THE POLITICS OF INDUSTRIAL LOCATION IN NIGERIA

By

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Introduction

The location of industries in Nigeria constitutes one of the most critical decisions in its industrial process. It also provides one of the strongest evidences of political influence in the determination of economic development. In fact, nothing seems to demonstrate the political and economic rivalries or the heterogenous nature of the Nigerian society more clearly than the decisions that relate to industrial location.

The function of this study is to demonstrate how politics (especially ethnic regional and state politics), influence governmental economic decisions. This is because non-economic locational decisions among other things, tend to limit the impact of any strategy such as the diversification of the Nigerian economy via industrialisation. In effect, the strategy is affected by ethnic regional interests because productivity in industries seems to be limited by political and communal considerations in their location. Stated differently, the influence of politics sometimes leads to the establishment of many industries or projects in locations that may be politically expedient but not economically viable.

The Theory of Industrial Location

Industrial location theory has experienced significant evolution since the turn of the century *(1)*. As Stefan Valavanis aptly put it, «the economics of location belongs to that class of works, of which each generation produces very few, that both introduce a new subject and exhaust it » *(2)*. This means that the theory of industrial location falls within the realm of issues that scholars have hardly agreed among themselves on what constitutes optimum location for different types of industries. Without being embroiled in the seemingly unending debates on the factors that in reality influence the location of industries, this aspect needs a brief elaboration.

The pioneer work of Alfred Weber stressed the least cost theory which recognized transportation costs, labor and raw materials as the factors that influence the industries in a particular place *(3)*. Weber also viewed the «agglomeration factor» as another important economic factor in

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the consideration of an industrialist on where to locate an industry. He defined the agglomeration factor as the advantage in producing or marketing costs at a particular location *(4)*. Thus, according to Weber, the optimum location for an industry «is either one where total transport costs per unit of output are minimized or one where the agglomeration and/or labor economies per unit of output are sufficient to offset the transport diseconomies as a result of not operating at the point of lowest transport costs» *(5)*.

One of the major problems with the Weberian least cost conceptualization is that it views transportation cost as the primary factor that determines the location of industry or as Norcliffe put it, it «assumes, as given, demand and the location of raw materials and markets» *(6)*.

Using the Weberian least cost approach, Edgar Hoover elaborated on transportation costs. He maintained that where the cost of production is constant, «the best location for the production process is at the point of minimum transport costs» *(7)*. Hoover considered Weber's view on economies of concentration as unacceptable and argued instead that the concentration of industries «is not limited to locations of cheap labor but can also occur at a source of materials, at a strategic distribution point, or at a site of advantageous product costs» *(8)*.

August Losch added another dimension to the classical debate on industrial location. In his maximum profit theory, Losch stressed that the optimal location for an industry is at the point of greatest profit derived from the largest market *(9)*.

These writers (Weber, Hoover and Losch) belong to the classical school of thought and their theories followed the partial equilibrium approach which ignored a host of other factors such as the hidden interests of economic actors that influence industrial location. The classical theories were also flawed on the ground that they hardly approached reality or events in the real world.

In later years, critics of the classical location theory (such as Greenhut *(10)* and Isard *(11)*) made and effort to provide a general equilibrium approach to the theory of industrial location. Unlike the partial equilibrium theories, Isard in particular recognized the relationship that exists between all factors that influence industrial location. He thus maintained that a selective consideration of factors presents a limited understanding but that what is needed is an approach that «comprehends the economy in its totality» *(12)*. This approach will involve in the words of David Bramhall, a consideration of «an entire economic system which specifies the motivating principles of economic factors, the physical-technological conditions of economic activity, and the nature of markets in which participants interact» *(13)*. Thus according to Isard, «the problem of production becomes a problem of choosing the right combination of the various types of capital, labor, land, and transport inputs» *(14)*.

It must be stated that the general equilibrium theory is flawed on the ground that it assumes complete economic rationality. Furthermore, it sought to explain industrial location by abstract statistical models which hardly reflected the true situation in the real world.

The inability of the normative industrial location theories to adequately address locational issues in the real world gave rise to the behavioral school of thought. The primary focus of this school is the recognition that locational decisions are not made on grounds of complete economic rationality. This therefore creates the need for a better understanding of the actual behavior of industrialists and decision makers since for example, personal needs or other hidden interests of a decision maker may influence the location of an industry at a particular point. This may or may not necessarily reflect a primary consideration of the least cost or maximum profit conceptualization. Notable among the behavioral theorists are Alchian, March, Simon, and Tiebout, to mention but a few *(15)*.

The considerations of partial equilibrium, general equilibrium and behavioral theories not withstanding, there still exists a lack of conceptual framework that can adequately explain locational factors. Similarly, other recent viewpoints have produced an avalanche of literature geared towards providing models that can help understand the complex nature of factors that influence the location of industries. These contemporary approaches are based on the general systems, growth pole and growth center, and economic base theories *(16)*, which like the classical, neo-classical, and behavioral theories, have advanced our knowledge of the theory of industrial location but failed to evolve a real world model that can put an end to the enormously varying viewpoints among social scientists on what ought to be seen as the optimum industrial locational factors for all situations.

In all, what has so far emerged from discussions on the theory of industrial location since the turn of the century is the identification of a host of factors that in one way or the other influence the location of manufacturing facilities in a particular area. At a broad level, these can be conveniently categorized as primary and secondary factors. The primary influences consist of six factors which are: raw materials, energy resources, capital, labor, transportation and transfer cost, and market *(17)*. The secondary factors that economists have stressed are: physical environment, political, economic, cultural and personal considerations *(18)*.

The influence of all of the above factors does, however, differ from industry to industry, locality to locality, and in fact from polity to polity. As Ludwig Schatzl rightly put it, the factors that have the greatest pull to the siting of an industry will depend «not only upon specific branch conditions but also upon the stage of development reached in the ... economy» *(19)*.

Although the primary and secondary factors that are briefly mentioned above or other theoretical conceptualizations of economic factors or spatial models that can explain industrial location in the real world are yet considered inadequate, or at best still passing through an evolution, there seems to be a consensus among economists of different shades of opinion that economic factors ought not to be ignored in the location of industries. Similarly, most scholars will agree that economic factors ought not to be ignored in the location of industries. Similarly, most scholars will agree that even in situations where there exists a good case for some social costs to be borne by some carefully calculated departure from the dictates of conventional economic wisdom, such social costs should be minimized in order not to overshadow or ignore «rational» economic considerations. There is no gainsaying the fact that for all economies, be they developed or developing, an industrial policy that allows socio-political considerations to predominate over «rational» economic calculations may end up, *ceteris paribus*, promoting «white elephant» projects that may have a «drawing back effect» on the industrial sector and indeed other sectors of a given economy.

Industrial Location in Nigeria

Theoretical and empirical studies on industrial location in Nigeria carried out by some scholars such as Kilby, Schatzl, Berger, Aboyade, Hakam, and Usoro *(20)* have shown that like in most polities, the determinants of the siting of manufacturing facilities in any particular area in the country are not only the purely economic factors. Other non-economic factors such as geographical, social and political considerations in many cases become very critical in the location of industries.

In recent years, the Nigerian government has adduced several reasons (some of them disturbing) for departing from the widely held viewpoints of some influential scholars on industrial location. The main argument often made by the country's policy makers is that there is the need for government policy to be used in order to encourage the location or relocation of industries away from the already congested administrative, urban, and commercial centers to other less favored constituent parts of the federation. The primary objective is to distribute or redistribute industrial and other economic activities over a wider geographic area of the polity. In other words, the Nigerian policy makers are willing to forego some benefits that could result from adhering to economic location factors for «equity» and political considerations. But as Aboyade rightly pointed out, «...the main danger is that given the political character and administrative machinery of a country like Nigeria, the substance of a developmental strategy is likely to be missed by the rulers for the shadow of narrow self-interests. Social benefit – cost analysis is often only vaguely understood, badly applied and readily claimed as a cloak for more dishonest or incompetent decisions» *(21)*. These facts no doubt make a judicious balance between economic and non-economic considerations in decisions relating to the location of industries in Nigeria difficult.

Although the influence of non-economic factors in the location of manufacturing activities is not by any means peculiar to Nigeria, we shall observe in the latter part of this article that the country presents an example per excellence of a polity where in many cases, political and social considerations overshadow pure economic calculations in the siting of industries. Stated differently, there is a serious lack of the ability or of the will for a reasonable or judicious balance to be struck between economic and non-economic factors in the establishment and location of industries.

However, this should not be taken to mean that decisions on industrial location in Nigeria are in all cases primarily influenced by non-economic factors. Therefore, we will begin this examination by first distinguishing those industries that are probably inevitably rooted to the sources of raw materials; and those where the types of ownership and control may have been crucial on whether or not economic factors are given priority over political and social benefit costs. The latter part of this study will be devoted to providing specific examples of industrial locations that are overly or overwhelmingly influenced by political, regional/state interests. The main objective here is to show that in many cases excessive intrusion of politics in the location of industries in Nigeria has had adverse effects on its industrialization process.

Industries Rooted to Sources of Raw Materials

The following section deals with industries that are inevitably sited or are rooted to specific areas because of the availability of needed raw materials. These are mainly agro-allied and forestry industries which engage in the processing of primary products. The industries in this category include vegetable oil industries, cotton ginneries, palm oil mills, saw mills and rubber processing plants. To a large extent, sugar processing plants are also located in areas where the raw materials are produced. In all these industries, cost considerations and advantages for conducting the processings in the immediate vicinity of raw materials have been a major factor.

For example, cotton ginneries were located in the cotton belts of Northern Nigeria such as Zaria, Lokoja, Gusau, Funtua and Malumfashi, to mention but a few early ones. Most of these cotton ginneries were established prior to Nigerian independence by the British Cotton Growing Association (BCGA). The major consideration of the Association was private profitability derived mainly from reduction in transportation costs. Similarly, the saw-mill industries were inevitably located in the forest belts such as Benin, Calabar, Ibadan, Abeokuta and Ife because of high loss in weight in processing. It would otherwise have entailed greater transportation costs to locate lumbering industries in non-forest areas.

Another example is the rubber processing industries. These are also located in areas of raw materials for various reasons: immediate processing is required soon after tapping the hevea to prevent chemical and biological reactions which may reduce the quality of the product; furthermore, considerable weight is lost during the processing of liquid latex to dry rubber. Similarly, a fair number of agro-allied and forestry industries *(22)* are rooted to specific geographic areas because of their dependency on the production factors, land and raw materials *(23)*.

Location of Industries Based on Private-Profitability Motive

Prior to the Nigerian government's direct investment in the industrial sector or those established in partnership with private foreign investors, most manufacturing facilities that were not rooted to sources of raw materials were located in the large urban, commercial and administrative centers *(24)*. For the private foreign investors that owned most of the medium and large scale industries, profitability motives or economic considerations seem to have dominated their thinkings in the siting of manufacturing facilities in any particular Nigerian town, district, or region/state.

In addition, the government's industrial policy which up to early sixties was based on an «open-door strategy» encouraged foreign investors through the liberal use of incentives to venture into the country's industrial sector. This policy supported the establishment of any form of industries in the country in which the foreign entrepreneurs were interested or willing to invest in. In other words, the primary concern of the State at this stage seemed to have been based on promoting the growth of industries at all costs. It meant that the foreign businessmen had a freer hand to locate their industries in any site or place they deemed fit in the nation.

The reasons for the preference of the center areas of the country by foreign investors are not difficult to find. First, the large urban and administrative areas provide a ready source of market for manufactured goods and for skilled labor. Second, infrastructural facilities such as road network, railways, port facilities, power, water supply, etc... are fairly more developed in the centers than in the periphery of the country. In addition, the urban and port locations made it easier for industrialists to obtain production inputs from domestic and external sources. There were also other attractive agglomeration advantages which made the large population concentrations important.

Another important attraction of the large urban and administrative centers is that they enhanced the proximity of the industrialists to the country's bureaucrats and policy-makers. For example, it was easier for the private foreign investors or their local middlemen or agents to obtain prompt and favorable reaction on tenders or applications to benefit from the numerous government contracts and industrial incentives such as tax exemptions, aid to pioneer industries, import licenses and so on, which otherwise would have been difficult if the advantage of proximity to influential government officials were lacking.

The major centers that benefited from these locational considerations are Lagos and Greater Lagos (i.e., the Federal Capital Territory), Kaduna, Ibadan and Enugu (i.e., the Former Regional Capitals); Port-Harcourt, Kano, Jos, and Onitsha, to mention but a few, represent other important centers of industry. Lagos and the Greater Lagos area have the highest concentrations of industries. In specific terms, over 60 percent of industrial establishments in the country are located in the Lagos area. These industries as we pointed out earlier were largely owned and controlled by private foreign investors. This meant that (given the liberal economic policies of the Nigerian governments in order to promote rapid industrialization) it is possible for the foreign investors to choose location they considered economically important for their enterprises. The locations they most preferred were thus the large urban and administrative centers that offered advantages such as availability of skilled and semi-skilled labor force, economies of scale, relatively adequate infrastructural facilities, and more importantly access to influential politicians and policy makers. In these considerations therefore, economic factors seem to play a primary role in the decisions of foreign investors in the location of industries. Where political influences were exerted by politicians on the foreign entrepreneurs, they were minimal in effect since the latter had various leeways by which they could circumvent undesirable political pressures to locate their industries based on private profitability motives. Even in recent times when Nigeria seem to acquire through oil some significant financial resources to participate or «insist» on where some private industries should be located, it remained subject to manipulation by some foreign business investors. They could easily cite made-up feasibility studies, type of soil (even when it is not an agricultural venture or any other type of economic undertaking that might need a special soil), or other related reasons to sustain their argument. Short or at most medium-term calculations seem to dominate the thinkings of many foreign investors given the fact that even if investing in a rural setting might in the long-run prove more profitable, they often prefer quick returns. One of the foreign business managers of a well established Nigeria firm that we interviewed in an earlier study (1980) about his unwillingness to involve his company in investments that might require long period of maturation before making profits, had this to say: «To be honest, decades of political instability in many African countries do not encourage long-term planning and investment» *(25)*.

Political Factors in Industrial Location

The Nigerian Development Plans of 1962–68 and 1970–74 expressed the need to carry out a programme of industrial dispersal in the federation in order to make for balanced development and equitable distribution of the country's wealth. At this period in the country's industrial development, equitable spatial distribution of activities rather than their viability and overall contribution to the economy was the primary consideration of policy makers. In other words, private benefit cost was placed in a secondary position or in many cases, gave way to social-benefit consideration.

As was pointed out earlier, the Nigerian Federal Government adopted the policy of spatial dispersal or balanced development and equitable distribution of industrial activities. This is not necessarily because it was the most realistic thing to do economically but because of the hidden narrow and parochial interests of some of its bureaucrats and political executives. In addition there were considerable political pressures from the regional/state governments for even development through the dispersal of industries. As Schatzl rightly observed, «Federal Government and State Policy was superimposed by the parochial location policy of individual politicians» *(26)*. These latter interest groups hardly relented in drawing the attention of the country's planners to the growth and congestion problems that characterize the Federal Capital because of the concentration of industries and other economic activities in the area. But as Aboyade argued, behind the fact of growth problems in Lagos lay the overwhelming political pressure from the regions or states to attract, as much as possible, any forms of industrial activities to their respective territories *(27)*.

Examples of industrial locations influenced largely by political considerations abound and deserve some detailed discussion. These examples are by no means exhaustive.

Iron and Steel Industry

Probably the most classic case of the misuse of politics in the location of industries in Nigeria is evident in the locational conflicts and political influences on the long proposed Iron and Steel industry. From the year 1959, the Federal Government considered the establishment of a steel industry as basic and pivotal in its program of rapid industrialization. It became a major preoccupation of the central and regional representatives at the National Economic Council (NEC) debates for over seven years before its dissolution by a military government. The bone of contention between the members of the NEC focused on the question of where in the former regions to locate the proposed Iron and Steel Industry.

At the invitation of the Nigerian Federal Government, the representatives of the United Nations Technical Assistance Administration had in its 1958 report suggested on grounds of economic viability the possible areas of the country where an iron and steel industry can best be located. They specifically recommended three possible alternative sites in the following order: Enugu in the former Eastern Region, Lokoja in the then Northern Region, and Onitsha as another location in the East. The Governments of the two regions obviously wanted the industry to be located in their areas of jurisdiction. The Federal Cabinet, the Legislatures, and the Planning Machinery notably the National Economic Council (NEC), Joint Planning Committee (JPC), and the Federal Ministry of Economic Development became arenas of conflicts and protracted debates between the competing political and bureaucratic narrow interests. Arguments and counter-arguments were advanced by each side on the merits of locating the proposed iron and steel industry in its region. Each side in the debate severally sought the advice of «experts» to buttress its claims. Several viewpoints were put forward. In each case the competing views were attributed to the findings of a «highly reputed and reliable» group of foreign experts. The long list of these conflicting findings and counter-viewpoints include, *inter alia*, those that maintain that: (a) the Enugu ores had undesirable high phosphorus content while the much needed ferrous content was low; (b) the cost of providing the infrastructural needs of the proposed iron and steel industry in Lokoja or an alternative location at Idah in the North was by far much higher than the cost of providing the same types of infrastructures at Onitsha; (c) that some expert reports exaggerated the costs of establishing the Steel Industry in a particular region; (d) that some expert reports show that the raw materials and the quality of it in some of the suggested locations were inappropriate and inadequate for the type and scale of steel-manufacturing activity under reference; (e) that the local manpower requirement was more easily available in Onitsha and its environs than in Lokoja; and (f) that some experts supported Lokoja because it is centrally located and for this locational advantage will be more accessible to the areas of anticipated demand.

It is difficult, if not impossible, to exhaust the flimsy and so-called expert reports, arguments and counter-arguments that each regional interest espoused to undermine and in fact to discredit the claims of its rivals. For example, the two competing regions (i.e., the North and East) in whose areas of jurisdiction the Steel Industry could possibly be located as suggested by the UN Technical Assistance Administration report, spent huge sums of money to fly in foreign «experts» from all over the world to support their lines of argument. Most of the reports of the so-called unbiased experts left much to be desired. This is because the foreign «experts» hardly disagreed with the political viewpoint of the particular region that had employed it. In other words, each group of «experts» supported the location interests of the region that had invited it and paid for its services and advice. For instance, all the expert reports that the then Northern region's representatives cited at the federal levels of decision making invariably supported the location of the proposed iron and steel manufacturing industry in Lokoja. Similarly, the Eastern region exhaustively produced experts' advice that favored Onitsha or Enugu in its territory.

The political locational conflict was further complicated when the former Western regional government no longer wanted to stay on the fence and accordingly threw in its weight in the struggle for the iron and steel industry. As it was expected, the latter regional government announced that high quality and extensive quantity of iron ore deposits had been found at Ikare in the West. It further buttressed the attractions of the purported findings made at Ikare by suggesting the possibility of linking «ancillary industries based on the deposits of limestone in Ukpilla and lignite in Asaba (both in the Mid-West) *(28)*. In additon, the Western regional government stressed that the feasibility study in support of its claim was carried out by a reputable group of international consultants.

On its part, the Mid-Western region (now Bendel State) joined in the race for the steel manufacturing industry. It justified its claim for the establishment of the proposed steel complex in its territory on the grounds that it has limestone and lignite deposits in commercial quantities at Ukpilla and Asaba respectively.

A further complication of the already bad situation arose when the Economic Commission for Africa (ECA) suggested the location of the proposed iron and steel industry in Port-Harcourt, (a port city of the former Eastern region) in order that the West African region of the Continent could benefit from the huge steel investment *(29)*. Port-Harcourt proved attractive to the Commission because of the view that such a location can facilitate the export of steel products to the other West African countries where they may be demanded. This suggestion as was expected won the unqualified approval of the former East regional government.

Compromised «Solution» of the Rivalries Associated with the Siting of the Iron and Steel Industry

In 1964, the Nigerian leaders decided to beg the steel issue. They attempted a compromise between the conflicting regional interests. Initially, the Federal Government leaned towards the establishment of two steel mills (instead of one originally planned) to be located in different regions of the country. This inclination was given expression at the sixteenth meeting of the National Economic Council in May 1964 where it was decided that the two steel plants will be located at Idah (in the North) and Onitsha (in the East). This non-economic compromise was of concern to scholars interested in the economic development of the country largely because «for the same level of output, splitting the industry between two sites would cost an estimated additional sum of £2.3 (₦4.6) million in capital investment and the profit rate (after allowing for all the direct and indirect subsidies) would fall from 2.5 per cent to 0.17 percent» *(30)*.

As if enough economic damage had not been done on the proposed steel project, another decision to further proliferate the industry was reached by the policy makers in order to placate the West regional government. In this regard, the NEC raised the possibility of a third steel plant to be located at Ikare or any other location in the Western region. This proposal was «debated» and favorably adopted at the NEC meeting and later by the Federal Government. The compromised decision was said by the policy makers to have been made in the interest of national unity. This leaves no doubt that the decision to site the vital steel projects in different locations in the country were in the First Republic taken primarily on political grounds which by and large ignored or at best placed economic factors in a secondary position. Furthermore, given limited capital and skilled manpower vis-à-vis the country's decision to simultaneously establish three steel plants is very indicative of the extent to which the nation's policy makers were ready to go in order to accomodate narrow parochial interests and political influences in the process of industrial development.

However, it is of interest to note that the 1964 fragile political compromise on the locations of the proposed steel projects did not eventually lead to its implementation. This was largely because the internal political wranglings that continued well into the late seventies provided an alibi for some of the foreign investors notably American, British and German Steel interests *(31)* (that were already reluctant to establish the project in partnership with the Nigerian Steel Development Authority) to withdraw their support. This consortium of steel interests raised some doubt as to whether the proliferation of the industry by the Nigerian policy makers and the choice of locations that may not be complementary to each other or economically viable were steps taken in the right direction *(32)*. Of course, they were not.

Thus for nearly two decades, the Nigerian Governments were unable to submerge differing and seemingly irreconciliable political interests to arrive at firm decisions on the specific locations for the iron and steel manufacturing industries. The frustration of the Nigerian public over the steel issue was probably best given expression in the 1975–80 Guideline for (Nigeria's) Third National Development Plan, which stated that:

> *... nothing has been gained by the delay in implementing the Iron and Steel project. For this as well as for most major planned projects, the problem has been the shortfalls in the implementation of Federal Government Programmes... decisions on their location are heavily politically charged and this leads to [frustrating] delays (33).*

It took a military decree in the seventies to call off the nearly two decades of political rivalries and to announce Ajaokuta in Kwara State (in the former Northern region) as the country's site for the steel complex against the competing claims of several communal interests.

As events later showed, even the military rulers were not apolitical in their handling of the iron and steel issue. Under General Gowon's regime (1966–75), the political division of Nigeria was changed. The regime in 1967 carved out 12 states from the 4 former regions *(34)*. This change by the military regime had its political implication and impact on the final decision that was reached by the government on the Iron and Steel issue. This is because the creation of the 12-states structure by Gowon created new centers of power beyond those that existed in the former regions which the major ethnic groups – Hausa/Fulani, Ibo, and Yoruba – dominated. The minority groups which were originally part of the regions were granted states of their own and greater participation in the central policy making organs than was hitherto possible. In addition the then Head of State and Commander-in-Chief of the Armed Forces, Yakubu Gowon, and many of his top subalterns were from the Middle Belt minority areas of the Northern part of the country. It was therefore not surprising that the decision was reached and made effective to site the iron and steel industry in Ajaokuta when the Middle Belt minority group of the former Northern region was well represented in the Federal Military Government. Because of continued political and bureaucratic interests and the ethinic loyalty of some of the non-Northern military and political leaders, efforts were made to accommodate the other special interests in the country that had over the years fought for the location of the project in their respective regions/states of origin. As a result, the originally planned single integrated steel project that was to be located at one site has been proliferated to smaller plants to be spread over many parts of the federation. These are the Ajaokuta Blast Furnace Plant in Kwara State, and the Aladja Direct Reduction Steel Plant at Warri in Bendel State. Three smaller Steel Rolling Mills were established at Oshogbo in Oyo State, Batagaruwa in Kaduna State, and Jos in Plateau State.

The regional distribution of the steel locations are as follows: the Ajaokuta, Batagaruwa and Jos steel complexes are in the former Northern region; the Delta steel plant at Ovwian-Aladja is in Bendel State in the former Mid-Western region; and the Oshogbo steel mill is located in Oyo State in the former Western region. The former Eastern region which between the period starting from July, 1966 to October 1979 (i.e. the period of the military governments when most of the steel decisions were reached) was not adequately represented in the government, did not benefit from the location of a steel plant. It is likely that the virtual absence of the military officers and political leaders of the latter region in the Federal Government during the long period of army rule may have accounted for the lack of a steel plant in the area or favorable consideration of the Eastern locations – Enugu and Onitsha – that were suggested in earlier debates. Perhaps to contain the dissatisfaction among the powerful political groups in the East and other areas of the country that so far have not benefited from the controversial steel industry, the post-military regime of President Shehu Shagari (1979–83), decided to set up two other steel rolling mills, one at Ikot Abasi in the Cross River State of the former Eastern Region, and the other at a location that was to be determined *(35)*. Probably, a ploy to keep some of the Ibos in Shagari's ruling political party at the national level, hoping that their favored location will soon get a steel project.

On the whole, the Nigerian Government will be committing a sizeable amount of its resources in the next decade to the development of the various steel industries in the country. For example, it is estimated that the Ajaokuta Blast Furnace Plant and the Aladja Direct Reduction Plant when fully in operation will cost well over ₦ 1.5 billion and ₦ 1 billion respectively *(36)*. The latter plant has since gone into operation and was formally commissioned in January 29, 1982. The former (the Ajaokuta steel industry) is expected to go into full production before the end of the eighties, about three decades after the initial decision to have a steel industry in Nigeria.

The Cement Industry

Another important example of the dominant influence of political factors in the location of industries in Nigeria can be found in the cement industry. The primary economic factor which the decision makers often referred to as essentially responsible or decisive for the location of cement industries is the existence of large deposits of limestone in any given area of the country. But as this work will show, there are many areas of the federation where there are vast limestone deposits which never attracted cement projects because of political considerations.

Limestone deposits occur at several locations in Nigeria. The important areas are: Nkalagu in Anambra State; North of Calabar in Cross River State; between Lagos and Abeokuta, especially at Ewekoro in Ogun State. Other areas include Jukura, Etobe, Igbo and Ajaokuta areas of Kwara State; at Ukpilla in Bendel State; Yandev in Benue State; Asaka in Bornu State, and near Sokoto the capital of Sokoto State. In effect, limestone deposits are scattered over many parts of the country. But contrary to the often stated government policy that only the most economically viable sites of limestone deposits will be developed as cement manufacturing centers, in actual practice political considerations and regional/state competitive rivalries proved instead to be the critical factors vis-à-vis the geographic-economic location factors. The result of the unhealthy competition between the constituent units of the federation thus led the more economically viable locations to be passed over for less attractive areas in the siting of cement projects.

The rush for this industry was started in December 1957 following the former Eastern region's establishment of Nigeria's pioneer cement project at Nkalagu. In the years that followed, the other regions hastily decided – for fear of being dependent on the Nkalagu cement industry – to set up similar cement projects in their respective areas.

In partnership with the British Associated Portland Cement Manufactures Limited (APCM), the Western region installed a cement industry at Ewekoro in December 1960. The Northern region for similar political reasons joined the race for cement industry. In the same year it rushed to establish a cement project in Sokoto (the hometown of the then Premier of Northern region). The Mid-West region also joined the regional competition and soon after 1963 established a cement industry at Ukpilla. The Eastern region was determined not to loose its lead in the domestic production of cement and as a result hastened to establish another cement plant at Calabar. Some other clinker plants were established by the nation's governments and foreign private investors in the capital area of Lagos, Port Harcourt (a port city in the former Eastern region), and at Koko in the former Mid-West State. Thus, as Schatzl pointed out, «cement plants became a fetish for economic progress for the regional government» *(37)*.

With the creation in 1967 of twelve States out of the four former regions of the federation, the new political power centers (i.e., the States) were equally anxious to join in the competitive political rivalries for cement industries and, of course, other manufacturing facilities that characterized inter-regional political and economic relations during the First Republic. The pressures by these state interests received expression in the Third National Development Plan of 1975–80. The document gave its support for the expansion of existing cement factories and the establishment of new ones *(38)*. Thus the Third Plan set aside an initial amount of about ₦85 million for new cement projects located at Ashaka in Bauchi State, Shagamu in Ogun State, and Yandev in Benue State. The Ashaka and Shagamu cement industries went into operation in 1978, followed by the Yandev plant in 1980. Although the demand for cement has sharply increased since 1973 *(39)* following an oil-induced upsurge in construction works in the country, probably a good economic argument for the proliferation of cement industries, there is little doubt that many of the projects have been designed and located primarily for political expediency rather than for economic reasons.

With the exception of the Nkalagu and the Ewekoro plants, most of the other cement industries experienced serious locational problems. The Sokoto cement factory was probably the worst hit project. Its poor location and debilitating transportation costs in conveying the finished products to the markets where they were demanded and also in bringing in imported inputs proved too much of a strain for the young import substitution industry. As a result of high losses, the Sokoto cement factory failed to be a viable economic undertaking. It needed government continued subsidization, especially in 1979, to keep the industry on its feet. In monetary terms, the reactivation of the Sokoto cement industry cost the government an additional ₦80 million. Perhaps this additional drain of funds by the non-viable cement factory as in some other pet industrial projects could have been avoided if vital and relevant economic factors were adequately taken into consideration in the decisions relating to the planning, selection of site, and in the implementation process. One therefore wonders if any feasibility survey was carried out on the Sokoto site prior to the establishment of a cement industry in that location.

The Sokoto project was not alone as a pet cement industry that suffered from locational constraints and debilitating operational costs. Political and geographical considerations in the siting of cement projects also took their toll on the four clinker plants located in Lagos, Port Harcourt and Koko. Two of the four clinker plants were located in Lagos.

The four clinker mills were established to fuse together clay and limestone as a first stage in the manufacture of cement. Little or no success was achieved in this direction. For example, the Koko clinker plant, after considerable losses and high operating costs, was forced to close down in 1964. A year later, the Port Harcourt clinker mill ground to a halt mainly because of the lack of raw materials and inability to compete with the viable Nkalagu cement industry located in the same region. Similarly, one of the two clinker plants located in Lagos could not benefit from agglomeration advantages because of the enormous costs involved in obtaining its inputs and was thus abandoned after causing considerable drain on the nation's resources. The second Lagos Plant, owned by the Lagos cement company is still in operation despite the high losses incurred in sustaining it. While it can be in part argued that the Port Harcourt and Lagos clinker plants were located in heavily industrialised port areas of the country in order to benefit from infrastructural and agglomeration advantages, hardly can a similar argument be advanced for the Koko mill.

In all, one observes an unhealthy competition between the regions/states *(40)* for cement industries which became one of the fetishes for economic development. Writing on the cement industry in the sixties S.U. Ugoh, had this to say:

> *Each regional government has gone about its business of establishing a cement plant in its own area, completely disregarding what exists in other places... The lack of federal coordination in the establishment and location of industries has led to gross misallocations and a waste of resources. And nowhere has this been more manifest than in the cement industry where each region has built or is building a cement plant which may be of inefficient size and/or poor location (41).*

The above observation on the Nigerian cement industries is still true today. Each of the nineteen states of the country still sees the cement industry as one of their industrial priorities. But unfortunately, their inefficient size and poor location have made it impossible for the various cement projects in the country to serve the quadrupled demand for cement since after the oil boom that has necessitated enormous construction works in the country. One finds that because of serious locational constraints, domestic production of cement lags very much behind local demands. Since 1977, Nigeria imports about two-thirds of its cement needs despite the proliferation of the cement industry under the import substitution strategy.

Industrial Estates

Other evidence of the politicization of industrial location by the constituent units of the Nigerian federation can be seen from the use of industrial estates *(42)* to attract manufacturing activities to sometimes submarginal or politically favored areas. According to Schatzl, «one of the most important instruments of public industrial location policy is the foundation of industrial estates. These industrial estates are used in Nigeria as instruments in inter-regional [or interstate] competition for industrial enterprises and for the intra-regional [or intrastate] distribution of industries» *(43)*. In other words, the establishment of industrial estates is part of the strategy employed by the regions/states to attract industries to their specific territories and to achieve the highest level of industrialization vis-à-vis the other constituent units of the nation. It is also used as a strategy to achieve other political motives that go beyond the rivalries associated with each region/state striving to obtain a larger share of the «national pie».

For example, beyond the fact that the Greater Lagos area had a special attraction for industrialists because of its large population concentration and other economic factors, there was an underlying political consideration by the then Western region and the federal government to vie for the concentration of industries in the area. On the one hand, the former Western region wanted to utilise the economic attractions of the Lagos area to promote rapid industrialization of its region. On the other hand, it wanted to check the «expansionist» tendencies of the federal capital and government. For the latter consideration, the former Western region concentrated most of its industries in estates established in Mushin/Ikeja, Ilupeju and Oshodi areas of Greater Lagos. The Federal Government on its part established industrial estates in Apapa, Ijora and Iganmu, all in the capital area and was unquestionably interested in extending its industrial locations well beyond the Federal Capital area *(44)*. The political motivation by these two governments to lay claims on the territories around the Federal Capital in part resulted to over 50 percent of manufacturing activities in Nigeria being concentrated in the Lagos and Greater Lagos area.

While the political rivalries for the territories around Lagos were going on between the Western regional and the Federal Governments, the former Eastern region countered by establishing major and minor industrial estates in its area of jurisdiction. The major industrial estates in the Eastern region are located in Port Harcourt and Enugu, while the minor ones are at Aba, Onitsha, and Umuahia. In addition, the government of the former Eastern region offered special and liberal incentives to induce private and foreign industrialists to invest in its area. Like the other regions its primary objective was to achieve the greatest possible share in the country's industrialization program. The former Northern region as was expected, joined the race by establishing locations at Kano and Kaduna as its major industrial estates, and in Jos, Ilorin, Maiduguri, Gusau and Zaria as secondary areas.

In all, each of the regions sometimes offered differential and attractive incentives such as liberal rent policies, development of infrastructural facilities, etc..., to induce especially foreign investors and industrialists to set up manufacturing facilities in their respective territories. The importance of the industrial estates and government incentives (such as the provision of industrial land, liberal rent policies and the provision of necessary infrastructures) lie in the fact that «in a developing country such as Nigeria, in which the infrastructure is still insufficiently developed and where legislation largely prevents the acquisition of land by foreigners, the provision of developed industrial sites facilitates and accelerates the process of industrialization» *(45)*.

Although there exist economic justifications for establishing industrial estates in order to boost rapid industrial development, there is little doubt that in the case of Nigeria, the major and probably dominating factor is political and not economic consideration. As was said earlier, the primary concern of the governments of the federation was to achieve for themselves the largest share of industrial projects in the country through the use of industrial estates. Whether or not the industries located in the estates were to be economically viable seem not to be of primary concern to the competing narrow parochial interests of policy makers in the regional/state and Federal governments. There is no gainsaying the fact that the consequences of such acrimonious rivalries and competition between the governments vis-à-vis their efforts to attract industrial investments at all costs results in wasteful duplication and a lack of coordination of national industrial strategy. There is also no doubt that the excessive consideration of non-economic factors in the establishment of industrial estates in some non-viable and politically favored areas in turn hurts the imports substitution and the industrialization process.

Wasteful Duplication of Beer Brewing, Soft Drinks and Carbonated Water, and Ceramic Industries

In some other areas of industrial development excessive socio-political equity consideration, inter-state competition and unhealthy rivalries can be observed in the establishment and location of some manufacturing facilities. For example, it has become a fetish for virtually all of the nineteen state governments of the federation to establish beer brewing, soft drinks and carbonated water, cement and ceramic industries (to mention but a few) in their areas of authority. The competition-induced duplication of the above industries has greatly reduced the advantages that accrue to an economy through large-scale production. For some of these industries, such as breweries and cement manufacturing, which require high fixed costs to be established, it is important that they engage in a large-scale production in order to reduce production costs. But because of the obvious financial and skilled manpower constraints of many of the state governments, these industrial projects are usually of small sizes and are thus inevitably confined to the state markets. For instance the supply of beer by the «Umuahia Golden Guinea», «Jos International», or «Nigerian Breweries» located in various parts of Nigeria, hardly meets the growing demands outside their immediate locations. The same is true for the soft drinks and carbonated water, and ceramic industries.

This situation therefore raises some important questions: Should the states embark on some of the above high fixed cost industries alone? Will it not be more realistic for the states, particularly the poorer ones, to combine their resources and efforts to establish fewer but more viable and efficient industries? Obviously adopting this method (i.e., cooperative efforts by the states to establish large-scale manufacturing facilities) will raise the probability of the hitherto proliferated small-scale industries taking maximum advantage of economies of large-scale production. In this regard, even the quasi-autonomous nature of the state governments in the federal system should not prevent cooperative economic efforts between them in establishing industries if the Nigerian leaders at all levels of government are serious about economic growth and development.

Oil Refinery

Another very significant example of industrial location based primarily on political factors is the recent siting of Nigeria's third oil refinery in Kaduna. The Kaduna refinery (in the Northern part of the country) is one of the most ambitious industrial investments since Nigeria became an important world oil producer. The project, designed to refine a total of 100,000 barrels of crude oil per stream day has two major sections. One section with a capacity for 50,000 barrels per day refines only Nigerian light crude for fuels, viz, Automatic Gas Oil (AGO), Aviation Turbine Kerosine (ATK), Dual Purpose Kerosene (DPK), Low Pour Fuel Oil (LPFO), and Mixed Liquified Petroleum Gas (MLPG).

Since its completion in 1980, the Kaduna refinery has had considerable difficulties operating the second section which refines heavy crude oil that is not available in Nigeria. In specific terms, the second stream of the refinery requires 50,000 barrels of imported heavy crude oil per day for the production of asphalt, lubricating oils, sulphur, wax, etc... Because of the non availability of the imported heavy crude oil, the second arm of the refinery remained idle for about 3 years after its completion in 1980. Even since 1983, the second half of the project has hardly fully gone into operation given the constraints arising from the long and frustrating negotiations to obtain regular supply of heavy crude oil from external sources such as Kuwait and Venezuala.

Unlike the earlier Port Harcourt and Warri refineries which are located in the South of the country, near the sources of crude oil, the ₦502 million Kaduna refinery is about 650 kilometers from the nearest oil well *(46)*. Because of its obvious poor location, especially as regards transport diseconomies, the Federal Government invested an additional sum of over ₦ 200 million in the laying of pipelines linking the refinery with its distant sources of crude petroleum and distributing depots in the Bauchi, Borno, Plateau, Kano, and Sokoto States of Northern Nigeria. Yet there exists other equally challenging transportation problems. This as we stated earlier arises from the fact that one-half of the estimated 100,000 barrels of crude oil input per day is imported from foreign countries. This means that the evacuation of the imported input from the coastal ports to the refinery (a distance of about 650 kilometers) will no doubt contribute to higher production costs *(47)*.

The extraordinary rushed attention (probably on political grounds) that was given to the Kaduna project was rightly put in a 1983 National Concord write-up titled «Kaduna, (Man-made) Oil City». It pointed out, *inter alia* that:

> *Kaduna refinery has recorded a first in timely attention to, and execution of contracts that is yet to be paralleled anywhere in this country. The contract for the job was awarded in 1977, two years before the soldiers had to quit government... Construction commenced in Kaduna only 11 days after the former* [*sic*] *signing of the contract in 1977* [*and was completed in early 1980*] *(48)*.

Critics also pointed to the special status granted the largely politically motivated Kaduna refinery even at a time when the country was passing through a belt-tightening economic austerity and stabilization measures introduced by the Federal Military Government. This has to do with the special transportation facilities granted for the imports of construction materials for the project. For example, 'at the Tin Can Island Port [the country's largest port facility], special berthing spaces were reserved for the Refinery as long as construction lasted, and there was also a marshalling yard solely devoted for loading Kaduna Refinery bound goods' *(49)*.

Although cost and strategic rationalizations were adduced by the Government for the construction of this largest refinery in a location that is so far away from the country's oil wells and port facilities for imported crude petroleum inputs *(50)*, it is generally believed in the country that the influence of some well placed Northern elites, especially in the Federal Military Government, was responsible for bringing about the location of such a huge oil industry (even at a great cost to the economy) at Kaduna. Though it is difficult to provide empirical evidence on how and by what method some of the Northern elites brought political pressure to bear on policy makers to site the third and largest Nigerian oil refinery at Kaduna, it is important to note that Kaduna is the place from where the influential late Sarduana of Sokoto, and the premier of the former Northern region, Alhaji (Sir) Ahmadu Bello, exercised authority over the rest of the country during the First Republic (1960–66). The Sarduana was known to have boasted that Kaduna may indeed become Nigeria's future capital. A boast which has materialized by the planned transfer of Nigeria's capital from Lagos to Abuja, about 80 kilometers south of Kaduna. In a Northern dominated military government, there is little doubt that Kaduna continued, in some ways, to attract the loyalty of the influential Northern elites. In this regard, one cannot ignore the existence of what is often referred to in Nigeria as the «Kaduna Mafia» with very strong political influence in the country. It is reported that this «Kaduna Mafia» is a clandestine body with a sizeable membership drawn from influential Northern political and business elites, academics, top military officers, top civil servants, and other pressure groups whose primary objective is the maintenance of the status-quo that seems to favor the political domination or significance of the Northern part over the Southern part of the country.

Liquefied Natural Gas (LNG) and Petro-Chemical Projects

Another area of planned strategic project that had been delayed over the years largely because of political indecision and consideration than of financial problems is the location or locations of the LNG and petro-chemical projects. The projects had since Nigeria's Second National Development Plan (1970–74) and subsequent ones been receiving the attention of the country's economic planners as one of the most vital projects that should be given top priority in the nation's bid for rapid economic development. But it was not until 1980, probably after the Kaduna Refinery was in place, that the Shagari administration (1979–83) decided that the first phase of a 3-phased petro-chemical project was to be sited at Kaduna (in Kaduna State) and Warri (in Bendel State of Nigeria).

It was planned that the Kaduna project will convert kerosine extracts for the production of linear alkylbenzene, heavy alkylates and solvents. Part of the attraction of the project is that the linear alkylbenzene and heavy alkylates will have 'further end-uses, ranging from detergents, lube oil additives, transformer oil, thermal fluids to grease and special oils for the rubber industry *(51)*. The third product, solvents, would be utilized in the manufacture of paints, including insecticides, aerosols, and dry cleaning agents *(52)*. The petro-chemical project located at Warri is expected when it goes into operation to manufacture black carbon products and polymerized propylene used in packaging, coating pipes and tubes, etc...

The contract for the construction of the above projects was signed in 1982. The foundation stones of the Kaduna petro-chemical project (first of such a project in Nigeria) and that of two other plants at Ekpan, near Warri, were laid in March, 1984 by the Federal Minister of Petroleum and Energy, Professor Tam David-West. This completed the phase of Nigeria's petro-chemical programme.

The location of the second of the 3-phase project further created opportunities for intense political pressures, particularly since 1980 when the Shagari administration decided that Kaduna and Warri will benefit from the first-phase. The political pulls for the location of the project was credibly stated in the Sunday Concord report entitled, «Politics Starve Petro-Chemical Projects». This report, among other things, pointed out as follows:

> *Informed sources close to the Shagari administration said the plant was originally scheduled for the town of Onne in the Rivers State. But due to representations made by Igbo leaders in the proscribed NPN (National Party of Nigeria) who asked for the location of the project in Imo State, the Shagari administration, reportedly became indecisive on the matter... To protect the interest of his* [*political*] *party among the Igbôs and the people of Rivers State in the last...* [*1983*] *general elections, Alhaji Shehu was said to have deliberately waved a decision on the location of the Olefin plant until after the polls. A decision had not been taken before the military seized power on December 31* [*1983*] *(53).*

There is little doubt that both the Rivers and Imo States of Nigeria were «hungry» for and lobbied for the petro-chemical project. A Rivers State former Governor, Chief Melford Okilo, was very consistent in his argument that the petro-chemical industry could find no other natural «haven» than the rich oil producing area of his state. He did not mince words in reminding his «detractors» that this state was governed by the NPN, the political party in power at the center and therefore deserved a «handsome» Federal Government reward such as the petro-chemical industry for its support. Similarly, Chief Sam Mbakwe, ex-Governor of Imo State, made no secret of the fact that he was interested and was lobbying for the project. Although Chief Mbakwe and his state government did not belong to the ruling party at the national level, he believed he had a strong position if the Federal Government was keen on putting politics aside and base its decision on economic and equity reasons. His primary argument was that Imo State is one of the oil producing states which have not benefited from any oil project or any other significant «federal presence» in the state as a whole.

Even after the civilian governments in Nigeria were overthrown in a December 1983 military coup d'état, interest in the planned petro-chemical industry did not wane in Imo State. This was demonstrated by among others, the pressures on the Military Governor, Brigadier Ike Nwachukwu through public addresses, direct appeals, and newspaper publications and individual opinions often expressed in the state's daily newspaper, the *Nigerian Statesman*, severally asking the Governor to use his «good offices» to request the Federal Military Government to locate the oil industry in Imo State. For the Rivers State pressure groups in the post-civilian period, one can only speculate that their demands may not have been as manifest as that of Imo State probably because the former placed their hopes on the fact that the Federal Minister of Petroleum and Energy hails from Rivers.

The continued debates and pressures for the location of the LNG and petro-chemical projects in favoured or politically expidient areas, may have forced the National Concord to suggest in its editorial comment of August 23, 1984 that:

> *We must restate that the nation is tired of the promises and politics of the LNG project. In the present situation where this [military] administration should not be playing to satisfy more political interests, Nigeria look up to it to implement the LNG project (54).*

The political infighting and clashes of interests that characterized and delayed the much belaboured LNG projects seem to have been put to rest by the decision in late 1984 by the Federal Military Government under Major-General Muhammadu Buhari, to site the second of the 3-phase petro-chemical industry near Port Harcourt in Rivers State. But this is not without costly politically – induced delays and its negative effects on the nation's programme of economic development.

Conclusion

It seems that political considerations in the location of many Nigerian industries emanate from the fact that communal loyalty is very strong in the society. It is a widespread national problem which poses a serious threat not only to the economic programmes for development, but also to the political system as a whole. This is largely because strong ethnic loyalty seems to have eaten deep into Nigerian political culture. Very often the success or popularity of any political figure is judged by the share of the «national pie» he is able to attract to his area of origin. These rewards of government or share of the «national pie» usually take the form of industrial establishments, provision of infrastructures (such as water supply, electricity, good roads, maternity and other medical services), educational institutions, etc... Although this phenomenon exists in all organized human societies, the high degree of its existence in the Nigerian society, we argue, makes it a deviant case.

It therefore may not be an exaggeration to state that narrow communal interests in the decisions relating to the location of industries probably place Nigeria as one of the best known examples of a developing country where excessive political factors impinge on its strategy of rapid industrial development.

In all, the geo-political character of industrial location is bound to continue for a very long time given the proliferation of States in the country and the associated expectations of the citizenry for the dispersal of manufacturing facilities *(55)*. In other words, the excessive weighting of socio-political «equity» in the distribution of industrial projects and, of course, the competition and rivalries between the States will without doubt continue to have adverse effects on the industrialization process. This therefore, creates an urgent need for Nigerian leaders to reverse this trend in order to minimize the distortions and politically induced waste in the country's industrial programmes.

FOOTNOTES

1. For a detailed review of the theory of industrial location see E. Willard Miller, *Manufacturing: A Study of Industrial Location,* University Park: The Pennsylvania State University Press, 1977, pp. 1–79. See also Walter Isard, *Location and Space-Economy,* New York: M.I.T. Press and Wiley, 1956, Chap. 2, pp.24-54.
2. Stefan Valavanis, «Losch on Location: A Review Article», *American Economic Review,* Vol. XLV, No. 4, Sep. 1955, p. 637.
3. Alfred Weber, *Theory of the Location of Industries,* Trans. by C. J. Friedrich, Chicago: University of Chicago Press, 1929, pp. 124–161.
4. *Ibid.*
5. Quoted from Miller (1977), *Op. cit.*, p. 51.
6. G. B. Norcliffe, «A Theory of Manufacturing Places», in Lyndhurst Collins and David F. Walker, eds., *Locational Dynamics of Manufacturing Activity,* London: John Wiley and Sons, 1975, p. 26.
7. Edgar M. Hoover, *Location Theory and the Shoe and Leather Industries,* Cambridge: Harvard University Press, 1937, p. 35.
8. See Miller, *Op. cit.*, p. 18.
9. August Losch, *The Economics of Location,* trans. by William H. Woglom with the assistance of Wolfgang F. Stolpher, New Haven: Yale University Press, 1954, pp. 16–32.
10. Greenhut argues that several factors influence industrial location. His analysis was based on the integration of the Weberian least cost theory and the theories of locational interdependence of industries. See Melvin L. Greenhut, *Plant Location in Theory and Practice: The Economics of Space,* Chapel Hill: University of North Carolina Press, 1956, pp. 103–176, and 273–286.
11. Walter Isard, *Location and Space Economy,* Cambridge: The M.I.T. Press, 1956.
12. *Ibid.*, p. 25.
13. David F. Bramhall, «An Introduction to Spatial General Equilibrium», in Gerald J. Karaska and D. F. Bramhall, eds., *Locational Analysis for Manufacturing: A Selection of Readings,* Cambridge: The M.I.T. Press, 1969, p. 468.
14. Isard, *Op. cit.*, p. 28n.
15. For the behaviourists approach to the theory of Industrial Location see A.A. Alchian, «Uncertainty, Evolution, and Economic Theory», *Journal of Political*

Economy, Vol. 58, pp. 211–221; J. G. March and H. A. Simon, *Organisations*, New York: John Wiley and Sons, 1958; C.M. Tiebout, «Location Theory, Empirical Evidence and Economic Evolution», Paper and Proceedings of the Regional Science Association, 3, 1957, pp. 74–86.

16. Miller, *Op. cit.*, p. 75.
17. *Ibid.*, pp. 81–82.
18. *Ibid.*
19. Ludwig Schatzl, *Industrialization in Nigeria: A Spatial Analysis*, Munchen: Weltforum Verlag, 1973, p. 75.
20. Peter Kilby, «*Industrialization in an Open Economy, 1945–1966*, Cambridge: Cambridge University Press, 1969. L. Schatzl, *Industrialization in Nigeria, Op. cit.*, Manfred Berger, *Industrialization Policies in Nigeria*, Munchen, Weltforum Verlag, 1975; O. Aboyade, «Industrial Location and Development Policy: The Nigerian Case», *The Nigerian Journal of Economic and Social Studies*, Vol. 10, No. 3, November 1968, pp. 275–302; Eno J. Usoro, «Government Policies, Politics and Industrial Development Strategy in Nigeria, 1947–1974», in O. Teriba and M. O. Kayode (eds.), *Industrial Development in Nigeria: Patterns, Problems and Prospects*, Ibadan: Ibadan University Press, 1977, pp. 113–124.
21. Aboyade, *Op. cit.*
22. It is often argued that this category of economic activities should not be regarded as industries as such since they are merely engaged in the processing of primary goods for export without fundamentally changing the products from their original state.
23. For detailed elaboration of the industries that are in Nigeria rooted to sources of raw materials, see Schatzl, *Op. cit.*, pp. 78–88.
24. *Ibid.*, p. 90. This category excludes those industries that are wholly owned and controlled by the Nigerian governments or in which it owned commanding equity shares and subsequently a greater influence on the decision relating to location sites.
25. Interview, Ibadan, January, 1980.
26. *Ibid.*, p. 99.
27. O. Aboyade, «Industrial Location and Development Policy: The Nigerian Case», *Nigerian Journal of Economic and Social Studies, Op. cit.*, p. 294.
28. O. Aboyade, «The Relations between Central and Local Institutions in the Development Process, II», *Nigerian Opinion*, Vol. 4, Nos. 4/6, April-June, 1968, p.323.
29. *Ibid.*
30. Quoted from a detailed analysis of industrial location in Nigeria by one of the country's influential economists, O. Aboyade, «Towards a New Industrial Location Policy», in O. Teriba and M. O. Kayode, (eds.), *Industrial Development in Nigeria, Op. cit.*, pp. 368–369.
31. *Ibid.* The consortium of foreign steel interests include Demang, Didier-Werke, Ferrostaal-Mecco, General Electric, Koppers, Wellman Smith Owens, and Westinghouse. These were mainly American, British and German transnational corporations.
32. *Ibid.*

33. Federal Republic of Nigeria, *Guidelines for the Third National Development Plan, 1975–80,* Lagos: Central Planning Office, Federal Ministry of Economic Development and Reconstruction, 1975, pp. 20–21.
34. In July, 1975, the Gowon regime was overthrown and replaced by the Generals Muhammed/Obasanjo regime which soon after (February 1976) created 7 new states bringing the total number of states in the Federation to 19.
35. Press statement by the former Nigerian Federal Minister for Steel Development under the Shagari administration. See *West Africa,* March 31, 1980.
36. *Nigerian Herald,* Ilorin, Friday, December 28, 1979, p. 7.
37. Schatzl, *Op. cit.,* p. 110.
38. Federal Republic of Nigeria, *Third National Development Plan, 1975–80,* Vol. I, *Op. cit.,* p. 157.
39. For example, the import of cement increased from 0.9 million tons in 1973 to 4.5 and 4.1 million tons in 1977 and 1978 respectively. The domestic production increased but very slightly from 1.2 million tons in 1973 to 1.5 million tons in 1978, an increase of only 0.3 million tons over the 5 year period. The total demand rose from 2.1 million tons in 1973 to 5.6 million tons in 1978, more than double the 1973 figures. See *African Research Bulletin,* September 15–October 14, 1979.
40. Economic competition is not of course unique or peculiar to the Nigerian political system. It can be said to exist in all organised human societies. But the long history of ethnic and communal rivalries in the Nigerian polity and its effect on the country's program of rapid industrialization is so significant during the period under consideration that it seems important to note it here.
41. S. U. Ugoh, «The Nigerian Cement Industry», in O. Teriba and M. O. Kayode (eds.), (1977), *Op. cit.,* p. 176.
42. The industrial estates are specially located areas with modern infrastructural facilities such as water supply, power, good roads and other communication networks. Ancillary services such as banking and financial institutions are also established in the areas declared industrial estates. The closeness of some of the estates to major urban areas made it possible for industries located in them to obtain the much-needed skilled and semi-skilled labor. In all, the estates are designed to reduce infrastructural costs, offer agglomeration advantages and other attractions to local and foreign investors in the industrial sector.
43. Schatzl, *op. cit.,* p. 103.
44. See Aboyade, *Op. cit.,* p. 373.
45. *Ibid.*
46. *Daily Times,* Lagos, Saturday, October 25, 1980, p. 3. See also, *New Nigeria,* Kaduna, Saturday, October 25, 1980, p. 1.
47. The rationale for the importation of crude oil to the oil rich Nigeria is based on the fact that the country's «sweet» or light crude petroleum is not very adequate for the manufacture of lubricants, for which the heavy type from Venezuela and Kuwait or other middle-East countries are preferable.
48. *National Concord,* Lagos, Tuesday, October 25, 1983, p. 5.
49. *National Concord,* Lagos, Wednesday, October 26, 1983, p. 5.
50. See *Daily Times,* Lagos, October 25, 1980, *Op. cit.*

RESUME

L'objet de cette étude est de montrer l'influence des questions politiques (d'ordre ethnique, régional ou autres) sur les choix relatifs à la localisation des industries au Nigéria. En d'autres termes, l'auteur cherche à démontrer que les questions politiques peuvent conduire les autorités à implanter des industries dans des endroits où une telle installation ne se justifie que politiquement.

Après avoir rappelé les idées-forces de la théorie de la localisation industrielle et la manière dont elles ont été appliquées au Nigéria, l'auteur passe en revue la localisation de plusieurs industries en particulier les industries du fer et de l'acier, celles du ciment, du pétrole, du gaz naturel et liquéfié et celles de la bière et des boissons sucrées. De l'analyse de la localisation de toutes ces industries, il tire la conclusion que les considérations politiques dans la localisation des industries sont dues au fait que le sentiment de loyauté au terroir est très fort dans la société au Nigéria. Ce sentiment est un problème qui touche toute la nation et constitue un danger sérieux non seulement aux programmes de développement économique mais aussi au système politique dans son ensemble.

L'auteur estime alors qu'il est temps que les autorités du Nigéria se penchent sur ce problème pour en renverser la tendance et ainsi réduire les disparités et les gaspillages qui en résultent dans les programmes d'industrialisation du pays.