



Butterfly Inflationary Effects of Multiply Police Check-Points in Nigeria

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Author's contribution

The sole author designed, analysed, interpreted and prepared the manuscript.

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ABSTRACT

There exists established research evidence of multiple police-check-points in the South East of Nigeria. Current research objective is to find out effects of these choking Police Check Points on the butterfly inflationary trends in the Nigerian Economy. It is a ripple effect of insignificant variable in one economic area that had a very significant effect in the whole and /or another section(s) of the populace. Data were sampled from a total of 450 business persons the six geopolitical zones of Nigeria with business links to South East Zone, in addition to other areas. The research established direct nexus between increasing police-check points in South East and increasing prices of goods and services in the Nigeria economy. The level of significance of surge Police tollgates in South East Zone and its butterfly inflationary trends in Nigeria is found to be significantly high on normal goods bought and sold with the Country. It is recommended among others that most of these check-points be disbanded if they are not there for political economy and exhortations against the Eastern States of Nigeria.

Keywords: Inflation; nexus of police check points & inflation; butterfly-effects on inflation; multiply police checks; illegal toll-gates.

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1. INTRODUCTION

Nigerian Police effectiveness is never in doubt. Effectiveness and Efficiencies of a Country's Security forces do not only add value to the growth of the national economic and social development but also creates a stable and peaceful environment for mental development of the Citizens. It gives protection assurance to the citizens to continue to carry out their daily lawful businesses and breeds harmony in the society. Chokprachakchat [1] outlined the functions of Police force to include keeping peace, maintaining public security and safety, preservation of property and human life. Chokprachakchat [1] argues that any society living in an unsafe and disruptive environment holds back the diverse advancement of that country. According to Ibrahim [2] Police force is a legal institution or state agency charged primarily with the enforcement of criminal law and the maintenance of order through monitoring, discharging and destroying challenges to the existing order of things.

The current research is not in contestation as to whether or otherwise Nigerian Police Force are fully discharging their functions as outlined by Chokprachakchat [1], Ibrahim [2] and in accordance with other statutory provisions. Nnaeto (2019, 10-18) established that on the roads to and out of Imo State alone there exist forty-seven (47) Police check points. That research went further to assert using unconfirmed facts on how Police extort huge money from Passengers and Traders using those routes. That research made no further attempt to carry out survey of roads in and out of the other remaining four states. As a result of dearth of published materials on the number of checks on these other four states, the current research focus is to carry out survey on all the five States of South East Zone. The main research objective of this research is to find out effects of choking Police Check Points in the Eastern Zone of the Country on the inflationary trends in the larger Nigerian Economy. Also the locus of this research anchors at finding out the effects of multiply Police Check Points in the South East Zone of Nigeria on Prices of goods and services in the region on the first instance and on the second discourse as to whether it has inflationary butterfly effects on the Nigerian Economy as a whole or not as micro changes in prices do not necessarily cause inflation.

2. RELATED WORKS REVIEW & ANCILLARY SURVEY

2.1 Surges in Police Check Points in Eastern States of Nigeria

It is established in the research of Nnaeto (2019) that there exist multiply police checks in the South Eastern Zone of Nigeria made of Abia State, Anambra State, Ebonyi State, Enugu State and Imo State. The land area of South Eastern Nigeria is about 40,900 to 41,400km² according to Edeh [3]. The South East Zone by the works of Eze-Uzomaka [4] is found to be the most densely populated area in Africa. As to the level of Police check points, Nnaeto (2019, 10-18) established that on the roads to and out of Imo State alone there exist forty-seven (47) Police check points. That research went further to assert using unconfirmed facts on how Police extort huge money from Passengers and Traders using those routes. That research made no further attempt to carry out survey of roads in and out of the other remaining four states. As a result of dearth of published materials on the number of checks on these other four states, the researcher and assistants took as ancillary research duties to carry out survey on all the five States of South East Zone. The Survey started simultaneously from September 20th 2021 and ended on 10th October 2021. It was carried out twice to minimize deviations resulting from busy days' effects. The check-points were found not to be at constant places, but many kept shifting may be for security reasons. Videos and Tapes were not used so as to save lives but calmly and successfully it was done via counting. The survey showed an increasing and shifting police check points as follows:

i.	Imo State	(Major Roads only)	68
		average	
ii.	Enugu State	(Major Roads only)	45
iii.	Ebonyi State	(Major Roads only)	25
iv.	Anambra State	(Major Roads only)	52
		average	
v.	Abia State	(Major Roads only)	59
		average	
Total Number of Check points			249

(Source: Researcher's Survey September 20th to 10th October 2021)

It should be strongly be noted that the Survey was not intended and did not substantiate that those established police check points were

extorting money from Traders and Passengers. The survey however established a causal link between stopovers for checks and delays in reaching destinations. Both Lawan [5] and Karimu [6] asserted via their respective research findings that Nigerian police do collect money openly at check points.

2.2 Illegal Toll Gates Induced Inflation in Nigeria

On inflation Musa et al [7] found that interest rate is inflationary in both the short-run and long-run. The findings of their study imply that interest rate in Nigeria is inflationary; meaning that increase in the rate of interest rate will lead to an increase inflation rate. Interest rate is the cost of borrowing which is corroborated by the works of Saunders and Cornett [8] that explained rate of interest to mean the price or fee paid by a borrower of money to the lender for the use of the money for a period of time. It is the extra money paid on the money borrowed. Interest rate will therefore include all charges and spending on borrowing which affects the cost of goods and services including Police Check point spending or commonly called 'pass-charge' increases cost of transportations of goods and services. High costs of goods and services have direct bearing to high selling prices of same goods and services. The nexus between these freely/willingly given monies or induced spending at Police Check-points and rate of price increases are no more contentious. Unearned income are easily spent and lavishly on consumptive goods. Studies had been conducted on how the earned & unearned income distinction may affect expenditure patterns. Ambler and Godlonton [9] took a study on earned and unearned income expenditure patterns in Malawi. The economic construct that led to their study was that when people work for money they may spend it more wisely than when money is unearned. Ambler and Godlonton [9] findings correlated positively with the economic construct prior to their study. It is also a common knowledge that illegal tollgates across and breath of Nigeria catalyzes large flow of sudden wealth to those superior Officers that ordered for creation of such Tollgates. Sahi and Dulta [10] in their study attest that sudden wealth, brings with it attitudes and behaviours much are different than those associated with earned money. One of such pattern change in behavior resulting from sudden wealth is spending as the propensity to consume is increased astronomically.

According to Nnaeto (2019) many roadblocks in Nigeria were for pecuniary interests not really for security of life and property of the zone. Nnaeto (2019) recommended in their findings that it will be correct to classify Police and Army check points in the Eastern Part of Nigeria as 'billing-Points' or illegal Toll-gates. Thus illegal billing points or illegal Tollgates will be substituted for Police/Army Check Points in the Eastern States of Nigeria. For easy of sentence shortening, all Security Check Points including Army, Police, Road Safety, Customs, Navy and Local Vigilantes for purposes of this research will be henceforth referred to as "Police Check Points, Police Billing Points or Illegal Toll-gates"

Cheri [5] asserts that police extortion is having aquasi-official status in Nigeria or rather a fully institutionalized tax collected at toll-gates which are carried out openly. Karimu [6] collaborated this assertion but went ahead to categorize these check-points as toll gates especially for commercial vehicles. Tollgate collections are routed into Government official revenue lines with controlled sharing and utilization features thus are very slow to create unintended inflation in the economy unlike illegal Tollgates. The illegal Tollgates inflationary assertion was confirmed by Bagus, et al [11] as they argue that income and consumption taxes which are imposed coercively on both consumers and producers tend to create inflationary trends. They went further to define inflation as a reduction in the spending power of tax payer and consumers.

While it should be understood that Government imposed taxation leads to redistribution of income between Tax payers and Government. Illegal Toll-gates leads to redistribution of incomes between a Business person and Security Agencies. Government imposed taxation is planned with inbuilt cautionary/alleviating strategies while Business persons verses Security Agencies income redistributions are not captured in the economic planning of the Government. This latter redistribution is more obscure and do catch Government economic planners unprepared, thus its inflationary trend is more impacting, spreading and disruptive to Government fiscal policies on the economy. In other words, Illegal Toll gates have a huge butterfly effects on the Inflationary trends in Nigeria.

One can argue that the redistribution of income caused by the Illegal toll-gates will not have a

huge force to create inflationary trend because of its trade-off phenomena between Business persons and Security Agencies but it should be noted that these Check points' billings adds to the prices of goods and services in the first instance. Secondly it leads to putting more money into the pockets of Security agencies thereby increasing their propensity to consume. Higher unmerited and sudden wealth usually leads to more unguarded spending leading to price chased inflation. In addition, it is a common knowledge in the study of macro-economic theory that future expectations of income increases the propensity to consume thus explaining the rationale behind increased consumption of alcoholic beverages by Security personnel posted to eastern states of Nigeria. Again it should be noted that Illegal Toll gate charges will only add to the prices as the Business person had already marked-up their profit. Taylor [12] consents to this line of reasoning by asserting that high price dispersion, costly or inefficient search by consumers can influence markup pricing. He admits that Firms pricing power to practice markup pricing is profit-push variant of cost-push inflation. Price markup depends not only on "normal profits" expected by a businessperson but also on the relation between fixed costs and variable costs. Variable costs include all cost of transportations of bringing goods and services to the market where they are demanded, thus Police Check point billings form a significant aspect of variable costs in Nigeria. Asekunowo [13] submits that inflation has always persisted in the Nigerian economy as a consequence; Nigerian businessmen used the pricing power they have to raise the prices of their products. This may be because the Nigerian product markets are not without some monopolistic structures with some measure of concentration of capital. These monopolists no matter how few they are practice markup pricing. The frequency of price changes in the developing countries is very high. This had been confirmed by Álvarez [14], where he asserts that the *mean* frequency of price changes obtained from the datasets underlying national consumer Price index clearly exhibit nominal stickiness, as the (unweighted) median across these studies for the estimated mean frequency of price change is 19% (per month). The degree of stickiness varies considerably across countries, with prices in the Euro area appearing to change less frequently than those in the U.S., which in turn change less frequently than those in high inflation developing countries (Brazil, Chile, Mexico, Sierra Leone, Slovakia) and likewise Nigeria. Rogers [15]

confirms that vividly explaining why different societies end up with different inflation rates is a difficult task that has largely been left unaccomplished by economists, thus variables that induce inflation in one society might be insignificant inflationary catalyst in another society. In Nigeria, many factors including 'cost' of production leading to mark-up by business persons is a significant cause of inflation thus Asekunowo [13] concludes that inflation can be said to be endogenous and exogenous shocks driven in Nigeria.

2.3 Butterfly Inflationary Effects

In economic arena butterfly effect can be seen as a butterfly flapping its wings in one a section of a Country which sooner or later be seen in another section or whole sections of Country in micro-economic thoughts. In macroeconomic thoughts, butterfly effects relate to a butterfly flapping its wings in one Country but sooner can cause a tornado in another Country [16,17]. In layman's language, it is a ripple effect of unrecognized or insignificant variable in one economic area that had a very significant effect in the whole and /or another section(s) of the populace.

Abdallah et al [18] study centers on micro effect on the price of agricultural products fluctuation which greatly led to widespread effects on the economy (Society) as whole. Also Guo et al [19] carried a study on the micro-economic butterfly effect in the price of agricultural products. Interestingly, they found that price changes in pork in the market are generally highly correlated with the prices of slaughtered pigs, piglets a few weeks ago and the prices of multiple feed a few months ago. Their research and findings leads hand to the current research which advocates that butterfly inflationary effect can be have micro-economic or macro-economic effects in the prices of goods and services nationally and internationally.

Xue et al [20] concentrate on butterfly inflationary effects at the macro-economic level. Their aspect of study centers on the butterfly effects between economic situations in the USA and selected Asian Countries. They found that a decrease in demand in the U.S. directly led to export reduction in other countries, especially in the world production base, Asia. Xue et al [20] expectations and findings among other include that export shrinkages and market confidence losses to significantly hamper the

domestic economies of the sample countries as an indirect impact of the U.S. crisis, but with different scales for different countries but results show that half of their sample countries suffered substantially from the U.S. financial crisis. This study therefore correlates the macro-economic nexus between financial crises in the U.S.A that had significant effects in Asian Countries.

The summary of this subsection is that butterfly effect can spread from a local arena to the whole nation or from one nation to another nation gradually unnoticed or with a speed not anticipated.

Ogu et al, [21] studied the Impact of inflation on economic growth in Nigeria 1999-2017. Other studies of inflation in Nigeria before them and thereafter mostly did not venture into butterfly effects on the Local and National economy so also many studies of Police multiple check-points in Nigeria. It is this gap that the current research effort is out to fulfill.

2.4 Brief on Economic Loci of Eastern States of Nigeria

Iwuoha and Lawal [22] affirms that the States of South East Nigeria include; Abia, Anambra, Enugu, Ebonyi and Imo states. They went further to exhibit the map of the states to appear thus:



LOCATION MAP OF STUDY AREA

Map 1. Study area

Source: Iwuoha and Lawal [22]

Eastern States of Nigeria accounts for More than 30 million people Iwuoha and Lawal [22], and they are predominantly of Igbo ethnic extraction with a population density ranging from 140 to 390 inhabitants per square kilometer [23]. This part of Nigeria is highly involved in domestic productive/manufacturing activities of all kinds. They engage also in large importation of goods of various kinds into Nigeria. OJIDE and OJIDE [24] citing Central Bank of Nigeria (2012) affirm that Nigeria imports mainly industrial supplies, transport equipment and parts, capital goods, food, beverage and consumer goods. Nigeria's main import partners are China, Albania, United State, France, and Belgium. Egwaikhide et al [25] and Banjoke et al [26] had earlier established that Nigeria is a producer of primary raw materials for foreign industries and importers of manufactured goods.

Gross Domestic Product of a Country accounts for over 80% of her economic development while over 20% of economic developments come from imports and exports of goods and services. The above assertion was affirmed by Udoh [27] when using survey states that the share of agriculture in Gross Domestic Product (GDP) was about 63% and about 80% of export earnings of the country came from agriculture. Eastern States of Nigeria is a major hub for imports of products of machinery, spare parts, raw and intermediate materials for manufacturing into Nigeria.

The assertion that the Eastern States of Nigeria is major hub in manufacturing is vividly captured by Oyelaran-Oyeyinka [28] when he stated that Nnewi a town in Anambra State an automotive Parts Industrial Cluster is a huge success story in Nigeria, and It is a very good example of how an informal cluster can survive and succeed without government support in terms of provision of essential public utilities. This industrial cluster exports automotive parts to countries in the West African sub-region as well as other international destinations. Its key critical success factors include active participation of private industry associations such as Nnewi Chamber of Commerce, Industry, Mines and Agriculture and the Nigerian Association of Small-scale Industries, a social – cultural milieu characterized by competitiveness, high entrepreneurial spirit as well as investment in training and capacity to imitate and assimilate foreign technology. Above all, the Nnewi cluster made an independent effort to provide the necessary infrastructural support when the state failed to do so. Since the mid-1970s, local traders in Nnewi have transformed

themselves into manufacturers of automobile parts through close linkages to technology suppliers in Taiwan Province of China.

Oyelaran-Oyeyinka [28] went further to assert that Nnewi supply Nigeria and other West African markets with switch gears, roller chains for engines, auto tubes, batteries, engine seats, shock absorbers, foot rests and gaskets for motorcycles, as well as other parts. Most of these firms have the design capability to modify products and adapt the production process to the local market. Firms in Nnewi grew despite major infrastructural and credit constraints. Electricity, for example, was only supplied through private generators, water was provided through the company's boreholes, telephone service was poor and tariffs high, land was expensive and scarce, and banks were reluctant to extend the level of credit offered to companies with high inventory costs. Despite all these limitations, Nnewi firms succeeded in innovating, growing and exporting to neighboring countries while other firms in Nigeria were failing. Much of this success was due to the acquisition of skills by workers mainly through learning by-doing, especially during equipment installation and test run, and through inter-firm linkages with foreign technology suppliers, notably those from Taiwan.

Oyelaran-Oyeyinka [28] picked another town in the Eastern State called Onitsha. Oyelaran-Oyeyinka [28] asserts that Onitsha is a very dynamic city and has the highest concentration of manufacturers in Eastern Nigeria with products ranging from pharmaceuticals to paints, and from plastics to chemicals. It attracts trading partners from the rest of the country and different parts of the West African sub-region. The plastic cluster in Onitsha has about 75 industries employing over 1,800 workers. The current researcher is affirming that Aba is a town in Abia State that produce capital, raw materials, semi-finished and finished goods of all kinds both for local and international use. Fabricated Machines, Plants, Shoes, Bags, Wears, jewelries, Cosmetics, to name but a few are all produced in Aba. The ones, they cannot produce, they imitate. The ones they cannot imitate, they import before distribution to other parts of the Country. The confirmation of this assertion came from Brautigam [29] as she affirms that in Nigeria, well-known cases of industrial clusters combined with active distribution systems include the footwear and leather industry of Aba and Onitsha. Brautigam [29] further affirms that Aba

and Onitsha have been centers for the production of footwear and other leather goods and also Aba and Onitsha dominated distribution systems for footwear.

Owerri, Imo State has the largest number of Hotels and leisure Industries throughout Nigeria. Pleasure seekers and Tourists troop into Owerri en-mass during Weekends and festive periods. Returning Easterners from abroad love lodge in Hotels in Owerri because its level of entertainment industries. Ebonyi State is well known for her Rice production and other agricultural produce while Enugu State hosts many educational institutions, human intellectual capitals and solid minerals. Abia and Imo States are also Oil producing States that economically impacts on the affairs of these states nationally and internationally. Globally, the concentrate of Oil production has direct nexuses among increased economic activities, high crime rate and huge security presence.

It is these huge manufacturing, entertainment and importation activities concentrated in the Eastern States of Nigeria that makes Police, Army and other Security Services posting in the Zone since the diminishing lost war concept is fading, very attractive and luring. Businessmen all over the world hate delays in product delivering, hence the lure to give tips easily to avoid delays occur more in the Eastern States than in the Northern States of Nigeria. Another factor that motivates Police extortions/Police billing check-points in the Eastern States can be attributed to the adaptive homogeneous nature of people from the zone to endogenous and exogenous changes in their environment. Also motivating the billing check points is the capitalist nature of the Eastern States of Nigeria, thus though the bear the initial burden of these Police Billing Check-points, the end burden is transferred to the consumers of their traders and distributions. These transfer burdens/police billing check-points is the main subject of this research. The multiple Police Check points in the Eastern States of Nigeria heavily add to cost of goods sold/distributed which can easily cause price pushed inflation.

3. METHODOLOGY:

3.1 Hypothesis

The only hypothesis formulated for this research is;

Ho1: There are no significant butterfly inflationary trends in Nigeria by numerous Police Check Points in the South East Zone of Nigeria.

3.2 Research Process

Fifty Business persons/Traders from each of the six geopolitical zones Nigeria with business links to South East zone were chosen as samples for questionnaire. Considering the large number of business locations in Lagos State and Abuja with links to the Easter States of Nigeria, more samples were taken from them. Thus a total of four hundred Business persons participated in the research survey. The geopolitical zones of Nigeria are made up of North West(Jigawa, Kaduna, Kano, Katsina, Kebbi, Sokoto & Zamfara); North East (Adanmawa, Bauchi, Borno, Gombe, Taraba and Yobe); North Central(Benue, Kwara, Kogi, Nasarawa, Niger and Plateau); South West (Ekiti, Ondo, Osun, Ogun,Oyo and Lagos); South South (Akwa Ibom, Baysea, Cross River, Delta, Edo, Rivers) and South East (Abia, Anambra, Ebonyi, Enugu, and Imo)

Sampling method adopted was willingness to participate based on solicitation/appeal issued via WhatsApp Groups and Facebooks. Questionnaire was administered through WhatsApp and Facebook phone numbers obtained from feedbacks. (Appendix A is the Questionnaire). The feedback on business axis grouped according to geopolitical zones as seen appendix B, among other outcomes from the administered questionnaire. The test for level of significance technique adopted is comparison of computed average inflationary trend based on the profit markup against the actual inflationary rate subsisting in the month of research data collection, analysis and compilation.

3.3 Data Collections, Processing and Evaluations

Key issues raised in the questionnaire as contained in question 1 is to affirm existence of high level of Police Tollgates in the South East Zone of Nigeria. Questions 2, 3, 4 and 5 were there to obtain confirmation of Police billings at these Tollgates and how Business persons pass these tollgate billings to the final consumer using mark-up or profit mark-up related strategies. While question 7 is to establish the business person's trading zone, question 8 helps to weight the frequency of influence exertion on the market price of goods along the zones. Questions 9 , 10

and 11 are key as the establish Business persons' profit elastic to be or not to be Police surged Tollgates in the South East Zone of Nigeria which is very vital in confirming cost pushed inflation kick-started in the South East of Nigeria with very high butterfly spread to other parts of Nigeria.

Feedbacks on the key issues are to be captured using percentages. The weighted average percentage were merely converted from seven days, or fourteen days to thirty days spread so as to be eligible for evaluation over thirty days period.

Butterfly inflationary trend is the differences between the sum of percentage spread mark-ups and 1, thus for illustrative purposes a month in this research is assumed to cover a spread of thirty days, thus a markup of 20% Police Tollgate's charge with goods re-stocking period of two weekly basis will have weighted inflationary rate of $((20/14)*30/30)-1 = 0.42\%$.

Arch profit elasticity of the products to cost is used as technique of determination of Business Persons' response to presence or non-presence of surged Police Check points in the South East Zone of Nigeria in order to elicit butterfly inflationary trends. The variables and equation for butterfly inflationary trends based on arch profit elasticity are derivable as follows:

Mark-up on Police Tollgates is represented by m ;
 Spread = s ;
 Number of days in a spread= d
 Butterfly Inflationary trend= bf

The equation: $bf= (((m/s)*d)/d)-1$

4. RESULTS

Business persons zonal perceptive the rate of Police surge in the South East Zone is 'Very High.' The rate of the affirmation is all above 90% thus giving credibility to prior research assertions of presence of very numerous Police Check points in the Zone. The researcher asserts that the Butterfly inflationary trend is the differences between the sum of percentage spread mark-ups and 1 thus average butterfly inflationary trends in Nigeria based on this research is

$((1.42+1.79+1.93+1.67+1.52+1.67+1.79+1.52)/8)-1 = 0.66\%$

With outcome of 0.66 which is >0 but <1 , shows that the goods in question are normal goods and not inferior goods that are less elastic to changes in price.

According to Trading Economics [30], Nigeria inflation rate for February 2023 is at 21.91%, out of which Police Tollgates alone contributed up to $(1.66/21.91)*100 = 7.58\%$ in absolute terms with inbuilt butterfly effect of above 3%. $[(0.66/21.91)*100]$. The butterfly inflationary hold is only 3% which is very insignificant but succeeded in necessitating inflationary effect of 7.8% that is very significant. With 7.58% imputed outcome, the effect of butterfly inflationary trends resulting from numerous choking Police Tollgates in the South East Zone is concluded very significant with normal goods bought and sold within the Country.

5. DISCUSSION

Economists are of the view that inferior goods are not subject to obey to the law of demand and supply in the face of increasing prices. This explains why the current research has to determine in the first instance whether the attributes of inferior goods were inherent in the research samples but it was found out to be of normal goods that is subject to quantity demanded changes in relation to changes in prices. Multiple Police Check points in the eastern states if Nigeria may be undocumented political strategy but by this research findings, it is an economic misadventure to the whole nation. In all spheres of non-monopolistic economic activities in Nigeria, the major stakeholders are from Eastern States of Nigeria, thus indirect or direct taxes imposed specifically on goods and services from the Eastern Zone will have inflationary effect on the whole nation. From the findings of this research, this assertion is confirmed in that all imposed taxes are transferred to the final consumer as built-in cost of goods and services.

At the point of responding to reviewers' comments and going to the press, Nigerian Government removed petroleum subsidies which impacted heavily on inflation levels in the Country and general increases in Consumer price index. The impact of removal of petroleum subsidy is recommended for further research effort. Also recommended for further research effort is the impact of indirect taxes on Consumer Price Index in Nigeria [31,32,33].

6. CONCLUSION

The effect of multiple police check-points in the Eastern States of Nigeria is more of imposition of indirect taxes on the economic activities in the zone and these added costs are transferred as built-in costs of goods and services to the final consumers within and outside the zone thereby creating inflationary effects to the whole nation of Nigeria.

7. RECOMMENDATIONS

The Nigerian Government should have a formal policy on the usefulness of surged multiple Police Check points in the Eastern States with a bid to reducing it to the extent that is necessary for Security reasons.

Most of the Checkpoints that within 500km apart from each other has no security usefulness and they are recommended for disbandment if they are not there for political economy and exhortations against the Eastern States of Nigeria.

A security research on the essence of multiple police check points in the Eastern States of Nigeria should be conducted. A research as to the essence of Security Personnel lobby to be posted to Eastern States of Nigeria should be conducted.

DISCLAIMER (ARTIFICIAL INTELLIGENCE)

Author(s) hereby declare that NO generative AI technologies such as Large Language Models (ChatGPT, COPILOT, etc) and text-to-image generators have been used during writing or editing of manuscripts.

COMPETING INTERESTS

Author has declared that no competing interests exist.

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APPENDIX A

QUESTIONNAIRE ON POLICE BILLING CHECK-POINTS

Dear Respondents, this questionnaire is sent you because you agreed to participate in a research related to Police Billing Check-Points in the South Eastern States of Nigeria. Be rest assured that your Phone Numbers and other identities will not be disclosed in the Research Publications in whatever form. Thanks for your participation. My name remains

QUESTIONNAIRE: Tick your answer where relevant.

1. The number of Police Check Points in the South Eastern States of Nigeria compared to your business location(axis) can be classified as [1] HIGH.....[2] VERY HIGH...[3] LOW (4) NORMAL
2. Is the money you spend across these Police Check-Points huge? [YES].....[NO].....
3. If huge, how do you recover these monies? [1] Input into price of goods [2]. Just forget it.
4. Do you use Mark-up to recoup the expenses [1] YES.....[2] NO....
5. If NO is your answer to question Number 4, is NO , describe how you recover the Police expenses
6. What is the average percentage you use as mark-up to cover the Police Expenses
7. What is your business axis from or to South East.....
8. How frequently do you carry out your business transactions from the South East to your business axis [1] ONCE A WEEK [2] ONCE IN TWO WEEKS.....[3] ONCE A MONTH [4] OTHERS PLEASE SPECIFY.....
9. Do you agree that numerous Police Check points in the south Eastern Nigeria adds to high cost of goods and selling prices throughout Nigeria.....[YES].....[NO]
10. Do you think you can still make same profit with or without those Police Check Points? [1] YES.....[2]NO.....[3] NOT SURE
11. If your answer to question 10 is No, will your profit be; [1] Increased [2]Reduced [3] Not sure
12. Why do you think that there exist numerous Police check points in the South Eastern States than others Zones in Nigeria?.....

Thanks a lot for your participation. This is purely for academic research.

Appendix B. Feedback on Key Issues According to Business Axis

Zone	Opinion on level of police check points in eastern states of nigeria	Average Mark up on police tollgates	Business frequency	Butterfly inflationary trend %	Will profit level change if police check points are removed	
South east	Very high	95%	2weekly	0.42%	No	99%
	High	5%			Not sure	1%
South west	Very high	90%	2weekly	0.79%	No	96%
	High	7%			Not sure	3%
	Normal	3%			No response	1%
South/ South	Very high	92%	2weekly	0.93%	No	93%
	High	4%			Not sure	4%
	Normal	3%			Increase	3%
	No option	1%				
North east	Very high	96%	3 weekly	0.67%	No	92%
	High	4%			Not sure	6%
					No response	2%
North central	Very high	91%	3weekly	0.52%	No	97%
	High	4%			Not sure	3%
	Normal	3%				
	No option	2%				
North west	Very high	94%	3weekly	0.67%	No	91%
	High	4			Not sure	7%
	No option	2%			No response	2%

Zone	Opinion on level of police check points in eastern states of nigeria	Average Mark up on police tollgates	Business frequency	Butterfly inflationary trend %	Will profit level change if police check points are removed
Lagos state	Very high 90% High 6% No option 4%	25%	2weekly	0.79%	No 97% Not sure 3%
Abuja	Very high 91% High 8% No option 1%	32%	3 weekly	0.52%	No 98% Not sure 1% No response 1%

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