



## **AN EVALUATION OF NIGERIA-CHAD TRADE AND SECURITY RELATIONS, 1988-2009**

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### **ABSTRACT**

The contemporary world is such that nations cannot do without one another. This is because some nations are connected by historical, cultural, social, economic, scientific and other forms of strategic interests. Nigeria and Chad over the years have a history of inter-state relations that pre-dates the coming of colonial masters. However, at the end of colonial rule, both states engaged in multi-dimensional forms of bilateral relations. This study, which adopts mixed method of research focuses on Nigeria-Chad economic relations. It reveals the forms of trade agreement between both states. The study highlights formal and informal nature of the trade amongst the two states and found that their history of diplomatic relations has promoted the national interest as well as the management of strategic over-lapping trade demands in both countries. This study used regression analysis and applied unit root, co-integration, chow test, stability test as well as Phillips-Perron (PP) and Augmented Dickey-Fuller (ADF) to find-out that there is strong positive significant relationship between Nigeria-Chad trade and economic diplomacy within the period of 1970-2018 as well as reasonable stability in Nigerian trade and security relations with Chad in the presence of Boko Haram menace. The study recommends increased bilateral trade, border security as well as intelligence sharing on the dynamics of security threats to the relations of both states.

**Keywords:** Diplomacy; bilateral relations; trade; resource endowment; Nigeria & Chad



## 1. INTRODUCTION

Nigeria and Chad have a historical foundation that strongly connects both sovereign countries. This historical relation emanates from the fact that there exist ethno-linguistic groups that cuts across both countries. They include the Kanembu, Shuwa Arab, Kanuri, Fulani, Manga, Koyam, Beriberi, Tazarawa, Adarawa and Matakam people.

These ethno-linguistic groups historically related with each other in the area of marriage, traditional governance (under the Kanem Bornu Empire) as well as engaged in inter-group trade across the Lake Chad, while also engaging in unrestricted forms of migration within these historically independent pre-colonial nations.

By the time the colonial masters (Britain for Nigeria and France for Chad) landed the shores of West Africa in their popular race for the scramble for Africa; they forcefully divided the people that made- up the area across their imperial colonial government. Britain and France used gunboat diplomacy as well as treaties to outsmart the traditional kings of these African communities. Soon, the local people became separated by international border treaties that were signed by Britain and France without the consent or knowledge of the indigenous people.

Unfortunately, while Britain and France have carved the sovereign borders of what we know today as Nigeria and Chad, the local ethnic people continued to perceive their kits and kiln in both side of the sovereign political divide as one. They freely perceived, visited and met their brothers in both sides of the divide as their own without much regards for the sovereign borders.

Furthermore, because the government of the Federal Republic of Nigeria and the Republic of Chad as members of World Trade Organization; their desire to promote trade relations amongst the two countries was essential in their bilateral relations, which led to the signing of the first trade agreement in 1971.

During the 2<sup>nd</sup> Nigeria-Chad Joint Commission in 1996, the Nigerian delegation drew attention of the meeting to the 1971 Trade Agreement between the two countries which had become obsolete (Nigerian Ministry of Foreign Affairs, 1996). It therefore called for a re-negotiation of the agreement. The Chadian side too agreed to the need for the re-negotiation of the agreement.

Consequently, the Nigerian diplomatic side gave their Chadian counterparts the draft of a new agreement which laid the foundation for the revised trade agreement. The trade



agreement received diplomatic attention in the fourth Nigeria-Chad Joint Commission meeting in 2008 and a new agreement was 'born' and was signed on 9<sup>th</sup> December, 2009.

Article 1 of it stated that the Contracting Parties shall make every effort to increase the volume of trade between the two countries in accordance with their respective domestic laws and subject to obligations under international treaties, conventions or agreements, to which they are part of and shall endeavour to achieve a balance of trade between themselves. This study evaluates this agreement in relations to the trade and security relations that both countries have experienced in the period under study.

The objectives of the study include to:

- Evaluate the significant relationship of Nigeria-Chad trade and diplomacy within the period of 1970-2018.
- Examine the stability of Nigeria-Chad economic relations and diplomacy with the presence of Boko Haram security threat.
- Ascertain the presence of structural changes and breaks in Nigeria-Chad trade relations and diplomacy within the period of 1970-2018.

### 1.1. Hypotheses

- H<sub>0</sub>: Nigeria-Chad trade and diplomacy have no significant relationship within the period of 1970-2018.
- H<sub>0</sub>: There is no significant Causality Trade relationship between both countries within this study period of 1970-2018.
- H<sub>0</sub>: Nigeria-Chad trade economic relations and diplomacy is not significantly stable with the presence of Boko Haram security threat.
- H<sub>0</sub>: There is no presence of structural changes and breaks in Nigeria-Chad trade relations and diplomacy within the period of 1970-2018.

### 1.2. Theoretical Framework

This study is centred on the theory of over-lapping demand. Linder (1961) came up with the theory and argued that over lapping demand drives trade amongst nations that have overlapping demand that will promote per-capital income. Linder (1961) maintains that countries with similar per capital income often consume similar quality products which naturally encourage trade amongst them.



To produce and trade, representative demand in the respective countries needs to have an overlapping zone in terms of the range of goods that are produced and consumed in common (Sen, 2010). The theory explains trade among South- South states (Linder, 1961; McCandles & Wallace, 1991; Sen, 2005).

Relating the theory to this study; Nigeria and Chad has many over-lapping trade demands. They include oil, millet, maize, livestock etc. These products are in high demands within both countries. The Boko Haram security threat has become an overlapping international security threat that is seriously undermining the Nigerian, Chadian, Cameroonian and Nigerian States.

## **2. LITERATURE REVIEW ON NIGERIA-CHAD JOINT AGREEMENT AND ECONOMIC DIPLOMACY**

As earlier stated, Nigeria and Chad signed a Trade Agreement in 1971 but it was not successfully implemented due to the monetary and fiscal policy challenges in both countries. The collapse of the Nigerian economy in the 1980s weakened Nigerian Chad relations. Hence, Nigerian began to look inward on how to strengthen her economy in order to be able to shoulder the responsibilities and challenges of “big brother” role in her bilateral and multilateral relations.

Writing the forward of the book, *Nigeria’s Economic Diplomacy: The Ike Nwachukwu Years, 1988-1992*, Ibrahim Badamosi Babangida, a former Nigerian President stated that “the successful accomplishment of a policy that is geared towards the actualization of Nigeria’s resources available to the country and which the country can then commit to its foreign policy pursuits in the continent is vital; besides the elevation of this important issues to the top of our foreign policy agenda, given the imperatives of the emerging new world order has become compelling and inevitable” (Chibundu, 2004; Ojo, 1976).

Unfortunately, the implementation of the options for Nigerian-Chad trade agreement in the eighties was difficult. Chad was trying to institutionalised post conflict peacebuilding after the 1965-1979 Civil War. The peace initiative could not survive and the country degenerated into the 1979-1986n Civil War as well as the Chad-Libyan War and the 2005-2010 Chadian Civil War. There was also the rise of Machiavellian politics and diplomacy amongst both states at that time (Ani & Ojatorotu, 2018).

Akindele and Ate maintained that there was high degree of criticism meted-out on the procedures of implementing the Nigerian-African policy (Akindele & Ate, 1986). In a



newsprint publication titled, *Sobering Reality: The Intricacies of Evolving Foreign Policy*, it was documented that Nigerian foreign policy had been the subject of a great deal of criticism in recent times.

Hence, castigated for its lack of orientation and effectiveness. Thus, the idea that Nigeria had no defined economic interest in her foreign policy with Chad continued till the beginning of the twenty first century when the government of the Federal Republic of Nigeria and the government of the Republic of Chad introduced the Nigerian-Chad Joint Commission.

A new turn in the economic diplomacy of both countries came with the introduction of Nigeria-Chad Joint Commission. At the inaugural meeting held in Ndjamená in 1987, a new pattern of economic diplomacy was introduced in the Nigeria-Chad bilateral relations. The Chadians requested for an “exclusive zone” with a bounded warehouse in the Nigerian ports.

The brief of the first Nigeria-Chad Joint Commission recorded Chad’s request for assistance from Nigeria in her house reconstruction programme. One would recall that many public and private materials as well as immaterial structures in Ndjamená were destroyed during the Chadian Civil War. Thus, during the visit of President Babangida to Ndjamená in 1988, Nigeria donated bitumen, drugs, petroleum products, cereals, vegetable oil and vehicles to Chad (Nigerian Ministry of Foreign Affairs, 1987).

Equally, the first Nigeria-Chad Joint Commission Protocol documented that Nigeria offered free resident permits to ECOWAS member states and other neighbouring countries like Chad, who were not to pay in order to obtain necessary immigration document from the Nigerian Immigration Services before coming into Nigeria.

When “Chad imposed a fee of 10,000 CFA for entry visas and 11,000 CFA for residential permit valid for three years, to Nigerians. Nigeria requested that Chad should waive the fees on the basis of reciprocity (Nigerian Ministry of Foreign Affairs, 1987)”. The Nigerian request was later granted.

One of the researcher in an interview with Chouadeung Victor, the Consul General of Chad, discovered that as at 2007, Chadians were still arrested by the Nigerian Immigration Officers, while trying to enter Nigeria, till late President Umaru Musa Yar’Adua ordered the effective implementation of the agreement by the Nigerian side in 2008 (Chouadeung, 2009).

In 2009, the Chadian side reported that it had received correspondence from the Nigerian side on the reciprocal waiver of Residential Permit payment for Chadian nationals living in Nigeria, and expressed appreciation to the Nigerian authorities for the gesture. The



Nigerian Government revealed that the decision had been communicated to all Immigration State Commands in the country for implementation (Nigerian Ministry of Foreign Affairs, 2009).

The Second Nigeria-Chad Joint Commission meeting took place from 22<sup>nd</sup> to 24<sup>th</sup> October 1996 in Abuja. During the session, the two countries laid down a mechanism that would strengthen financial exchanges among both countries. The mechanism would regulate financial exchanges between Nigeria and Chad. This was followed by the request from the Chadian Government for concessions on transactions in the Lagos Ports.

This they believe would make Nigerian ports more attractive to Chadian businessmen than the Duala Ports in Cameroun. It would be recalled that Chadian importers have over the years, raised concerns on the restriction of their use of Calabar Port, for the transit of its goods and merchandise. This was reported to the Nigerian Government officially in 2009 but the Nigerian side denied historic knowledge of it, hence, requested that the Chadian Party should present its requests, specifying the areas of assistance and support for its consideration (Nigerian Ministry of Foreign Affairs, 2009). In the course of the Second Joint Commission meeting, the Chadian side reiterated their reliance on Nigeria for 90% of its petroleum requirements. They listed their quarterly need of petroleum products as follows:

- Super petrol - 10,000 cubic meters
- Gas oil (diesel)- 30,000 cubic meters
- Aviation fuel - 10,000 cubic meters
- Kerosene - 2,000 cubic meters (Nigerian Ministry of Foreign Affairs, 1996)

Nigeria promised to channel the Chadian request to the appropriate “quarters” where it would be taken care of. During the 2<sup>nd</sup> Nigeria-Chad Joint Commission also, the Nigerian delegation proposed the establishment of direct satellite link across the two countries. “In this connection, there was exchange of information between the two delegations on the configuration of their earth stations as well as the different positions of the satellite stations they use” (Nigerian Ministry of Foreign Affairs, 1996).

Furthermore, during the Third Nigerian-Chad Joint Commission meeting held from February 28<sup>th</sup> to March 2<sup>nd</sup> 2000 in Ndjamen, the two countries expressed their wish to collaborate in industrial cooperation. Before this time, Nigeria has signed a number of agreements with Chad that had some economic implication. In the fourth Nigerian-Chad Joint



Commission meeting held in Abuja in 2008; “the Tchadians agreed to enter into co-operation in the area of Technical Aid Corps (TAC) Programme (with Nigeria) and take advantage of its services” (Nigerian Ministry of Foreign Affairs, 2008).

“The Tchadian party expressed satisfaction in the establishment of its Consulate-General in Maiduguri. Relating to this, Nigeria expressed the desire to establish its own Consulate-General in the Tchadian territory as a measure of reciprocity” (Nigerian Ministry of Foreign Affairs, 2008).

Ogwu and Olukoshi (1991) have argued extensively on the importance of economic diplomacy in Nigerian foreign relations. However, the economic diplomacy between Nigeria and Chad is on a process of continuous growth. In order to re-energize their economic diplomacy, a new *Trade Agreement between the Government of the Federal Republic of Nigeria and the Government of the Republic of Chad* was signed on 9<sup>th</sup> December 2009 in Maiduguri to replace the initial one signed in 1971.

### **3. NATURE OF INFORMAL TRADE IN NIGERIA-CHAD ECONOMIC DIPLOMACY**

Economic relations in international relations are not always based on formal trade and documented comparative cost advantage. It is often influenced by the activities of informal merchants. Informal trade is an unofficial cross-border trade amongst sovereign territories. The informal cross-border trade between Nigeria and Chad has been going on since independence era. The commercial activities of informal merchants have become a continuous feature in the Lake Chad region.

Egg and Igue (1993) have stated that the major reason why the informal operations of the cross-border trade takes place is because, the Nigerian government does not take into consideration the French zone economic policies while designing her own policies. To the lay man, informal trade simply connotes smuggling or illegal parallel trans-border marketing. The informal trade in the Nigeria-Chad economic relations has remained endemic because of many factors.

They include the unequal endowment in resources between Nigeria and Chad, the historic trade network between the homogenous societies in the two countries, the changing climatic factors, political policy (instability), changes in world price of goods, the easy access to Naira and CFA Franc in the two countries as well as the cash and carry nature of informal



trade (Nyong, 1997). There are a number of agricultural and food items that are sold in the informal market of Nigeria and Chad.

Table 1: Food Items in the Cross-Border Trade between Nigeria and her Neighbours

Serial Number	Agricultural/ Food	Manufactured Food Item
1	Millet	Tinned fish
2	Maize	Tinned beef
3	Sorghum	Maize grit
4	Yams	Wheat flour
5	Onions	Cooking oil
6	Fish	Macaroni
7	Livestock	Tinned Tomatoes
8	Rice	Garri
9	Beans	
10	Coconut	
11	Kolanut	
12	Fresh Tomatoes	

Source: Balami (2006), Balami (1995), Balami (2002) and Balami (2003)

During the 2<sup>nd</sup> Nigerian-Chad Joint Commission meeting, both delegations recognized the importance of trade between Nigeria and Chad but regretted that trade between the two countries is largely unrecorded. The informal trade between Nigeria and Chad is not only carried-out by Nigerians but also Chadians. Balami wrote that “the percentage can be put at 80% as Nigerians and 20% of the actors are non-Nigerians” (Balami, 2000; 2001).

Table 1 shows the agricultural/ food items produced in some countries that are found around Nigerian sovereign borders. Balami (2002) pointed out that millet, maize and sorghum are amongst the goods traded in Nigeria-Chad informal market. He showed that the higher prices of goods in the informal market attracts the flow of the goods at a higher price that sometimes in 1997, the massive outflow of the food items through the border markets “caused scarcity in border states of Nigeria like Borno”.

“The advantage of cross-border trade in cereal is that in countries like Nigeria; where population figures are contested and actual output is not known, the cereal trade helps in filling the hunger gap that exists in Niger, and Tchad border regions with Nigeria as well as border markets of Nigeria” (Balami, 2006, p.15). There was more than 70% increase in the level of activities in the livestock markets between 1997 and 2003 in Nigeria, Chad and Niger (Balami, 2003).

Trade relations between Nigeria and Chad are largely “unrecorded” (Obimah, 2009). The situation was blamed on smugglers (Eigbire, 2008). This was equally reiterated by Ambassador Bagudu M. Hirse, former Minister of State II, for Foreign Affairs, Nigeria. “He emphasized that both countries shared common historical and cultural ties, while informal trade



between our citizens had continued to increase in recent times. He observed that commercial activities between the countries had remained unorganized, and reiterated the need to formalize trade and economic activities to enhance economic growth and development in both countries” (Nigerian Ministry of Foreign Affairs, 2009).

In order to combat the problem, the Nigerian government proposed the setting up of border markets between Nigeria and Chad, similar to what already exist between Nigeria and Niger Republic. The Chadian side stated that they have initiated move in that direction with the Borno State Government in 1994. The two countries went further and agreed to participate in each other’s trade fairs, while the exchange of trade missions would be promoted.

The international trade between Nigeria and Chad has been bedevilled by the nefarious activities of smugglers for years. The main aims of the smugglers are to avoid taxes, custom duty and evade the fiscal policies of the different governments in Nigeria and Chad. Nigerian-Chad Joint Commission has equally shown that smugglers are major threat to the growth of formal trade between the two countries (Nigerian Ministry of Foreign Affairs, 1996).

Attah (2008) stated that smuggling between Nigeria and Chad is promoted by the trader’s quest for profitability, proximity of boarder line, and the quest for ostentatious goods. Chadians often look down on goods from their country, while preferring foreign made goods from the porous Nigerian borders. Despite all measures taken to stamp out the criminal activities of smugglers, the porous borders between Nigeria and Chad tend to undermine genuine efforts by government officials to achieve the goal. Chadian cattle, hides, skin and cotton are smuggled into Nigeria.

Yakubu Muktar revealed that Ari Musami also known as Ari Ci Shingowa, an illustrious Borno trader brought dyed cloths of “Hausa manufacture, which were sold in both Borno and the Eastern cattle markets of Chad and Cameroun” (Muktar, 2000). He went further to show that Tijjani Gado Bama engaged in cattle trade in Nigerian, Chad and Cameroonian markets of Bamaa, Ladin Bulongu, Attia, Abesher and Marua (Muktar, 2000).

Works (1976) while explaining the trade dynamics of the informal Hausa merchants in Chad stated that fundamentally, a non-contractual relationship involving the exchange of allegiance for some form of aid, clientele could assume various shapes and was never immutable. Some of the prosperous merchants were actually clients of men in Nigeria, yet each of them had his own followers ranging from *mallamai* and peddlers to servants and beggars.



Some clients were business associates who bought supplies from their patron either for market trading or for peddling; others obtained goods on commission, receiving one quarter to one third profits. Still others were messengers between Hausa settlements who provided their landlords with important market information. Rivalry and risk came into play, for prestige weighed as heavily as wealth among the informal merchants in Nigeria-Chad border. Clients often switched patrons, or a peddler would occasionally abscond with the goods and profits of his patron (Works, 1976).

Table 2: Evolution of Cost of Cattle Marketing from Production Centre (Dourbali in Tchad) to Consumption Centre (Lagos in Nigeria)

Types of cost	Monthly cost per cattle in (FCFA)				
	June	July	August	September	October
Official Cost	3.647	3.659	3.718	3.587	3.617
Unofficial cost	24.841	18.331	22.015	20.991	29.172
Total	28.488	21.990	25.733	24.578	32.790
Percentage of unofficial over total cost	87	83	85	85	87

Source: Balami (2006) and Balami (2003)

Table 2 shows the evolution of cost of transporting cattle from Tchad to Lagos in Nigeria for the months of June to October, 2002. The costs were divided into official and unofficial. The official costs include cost of transportation and tax paid to government agencies, while the unofficial costs include costs of bribes, commission and illegal toll/fees paid by the cattle traders to government officials. The unofficial cost is more than 80 percent of the total cost and it varies from time to time depending on the level of control on the route. This has implication on the ratio of formal and informal costs and their profit margin, which leads to the introduction of centralized corruption and acquittal system of fraud by the merchants (Balami, 2006).

These cattle traders and their *dillalai* (middle men) form associations to protect and promote their common interests. Balami maintained that the economic force of price in the informal cattle trade pushes actors in the trade to engage in “sourcing of cattle up to the Salamat region in Sudan and the southern collect markets of Tchad as highlighted at Mubi and Maiduguri during the in-depth interview’s follow-up in October, 2002” (Balami, 2006). Kadiri (2009) revealed that many livestock farmers in Borno and Yobe states goes to Chad to buy their young ones at a very cheap price, then comes home to rear them in Nigeria before going to sell them. The cattle market in Chad is regularly patronised by merchants from Borno and Kano state, Nigeria (Muktar, 2000).



The informal trans-frontier traders between Nigeria and Chad are dominated by trade actors from Hausaland, Fulani, Shuwa, and Kanuri. However, the emerging trends have shown the increased percentage of Igbo, Kanem and Sara people in the informal trade between Nigeria and Chad. Most of the merchants who engage in this informal business often escape the watchful eyes of security officials of the two countries, using Cameroon as a by-pass.

Informal trade promotes capital flight to and fro the two countries. Presumably, it could be argued that the degree of disequilibrium in the trade create more economic loss for Nigeria and Chad. The extent and importance of the transit trade through Borno can probably be gauged by reference to exchange of items such as livestock, natron, indigenous salt, kola nuts and indigenous cloths. Large quantities of these same articles originated from Chad, Niger and Cameroun. Again, kola nuts and indigenous cloths, which were among the most important indigenous items coming to Borno from the West, formed a substantial part of the commodities conveyed across the frontiers into Niger, Chad and Cameroon (Muktar, 2000).

There are many articles of trade involved in the informal trade between Nigeria and Chad. Informal merchants export petroleum products, motor spare parts, shoes, clothing etc from Nigeria, while they import cotton materials, hides, skin, gum arabic, live-stock etc from Chad. These goods easily move across the borders of the two countries because of the porous nature of Nigeria-Cameroon-Chad trans-border route.

Kamanda and Oyep have opined that “about 10% of Nigeria’s neighbour’s foreign trade is with Nigeria (Kamanda & Oyep, 1997). In addition, present research indicators show that Nigeria is the second largest external trade partner to Chad, after France. But most percentage of trade between Nigeria and Chad are informal and unofficial. Balami has attributed the big deficit in Chadian balance of payment with Nigeria to petroleum products (Balami, 1995).

The structure of the actors in the informal trade can be divided into two. They include the petty informal traders and the mega-informal traders. The petty traders often stay at the boarder entry-points to intercept goods transported into the country for them. Such goods are small in quantity and have little fiscal and monetary value.

On the other hand, the mega-informal traders are big merchants, who engage in the sale of trailer-loads of petroleum products, spare parts (from Nigeria to Chad), cotton and livestock (from Chad to Nigeria). Using business ethics analysis, it can be argued that the mega-merchants have continued to succeed in their illegal trans-border trade because of their unethical connection with the law enforcement agents and other government agencies.



While the petty traders do not follow well established routes, the mega traders do not only follow such routes, but also monitor the movements of their goods through standardized communication channels.

Trade in these two articles (livestock and kola nuts), which had existed for many years before the advent of colonial rule, was given additional impetus with the provision of new transport facilities and an increased rise in earnings resulting from the production and sale of overseas exports (Muktar, 2000). Works (1976) revealed “Nachtigal report that kola was only imported for royalty during his stay in Abeche, but the demand expanded quite rapidly, becoming a fashion first among leading members of various courts and filtering down to the local populace in both northern and southern Chad”.

This study would be incomplete if one neglects the role of the parallel (illegal) foreign exchange market operators. At a time, “over 80% of the foreign currencies traded in parallel foreign exchange market in Borno and Kano is CFA France” (Balami, 1995). The operators in this market had accounts that cut across, Nigeria, Cameroon and Chad, in order to facilitate easy flow of cash for their informal trade.

Balami (2006) went further to argue that the increase in the percentage of Nigerians that are opening parallel account in Chad forced the Chadian Government to place ban on foreigners operating the account (Balami, 1995). However, the action did not quench the tide as the removal of visa requirement on Nigerians, easily allowed Nigerians whose kits and kilns are in Chad to continue the business for them.

Balami (2006) has shown that the Nigerian products exported to her neighbours may be competitive not because of the efficiency of our markets but because Nigeria is favoured by nature. Nature has given Nigeria comparative advantage over our neighbours in the production of some crops like millet, maize, beans, sorghum and garri. In terms of imports, the neighbouring cattle are competitive on the Nigerian market though Nigerians are rearing animals.

Nigerian manufactured products are not competitive than those made in Chad because the per unit cost of production is very higher in Chad. Again, there is the increase in the exchange rate which does not favour the naira, level of inflation and level of adequate supporting facilities such as energy, transportation, shortage of fuel and inconvenient environments like bad government policy and insecurity.



It should always be remembered that the activities of Boko Haram terrorists and other criminals remains major challenge for all the countries in the Lake Chad region (Maza, Koldas & Sait 2020; Foyou, Ngwafu, Santoyo & Ortiz, 2018 Ani & Ojakorotu, 2017). Over the years, the insecurity in the region has affected their security politics, bilateral and multilateral relations (Ani & Uwizeyimana, 2020; Ani, Ojakorotu & Uwizeyimana, 2019).

#### 4. ANALYSIS AND FINDINGS

##### Modal 1

$$PCNGDP_t = F(TNCTV_t, FEXRT_t, BOKHAR_t) \quad (1)$$

##### Explicitly

$$\Delta \log PCNGDP_t = \beta_0 + \beta_1 \Delta \log TNCTV_t + \beta_2 \log FEXRT_t + \beta_3 \log D_{1i} + \mu_t \quad (2)$$

$$E(\Delta \log (PCNGDP_t \setminus D_{1i} = 0, D_{1j} = 1)) = \beta_0 + \beta_3$$

Where (TNCTV) is Total Nigerian and Chad trade value,

(PCNGDP) is percentage contribution of Chad-Nigerian trade relation to Gross Domestic Product, (FEXRT) is Foreign Exchange rate and

(BOKHAR) is presence of Boko Haram as a Dummy Variable ( $D_1$  and  $D_2$ )

$D_1$  takes a value of 1 with the present of the influence of Boko Haram in Nigeria and Chad, and 0 otherwise. (i.e.  $D_{1j} = 0$  implies the value of  $D_{1i}$  in the absent of the influence of Boko Haram in Nigeria and Chad and  $\log$  is natural logarithm,  $M_2$  is the nominal  $M_2$  money stock,  $P$  is the domestic price level.  $D_{1i}$  is dummy variable represented by  $BOKHAR_t$  the influence of Boko Haram in Nigeria and Chad.

$\mu$  is the white noise disturbance term, while  $t$  in the model represents at current period time,  $\beta_0, \beta_1, \dots, \beta_5$  are the parameters of the coefficient.

**The 'a priori' expectation** about the signs of parameters to be estimated in the model above shows that as total Nigerian and Chad trade value improves, real income from the countries or percentage contribution of Chad-Nigerian trade relation to Gross Domestic Product rises ( $0 < \beta_1 > 1$ ) to positive relationship. An effective exchange rate will decrease while there will be increases in the demand for foreign currency ( $> \beta_4 <$ ). Conversely, as Presence of Boko Haram rises, the distortion in the economy increases thereby decrease the total Nigerian and Chad trade value ( $> \beta_3 <$ ) inverse relationship.

##### 4.1. Chow Test Estimation procedures



1970 – 1995, Equation 1

$$\Delta \log \text{PCNGDP}_t = \beta_0 + \beta_1 \Delta \log \text{TNCTV}_t + \beta_2 \log \text{FEXRT}_t + \beta_3 \log D_{1i} + \mu_{1t}$$

$$n_1 = 25$$

1995 – 2018, Equation 2

$$\Delta \log \text{PCNGDP}_t = \beta_0 + \beta_1 \Delta \log \text{TNCTV}_t + \beta_2 \log \text{FEXRT}_t + \beta_3 \log D_{1i} + \mu_{2t}$$

$$n_2 = 23$$

1970 – 2018, Equation 3

$$\Delta \log \text{PCNGDP}_t = \beta_0 + \beta_1 \Delta \log \text{TNCTV}_t + \beta_2 \log \text{FEXRT}_t + \beta_3 \log D_{1i} + \mu_{3t}$$

$$N = (n_1 + n_2) = 48$$

Equation (1) and (2) in model (2), assume that the regressions in the two-time period are different, that is the intercept and the slope coefficients are different, as indicated by the subscripted parameters. In the above model, the  $\mu$ 's represents the error terms and the  $N$ 's represent the number of observations.

#### 4.2. Unit Root Test:

To stem the problem of spurious regression, it is important that the time series properties of the data set employed in the estimation is ascertained. It became reasonable to test for the presence of unit root in the series using the most generally accepted Augmented Dicke-Fuller models (ADF) and Philip-Peron (PP) unit root tests. Augmented Dickey Fuller (ADF) test statistics is compared with the critical values at 5% level of significance. A situation whereby the ADF test statistic is greater than the critical values with consideration of the absolute values, the time series is stationary. Augmented Dickey-Fuller test relies on rejecting a null hypothesis of unit root (the series are non-stationary) in favor of the alternative hypotheses of stationarity.

### 5. RESULTS

Table 3: Unit Root Test (Tests include intercept and trend) Result

Group unit root test: Summary  
 Series: PCNGDP, TNCTV, FEXRT, BOKHAR  
 Date: 04/09/20 Time: 04:48  
 Sample: 1970 2018  
 Exogenous variables: Individual effects  
 Automatic selection of maximum lags  
 Automatic lag length selection based on SIC: 4 to 9  
 Newey-West automatic bandwidth selection and Bartlett kernel

Cross-



Method	Statistic	Prob.**	Sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	35.4716	1.0000	3	114
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	11.1844	1.0000	3	114
ADF - Fisher Chi-square	1.3E-06	1.0000	3	114
PP - Fisher Chi-square	0.00000	1.0000	3	140

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Group unit root test: Summary

Series: PCNGDP, TNCTV, FEXRT, BOKHAR

Date: 04/09/20 Time: 04:50

Sample: 1970 2018

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 7 to 10

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-Sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	41.4381	1.0000	3	102
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	7.18889	1.0000	3	102
ADF - Fisher Chi-square	0.00058	1.0000	3	102
PP - Fisher Chi-square	33.5847	0.0000	3	136

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Group unit root test: Summary

Series: PCNGDP, TNCTV, FEXRT, BOKHAR

Date: 04/09/20 Time: 05:53

Sample: 1970 2018

Exogenous variables: Individual effects

Automatic selection of maximum lags

Automatic lag length selection based on SIC: 4 to 7

Newey-West automatic bandwidth selection and Bartlett kernel

Method	Statistic	Prob.**	Cross-Sections	Obs
Null: Unit root (assumes common unit root process)				
Levin, Lin & Chu t*	51.6105	1.0000	3	113
Null: Unit root (assumes individual unit root process)				
Im, Pesaran and Shin W-stat	-1.09112	0.1376	3	113
ADF - Fisher Chi-square	16.6030	0.0109	3	113
PP - Fisher Chi-square	80.7366	0.0000	3	132

\*\* Probabilities for Fisher tests are computed using an asymptotic Chi-square distribution. All other tests assume asymptotic normality.

Source: Computed by the authors using E-views Statistical package version 9.0



**Table 4 : Co-integration Results**

Series: PCNGDP TNCTV FEXRT BOKHAR  
 Lags interval (in first differences): 1 to 1

Unrestricted Cointegration Rank Test (Trace)

Hypothesized No. of CE(s)	Eigenvalue	Trace Statistic	0.05 Critical Value	Prob.**
None *	0.864374	152.1235	47.85613	0.0000
At most 1 *	0.655216	68.21366	29.79707	0.0000
At most 2 *	0.399048	23.49053	15.49471	0.0025
At most 3	0.048826	2.102457	3.841466	0.1471

Trace test indicates 3 cointegrating eqn(s) at the 0.05 level

\* denotes rejection of the hypothesis at the 0.05 level

\*\*MacKinnon-Haug-Michelis (1999) p-values

Source: Computed by the authors using E-views Statistical package version 9.

**Table 5: OLS Results**

Dependent Variable: LOG(PCNGDP)

Method: Least Squares

Date: 04/09/20 Time: 04:56

Sample: 1970 2018

Included observations: 46

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	1.334765	0.582928	2.289760	0.0271
LOG(TNCTV)	0.791085	0.116222	6.806677	0.0000
LOG(FEXRT)	0.191283	0.079884	2.394525	0.0212
BOKHAR	-0.293003	0.351134	-0.834447	0.4088
R-squared	0.911300	Mean dependent var		6.337660
Adjusted R-squared	0.904965	S.D. dependent var		1.782729
S.E. of regression	0.549577	Akaike info criterion		1.723604
Sum squared resid	12.68545	Schwarz criterion		1.882616
Log likelihood	-35.64289	Hannan-Quinn criter.		1.783171
F-statistic	143.8359	Durbin-Watson stat		1.100500
Prob(F-statistic)	0.000000			

Source: Computed by the authors using E-views Statistical package version 9.0

**Table 6: Chow Test Results showing three sub periods**

Periods	C	TNCTV	FEXR	BOKHAR	RSS(ur <sub>1</sub> ,ur <sub>2</sub> , r)	R <sup>2</sup>
<b>1970-1995</b> n <sub>1</sub> = 25	422.4669 (111.1646)	0.157186 (0.180750)	18.11652 (2.223383)	-884.9613 (521.6210)	17581097	0.975530
<b>1995-2018</b> n <sub>2</sub> = 23	0.371185 (0.463139)	0.999415 (0.085070)	0.000138 (0.000829)	-0.039978 (0.475122)	14.40771	14.40771
<b>1970-2018</b> N <sub>1</sub> 48	1.334765 (0.582928)	0.791085 (0.116222)	0.191283 (0.079884)	-0.293003 (0.351134)	12.68545	12.68545

Source: Computed by the Authors using E-views Statistical package version 9.0



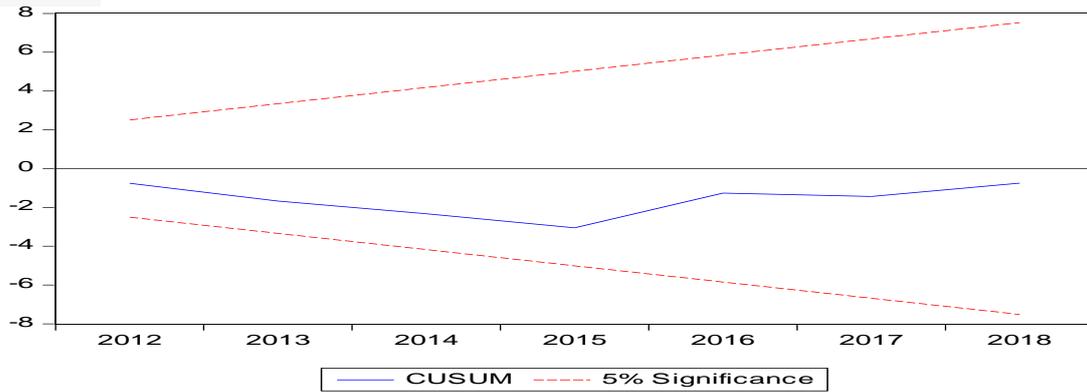


Figure 1: Stability Test Results

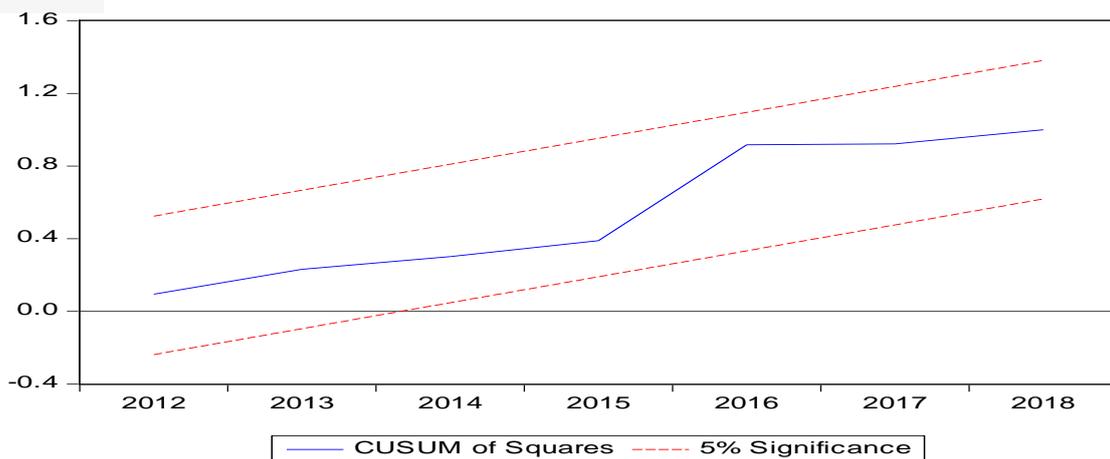


Figure 2: Stability Test Results

## 6. DISCUSSION

### 6.1. Unit Root Tests Analysis

This study applied Phillips-Perron (PP) and Augmented Dickey-Fuller (ADF) group unit root test to eliminate the presence of spurious result and autocorrelation in the models. The result is presented in tables above.

In the table 1 above, the PP and ADF group unit root tests statistic results show that first difference of the ADF and PP group statistic is not free from the unit root problem. In other words, the variables are not stationary and were not significant in absolute terms at 5% levels of significance since their probability values of ADF, PP, and Shin W-stat [7.18889, 11.1844, and 1.0000] are insignificance. However, while at the second difference, the variables PP, ADF and Shin W-stat group test statistic became stationary since their probability values [-1.09112, 16.6030, 80.7366 and 0.1376 ] in absolute terms, at 5% levels of significance are statistically significant.

Generally, the results indicate that time series are integrated of order one, I(1). The integration of group probability values of the variables at the same order with the respective application (ADF, and PP); this implies a linear combination of series which could be said to be co-integrated. The level of their integrations indicates the number of time series that it has to be differenced before their stationarity is induced.

Considering the ADF and PP test statistics at 5% critical values, it is observed that these tests (i.e. the t- statistics) are strong. Based on the above results, we can now further the other estimations model since the problem of spurious results has been adjusted with the aid of ADF and PP unit root test. Having found that all the variables are integrated of order two, co-integration tests are conducted to see if there is a long run or equilibrium relationship between the variables.

## 6.2. Co-integration Test

The estimated equations report that there is a long run relationship between the D(BOP,2) and the explanatory variables; D(BOT,2) D(DOC,2) D(EXR,2) D(INFR,2) and D(RGDP,2) is the hypothesis to be tested in this study. Firstly, the summary of the Johansen Co-integration Test is shown in the Table 4.3 below. The model with lag 1 was chosen with the linear deterministic test assumption.

Under the Johansen co-integration test, there are four co-integrating equations. In Johansen's method, the eigenvalue, trace or Max-Eigen statistic and critical value are used to determine whether co-integrated variables exist. The results from the trace statistics show that the absolute values of (i.e. PCNGDP [152.1235 > 47.85613], TNCTV [68.21366 > 29.79707], FEXR [23.49053 > 15.49471], and BOKHAR [2.102457 < 3.841466] variables were greater than 5% critical value respectively.

In addition, their eigenvalues are significantly greater than zero (I.e. 0.8 PCNGDP, 0.06 TNCTV, 0.3 FEXR, expect BOKHAR variable that stood at 0.04). In other words, the null hypothesis of no co-integration among the variables is rejected since more variables in the equations at 5% were statistically significant. The test result shows the existence of long-run equilibrium relationship between the variables PCNGDP, TNCTV, FEXRT, and BOKHAR.

## 6.3. Ordinary least square (OLS)

T- Critical value at 5% =  $\alpha / 2 t_{0.025} = 1.469$  with reference to n-k, where n is the number of observation = 46 and k is the number of parameters = 4; 46 - 4 = 42 at (4; 42) degree of freedom. F- Statistic, f- critical = k-1 and n-k value. Where k = 4-1 = 3 and k-n = 30: at (3; 42)



degree of freedom,  $F_{0.05} = 1.35$ . (Gujarati, (2005) is the source of statistical four-figure table used).

The above equation estimated Total Nigerian and Chad Trade Value (TNCTV), foreign exchange rate (FEXRT), and Boko-Haram (BOKHAR) as a Dummy Variable ( $D_1$  and  $D_2$ ) on the dependent variable percentage contribution of Chad-Nigerian trade relation to Gross Domestic Product (PCNGDP).

The OLS regression result above shows that Total Nigerian and Chad trade value (TNCTV), and foreign exchange rate (FEXRT) coefficients have positive relationship with the dependent variable (i.e.) percentage contribution of Chad-Nigerian trade relation to Gross Domestic product (PCNGDP) in Nigeria within the period under study. The estimated result implies that a unit increase in these independent variables used (i.e. Total Nigerian and Chad trade value (TNCTV), and foreign exchange rate (FEXRT) will lead to increase in the value of percentage contribution of Chad-Nigerian trade relation to Gross Domestic product (PCNGDP) by [0.791085 TNCTV and 0.191283 FEXRT] percent respectively, there by posting a strong significant relationship of Nigeria-Chad trade diplomacy within the period under study. The sign borne by the parameter estimates of  $\beta_2$ ,  $\beta_3$  and  $\beta_4$ , were in conformity with the historical and economic a priori expectation.

On the other hand, the coefficients of Boko-Haram influence have negative linear relationships with percentage contribution of Chad-Nigerian trade relation to Gross Domestic product (PCNGDP) the dependent variable. If the Boko-Haram effect coefficient in Nigeria decreases by [-0.293003], it will lead to increase in Balance of payments trade adjustment between Nigeria-Chad trade diplomacy by 30 percent.

Thus, the outcome of Boko-Haram influence is in line with initial expectation since price, trade and insurgence relationship on life and properties should be inverse relationship with value and volume of the Balance of payments between Nigeria-Chad trade diplomacy. Theoretically, the sign of the Balance of payments, the dependent variable could be positive or negative. Thus, if the Balance of payments between Nigeria-Chad trade diplomacy result shows negative, it will imply that the Nigeria- Chad monetary policy variables coefficients employed are affected and influence Boko-Haram effect which lead to between Nigeria-Chad trade diplomacy adjustment.

Generally, the implication is that Balance of trade adjustment between Nigeria-Chad trade diplomacy economy with an adverse movement in her monetary and fiscal policy



instruments will have enabling good control by Boko-Haram effect which ordinarily, monetary policy variables of the both country will simultaneously expand the investment expenditure on importation, and lead to increase in the nonoil sector of the economy like agricultural sector output for export to other countries. This in the long-run will lead to economic stabilization towards achieving Balance of trade payment adjustment between Nigeria-Chad trade relation economic diplomacy.

**T-test:** The calculated t-value for the regression coefficients of Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT), Boko-Haram (BOKHAR) as a Dummy Variable are [6.806677TNCTV], [2.394525FEXRT] and [-0.834447BOKHAR] respectively. The tabulated t- value is 1.469. It is clear that not all the calculated t-values of all the independent variables were greater than the tabulated t-value at 5% level of significance. Only the Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT) calculated t-value coefficients were greater than the tabulated t-value at 5% level of significance.

We then conclude on the T-test that only Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT) regression coefficient were statistically significant to the study within the period of study (i.e. 1970 to 2018). We therefore reject the hypothesis one that said “There is no significant relationship of Nigeria-Chad trade and diplomacy within the period of 1970-2018. rejecting this hypothesis implies that with the t- statistic value of the Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT) calculated t-value coefficients were greater than the tabulated t-value at 5% level of significance, and based on this outcome, we accept the alternative hypothesis that said “There is strong positive significant relationship between Nigeria-Chad trade and economic diplomacy within the period of 1970-2018”.

**F-Test:** This is used to test for the joint influence of the explanatory variables (i.e. Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT), Boko-Haram (BOKHAR) on the dependent variable [i.e. percentage contribution of Chad-Nigerian trade relation to Gross Domestic product (PCNGDP)]. Thus, the  $F_{\text{calculated}}$  value stood at [143.8359] while the  $F_{\text{tabulated}}$  value is 1.35 at 5% level of significance. Since the  $F_{\text{calculated}}$  143.8 % value is greater than the  $F_{\text{tabulated}}$  value 1.35%, we then conclude that the regression plane is statistically significant. In other words, it means that the joint influence of all the explanatory variables] on the dependent are statistically significant.

**Coefficient of Multiple Determination (R<sup>2</sup>):** The computed coefficient of determination (R<sup>2</sup> 0.911300) shows that 91% of the total variations in the dependent variable [percentage contribution of Chad-Nigerian trade relation to Gross Domestic product (PCNGDP)] is influenced by the variation in the explanatory variables namely, Total Nigerian and Chad trade value (TNCTV), foreign exchange rate (FEXRT), and Boko-Haram (BOKHAR)]. While other remaining 1% out of the total one hundred variations in the dependent variable accounted for the other factors not included in the model, and have been captured by the error term in the regression model. Based on the R<sup>2</sup> value, we can conclude that our linear regression model has no good fit.

**The Durbin Watson** statistics suggest an evidence of auto-correlation since its value (1.1) is less than 2.5%.

#### 6.4. Chow test

$$\text{Where } F^x = \frac{(RSS_r - RSS_{ur}) K}{f(k(n_1 + n_2 - 2k))} \frac{RSS_{ur}}{(n_1 + n_2 - 2k)}$$

F<sup>x</sup> is the f value computed from the result in the Model,

RSS<sub>r</sub>, is the Residual sum of squares restricted form the results of the pull observation with degree of freedom (4- 48) = 44.

RSS<sub>ur</sub> = Residual sum of square obtained from RSS<sub>1</sub> +RSS<sub>2</sub> sub period

(I.e. 1970 – 2018 RSSR, RSS<sub>1</sub> 1970 -1995 and 1995 – 2018 RSS<sub>2</sub>), with degree of freedom

Is therefore analyzed as follows:-

$$RSS_r = 12.68545$$

$$RSS_{ur} = 17581097, RSS_1 + 14.40771, RSS_2 = 17,581,111.40771$$

$$K = 6 \quad n_1 = 19, \quad n_2 = 18.$$

Therefore,

$$F^* = \frac{(12.68545 - 17,581,111.40771)/4}{17,581,111.40771/(25 + 23 - 2(4))}$$

$$F^* = \frac{(12.68545 - 17,581,111.40771)/4}{17,581,111.40771/(48 - 8)}$$



$$F^x = (4,395,274.680565) / 17,581,111.40771 / (40)$$

$$F^x = \underline{4,395,274.680565} / \underline{439,527.78519275}$$

$$F^x = \underline{9.999}$$

The F-critical ratio = 1.35. (4, 44) df.

### 6.5. Decision Rule:-

The rule state that the null hypothesis that said “no structural change effect should be rejected if the computed  $f^x$  – value exceed the critical f- ratio at the chosen level of significance.

Therefore, we agree that the  $f^x > f$ -tab (i.e. f- value computed statistical value = (9.999) is greater than the f–value tabulated = (1.35). We then reject the null hypothesis that said; there is no structural changes effect occurring in the Nigerian- Chad trade relations and economic diplomacy with the employed monetary variables and percentage contribution of Chad-Nigerian trade relations to Gross Domestic product during the period under review.

The second test of hypothesis in chow-test is that the sample population error terms  $u_{1t}$  and  $u_{2t}$  are independently distributed.

Where,

$u_{1t}$  = the error term in equation one having the period from 1970 - 1995

$u_{2t}$  = the error term in equation two having the period from 1995 – 2018.

Then we test the hypothesis that say’ s:-

$H_0: \sigma_1^2 = \sigma_2^2$  that is, the variances in the subpopulation is the same.

$H_1 = \sigma_1^2 \neq \sigma_2^2$  that is, the variances in the subpopulation are not the same.

However, the two true error variance is not observable; thus, we use their estimated value to compute their variance below

$$\sigma_1^2 = \text{RSS}_1 / n_1 - 4 = 17581097 / 25 - 4$$

$$\sigma_2^2 = \text{RSS}_2 / n_2 - 4 = 14.40771 / 23 - 4$$

Where  $\sigma_1^2$  and  $\sigma_2^2$  stand for estimated variance.  $\text{Rss}_1$ ,  $\text{Rss}_2$  and  $n_1$ ,  $n_2$ , remain the same thing in meaning. Thus,  $F^x = \sigma_1^2 / \sigma_2^2$



$$\text{Therefore, } \sigma_1^2 = 17581097/21 =, \quad \sigma_2^2 = 837,195.0952380952$$

$$\sigma_2^2 = 14.40771/19 =, \quad \sigma_2^2 = 0.7583005263157895$$

Here the rule is that the larger value of variance assumed the numerator while the small value of the estimated variance assumed the denominator.

$$\text{Therefore, } \sigma_1^2/\sigma_2^2 = \frac{0.7583005263157895}{837,195.0952380952}$$

$$F^* = \underline{9.0576}$$

Thus, with the degree of freedom (4, 44) the F - critical value at 5 percent stood at 1.35. Therefore  $F^*$  - value of variance computed = 9.0576, is greater than the F- critical value 1.35. With this, we reject the null hypothesis and accept the alternative hypothesis that the subpopulations are not the same.

The purpose of this model is to check if structural change occurred in Nigerian- Chad trade relations and economic diplomacy and how it has affects balance of trade adjustments in Nigerian- Chad trade relations and economic diplomacy, which is our reference topic. In terms of the Chow test, for parameter stability conducted by splitting the total sample period into 1970-1995, 1995-2018 and 1970- 2018, there is no evidence of parameter stability.

In other words, there exhibit evidence of instability from the results estimated, based on this, we reject the hypothesis four of this study that stated, “There is no presence of structural changes and breaks in Nigeria-Chad trade relations and diplomacy within the period of 1970-2018”. This implies that there is the present of structural change and breaks in Nigeria-Chad trade relations and diplomacy that occurred within 1980 to 2018 effecting the Nigerian balance of trade adjustments.

The next purpose of this chow test to our research is to find out the point of breaks at which these breaks in the underlying relationship might have occurred and led to breaks in Nigeria-Chad trade relations and diplomacy. This point is called the point structural of break, which from the results is located around 1994 and 1995 since the variances in the subpopulation are not the same and the sample population  $f^*$  shows statistical significant 9.0576.

However, we employed stability test of cumulative recursive sum of residual (CUSUM) and cumulative sum of recursive residual squares (CUSUMSQ) procedures by (Brown, Durbin & Evans1975). Thus, the results of this test are presented below.



## 6.6. Stability Test

The central issue for empirical analysis here is the stability of Nigeria-Chad trade economic relations and diplomacy with the presence of Boko Haram effects, which we reported in figure 1 and 2. It has been a standard practice to incorporate short-run dynamics in testing for real trade economic relations and diplomacy of countries.

To this end, we follow Brown, Durbin and Evans (1975) to apply the cumulative sum of recursive residuals (CUSUM) and cumulative sum of squares of recursive residuals (CUSUMSQ) to residuals of chow test tested above. The CUSUM and CUSUMSQ test statistic are updated recursively and plotted against break points in the data. For stability of short-run dynamics and the long-run parameters of Nigeria-Chad trade economic relations and diplomacy, it is important that CUSUM and CUSUMSQ statistic should stay within the 5 percent critical bound line, represented by two straight lines. The test finds parameter instability if the CUSUM and CUSUMSQ go outside the area between the two critical lines. In other word, the significance of any departure from the zero line is assessed by referencing to a pair of 5 % significance lines; these plots were shows in Figure 1 and Figure 2.

However, from the results (plots) above, it is clear that both the cumulative recursive sum of residual (CUSUM) and cumulative sum of squares of recursive residuals (CUSUMSQ) plotted are Figure 1 and Figure 2 significant and has the right picture in Figure 1 and Figure 2 above since it stays within the 5 percent critical bound line, represented by two straight lines. This implies that the parameter Nigeria-Chad trade economic relations and diplomacy with the presence of Boko Haram effects is stable during this period of observation (1970-2018).

The outcome of these results were not affected by the presence of the structural change effect as we found with the chow test result above. Thus, since there is a structural change effect during this period of review, it is very possible for the Nigeria-Chad trade economic relations and diplomacy to be stable throughout these periods of observation even with the Presence of Boko Haram attack. Therefore, we accept the alternative hypothesis two of this study that side that there is stability in Nigeria-Chad trade economic relations and diplomacy even with the presence of Boko Haram effects.

## 7. CONCLUSION AND RECOMMENDATIONS

This study investigated the nature of Nigerian-Chad trade and security relations from 1960-2019. It found that the volume of trade amongst the two states, both the formal and informal trade has continued to grow, irrespective of the challenge of Boko Haram



terrorism that has taken over the border of both states. The study concluded that Nigeria-Chad trade relations and diplomacy has contributed to joint ventures opportunities between Nigerians and Chadian investors and has promoted and protected national interest. Insurgencies, border insecurity, activities of smugglers, trade blackmails are challenges of Nigeria-Chad economic diplomacy, however the trade has continued to grow.

The study recommends that economy needs to be fashioned to the realities of globalisations, as such, the economic diplomacy of the present administration need to be directed towards addressing contemporary challenges in the economic environment. Even as the border is closed, the activities of smugglers and the parallel market is obvious.

Therefore, more scrutiny should be done on what enters and goes out of the country. Finally, since diplomacy is a game of elaborate rules requiring sound professional acumen, the federal government must ensure special trainings in international relations at the master's degree level and in other related areas as this will further equip and arm the officers with all they need to properly discharge their duties.

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