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EXPLOITATIVE AND DISTRIBUTIONAL MODELLING OF THE NIGER DELTA CONFLICT AND ITS IMPACT ON THE NIGERIAN ECONOMY

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Abstract

The construct that presents the conflict in the Niger Delta as a security challenge is replete with contradiction. This study utilized game-theoretic approach to analyse the exploitative and distributional nature of oil resources and its impact on Niger Delta conflict and the Nigerian economy in general. The solutions that have been proffered to end the conflict militarily, never resolved the conflict. The quest to load the resolution of the conflict through the amnesty programme has met with some success but this is not sustainable and the benefits accrue only to a few (less than 0.1%) of the people of the Niger Delta. The endless cycle of violence will continue except the primary forces that drive the conflict are tackled. This will involve distribution of revenue to the people who bear the burden of the environmental degradation as result of oil exploration, the restoration of lost flora and fauna of the Niger Delta and the incentivising of the federating units to look beyond oil revenues.

Key Words: Distributional Conflict, Economic, Political and Geographic (EPG) Distance, payoff

Introduction

The fundamental conflict that defines the trajectory of growth or otherwise of the Nigerian economy is the conflict about who should control the oil and gas resources in the Niger Delta. This dispute is complex and multi-dimensional (Garba 2004). The conflict has mutated severally since oil was discovered in commercial quantity in Oloibiri in present day Bayelsa State. While the Nigerian state was passive towards the global oil and gas game in the immediate aftermath of independence in 1960, the observed effects of the game in fuelling the civil war convinced the then ruling military junta to begin to change the rules of the game beginning from 1967, under the philosophy of state control of commanding heights of the economy (Tamuno 2011).

Over the years the Nigerian State has maintained that the crisis in the Niger Delta is a security crisis. The essence of the crisis is seen to be situated in the breakdown of law and order in the Niger Delta in relation to oil extraction activities. The military occupation of the Niger Delta with active and continuous military engagement of villages and the scorched earth policy of successive governments (until the Yar'Adua Government), has not been able to engender lasting peace. The attempt to deescalate the conflict vide co-opting the militants and providing cash settlement during the Yar'Adua government and continued by the successive governments has been partially successful and has restored some measure of peace. But this peace can be likened to the peace of the grave yard- it is a cauldron simmering under and capable of exploding at the slightest provocation, but especially in times of dwindling petro-dollar receipts when oil prices go down and the pool of revenue available to the Federation is not enough to satisfy all parties to the conflict.The havoc wrecked by

the Niger Delta Avengers and other upstart militant groups between May 2015 and August 2016 clearly demonstrates the unstable nature of the conflict. It has been persistent and dynamic. The reason for this can be located in the fact that sufficient attempt has not been made to dissect the root cause of the crisis let alone addressing the fundamental cause of the conflict (Garba 2006). The Buhari government in 2017 in the aftermath of the chaos caused by the Niger Delta Avengers tried to find a solution to the crisis with the meeting held with elders of the Niger Delta under the leadership Chief Edwin Clark where a 16 point demand were made on behalf of Niger Deltans. The agreements reached are currently in abeyance (Premium Times November 1, 2016).

More worrisome, the crisis in the Niger Delta is having a huge negative impact on the socio-economic development of Nigeria. More specifically, the following consequences are observable:

a. The continuous fracturing of relations within and between communities in the Niger Delta. The fratricidal conflict in the region, as communities squabble with each other over oil resources testifies to this (Tamuno, 2011, Osaghae and Suberu, 2005).

b. The conflict has fractured relations between the communities in the Niger Delta and the Nigerian State. It is this fractured relation that led to declaration of the Ogoni Bill of Rights (1990)[1] and the Kiaima declaration (1998)[2]. The height of this fractured relationship was the killing of Ken Saro-Wiwa and other Eight members of Movement for the Survival of Ogoni People (MOSOP)[3](Garba, 2004, Tamuno, 2011)

c. The crisis has fractured relations between the communities of the Niger Delta and the Multinational Oil companies. The purchase of arms by Shell for the Nigerian military and the resort to kidnappings, abductions and blow up of pipelines by the youths is the outward manifestation of this fractured relationship (Taft and Haken, 2009)).

d. The socio-economic landscape of the Niger Delta has undergone radical transformation that is largely detrimental to the indigenous local businesses. For example the people of the Niger Delta have been living with the perils of oil pollution for over 30 years- this lingering pollution has contaminated the land and rivers that nearly two-thirds of the Niger Delta people rely on for food and livelihood. The creeks have vanished and fishing no more productive (2011 UNEP Report on Niger Delta, 2015 Amnesty Report on Pollution in Niger Delta).

e. The crisis has led to damage and degradation of physical assets and infrastructure, reduced level of human capital due to deaths, disease and displacement, lost employment opportunities and livelihood, weakened institutions and a decline of social capital, particularly the bridging type of networks that reach across ethnic or communal divides, growth collapse and capital flight (2011 UNEP Report on Niger Delta, 2015 Amnesty Report on Pollution in Niger Delta).

[1] The Ogoni Bill of Rights is the demand by the people of Ogoni presented to the Federal Government of Nigeria in November, 1990 for political autonomy to participate in the affairs of the Republic as a distinct and separate unit.

[2]Kaima a small town in Bayelsa State is the birth place Isaac Adaka Boro. On December 11, 1998 5,000 Ijaw people representing over 40 Ijaw clans, chose the historic town of Kaiama to articulate their aspirations for the Ijaw people, and to demand an end to 40 years of environmental damage and underdevelopment in the region.

[3]Ken Saro Wiwa and 8 other MOSOP leaders were executed by the late General Abacha's government on 10th November, 1995 for masterminding the gruesome murder of Ogoni Chiefs. This attracted wide spread condemnation from the international community and resulted in Nigeria's suspension from the Commonwealth.

From the forgoing, this paper will focus on evaluating the fundamentals of the Niger Delta conflict within the context of the strong expectation of the stakeholders in the oil producing communities to access a greater part of the revenue accruable from crude oil exploration. This is based on the assumption that the Niger Delta conflict is a distributional conflict amongst the constituent parts that make up the Nigerian Federation.

The contribution of this work to the literature is the analysis of the Niger Delta within the context of games theory using a model of exploitation and distributional (revenue) conflict rather than a political or military action that has been the prevailing perception until now. The model used the EPG distance (economic, political and geographic) to explain the root cause of the conflict.To achieve the objective of the study, the paper is structured into four sections. The first section provides an introduction, section two review the literature. Section three presents the methodology used in the study. In section four, we present the empirical findings and discussions of the results and section five concludes the study with recommendation.

Literature Review

Generally, the concept of game theory is perceived as the study of alternative strategies that a firm, organization, government or a nation may choose to adopt in order to articulate or realize its interests, depending on their assumptions about their rival's behaviour. In other words, it is a tool for the analysis of strategic behaviour amongst individuals, firms, organizations, governments or nations in a situation of competing economic, political or social interests on the basis of their interdependence. Game theory recognizes mutual interdependence and takes into account the expected behaviour of other participants in the market or decision space. Rivalry among participants in terms of conflict of interest necessitates the use of game theory for analysis (Mohammed, 2008; Garba, 2004; Harsanyi, 1967; Nash, 1950; Von- Newman, 1944).

Competition and conflict of interest serves as prelude to game theory. Thus, the general context of choice and business decisions under competing interest circumstances is one of strategic situation and not a non-strategic or passive situation. Clearly, in the real world situations to assume a perfectly competitive scenario is to imply passivity and non-strategic behaviour on the part of agents confronted with a choice situation.

For the purpose of this study, the review of empirical literature is carried out specifically with a view to present typical conflict situations across the world that has been discussed, evaluated and analysed using game theory as a frame work. This is considered necessary in order to provide an empirical illustration of the application of game theory in specific conflict situations. This paper provides the literature review by dimensioning the conflicts with epochal events like the Nuclear Deterrence / Cold War between the United States and the defunct USSR, the Israeli-Palestinian conflict and the quest for dominance by OPEC in the international oil market that have been studied and analysed.

Cold War / Nuclear Deterrence

During the two decades between 1946 and 1966 American strategists using game theory articulated the first systemic theory of coercion. Bernard Broder, Albert Wohlstetter, Herman Kahn, Thomas Schelling and others used game theory to invent a new military strategy, one markedly different from anything either super-power had adopted before (Jordan, 2015). Before the nuclear age, there was no common framework to discuss coercion. Scholars such as Sun Tzu had studied it and some like Machiavelli or Hobbes have thought deeply on it. But these were mainly discussed in the context of war or revolution, or of domestic politics or state formation (Jan, Ilona & Petr, 1995).In the analysis of international relations two kinds of goods were recognized: first, the good which each state might hope to gain through violence. Second, the good which both states could gain from avoiding violence. The first state would divide in proportion to their strength- a state twice as likely to defeat an enemy as to be defeated would enjoy twice the wealth. This is the realm of military power or in game theory parlance a zero-sum game. The second kind of

goods states would divide by their ability to negotiate. This is the realm of coercive bargaining or distributive conflict (Hector, 2004).

But Schelling (1960) used game theory to analyse the nuclear arms race and was able to divorce coercion from military strength. He showed that with nuclear weapons, the cost of war became so high that military power mattered far less to one's international position than coercive power- than reputation, risk and commitment. Avoiding the costs of nuclear war was far more valuable to the superpowers than any gains nuclear war might provide and so the character of international relations of the cold war came to depend far more on how well states could coerce than on how well they could fight. The success of brute force depends on the strength of the opponent, but the success of coercion depends on his interests (Schelling, 1960). Thus, although nuclear weapons do not in the least help the United States to conquer Russia (or vice versa), they are far from useless. The sheer threat of pain, uncoupled from the threat of victory, can induce an enemy to comply with one's demands. In nuclear war, winning is beside the point. The character of the cold war did not really depend on which side would probably come out ahead in a nuclear exchange, rather it turned on how well each side could use the threat of monumental pain to get what it wanted. According to Schelling (1960), for most of history, some sort of military victory has been a prerequisite to successful coercion. One state could not credibly threaten great pain against a rival unless it could also defeat that rival. But nuclear weapons overthrew this principle, for one country can impose unfathomable damage even while losing a war (Schelling, 1960). This explains the quest by the Iranians to obtain nuclear weapon as a bargaining chip against the West- especially the United States. Although the initial reaction of the West led by America was to impose punitive sanctions, the end result was an accommodation of Iranian interest with the negotiated settlement reached in 2015 that lifted sanctions and allowed Iran back into the comity of nations.

A key finding from the use of game theory to study the cold war byWilliams (1991), Freedman (1981), and Schelling (1980) is that with nuclear weapons, coercion became the essence of international politics, for to avoid war became vastly more valuable than to exploit one's war making strength- with nuclear weapons, the power to hurt is more impressive than the power to oppose. This might seems obvious, but at the time, it was strikingly original. A chief contribution of this body of works is not that nuclear weapons are a fundamentally new way of war because of their unprecedented destructive power- which was true enough. But their major insight stems from their analysis that differentiated nuclear wars from others in the speed of their destruction but even more importantly the ability of even defeated states to use them. Instead of a nation incurring tolerable cost over an extended conflict, nuclear states face immediate and intolerable cost if one does not yield (Freedman, 1981). Another notable contribution of this group of theorists is the distinction they made between deterrence and compellance. Deterrence is a threat to do X if an enemy does Y. Compellance is a threat to do X until an enemy does Y. This distinction seems irrelevant, but its hidden significance is that to deter is almost always easier than to compel. This formed the basis for the nuclear détente and helped shape the contours of the cold war (Schelling, 1960).Another insight provided by Williams (1991), Freedman (1981), and Schelling (1980) was that war is not a zero-sum game. If war or any conflict is not zero-sum, if there are positive gains from both sides from avoiding conflict, then the distribution of these gains will matter (Schelling, 1960, Williams, 1981). This is a telling picture, because it resonates very well with the Niger Delta crisis.

Shale Oil versus Organization of Petroleum Exporting Countries (OPEC)

Kayle (2014) used game theory to analyse the potential response to the shale oil development by the Organization of Petroleum Exporting Countries (OPEC), and the results showed that in a perfectly collusive situation, OPEC has the capacity to hinder shale oil development and in an imperfectly collusive situation OPEC's ability to effectively respond to prospective shale production is severely limited. Starting from the realistic perception that there exists an already weak

economic incentive for OPEC producers to collude given the recent shifts in the level of OPEC market power and the strong argument for oil being fungible in the long term, Kayle (2014) showed that OPEC would have three basic options: first, maintain business as usual; second, flood the market to deem shale development economically infeasible; and third, cut production to realize short term gains as a fully maximizing cartel.

After establishing this, a game theory analysis that included a qualitative discussion of OPEC and member countries incentives and responses in the situation where shale oil reserves are beginning to be developed on a sufficiently large scale to threaten OPEC's market share and thus its political influence was developed by Kayle (2014). Accordingly, Kayle (2014) concluded that in a perfectly collusive scenario OPEC could potentially thwart shale development given a specific set of circumstances. More likely though would be either a slow decline in OPEC's market share from maintaining business as usual or a more rapid deterioration in OPEC's market share resulting from cutting production to operate as a fully profit maximizing cartel. In the more probable scenario of imperfect collusion OPEC's responses were much less effective. In the vast majority of situation, OPEC member countries had incentive to cheat and a regression to business as usual and steady decline in political power appeared more likely. While it depended on many future conditions, the fundamental conclusion drawn from the game theory analysis was that in the more plausible case of an imperfectly colluding OPEC, the cartel would be highly ineffective at hindering a large scale rise in shale oil development, unless very specific circumstances were present leading to gradual reductions in the power of OPEC as a political entity. As shale production progressed in countries outside the United States, Kayle (2014) found that the shale oil revolution has the potential to significantly impact OPEC market share and furthermore, an OPEC response would likely be ineffectual.

Niger Delta Conflict

Garba (2004) used game theory within the framework of political economy to analyse the Niger Delta conflict. The study based its analysis of the conflict on three fundamental questions generated by global economics and politics of oil and gas. In analysing the question of who controls, who can control and who should control, Garba (2004) sought feasible solutions to the problems at the roots of the grievances, non-violent struggles and rebellion in the Niger Delta. The framework the study adopted indicated that the preferences of host communities are in conflict with the preferences of oil exporters and are under constant threats by the interests of global oil players. Also, Garba (2004) showed that the inherent nature and history of oil and gas as well as the dependence of industrial economies on cheap supply of oil and gas makes it difficult for oil exporters to control the operational dimensions of the oil and gas value chain. For countries like Nigeria that has failed to use the opportunity presented and have chosen to remain passive about controlling its oil and gas resources, the protection of its citizen's right are also imperilled. Thus, Garba (2004) postulated that first, ethnic nationalities would not acquire control simply by acquiring ownership rights over oil and gas resources; second, political autonomy is not sufficient for ethnic nationalities to acquire the capacity to withstand the threats of the curse of oil; third, the conflicting solutions proffered by the federal government and the ethnic nationalities are neither stable nor sustainable and their costs are substantial and non-decreasing; and fourth, a cooperative solution to the national question that builds capacity of the Nigerian state to guarantee and protect the rights of Nigerian citizens seems to be the better option if Nigerian contestants or players are rational and prudent.

Garba (2004) indicated that the global economics of oil and gas show that the essential nature of the oil and gas industry and the conflicting interest of unequal players generate political-economic outcomes of market failure globally and state failure in developing resource rich countries. When market and state failure co-exists, the social consequences are disastrous, sustained and non-decreasing. Consequently, oil and gas could easily be a curse for developing nation states and communities endowed with oil and gas resources because they are unlikely to control rates of depletion, wasting of gas,

choice of technology, costs, prices or the economic rent from oil and gas.

Garba (2004) reviewed the OPEC revolution of the 1970s allowed developing oil exporting governments to acquire property rights and greater control. However, the multinational oil companies control operations (exploration, development, production, gas flares, transportation, etc.). The game theoretic analysis he adopted predicted that the solution forced by OPEC in the 1970s by a political-economic strategy was not sustainable. Because countries like Nigeria disastrously botched the opportunity to overcome the curse of oil and failed to come to terms with the transient nature of the OPEC solution, they naively walked into strategic ambushes of (jumbo loans, trade debts, refinancing deals and debt clubs). Consequently, they could not ward off the adverse effects of oil revenue shocks on macroeconomic stability.

With respect to the threat that global contestations for oil and gas resources poses to Nigeria, Garba (2004) articulated a thought provoking argument that central to the rise of ethnic nationalism and growing economic rent is the national question. If the national question were to be resolved in a way that strengthens the Nigerian state and the rights of Nigerian citizens, Nigeria may not get to the extreme endpoint of a failed state. The threats of secession, incidences of open conflicts and cynicism by citizens against the government at every level are indicators that the ship of the Nigerian state is at the very least off-course. Garba (2004) identified two possible options: (a) a resolution of the national question or (b) dissolution of Nigeria. Resolving the national question would require an actionable social contract between citizens and a strengthening of the Nigerian state to protect and extend the rights of Nigerian citizens. In this option, property right would not be the exclusive right of the federal government but, more likely, some compromise between the status quo and the ethno-national extreme. Such a solution is a cooperative solution, would be ethical, prudent and efficient. A cooperative solution on property rights would pre-determine control on operations, and the national strategy for creatively dealing with the oil and gas game, and for effective utilization of economic rent.

However, Garba (2004) put forward that the concept of resource curse is likely to work against a cooperative solution. This was substantiated on the grounds that transition of ethnic militias to rebels could work for or against a cooperative solution. The upgrade of ethnic militia to the category of rebels could work against a cooperative solution if rebels grow progressively strong while the state grows progressively weak. Beyond a cooperative threshold, the Nigerian state which is presently at risk could become dissoluble. Garba (2004) strongly asserted that the dissolution of the Nigerian state would not necessarily end the contestation over oil and gas resources of the Niger Delta. Neither would it likely enable the building of modern states given that the smaller and most probably weaker states that would emerge would unlikely have the capacity to wrest control of oil and gas resources from the established global players.

In view of the issues raised above, Garba (2004) pointed out that; the global political-economics of oil and gas, the current state of Nigeria and the costs of existing contestation; and the cost-benefit analysis of possibilities, an antagonistic solution would impose substantial deadweight social, economic and political loss on oil producing communities, other citizens, government and Nigeria as a whole. Consequently, rational and prudent players (ethnic nationalities, the ruling elite and Nigerian civil society) would be better off if they choose or are driven to a cooperative solution that strengthens the capacity of the Nigerian state and guarantees the welfare and rights of the Nigerian people.

Mohammed (2007) used both the strategic and sequential forms of game theory to investigate the impact of the international and domestic contest for crude oil resource control on the Niger Delta crisis. The struggle for resource control in the Niger Delta according to Mohammed (2007) is both international and domestic in nature; and that the domestic contest is subordinate to the international contest. The federal government does not possess the requisite technology to control the oil and gas

industry and to this extent is unable to transfer control to state governments or host communities by simply ceding ownership or by the acquisition of property rights over oil resources by governors and communities of oil producing states. Therefore, the resource control solution reached at the national political reform conference to amend the 1999 constitution is incapable of addressing both the domestic and international contest. The conference was dominated by the struggle to increase the revenue derivation formula in favour of the host state governments of the Niger Delta. This was strongly resisted by the Northern state governments that eventually ended the conference in a dead lock situation. However, the federal government reverted to the status quo situation of 13% derivation formula as a solution. Mohammed, (2007) argued that the solution was tenable but not sustainable to keep the Nigerian state in the balance going forward.

Mohammed (2007) showed clearly that a more feasible and potent means of controlling oil resources by Nigeria would be the investment in the acquisition of technological requirements in the oil industry both by the state and the federal government. The control of technology invariably dictates the flow and direction of economic rent associated with oil exploration and production. It follows logically that the acquisition of a larger share of revenues accruable to the Nigerian state does not imply resource control. Although, a fairer redistribution of the derivation formula may help to address a considerable amount of the cost of externalities, it may not necessarily generate the expected outcomes envisaged by a generality of the Niger Delta people. Appropriate education that is technology driven as an end, targeted at the Niger Delta youths was viewed by Mohammed (2007) as a long term viable option to providing employability opportunities that could grant sustained access to economic rent from crude oil. Also, this provides a viable means by the Nigerian state to protect the interest of the youths who engage in militancy.

Methodology

A Model of Exploitation and Conflict

This model of conflict in Nigeria starts by assuming that the country is populated by a continuum of groups of measureY_N. For simplicity we group Nigeria into two, A (Nigeria excluding the Niger Delta- the non-Niger Delta coalition) and B (Niger Delta Region). Within each group, all players are identical. Each player of group A has an initial exogenous income stream Y_A and each player of group B has initial exogenous income stream Y_B from assets that cannot be confiscated. One may think of these as human capital (slavery is not allowed). In addition, the country is endowed with aggregate resources that generate an income stream Z that must somehow be distributed among the population. Z in the extant case represent the petroleum resources in the Niger Delta region.

Group A then chooses between two actions: C (for conflict) or P (for peace). Another critical assumption the model makes is that whatever decision is made by players of the group it is with the aim of choice maximization of the utility of agents. If group A chooses C, it takes hold of the common resources Z, to the exclusion of players of the other group (B). If group A decides to seize control, a fraction of the country's resources ∂ is lost. Exploitation is costly. There are several reason to justify this cost- it could represent the cost of the repressive apparatus required to enforce the exploitation of group B, it can also represent the deadweight cost of discrimination (for example, exploitation may exclude talented players of group B that otherwise could have been useful to the country). Net of this cost, conflict results in a reallocation of the common resources Z at a lower level. Also a fraction of the exogenous income stream $\emptyset$ is lost due to reduced productivity.

Empirical Analysis

The Nigerian economy if peace prevails is represented as:

$Y_N^P = Y_A + Y_B + Z$ …………………………..... 1

The payoff for each group is:

$A = Y_A + Z_A$ ………………………………... 2

$B = Y_B + Z_B$ ………………………………… 3

If exploitation prevails but with B allowing peace to prevail we have:

$Y_N^E = Y_A + Y_B + Z - \partial$ …….. 4

The payoff for each group is:

$A = Y_A + Z_A - \partial_A$ …… 5

$B = Y_B + Z_B - \partial_B$ …… 6

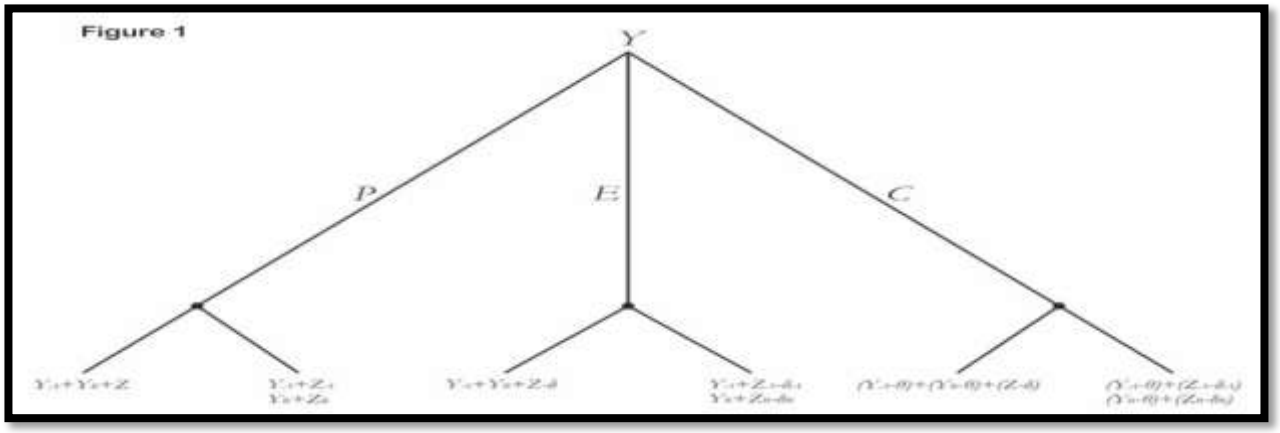
If B chooses to resist and conflict prevails the economy becomes:

$Y_N^C = (Y_A - \emptyset) + (Y_B - \emptyset) + (Z - \partial_A - \partial_B)$ …….. 7

The payoff for each group is:

$A = (Y_A - \emptyset) + (Z_A - \partial_A)$ …….. 8

$B = (Y_B - \emptyset) + (Z_B - \partial_B)$ …… 9



The 3 Stage Game

At each final node the payoff of A is listed first and the payoff of B is second. The interpretation of the payoffs is straight forward in the Y_N^P case were peace prevails. In the case of exploitation (Y_N^E) the exploiting group receives its own endowment in addition to Z less the cost of exploitation.

In the case Y_N^C or open conflict, each group receives its share of non-exploitable resources less the cost of less the cost of conflict ($\emptyset$) in addition to a share of the exploitable resources less the cost of exploitation(∂).

Having established that the situation were peace prevails is optimal, the question then is why won't the contending groups (A and B) choose the peaceful outcome? This study in solving this puzzle makes the claim that policy making in an environment where a decision taken that favours one group simultaneously imposes negative externalities on the other group makes it a game where most solutions are seemingly unstable. These externalities can be material (in our extant case economic and/or geographic distance), but we can extend this externality to include political distance (more psychological than material).

Consider our initial group A and B. The valuation of the common resource Z produced depends on the attitude of players(q), which we assume to be normally distributed. The objective of each group is to maximize their utility or share of the common resource:

$q_{AB} = Y_{AB}\ \mu(Z_A, Z_B)$ …… 10

Where $\mu_A^i > 0, \mu_{AA}^i < 0$ and $\mu_B^i < 0,\ \mu_{BB}^i < 0$

This implies that a favourable decision on the share of the common resource to group A reduces the share available

for group B. The set-up of the utility function means that players' type with strong preference for their group to control the common resource are more involved and since $\mu_B^i < 0$ those most dedicated in group B will be most negatively affected. Further, since $\mu_{z_A, z_B}^i \geq 0$, a higher Y (as result of increase in Z) increases "hawkishness" as the groups rival one another for an increased share of the common resource Z. The implication of this is that the groups are more than likely to be led by players who are most adversarial and whose strategies is to employ conflict to obtain a larger share of the common resource Z. This explains why the militants are the perceived leaders in the Niger Delta struggle for resource control.

In the decision making process group members strategically delegate leadership. The reason for this is that the members see that their choice of leaders impacts on their share of common resource Z. Given this scenario, then the nature and dynamic path of the conflict is established: in conflict contending groups are likely to delegate leaders with moderate views so as to avoid aggrieving members of the other group. However, when groups cooperate, group members select leaders who are hawkish and can obtain more of the common resource for the group. This is why the solution at the different phases of the conflict is seemingly unstable.

In summary, we are likely to have situation of conflict if:

1. The EPG distance between *A* and *B* is large

II. The country's endowment of exploitable resources is neither too small nor too large with implication for distribution

III. Group *B* has high per-capita income

IV. Group *A* has low per-capita income

V. Group *B* is geographically located at the border (i.e. not centrally located)

VI. The efficiency costs of exploitation are modest

Conclusion and Recommendations

This study utilized game-theoretic approach and analysed the exploitative and distributional nature of oil resources and its impact on Niger Delta conflict and the Nigerian economy in general. For a utility maximizing group any decision that imposes negative externalities will create conflict. This establishes the dynamic path of the conflict. Higher Y (as result of increase in Z) increases "hawkishness" as the groups rival one another for an increased share of the common resource Z. The implication of this is that the groups are more than likely to be led by players who are most adversarial and whose strategies is to employ conflict to obtain a larger share of the common resource Z. This process establishes the players, their strategies and the payoff. Members strategically delegate leadership. In times of crisis the will elect leaders with moderate views to obtain peace. In times of peace and especially with higher Y, members are likely to elect hawkish leaders. This is why the solution to the Niger Delta conflict is seemingly unstable. As a long term solution to the problem of Niger Delta, the government should devise a mechanism for distributing funds directly to households and communities rather than restrict the benefits of the amnesty fund to only militants. This policy recommendation if implemented will marginalize the militants while simultaneously retaining the support and the goodwill of residents of the Niger Delta communities. It is time to end the amnesty programme and engage in a more robust, more sustainable and more inclusive policy.

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