groups appropriate resources in the economy but the government's appropriation exceeds those of the 'dissident' groups. If the dissidents feel unhappy with this status quo ante, two options present themselves to them: First, they can opt to wage 'rebellion attacks' with the motive of toppling government and appropriating more shares to themselves by setting new economic order in place or; the second alternative, wage 'terrorist's attacks' against government and its symbols of authority. This

latter option is low in intensity compared to the former and resort to it is often made after the dissidents must have weighed and evaluated the relative costs of both options. If dissidents fail to choose between any of the twin options, then they would be consigned or compelled to maintaining the status quo. This, they do if the costs of either of the dual options is too high compared to the reward of doing so.

The Boko Haram insurgency/terrorism could be contextualized and analysed along the tenets of this theory. The BH's umbilical cord was cut at Nigeria's Northern region which lags behind the Southern region in many indices of economic growth and development. Stripping the BH phenomenon of other probable, non-economic causes, it could safely be argued that over the years, governments' appropriation or misappropriation of resources to the crass disadvantage of the North might have provided the ground for creation of 'dissidents'. Perhaps having evaluated the relative costs of the options of 'rebellion' and 'terrorist attacks', these 'dissidents' chose to settle for the latter alternative. And, probably in an attempt to maximise both impacts and concomitant rewards as well as curbing operational costs, religion—that 'opium of the masses'—was cunningly dragooned into the equation. And, with various Nigeria's institutions already weakened by institutionalized corruption over the years, the costs of the twin options open to Nigeria's 'dissidents' appeared not have been made to be too high relative to the reward thereof; hence the 'dissidents' choice of the 'terrorist attacks' option with its attendants material and non-material costs on Nigerians.

2.3 Review of Existing Literature on Economics of Terrorism

A review of related literature on economics of crime indicates that a paper widely acknowledged as pioneer in the field is Garry Becker's paper entitled 'Crimes and Punishment: An Economic Approach' (Becker, 1974). The author explores how potential criminals are so rational as to weigh the relative costs and benefits of crimes before partaking in same. Becker uses the term 'crime' in such a broad sense as to encompass all acts of violations of law from the *white* to the *green* collar crimes. They include not only murder, assaults, robbery and arson but also others like tax evasion, forgery, traffic and other law violations (Becker, 1974).

The bottom line is, *crime* when viewed from this broad angle becomes a vital economic activity worth more than the current scant, passing attention economists are ready to give it. It is, and no hyperbole intended, 'an industry' of its own with numerous factors of production combining to produce it for the consumption of its unwilling clientele. According to Becker (1974), to fight crime, he develops a model of the factors that combine to produce crime. He maintains that understanding these factors is not only vital but also necessary in combatting crimes. The model incorporates behavioural relations vis-à-vis the production of crimes. These relations are categorised as:

- a. Number of crimes which he called 'offenses' and the cost thereof.
- b. Number of offenses and penalties/punishment exerted.
- c. Public expenditures on police and courts vis-à-vis the number of offenses, arrests and convictions secured.
- d. Number of convictions and the costs of incarceration and other punishments and
- e. Number of offenses and private expenditures on protective or preventive measures employed.

The above, according to Becker, combine to determine the intensity and gravity and hence the profitability of the supply of crime in any society. Suffice it to say that so long as there are recalcitrant members of society who will obstinately insist on swinging their arms even where and when other arms begin, there will always be some laws to equilibrate actions. Thus, the amount of harm caused often tend to increase as the level of activity increases. Though Becker acknowledges the existence of myriad of theories seeking to explain the determinants of the number and intensity of crimes people commit, he settles for, affirms and hinges his entire arguments on one particular position. The thrust of Becker's thesis is that, *ceteris paribus*, if a potential criminal's probability of being convicted or punished when convicted increases, the number of offences or crimes he commits decreases.

Therefore, in a nutshell, Becker develops optimal policies (public and private) to combat crimes. He pointed out that there are certain variables which are within the legitimate domain of public decision making process such as government expenditures on courts, the police etc. These, Becker submits, could be positively altered in such a way as to affect the probability of discovering,

apprehending, convicting and punishing offenders/criminals for society's good. Also, the magnitude or gravity of penalties are all within a government's decision making authority.

In the same vein, Krueger and Maleckova (2003) attempt an investigation of possible existence of causal relationship between terrorism on the one hand and poverty and education on another. They arrived at the conclusion that, any relationship among these variables is not only 'indirect', 'complicated' but also 'quite weak'. Thus, it is the strong belief of the two authors that terrorism has got very little to do with economic circumstances. They posit rather that political conditions, frustrations and a sense of indignity lie at the root of the problem. They provide three (3) evidence to buttress their conclusion: (1) A research by Green et al (1998) on hate crime which Krueger and Maleckova (2003) consider as 'closely related to terrorism'. The research found no correlation between hate crime and unemployment in the New York City. (2) Public opinion data obtained by the Palestinian Centre for Policy and Survey Research (PCPSR). The polls found no relationship between levels of education and income of Palestinians vis-à-vis their attitude towards armed attacks as an option for resisting Israel's occupation. About 72% of those interviewed across all education levels and occupations preferred armed attacks, and (3) evidence from Hezbollah militant terrorists organization's resistance against Israel's occupation of Southern Lebanon.

However, a careful scrutiny of this paper by Krueger and Maleckova (2003) reveals a handful of weaknesses in both approach and methodology; and hence conclusion reached by the duo. First, while the authors made a good job of starting with a working definition of the often controversial term of terrorism, they ignored the equally important task of itemising the various classifications/types of terrorism. That is very crucial and necessary in that they greatly assist in accurately identifying the cause(s) of different types of terrorism; after all, different types of terrorism may be caused by different causes/factors (for instance see Enders & Hoover (2012)). Furthermore, the first evidence put forward by Krueger and Maleckova is tendentiously contentious: After all, while hate crime and terrorism could be seen as twins, I submit that they are by no means identical. Therefore, the mere fact that unemployment is found not to have been the cause of hate crime in one particular city of a particular country on one particular continent should not be a cogent enough point to conclude that unemployment does not cause terrorism. This would appear to stretch the logic of deduction or generalization a bit far.

Also, the last two evidence tendered could be viewed by some as a clear case of terrorists being terrorists to some but freedom fighters to others. Hence, if there is contention about who is terrorising whom, in a contentious conflict such as the ones cited in the last two examples, attachment of the terrorist label on a side or both and a research thereupon may not go without strong charges of bias and subjectivity. In essence, to use evidence from Israel-Palestinian crisis—a crystal clear case of domestic conflict—to make generalizations about the cause(s) of terrorism without even stating which variant, appears to be a bit off the mark.

The methodological deficiencies in Krueger and Maleckova (2003) appear to have been rectified by Enders & Hoover (2012). First, these authors set out by demarcating terrorist acts into two: (a) domestic incidents of terrorism and (b) Transnational Incidences. This categorisation is important in that greatly helps us in tracing the root causes of terrorism of whatever kinds. Different types of terrorism could possibly be caused by different factors or forces. Secondly, Enders & Hoover use Split sample and smooth Transition Regression technique to allow for a non-linear relations between poverty and terrorism. Their findings, though tentative, reveal interesting facts about terrorism. After they have accounted for non-linearity between the variables in focus, Enders & Hoovers found out that poverty indeed does have robust impacts on domestic terrorism. The impact of poverty on transnational terrorism was however found to be small but not to the extent of being insignificant.

Moreover, basing their theoretical model on Tornell (1998), Blomberg et al (2004) classify conflicts into 'rebellion' and 'terrorist attacks'. The economy is assumed to be made up of two key players: Government and 'dissidents' who based on the nature of appropriation of resources chose to fight the government either through rebellion or terrorists attacks. However, the main empirical finding of Blomberg et al (2004) is that terrorism incidence(s) in a country has an economically significant negative effect on growth. But that effect is overall less than the effect wars (internal or external) have on growth. They also found out that in the event of the challenge of terrorism in a

country, investment spending often plummets or give way to increased government spending on military hardware and related goods/services. Ismail & Shehla (2014) in their study on the determinants of terrorism in Pakistan also found terrorism to have a long run relationship with socio-economic factors of poverty, unemployment, inflation, per capita GDP and literacy levels in Pakistan.

Dambazau, (2014) made a good job of assessing the threat posed by Boko Haram to public security in Nigeria and the West African sub region. Being a retired military general, little wonder then that security issues appear to dominate the theme of Dambazau's paper even though many of his arguments rest on certain identifiable economic pillars and platforms. Dambazau started by stating the basis of Nigeria's strategic importance to global security which include: Being the most populous black nation on earth, located at the Gulf of Guinea which is a major source of world oil, contributing (in troops and logistics) to African Union and United Nations' peace keeping operations etc. While he identified so many security challenges facing Nigeria since the advent and adoption of democracy in 1999 such as ethno-religious conflict, kidnappings, rampant rape cases, robbery, piracy, trans-border criminal activities, election-induced violence, Dambazau submitted that Boko Haram and Niger-Delta militancy so far remains 'the most serious' challenges threatening Nigeria as an entity. He identified certain factors responsible for Nigeria's sorry security state. They include: poor leadership at all governmental levels occasioned by incredible level of corruption, lack of transparency, accountability and rule of law; weak institutions that thrive with impunity on bribery and corruption etc.

Elaborating further on the reason for the prevalence and persistence of Boko Haram and related challenges bedevilling Nigeria, Dambazau drew an interesting analogy relating to mosquito breeding. Dambazau noted that just as stagnant waters, dirty environment or poor sanitation provide the fertile ground for the conception, development and maturity of the mosquito larvae that metamorphose to adult mosquitoes to cause threat to health, so do bad leadership (such as Nigeria's) that thrives on corruption, mismanagement and lack of accountability and rule of law breed the mosquitoes of Boko Haram, Niger-Delta militants and similar sinister groups.

Salaam (2012) identified certain probable *risk factors* that must be taken into cognisance while exploring the Boko Haram problem. These factors as opposed to mere religious fanaticism, Salaam argues, are responsible for the emergence of security threats like Boko Haram. And the problem is made worse by absence of certain *protective factors* which make able-bodied youngsters turn to extremists as they are left to grope in the dark in search of solutions to obvious society's inadequacies. Thus for any lasting solution to be found to the problem, government must address those risk factors first. Specifically, unemployment, poverty, pervasive corruption, mass illiteracy and socio-political marginalization must be addressed.

Aghedo & Osumah (2012) appear to concur with and re-echo Salaam's main arguments. Utilising primary and secondary sources, the duo give an overview of the dynamics surrounding the evolution of BH as well as assessing the government's response thereto. And, in the final analysis, Aghedo and Osuma traced the root of the problem to 'governance failure and institutional fragility'. They therefore conclude that for effective solution to be arrived at, human security approach, rather than repressive security one should be adopted.

Other papers reviewed which are more or less a regurgitation of the above samples are by Freedom Onuoha (2010), Abimbola (2010) and Abimbola (2011). One central argument that shone through all the Boko Haram-specific literature reviewed was Nigeria's leadership and institutional weaknesses or failure occasioned by unbridled and incredible level of corruption, poverty, unemployment etc.

3. Methodology and Data Sources

3.1 The Data

The START which stands for the National Consortium for the Study of Terrorism and Responses to Terrorism archives data on global incidences of terrorism for the US Department of Homeland Security. The database is by far the most richest or comprehensive even though it does not differentiate between domestic and transnational incidences which is significant for thorough research on terrorism.

The START has data on terrorism incidences, including fatalities and injuries for Nigeria from 1980 to 2013. While this is a quantum leap towards this research on the Economics of Boko Haram terrorism, the snag is Boko Haram started its terror campaign relatively recently, that is, in 2009. But a four-year time series is by no means a good statistical sample size to use for research. This informed the choice of two broad methodologies in finding answer to the question of whether or not Boko Haram is a child of economic circumstances. Therefore, we use the data on Terrorism in Nigeria from 1980-2013 only to explore the nature of the trend and relationship between terrorism and economic factors in Nigeria generally before using the deductive method of extrapolation to attempt making deductive conclusions on Boko Haram. This is logical in that, the motivations for Boko Haram might not be any different from the motivations for other types of terrorism over the range of our sample.

3.2 *The Methodology*

This research uses two broad methodologies namely, the Ordinary Least Squares(OLS) regression and descriptive statistics. The use of the former is to find out what sort of relationship exists between terrorism and economic factors of unemployment, GDP and population growth in Nigeria. Having established the nature of such relationship, data on economic indices of the Northern (Boko Haram enclave) and Southern regions of Nigeria will be described, compared and analysed so as to re-enforce or shed some light on the results of the OLS regression.

3.3 *The Model*

The Empirical Model:

The dependent variable in our empirical model is terrorism incidences and intensity, written as **TII**. Terrorism in Nigeria long pre-dated Boko Haram and the country has had sanguinary experiences with fatal and bloody terrorists' attacks such as the ones by Niger-Delta militants, Maitatsines and sometimes ethnic groups or organised gangs of both religious and secular hues. However, since in the 80s and 90s-that is prior to the advent of the most lethal Boko Haram- incidences were so few and far-between, we merged number of incidences and fatalities/injuries from 1980s to 2013 together to get **TII**. The reason for the merger is simple: Since data variability/variation was very little in the 1980s and 1990s with many zero entries, the regression of individual variable, say incidence alone, would present results with neither econometric nor economic significance/consequences.

The model is written as:

$$\text{LogTII}_t = \alpha + \beta_1 \text{LUnemp}_t + \beta_2 \text{LPOP}_t + \beta_3 \text{LpGDP}_t + \beta_4 \text{LpGDPSqrd}_t + e_t \quad (1)$$

Where:

LogTII is the log of Terrorism Incidence and Intensity; **LUnemp** is the log of unemployment; **LPOP** is the log of population; **LpGDP** is log of per capita Gross Domestic Products and **LpGDPSqrd** is the log of per capita GDP squared. The log of terrorism incidence and intensity in Nigeria (TII) is expected to be positively correlated with the log of unemployment. An establishment of this fact automatically leads to the conclusion that as unemployment increases in Nigeria, terrorism incidences and intensity also increases. This is economically tenable and plausible as a number of research have empirically established the existence of positive link between unemployment and crime for instance Becker G.S (1974) and Enders and Hoover (2012).

Similarly, log of population is expected to have a positive relationship with the log of terrorism incidence and intensity. While there is near consensus among economists about the positive role human capital plays in economic growth and development of nations, developing countries like Nigeria suffer from the problem of population explosion with little economic progress to show for it. The reason is often found in mismanagement which result in fierce competition for scarce resources with its attendant consequences on crimes a variant of which is terrorism. The relationship between the log of TII and the log of PGDP is a controversial one. There is debate in economics literature about the effectiveness of per capita GDP as a measure of welfare.

Many are of the view that per capita GDP is not a true reflection of peoples' welfare since it does not factor in income inequality. Be that as it may, however, per capita GDP should give us some

hint or picture--no matter how vague--about public welfare. Thus, there are two senses in which we use per capita GDP here: One is that an increase in the log of per capita GDP decreases terrorism and vice versa. Here the increase (or decrease) in per capita GDP denotes improvement (or decline) in welfare of citizens which would result in lower (higher) terrorism intensity. Therefore, it is expected that the log of per capita GDP would be negatively related with the log of terrorism incidence and intensity in Nigeria.

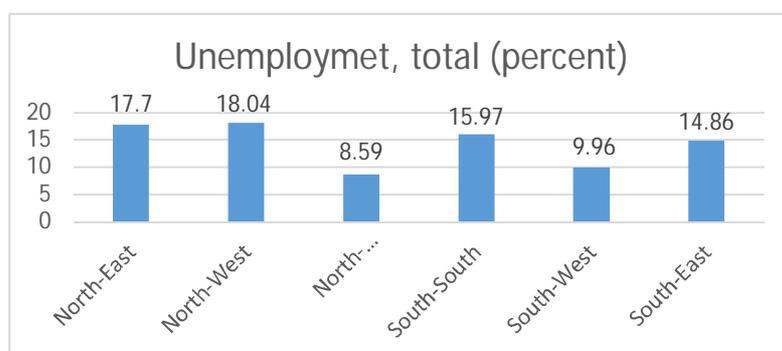
The second sense is embodied in and captured by taking the log of per capita GDP and squaring it to get the quadratic thereof. This captures the impact of increase or decrease in per capita GDP acting as surplus or deficit for funding terrorism such as the Boko Haram or Niger-Delta variants. This is expected to be positively related with the log of terrorism incidences and intensity because an increase (up to a certain level) in *Log pgdpsqrd* would denote the presence of surplus to fund terrorism and vice versa. Or put in another way, an increase in per capita GDP could be seen as an increase in state capacity that compels ‘dissidents’ to waging terrorist attacks against an all-out war which they may not survive given increased state capacity to deal with or respond to their threat strongly. This interestingly confirms the finding of Nasir et al. (2012) who also found out the same positive impact of GDP on terrorism in Pakistan. Nasir et al. (2012) contend that increased GDP means that state capacity increases. This will make the terrorists prefer (and find it feasible) waging ‘terrorist attacks’ to rebellion or open war.

4. Results and Discussions

4.1 Analysis of North-South Economic Indexes

The Northern region of Nigeria is the birthplace of Boko Haram and hence its main epicentre and hotbed of bloody terror campaign since 2009 when BH took up arms against the state. Having established the correlation between terrorism incidence and intensity on the one hand and unemployment, population growth and GDP on the other, it would greatly aid the cause of this project to review and analyse the economic indexes of Nigeria’s Northern region vis-à-vis Southern region. This effort would expectedly shed some light on how economic circumstances or factors greatly influenced--if not entirely set the stage for the emergence of Boko Haram as a despicable domestic terrorist organisation with global notoriety.

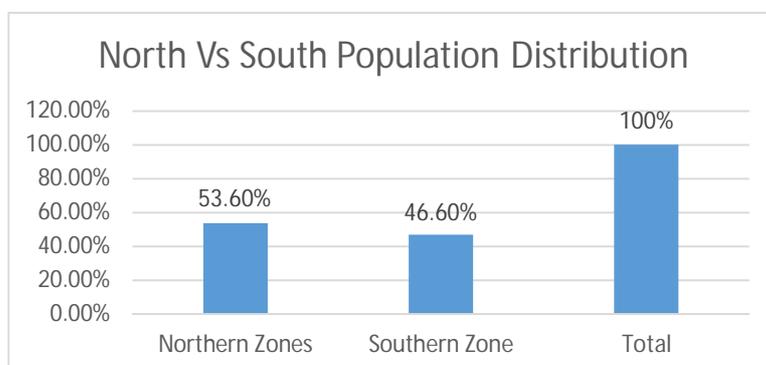
Unemployment: The states or zones in Nigeria’s Northern region which could safely be considered as Boko Haram’s birth place appear to be leading those in Southern region in virtually all unemployment indexes over the years. For instance, the percentage of average unemployment between 1999 to 2010 for the Northern and Southern regions were 14.7% and 13.60% respectively. The apparently slight disparity in the unemployment averages between the two regions is a reflection of the statistically insignificant unemployment coefficient in our OLS regression results. But the first difference results show unemployment to be significant. The following chart depicts unemployment as a percentage of total among the Northern and Southern zones:



Source: Constructed from unemployment data sourced from Nigeria’s National Bureau of Statistics (NBS)

Population: According to the 2013 Nigeria Demographic and Health Survey (NDHS) conducted by the Nigeria National Population Commission, the total fertility rate in Nigeria is 5.5

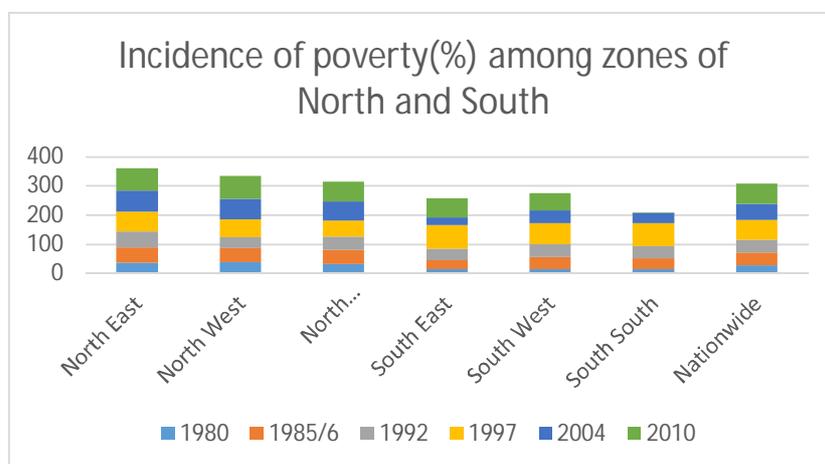
births per women (bpw). The states/zones in the North have an average of 6.1 bpw against the states/zones of the South with an average of 4.53 bpw. This disparity in total fertility rates between Nigeria’s Northern and Southern regions reflects itself in the distribution of population between the two regions as confirmed by the 2006 census which estimated Nigeria’s total population as 140,431,790:



Source: Nigeria’s National Population Commission (NPC), 2006 census data.

Therefore, with population found to be positively correlated with our dependent variable of Terrorism Incidences and Intensity (TII) and the Northern region having more population than the South, TII such as those of *Boko Haram* and *Maitatsine* occur in the North more often than in the South.

Poverty Incidence: Absolute and relative rates of poverty and its severity have over the years been higher in Nigeria’s Northern region than in the South. The average poverty incidence in the North between 1980 and 2010 was 55.94% higher the national average of 51.10%. The average poverty incidence in the Southern region over this period was 43.69%. The following chart sums up poverty incidence(in %) among zones in Northern and Southern regions:



Source: National Bureau of Statistics (NBS), HNLSS (2010)

Education: There is also a glaring disparity between the North and South of Nigeria in terms of access to education. The zones in the North lag behind those in the South in university education pursuit (as is the case also in primary and secondary enrolments) as can be confirmed in the following table:

Table 1: ACCESS TO NIGERIAN UNIVERSITIES BY NORTH-SOUTH ZONES

Year	2003		2004		2005	
Zones	Access	% of Access	Access	% of Access	Access	% of Access
South-East	16541	31.9	47578	44.0	41026	33.4
South-West	11621	22.4	17228	15.9	22901	18.7
South-South	124885	24.1	30739	28.4	35788	29.2
North-East	1536	3.0	2563	2.5	4572	3.7
North-West	2558	5.0	1418	1.3	5112	4.2
North-Central	7048	13.6	8540	7.9	13261	10.8

Source: Agboola & Ofoegbu, 2010.

4.2 Results' Interpretation

The Augmented Dickey Fuller test was performed to check whether the data is stationary or non-stationary. All four variables of TII, Unemployment, population and per capita GDP were found to have unit root in their levels but are stationary in their first difference. Thus the results of the first difference regression can be seen below. Here, unemployment is found to be very statistically significant and possess the expected positive sign. The other three variables are found to be statistically insignificant which is not entirely surprising. It has been argued herein that 'mismanagement of population', rather than population explosion/growth per se, brought about by corruption and general mal-governance is one of Nigeria's major problems. And, little wonder, per capita GDP being a questionable measure of social welfare is found to be insignificant.

Moreover, while variables such as poverty, educational enrolment/attainment and or inequality index should have been added in the regression results, data on such were unfortunately not available with the World Bank and the IMF—two highly reliable data sources. Those procured from the Nigeria's National Bureau of Statistics (NBS) were incomplete and their reliability in serious question/doubt. However, the descriptive statistics aspect dwells on such as far as data availability permits.

Table 2: First Difference Regression Results

D.LTII	Coefficients	Standard Errors	t-Values	Prob-Values
Constant	-4.335935	4.043449	-1.07	0.292
LUnemp D1.	1.576437	0.4298695	3.67	0.001
LPop D1	169.1368	155.7433	1.09	0.286
LpGDP D1.	0.6942728	0.5713557	1.22	0.234
R-Square	0.3571			
Root MSE	0.81249			
F (3, 29)				
N	33			

5. Conclusion and Policy Recommendations

The main objective of this work is investigating whether or not Boko Haram is a product of certain economic factors like poverty, unemployment, population growth etc. which are prevalent and pervasive in especially Nigeria's Northern region--Boko Haram's birth place and theatre of operations.

Regarding the aspects of descriptive statistics, we have seen that the Northern region is leading the Southern region in terms of indexes of poverty, unemployment and population growth. It

is therefore the conclusion of this paper that, there are possible links between Boko Haram and economic factors. Other forces/factors might have played some roles but the economic factors appear to have leading roles as the empirical evidence lead us into believing. Therefore, the Boko Haram problem could be seen as a symptom of economic diseases.

The findings of this paper share quite a number of similarities with those of previous researches. For instance Ismail and Amjad (2014) found terrorism to be highly correlated with socio-economic factors in Pakistan. Also, Nasir et al. (2012) came up with similar findings. In fact, Nasir et al (2012) also found out the apparently paradoxical positive relationship between terrorism and per capita GDP in Pakistan.

Moreover, Gassebner and Luechinger (2011) though did not find strong link between terrorism and per capita GDP, they found out that population is a robust explanatory variable for terrorism. Enders and Hoover (2012) however were able to establish the link between terrorism and per capita GDP. After decomposing terrorist acts into the two types of domestic and trans-national incidences, the duo submitted that the effect of poverty on each type is distinctly unique. While poverty was found to have quite a small—but significant—impact on transnational terrorism, it was found to have ‘a very strong influence’ on domestic terrorism like Boko Haram thereby confirming the finding of this research.

Restoring Lake Chad's land and water resources

A lot has been written about the economic importance of the ancient Lake Chad to the economy of the North-East and the country as a whole. And, efforts by successive governments at making pledges to commit millions of Naira towards resuscitating the lake appear to yield little or no fruits.

The Lake Chad, which according to a UNDP report (2008) used to cover a total area of 25,000 sq. kilometre in 1964 has now incredibly shrunk to only 1,500 sq. kilometre. Little wonder then the UN Food and Agricultural Organisation (FOA) has described the problem as ‘a global catastrophe’. The current Nigerian government therefore in collaboration with other member countries of the Lake Chad Basin Commission should, as a matter of urgency, partner with other relevant global agencies to rejuvenate Lake Chad. It has been pointed out that farmers, fishers and herders whose activities have been adversely affected by the continuous shrinking of the lake are paying the price hugely. Hence, in order to boost employment and curb poverty with their concomitant consequences of engendering violent conflicts, Nigeria's government should consider restoration of potentials of the Lake Chad an important priority.

Massive investment in Agriculture

With Nigeria's vast arable land, it is a sad irony that the country cannot feed itself. It has to import rice and other cereals and food stuff. There are several ways by which Nigeria can revamp its agriculture sector with a view to boosting employment and reducing poverty among its army of jobless and poor citizens. These include but are not limited to: Mechanisation of the sector, provision of processing and storage facilities, construction of agro-allied industries, provision of education through affordable extension services to farmers and resuscitation of and investing enough capital in River Basins Development Authorities. Towards this end, there should be a total ban on importation of food items that can be grown locally. Loans should also be given to farmers at affordable rates and efforts made to check any corrupt tendencies by officials. Commercial animal husbandry should also be encouraged and supported. General economic diversification away from the present reckless reliance on oil should be pursued.

Industrialization Drive

The role of industrialization to economic growth and development cannot be over-emphasized. In fact, it is the engine of growth and development. Nigerian's government should commit capital towards the resuscitation of comatose industries. Towards that end, the power sector should be brought back to work. Electricity supply should be stable and constant. Trillions of Naira invested in the sector in the last couple of years with virtually nothing to show for it should be investigated and those found wanting prosecuted. Laws to protect local industries should be enacted; those already in place enforced to the letter. Local textile industries should be resuscitated and unbridled dumping by Chinese merchants should be outlawed.

Regulation of the Activities of Scholars/Preachers

Nigeria is probably the only country in the world where the activities of Islamic and Christian preachers are left completely unregulated by authorities. Practically every Tom, Dick and Harry who is able to afford it can go to the market place and purchase sound system equipment and start up a career in clergy as a Sheikh or a Pastor—'a man of God'. Such self-appointed spiritual leaders capitalize on people's emotional disequilibria brought about by excruciatingly painful pangs of poverty, misery and joblessness to sow the seed of hate and hatred, bigotry and intolerance with resultant ethno-religious conflicts raging on and off. Therefore, it will greatly help if governments at Federal or State levels could come up with boards or bodies saddled with the tasks of regulating the activities of clergymen.

Certification and Incorporation of Traditional scholars into the Civil Service

States in the North should, as a matter of urgency, begin a process of certifying and incorporating into their civil service those with certain levels of Islamic education. Left unengaged in any gainfully employed job, those people constitute more threat than ordinary unemployed folks. The reason is simple. They can misuse or misapply their knowledge to cause some serious security threat such as the one being witnessed.

Future research on the BH phenomenon should focus on the impact of the insurgency on Nigeria's (or the North's) economy. Such efforts would encourage authorities and other stakeholders to better appreciate the impacts violent conflicts have on economy thereby gingering government into taking measures to forestall future recurrence of similar violence.

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