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PROJECT EVALUATION IN A DEVELOPMENT BANK

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I. INTRODUCTION

NIDB was established to provide medium and long-term finance in the form of loans and equity to enterprises in Nigeria which are privately owned and managed. The Bank has a paid-up capital of £2 million in ordinary shares and £250,000 in non-voting preference shares. It also received an interest-free, long-term loan of £2 million from the Federal Government of Nigeria. The Bank's largest shareholders are the Central Bank of Nigeria and the International Finance Corporation: each owns about 25% of the equity. The largest part of the remaining shares is held by a number of leading private banks around the world. NIDB expects to seek additional financing from both the Federal Government and the IBRD when present resources are exhausted.

The Bank started operations early in 1964. It was the successor of the Investment Company of Nigeria (ICON). At the end of June 1965, NIDB had approved loans and share participations totalling £2,200, 000. These sanctions are for manufacturing or mining projects. NIDB does not finance service industries or agricultural farming.

As is usual in development banks, disbursement of funds has been lagging behind sanctions. This has been caused by delays in the projects obtaining such things as pioneer status (income tax relief), import duty relief, bank guarantees for machinery credits, bank overdrafts, utility guarantees, machinery from overseas suppliers, and by delays in construction.

These delays in disbursements have forced the Bank to forego a great deal of income. We lend at a rate of 8-8 1/2%. We can earn only 4 1/2 - 5% when our money is in short-term instruments. In spite of this, NIDB made a profit of £110,000 for 1964. The advantage of a capital structure which gives the Bank equity funds and non-interest bearing loans in the initial stages of life is clearly evident.

II. ECONOMIC GROWTH AND NIDB POLICIES

NIDB must operate in an environment where investment is restricted by such factors as the limited size of the market, the high production costs, the lack of indigenous managerial and technical skills, and the

foreign investors' unshureness over the safety of their overseas investments.

This does not mean that the situation is bleak for the gross domestic product has grown at an average annual rate of 4.5 per cent from 1958-1959 to 1962-1963. Furthermore, the total private sector has been responsible for an increasingly important part of this growth:-

NIGERIA: GROSS DOMESTIC PRODUCT AND FIXED INVESTMENT*

	<u>Gross Domestic Product</u>	<u>Gross Fixed Investment</u>	
		<u>Private</u>	<u>Public</u>
1958 - 1959	900	59	50
1959 - 1960	938	63	64
1960 - 1961	981	66	61
1961 - 1962	1,014	84	56
1962 - 1963	1,072	82	55

* In constant 1957 prices

This of course is vital to NIDB since it was established to invest in projects which are privately owned and managed. The Bank does join with the Federal and Regional Governments in assisting the development of some enterprises, but only where the project is not Government-controlled or dominated.

One of NIDB's major goals is to increase Nigerian investment in industry. While indigenous investment has been increasing, most of the major manufacturing companies in the country are foreign owned. Indigenous investment has concentrated in fields where the investment required is small and where the technical requirements are either not great or have been in the country for a number of years. Thus this investment has gone into such fields as bakeries, sawmills, crepe rubber processing, and palm kernel crushing.

In the last few years, some Nigerians established in retail and wholesale business have started their own manufacturing operations. This is particularly true in the field of pharmaceuticals. In one case financed by NIDB, the promoter is a drug wholeseller who with assistance from his overseas supplier is starting to produce antibiotics.

In contrast to indigenous investment, foreign investment has gone largely into fields where the degree of technical skill required is high, capital requirements are large and high-level managerial skills are needed to create an extensive marketing organization. Textiles mills, rubber tyre factories, beer factories, enamel ware plants, cement companies, tobacco plants, and sugar mills are examples of foreign investment. While indigenous entrepreneurs are not as yet able to start and finance these major industries, NIDB tries to ensure that Nigerian individuals or institutions own at least 25% of the equity of the foreign owned plants which it finances.

As stated before, NIDB finances only manufacturing and mining ventures. These projects must be to the economic benefit of the country, and must be more than simple assembling companies. There are a number of proposals in the country for setting up assembly plants for such items as trucks, passenger cars, refrigerators, airconditioners, radio sets, etc. Most of these involve the establishment of units which would be able to compete with the imported finished products only on the basis of very considerable import duty relief on the components required. Besides, they involve hardly any manufacturing process but rather the fitting together of imported, ready made components.

In most cases the decision to assemble a product locally seems to have been taken by expatriate trading firms who fear that import restrictions may be imposed on the finished product because it may be considered a luxury item. This applies particularly to motor cars, refrigerators and radio sets. In a few instances, the initiative for establishing assembly plants comes from foreign exporters who feel that their traditional market here may be threatened by import controls which may tend to become discriminatory as between sources of supply.

It appears that encouraging assembly plants does not contribute much to the industrial progress of Nigeria. In some cases they can even pre-empt the market and stop a future fully integrated manufacturing operation. Thus the Bank's policy is to participate in assembly projects if there were reasonable prospects of progressive manufacture of the components within Nigeria.

III. ANALYSIS OF PROJECTS

Unless we are dealing with a large, established company or with wealthy individuals known to us, the first questions we ask are, "What is the total cost of the project," and "Where is your share going to come from". The Bank's operating policies make these questions crucial. NIDB does not finance more than one-half of the cost of the project, and it does not take more than 25% of the equity. To limit its financial vulnerability, NIDE does not invest more than £200,000 in any one project, and to limit its expenses it does not invest less than £10,000.

By limiting the Bank's financing, we automatically screen out proposals in which the promoter expects to be set up in business. Whether the promoter puts his shares in the project in the form of cash or industrial assets directly related to the project, he is forced to risk a sizeable amount of his own resources. The staff feels that its single best insurance that a project will be a success is that the promoter has both the risk of not making profits and the risk of losing money.

1. Management

The staff's attention can be turned to the details of the project now that the preliminaries are out of the way. The Bank rarely finances a project where the managers are going into a business in which they have not had direct experience. It has been possible for us to maintain this policy since a large number of indigenous businessmen have come to us with projects for expanding and modernising their existing business.

Recently some wealthy Nigerian traders have been moving into manufacturing fields and starting new factories. This is a very healthy trend for the economy. In these instances NIDB usually insists that the promoter have a signed technical agreement guaranteeing experienced engineering management for a number of years. This agreement could be made with an overseas marketing firm, it could be with one of several consulting development companies that exist in Nigeria, or most likely it could be with the machinery supplier. Here, one must be particularly careful for the machinery supplier usually wants to assign their engineers to the project only during the installation and running-in period.

It is also necessary to see that the technical management is deep enough. We have seen instances where production drops significantly when an engineer goes on leave. Even when present management is very strong, we find that special clauses must be inserted into the investment agreement. We do not want a company or individuals to start a project and then sell out to others who are not known to us. Thus it is not unusual for NIDB to require that the promoters obtain its consent before any changes are made in the capital structure.

In cases where the promoter is also the machinery supplier, the problem is even more critical. Since the promoter is selling his project to a number of institutions there is no individual with an ownership interest training his men to take over. Furthermore, since the machinery supplier has usually made his profit on the sale of the machinery, he is less interested in the proper managing of the plant. Here, the Bank insists that a strong managing agency contract be part of the investment agreement. The promoter must guarantee the performance of the plant and must guarantee to supply management for a 10-12 year period.

2. Capital Costs

The staff takes great pains in analysing the capital costs put forth by the promoter. The Bank has been handicapped hitherto since there were so few past projects which could serve as a guide and since it was some time before the Bank could add an engineer to its staff. An initial look at capital costs can be taken by comparing the plant and equipment costs with that of other factories on a cost per unit for output basis.

Helpful information on costs has been gotten from the USAID Facts Sheets and from such organizations as the O'CD. The difficulty with cost per unit comparisons is that machinery capabilities and quality vary by wide margins. Thus it is usually necessary to see that competitive quotations are received, and the Bank often requires that the machinery is to be valued before it is shipped to Nigeria.

The Bank is particularly cautious when an investor wants to purchase used machinery for his project. There can of course be economic savings in using used machinery and some projects can be quite successful with it.

Nevertheless, it can be over-priced, obsolete, and in bad repair. The deteriorating financial position of one of the country's textile mills is primarily due to high labour and maintenance costs caused by used machinery.

The sponsors usually fail to add a large enough allowance for contingencies and for working capital. In the case of working capital, companies often assume that accounts receivable will be no more than thirty days and that forty-five days for raw materials will be sufficient. It is necessary to be particularly cautious where the sponsor assumes he can discount his accounts receivable and where he thinks the banks will automatically increase the overdraft as the company grows.

Commercial banks in Nigeria are far from liquid. In fact, loans as a percent of deposits averaged 91% in 1964. This high loan/deposit figure is made possible by the large amount of resources the banks, (which are mainly foreign owned), have outside the country. While these resources exist, it is expensive to use them and there is a reluctance to over-extend local commitments.

The staff is also cautious when the sponsor claims the market demand is such that he can sell his output for cash. For instance, the present terms in the textile industry are cash on delivery, but with an increasing number of local mills entering production, the situation will change rapidly.

3. Sales Forecasts

Most of our appraisal time is spent trying to forecast sales. This is the most difficult task faced. As one would expect, the investor invariably over-estimates sales. The Bank recently received a proposal from a very experienced businessman who wanted to produce a staple household good. His estimate for the total market was more than double that indicated by import statistics. It was extremely difficult to convince him that his figure was unrealistic. He reasoned that this item was an essential part of life and that the per capita consumption would be roughly the same for all countries in the world. Obviously, things that are essential part of life in a country with per capita income of £300 per year differ from those in a country with per capita income figure of £30.

This example does not stop there. He was so sure he could sell his

output, he had already put £20,000 down on the machinery. He felt that his factory could always export any surplus production. Quite a few promoters take this position. Unfortunately, exports of Nigerian manufactured goods are very small. As mentioned before, unit production costs in Nigeria tend to be high. This is why tariffs are needed to protect Nigeria's own industries.

In estimating the domestic market, we rely a great deal on the import statistics. Nigeria is still at the stage of development where the sales of a few domestic firms can be added to the imports to get the total market. At the same time, anyone who has dealt with the classification of large amounts of data knows that import statistics cannot be 100% reliable. Furthermore, it is often difficult to get a historical trend of imports due to the major revision in the reporting categories undertaken for 1963.

Import statistics of non-consumer goods can be particularly misleading when trying to gauge the market for an import substitution product. A few large non-recurring projects can inflate the indicated market by as much as twice its actual size. The best way to circumvent this is to check the import statistics on a month by month basis, and calculate the cost per unit for each month. When a discrepancy is indicated, it must be checked on with the importers and some evaluation made.

An even greater difficulty is that demand for non-consumer goods such as pipes or valves tend to be fragmented into a number of specialized areas. Due to economies of scale the domestic plant will usually be geared to handle only a few of these areas. An over-estimation of the applicable market was one of the major reasons for the failure of a plant built to produce valves.

Even when this analysis shows a large enough market for an item, the Nigerian consumer is very quality conscious and there is no guarantee he will buy the indigenously produced products. In fact, he prefers the prestigious foreign produced goods to such an extent that one of the shoe companies found they had to delete the "made in Nigeria" label. Furthermore, the consumer is very brand conscious as has been evidenced by the difficulties other companies have had in trying to compete against Raleigh bicycles and Martell brandy.

New firms have resorted to such advertising media as newspapers, billboards and spot films at the cinemas to introduce their brands. In addition, some firms in conjunction with the newspapers have started a "buy Nigeria" campaign which may have some effect.

4. Government Support

Government support for an industry is extremely important. The Federal Government has declared a number of industries pioneer; companies starting in these industries can apply for freedom from income taxation on a sliding scale up to five years depending on the total investment. The Government also allows all firms accelerated depreciation allowances as well as protection from foreign competition through import duties.

In addition, the government will also consider import duty relief applications from companies that import a dutiable raw material for manufacturing purposes. In recent months, companies have been finding import duty relief more and more difficult to obtain. This is largely because the Government cannot afford to see its revenues cut sharply and because the relief can discriminate against companies already producing the same product.

Excise taxes have also been introduced. They are levied on such items as beer, cigarettes, biscuits, shoes, some textile products, cosmetics, and matches. Excise taxes are applied at the factory, and since they affect only locally produced goods, they reduce the differential import price advantage for the local producer. In one case, a firm had been granted import duty relief that it felt was necessary for its plant to be profitable. But the differential required was cut by a new excise tax.

An appeal was made to the Government and the excise tax was rescinded. Government is very responsive to an appeal of this type. Business tends to be in a very strong bargaining position. The local political repercussions of cancelling a proposed factory, or even worse, closing an existing one can be severe.

The Government-owned Marketing Boards in Nigeria control most of the exports of agricultural commodities. In the case of projects such as groundnut, cottonseed, and palm kernel crushing, the Marketing Boards set the price of the raw material to the mill. As you would expect, they can make almost

any project profitable merely by selling at a low enough price. In the past, the Marketing Boards would invest directly in a project taking perhaps 10-25% of the equity. While it was to the promoters' advantage and consequently to our advantage to have this investment, this policy can put them in a position of compromising their own interests. Thus the Northern Marketing Board has now ceased making these direct investments.

5. Agro-Industrial Projects

Nigeria's long-run comparative trade advantage should be in the above kind of agricultural processing as well as in canning and raw material processing operations. NIDB can finance these processing projects and encourage them. The biggest difficulty with such projects is ensuring a supply of raw materials. A cannery established some time ago is understood to be operating far below capacity largely because of this difficulty. The quantity and quality of supply from local farmers cannot be relied on, and a cannery must have its own plantation.

In the case of this cannery, a plantation was part of the total project but production never reached the required levels. It is not enough for the sponsor of a venture to supply technical machine skill; he must also have technical skill that is useful in managing large scale agricultural projects. The combination of both talents is rare in Nigeria and is probably the major reason more of these projects have not been started.

6. Operating Costs

In view of all the uncertainties in such things as managerial talent, capital costs, market size, market price, and raw material availability, it is with some relief that the analyst turns to the sponsor's estimates of operating costs. We know the wage rates in Nigeria, the supervisory staff salaries are given to us, and we can compute the cost of utilities. Close estimates can also be made of such things as routine maintenance costs and administrative overheads, and it is possible to obtain accurate figures on the raw material costs. However, we must largely rely on the sponsor for estimates on the number of labourers required, the expected plant capacity, and the wastage figures on raw materials.

7. Financial Analysis

NIDB is not using discounted cash flows for computing the return on investment. Since the expected return on our projects is above our cost of capital, the discounted cash flow method would be useful principally as a refined method of determining the best investment to take among alternative uses of funds. The Bank has yet to find itself in a position where it must choose between two projects and in which the expected return would be determining factor. The Bank has enough resources so that it can finance all profitable projects and the extent of profitability can be determined by simpler methods.

There have been a few instances where there were two proposals to finance a project in an industry with a market so small that only one could be viable. In these cases the choice of projects could be determined by our judgement of the managerial abilities and credit soundness of the sponsoring companies.

In giving financial assistance, NIDB tries to keep its investment in equity to a minimum. Since it is a new institution, it cannot afford to jeopardise its profit position with large amounts of the slow returning equity shares. With 30% of its investments in long-term loans, the financial analysis is concentrated on the return on capitalization. We compute this by dividing profits after taxes by common stock plus reserves and outstanding long-term debt. We feel that the forecasts should show a return of at least 10% during a normal year of operation. If an investment is being made in share capital, the return on equity should exceed 15% after taxes.

We do not want debt to be more than 50% of the total capitalization. The composite debt/capitalization ratio in the new projects financed is 44%. The highest percentage debt was 54% in a pharmaceutical project and there was a mining venture financed completely with equity. Coverage ratios are also computed, and we want profits to be double interest plus loan repayments adjusted to a before tax amount.

Net assets should cover the total of all long-term debt twice. This is because the assets of a company in liquidation are worth little. It is also

a way to improve the debt/capitalization ratio; and as suggested before, it is a way to be sure the sponsor puts a large amount of money in the project.

We also compute a return on total investment, but this is mainly a macro-economic tool and is considered a background factor in estimating the projects' general value to the economy. It is usually above 8%. However, it is a difficult figure to use because while it is above our cost of capital, a judgement of the cost of capital for the whole economy is difficult to make.

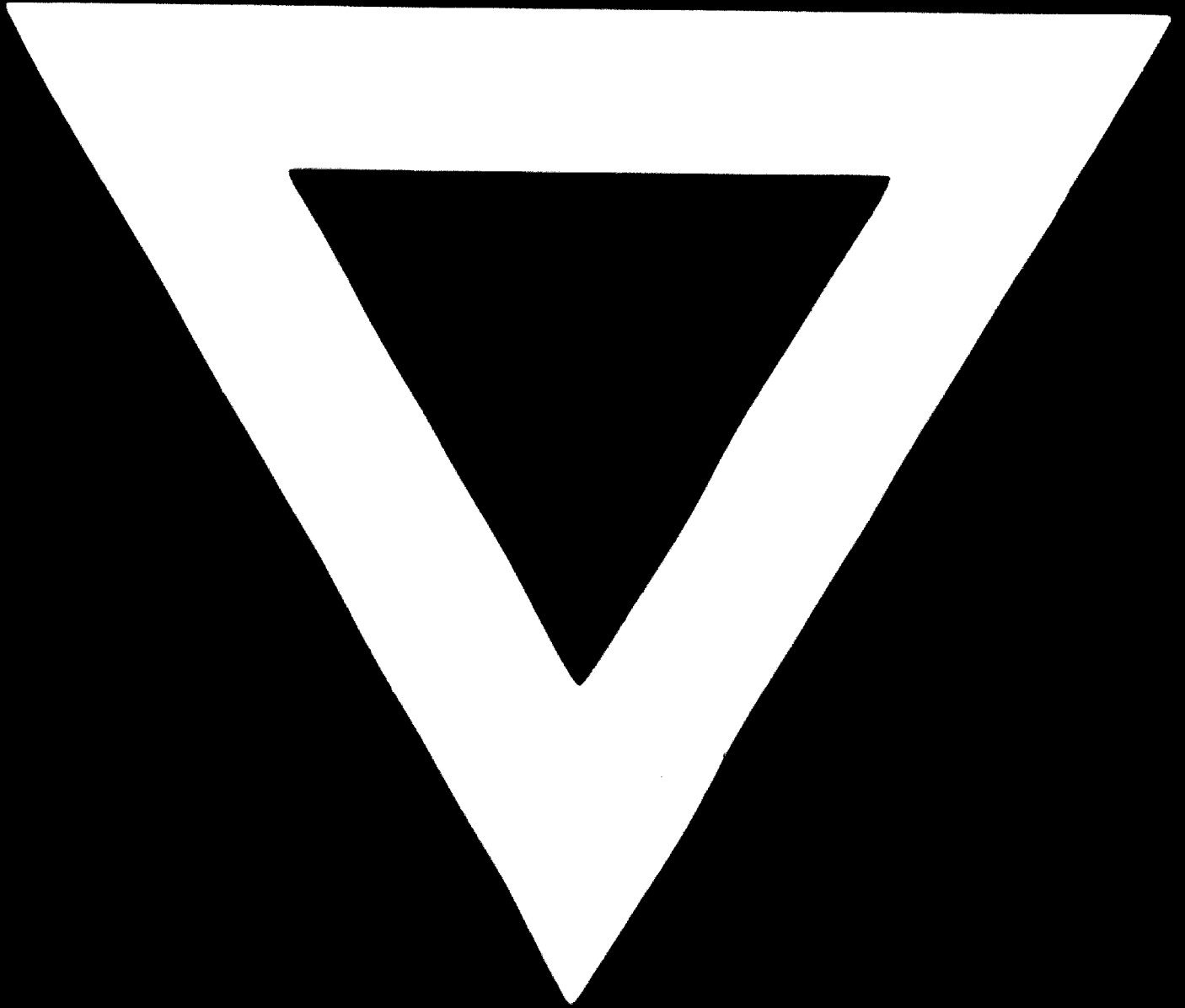
In the evaluation of a project, we also give consideration to the effects it will have on the balance of payments and on employment. It is of course difficult to use these considerations as a direct evaluation tool in deciding whether to give financial assistance. All of the projects placed before the board of directors have been shown to have beneficial effects for the economy, and we have enough funds to provide assistance to all of them. However, we are an institution founded to help the industrial progress of the country. We want to know these effects and they are important to us and to the institutions that finance the Bank.

IV. CONCLUSION

In evaluating a project NIDB thus takes into account its technical managerial, economic, and financial aspects. No project can be completely satisfactory on all these counts. Nevertheless, if sound judgement is exercised and the more obvious weaknesses are corrected at the discussion stage, the basis for a commercially viable project can be laid.

NIDB backstops its sanctions by a strict system of disbursements designed to ensure that funds are expended for the purposes sanctioned. Furthermore, NIDB has recently set up a follow-up unit to keep track of the progress of the companies which it finances. With these safeguards, NIDB believes that it can avoid the more obvious pitfalls of development banking.

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