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SOME REFLECTIONS ABOUT
FINANCING INDUSTRIAL DEVELOPMENT IN AFRICA*

by

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Introduction

Before entering the discussion of channels and institutions which could be used to influence and direct industrial development in the least developed countries of Africa, I believe it necessary to place the subject in the context of the present status and role of the industrial sector in these countries. Excluding mining, this sector represents only a very small proportion of the whole economy. Compared to agriculture, its contribution to GDP and employment generation is small in most African countries.

Industrial growth rates have varied widely from country to country but have seldom been very high over prolonged periods of time. As the urbanization process in African countries is in its early stages, demand for industrial products - which originates more from urban than rural populations - has remained relatively low. Education levels in many of these countries are still fairly low, and this also affects the demand for industrial goods and the pool of supply of skilled manpower (workers, technicians, accountants, engineers and managers) to develop and implement industrial projects. Finally, if such projects are developed, it is often necessary to rely on foreign managerial and technical assistance, which tends to be expensive if not funded by international donors in the form of grants.

The problem of promoting and developing the industrial sector in these countries is thus really quite complex and offers a difficult challenge. This is particularly so as the experience of other countries is often not appropriate to the least developed African countries. Given the special circumstances of these countries and their economies, country-specific solutions probably have to be found which deal with the individual limitations and constraints to industrial development and exploit favourable factors and characteristics favorable to industrialization.

In these circumstances, the choice of industries to promote is an important problem and needs careful consideration. Although this question is not the subject of this paper, it is necessary to have at least a rough idea of the direction in which the industrial development effort might go in order to define what kind of institutions might be appropriate to promote, implement and direct the industrial development effort in the least developed countries of Africa.

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The most difficult problem in making industrial investment decisions in most of these countries is the limited size of the market for most industrial products. In most countries total population is small, the share of urban as compared to rural population is fairly low, rarely more than 10%. Since demand for industrial products is usually much higher in urban than in rural areas, this situation by itself limits demand. In addition this is compounded by generally low levels of monetary income, both in urban and rural areas, where large parts of the population still live outside the monetary sector of the economy, and by the fact that distribution of industrial products is frequently hampered by high transport costs, inadequacy of distribution systems and/or excessive mark-ups by merchants. Consequently, low demand leads to problems since in many industries the existing or forecast domestic demand does not justify the construction of a plant of minimum economic size, as production unit costs tend to rise quickly with declining sizes of production units and consequently lead to higher prices which may take the product out of reach for most potential consumers.

One possible way to overcome the limitations of market size would be for several countries to join markets for industrial products to permit the establishment of plants of a reasonably economic size. This regional approach to industrial development is fully recognized by a number of countries but unfortunately attempts to establish plants to serve regional markets have not been very successful thus far, except in a rather limited number of cases.

Barring the regional approach, one logical solution to solve the problem caused by low domestic demand seems to search for products which meet the needs of the population, can be manufactured at a relatively low cost and sold at a price which can be afforded by the majority of the population. At first sight this may seem a set of ideal conditions that cannot be met. However, some possibilities do indeed exist, because there are already some simple industrial products widely used by the population of most African countries. For instance, clothing, many household furnishings and utensils, and building materials, can be produced locally as well as simple tools and implements. Particularly in agriculture such tools and implements could replace traditional products and might initially be produced by artisans, which could be assisted by a program of technical and financial assistance specifically geared to develop inexpensive and simple ways to improve artisan techniques of production, introduce new materials and final products and thus contribute to meeting the needs of a great part of the rural population.

In the longer term this development might lead to a widely scattered pattern of small industrial or semi-industrial enterprises which would progressively emerge throughout the country. Such development would be advantageous because it would create employment at a fairly low cost and would also help to develop over time a class of entrepreneurs which could eventually promote and manage larger enterprises or become involved in other activities in the modern sector. Finally, the existence of a reasonably large number of small industrial enterprises may provide the basis for interesting backward linkages to new industries at a later point in time.

Apart from relying only on the domestic market, there exist - at least theoretically - the possibility of starting industries which serve both the domestic and export market in order to exploit the economies of scale, if any. For the least developed countries in Africa this is indeed a fairly theoretical

possibility for modern industries except where it involves processing of domestic raw materials which, with the exception of minerals, means agro-based enterprises. (There could also be some potential to develop modern industries explicitly export-oriented that would use labor intensive technologies to produce low skill products, taking advantage of the low level of wages in the least developed countries.) In the agroindustrial subsector there indeed exist many possibilities for industrial development based on both domestic and export markets, but the potential is burdened with a problem that often prevents efficient solutions: the conflict in pricing policies arising from the desire (and often the political need) to keep prices low for domestic consumption while permitting the enterprise to make enough profits to keep its plant and production process sufficiently modern to compete in export markets. This conflict often spills over into the institutions that are supposed to support the subsector financially.

Institutional Framework

Industrial development in our days very rarely takes place spontaneously. Usually, a host of institutions are involved in promoting, encouraging, directing, helping industrial development - and sometimes impeding it. Basically, the institutions involved can be subdivided into three functional groups - which are not necessarily synonymous with groupings by level of authority and control - as follows:

- (i) macroeconomic planning and control
- (ii) financial institutions
- (iii) technical assistance

(i) Macroeconomic Planning and Control

In most countries macroeconomic aspects of industrial development are considered by government ministries in view of the overall constraints and possibilities of the economy. While this is certainly a necessity in our complex, modern world it seems that all too often the people responsible for formulating the broad framework of industrial policies - whether nationals or foreign experts - have been educated in or influenced by countries where industrial development took place long ago under circumstances which were quite different from Africa today and consequently their views on industrial development problems tend to be tinted by a preference for macroeconomic approaches resulting in models which are of little relevance to the situation of the particular African country. As a result, the functional distribution of tasks outlined above is frequently not seen as such and is replaced by the desire for a controlling influence in order to assure a methodologically "pure" execution of macroeconomic policies at the lower levels.

The remarks are not made to imply that the government should be kept out of decisions concerning industrial development. On the contrary, it is the natural prerogative of governments in any country to expect that decisions by subordinated institutions will be taken with due respect to the respective national goals, objectives and policies of the country in question. This means, even in a market oriented economy, that the government should have - at least through the Central Bank - means to substantially influence those decisions taken at the lower level

that would impair the general policy objectives of the country. Yet there remains an area of freedom outside these fundamental issues that the subordinated institutions badly need if they are to fulfill their developmental function on the microeconomic level in a reasonable way. This is an important and very difficult dilemma in industrial development policies in developing countries, particularly in the early stages of such development. Whatever the system, it is important that whenever investment decisions are taken for political reasons irrespective of their economic merits, and financial viability, it be fully recognized and the respective responsibilities of the decision making and the implementation agency well defined.

(ii) Financial Institutions

Sources for financing industrial development are very numerous. The government might provide funds directly, some institutional or multi-lateral donors might wish to finance directly or indirectly an industrial project or an industrial estate in a given area or subsector. There are also direct flows of public and private capital through loans, equity investments or suppliers' credit. Moreover, in most countries specific institutions have been created to provide equity and term finance to medium and large size projects, and also - sometimes - to small-scale enterprises. Finally, commercial banks might also be active in providing term funds for industrial development. This complex of institutions financing industrial development clearly requires a central body - usually the Central Bank or the Ministry of Finance - to monitor the role of each of these institutions in industrial development financing, and exercise some regulatory function. There is also a need to coordinate the various actions of external donors which provide assistance to industrial development, since sometimes their goals and objectives might differ or not be totally acceptable to the government.

The question arises, thus, how many institutions are really needed in any particular country to provide industrial finance and even whether it is worthwhile to establish specific institutions to deal only with industrial investment financing. This is a very important question, because in many countries the need and justification for a number of institutions, each dealing with a particular sector or category or size of borrower is questionable, if only on the basis of the shortage of highly qualified human resources in the country. In many cases, it might be better to establish a multi-purpose development bank which would not only provide term funds to industry but assist other sectors such as agriculture, services and housing. Very often, the potential volume of business in the industrial sector alone would not justify the establishment of an institution catering specifically for financing industrial investments alone. Nevertheless, there are many countries with such institutional proliferation and it is often difficult for the government to estimate how costly such proliferation of institutions is in terms of a draw down on the country's scarce human resources.

The framework of financial institutions catering to the needs of industry is usually geared towards medium and large size enterprises, leaving a large section of the economy uncovered by financial system, viz. the lower end of the enterprise size range. This means that ways and means of catering to the needs of small industries, artisans and the informal sector have to be explored and then implemented. This is a field which requires a lot of imagination and sensitivity to the reality of the problems in any given country, because circumstances vary so widely from country to country.

Up to now most of the financial institutions established in a country to provide term finance to industrial development have been associated directly or indirectly with commercial banks to provide working capital financing. Given the scarcity of foreign exchange in many countries and the dependence of many industries on imported inputs, there is some need to think about a closer and more efficient linkage between institutions specializing in short term financing of working capital and institutions dealing with long term financing requirements for industrial projects.

There are many other issues related to financing of industrial development. What terms and conditions should be charged for loans made to industrial projects? The interest rate question, the question of who would charge or pay the foreign exchange risk on external funding, are usual problems which can become quite difficult since on these questions economic theory is often ambiguous and divergent from political and practical realities. Discussions can touch on very sensitive policy issues. Few would question for instance the desirability of industrial entrepreneurs paying an interest rate which is positive in real terms. This however often raises the question of the whole interest rate structure in the country and the possible role interest rates could play as resource mobilizer and allocator in poor countries when a substantial part of the economy is non monetized. Certainly, in some countries and in particular cases, it may be justified to subsidize entrepreneurs during the start-up period. Another question that has been very much debated is whether it is better to have publicly controlled (or owned) development banks or to have them directed by - perhaps disinterested and hence objective - foreign sponsors or have a combination of public and private interests. There is no simple answer to these questions. In view of the scope and complexity of all these issues, there is a need for government involvement in and overall control of the use of funds for industrial investment programs and projects, so that they fit with national economic objectives and policies.

Whatever the institutions involved and whatever the links between them, it is necessary to coordinate their decisions with the national goals and objectives. In that sense the important thing is to design the charters, policy statements, etc. in such way that they provide both a basis for decision making basis that takes into account national goals and objectives and provides for the progressive build-up of the institution into a financially sound and creditworthy entity. Sometimes, these objectives are not easily reconciled because any institution might - under government's pressure - invest in projects that would make sense only for social or political reasons while on purely economic or financial grounds these investments might not be as economic as one would hope.

Whereas the financial assistance to medium and large scale enterprises is usually given by institutions that are well established and for which rules of conduct have been well developed through history and experience, the experience of institutions dealing with small industry and other small entrepreneurs have not yet been extensive enough to pass any judgement on their effectiveness. Some questions might be asked about the best ways and means to establish such sort of institutions. Three considerations have to be taken into account: first, these institutions have to be very close to the customer in order to be able to meet his needs efficiently, adequately and quickly. Second, the procedures of these institutions have to be very simple, and particularly those of the institutions which provide the funding of these activities. Third, the entrepreneur or the small enterprise needs access to a number of support services in fields like management, accounting, marketing, technology, etc. Whether those services

have to be provided by the financial institutions or by other specialized type of institutions, is a matter of debate. Providing technical and financial assistance through the same institution has its merits in terms of facilitating both the coordination of the various services, and a speedier reaction of the institution involved to the particular needs of the small enterprise. However, it also has its drawbacks, the main one possibly being that the institution might tend to become dominated internally by one of the two main departments. Indeed, it might either be dominated by the financial department and thus may not be ready to finance enterprises which are risky or, if the technical assistance department dominates, will be making decisions in a more generous manner than any financial institution could afford, reflecting the conflict between disciplinary and assistential functions that arise when they are combined in one institution. There is another disadvantage to technical and financial assistance through a single institution, namely the tendency of the involved institution to favor the projects it promotes or develops in its provision of technical services. As a result, other projects financed by other institutions or agencies will not receive the attention they deserve. Finally, it is clear that the choice of whether technical extension services have to be rendered by the financial institution or not will have to be adequately reflected in the type of financial structure and resources which will have to be proposed for the institution.

(iii) Technical Assistance

Providing financial assistance for a project that has been analysed and found viable on economic, financial and commercial grounds is a fairly easy procedure - a good project can usually get financing, if presented properly. However, if the technical side of the project is complicated, the economic and financial potential can be in jeopardy, unless technical assistance is provided. In many cases it will be the foreign sponsor who provides such assistance but this can become an expensive service. In other cases, given the scarcity of local consultancy services it may be necessary to employ foreign technicians, which again raises the question of cost.

The heart of the problem is the fact that local talent can be trained relatively quickly for jobs like financial and economic appraisal of projects while engineering capability and experience is much harder to come by. It is rare to find a local engineer in a financing institution and it would be even more difficult to staff an institution with sufficient local talent to provide technical assistance to all younger manufacturing establishments that need it. This is mainly due to the fact that technically talented people would tend to go into private business themselves in LDCs. On the other hand, foreign technical experts are quite expensive. It is in this branch of foreign assistance that programs are often highly unrealistic because there is no way in which the proposed technical assistance institutions could be staffed at reasonable cost with good people, the "opportunity cost" for good technical people being too high.

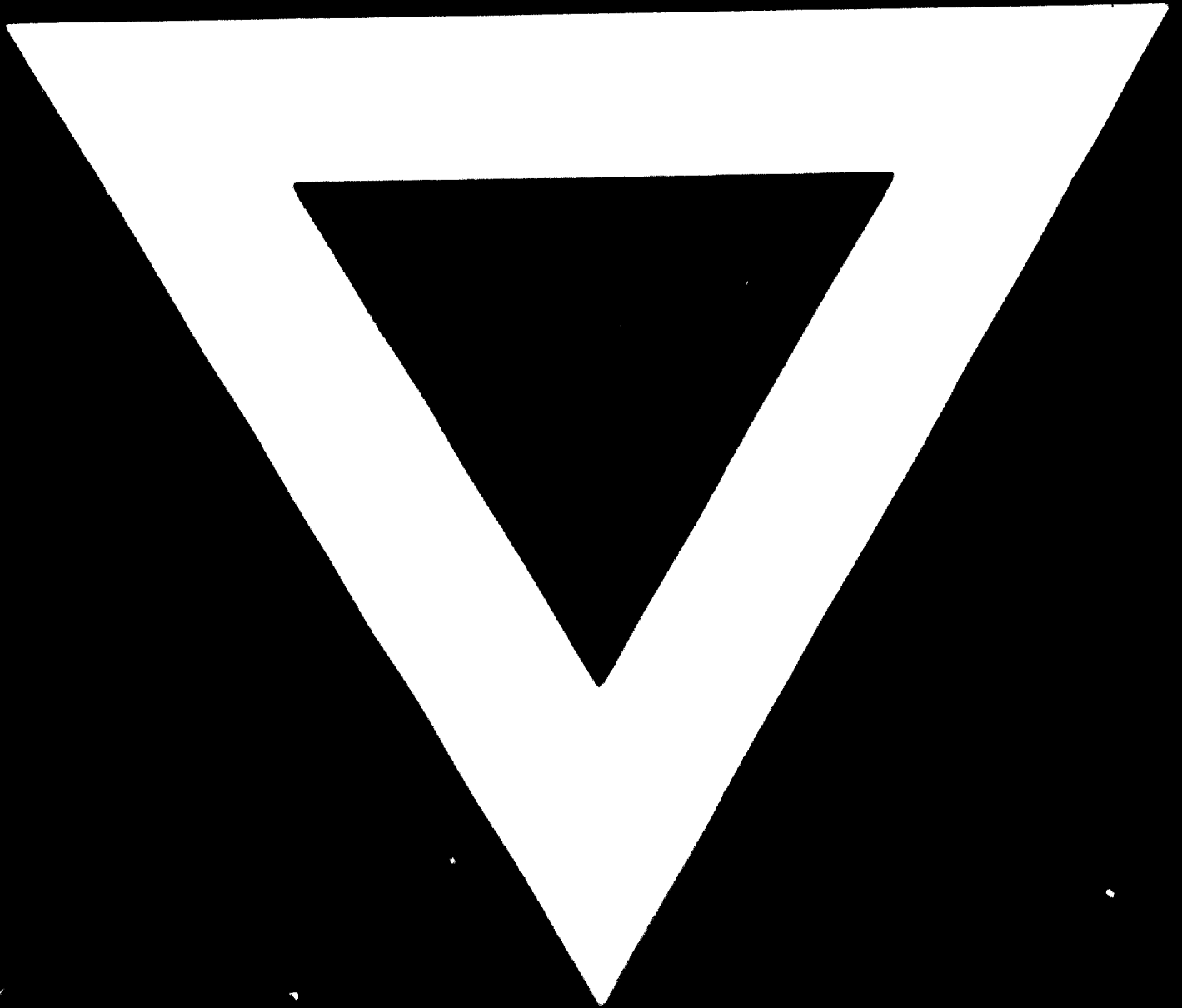
1/ This seems to have some relation with the widely accepted theory that whereas subsidizing technical assistance may be acceptable, subsidizing financial assistance is not justified.

This is even more true, if the expectations about technical assistance are further raised to not only providing technical assistance about currently used machinery and equipment, but is expected to include the control of technology transfers and the development of an appropriate technology for the country in question. Recommendations about such action are often made without proper consideration of the cost/benefit relations involved. While machinery and equipment offered by developed countries often has a greater capacity than needed in the developing country, the cost of developing, designing and custom building a machine with lower capacity may well be much larger than the cost of buying and running a standard machine at 60-70% of capacity. (The recourse to obsolete or second-hand machinery may also be considered although few entrepreneurs seem to be willing to do so for a number of reasons, in particular the lack of repair services.) It may also be more economic to use scarce local technical talent for running industrial plants rather than to use them to develop, design and have machinery with appropriate capacity built for use in developing countries. Economies of scale suggest that such a policy might be more costly in practice than it looks in theoretical calculations. People advocating labor intensive technology in manufacturing tend to overlook the fact that in least developed countries, industry generally contributes relatively little to solving the unemployment problem since its employment creation effect is small. Probably the proper field for labor intensive technology to create a large employment effect is more in construction (especially highways) and transport, than in industry. Transferring industrial technology is already difficult and developing suitable labor intensive technologies at relatively substantial expense would result in absorbing only a small additional amount of labor.

The above observations relate to medium and large scale enterprises. As pointed out before, in many least developed African countries, it might be preferable to try and develop some industries in the artisan sector that could cater to the basic functions and needs of the majority of the population. There it is conceivable that appropriate technology might be useful to develop simple techniques which could at low cost produce some goods that could be both usable and affordable by a large proportion of the population. To do this, probably, a combination of a research institute having both local people aware of the needs, traditions and customs of the population, and of highly versatile engineers/experts could possibly develop such techniques. Such institutes do not seem to exist in the majority of countries for various reasons: you might have very qualified engineers, but they might not be sufficiently aware of the local environment; you might have people highly specialized and motivated to a subject but they might be absorbed by their "research" more than by the practicability of the results. It is in this field that theoretical and applied research could pay off in order to meet the needs of the majority of the population in the least developed African countries.

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