

ATINER CONFERENCE PAPER SERIES No: ECO2012-0320

Athens Institute for Education and Research

ATINER



ATINER's Conference Paper Series

ECO2012-0320

**Industrialization in Sub-Saharan
Africa and Import Substitution
Policy**

Ana Paula Fontainhas Mendes
Senior Economist
MCC Agency
Cape Verde

Mario Augusto Bertella
Professor
Economics Department
Sao Paulo State University - UNESP
Brazil

Rudolph Teixeira
Analyst
Eletrobras
Brazil

Athens Institute for Education and Research
8 Valaoritou Street, Kolonaki, 10671 Athens, Greece
Tel: + 30 210 3634210 Fax: + 30 210 3634209
Email: info@atiner.gr URL: www.atiner.gr
URL Conference Papers Series: www.atiner.gr/papers.htm

Printed in Athens, Greece by the Athens Institute for Education and Research.
All rights reserved. Reproduction is allowed for non-commercial purposes if the
source is fully acknowledged.

ISSN 2241-2891

20/11/2012

An Introduction to ATINER's Conference Paper Series

ATINER started to publish this conference papers series in 2012. It includes only the papers submitted for publication after they were presented at one of the conferences organized by our Institute every year. The papers published in the series have not been refereed and are published as they were submitted by the author. The series serves two purposes. First, we want to disseminate the information as fast as possible. Second, by doing so, the authors can receive comments useful to revise their papers before they are considered for publication in one of ATINER's books, following our standard procedures of a blind review.

Dr. Gregory T. Papanikos
President
Athens Institute for Education and Research

This paper should be cited as follows:

Fontainhas Mendes, A.P., Augusto Bertella, M. and Teixeira, R. (2012)

“Industrialization in Sub-Saharan Africa and Import Substitution Policy”

Athens: ATINER'S Conference Paper Series, No: ECO2012-0320.

Industrialization in Sub-Saharan Africa and Import Substitution Policy

Ana Paula Fontainhas Mendes
Senior Economist
MCC Agency
Cape Verde

Mario Augusto Bertella
Professor
Economics Department
Sao Paulo State University - UNESP
Brazil

Rudolph Teixeira
Analyst
Eletrobras
Brazil

Abstract

This article aims to contribute to the understanding of the process of import substitution in Sub-Saharan Africa. Import substitution was one of the development strategies which started to prevail as a form of industrialization in most developing countries in the post-war period. Soon after independence, countries of Sub-Saharan Africa identified themselves ideologically with that strategy, and began to implement it in the subsequent years. The objective was to ban the export structure based on obsolete farming, and use import substitution as support to expand and diversify its production. Some authors point out that the measures taken for implementation of the import substitution industry in African countries lacked economic rationality, and were much more *ad hoc* than in any other part of the world. Africa's strategy failed due to great structural constraints of the domestic market, and strong external restrictions. Physical and human capital was much smaller than that of other underdeveloped countries. The literacy rate was very low, labor unskilled, and experienced management very restricted. Moreover, the institutions and bureaucracies intended for development were fragile, as a reflection of the shortage of qualified personnel. The low domestic savings level and declining terms of trade for exports of primary goods caused the investments in the industrial sector to be below expectations, even with the help of foreign aid. This constellation of constraints and the dynamic of the process itself paradoxically made the import substitution strategy increase (instead of reducing) Africa's dependence on developed countries and the international market.

Contact Information of Corresponding author:

Introduction

Import substitution was one of the development strategies which started to prevail as a form of industrialization in most developing countries in the post-war period. In many Latin American countries, especially Brazil, Mexico, and Argentina, a conscious implementation of import substitution policies was observed as of the 1950s and early 1960s. Soon after independence, countries of Sub-Saharan Africa identified themselves ideologically with that strategy, and began to implement it in the subsequent years; in fact, that was the only strategy associated with the ideology of development originated with the independence process in African nations. Nevertheless, how that process occurred in African countries and why it was not very successful are still not well known.

In the first half of the 1960s, Tanzania, Zambia, and Nigeria began to implement the import substitution industry on a large scale; afterwards, the implementation of this strategy was noted, among other countries, in Ghana and Madagascar and up to the 1980s import substitution was observed in the other Sub-Saharan countries.

The industrialization process in Sub-Saharan Africa occurred in two phases: the initial stage, a very incipient one still during colonialism, stimulated by colonial people, started around that time and ended in the late forties; the second stage of industrialization began in the late fifties and gathered momentum in the sixties, when import substitution was more widely implemented. In the latter period, industrialization, as in Latin America, is a politically conscious strategy aimed at overcoming underdevelopment. In the Sub-Saharan region, the process of import substitution followed the dynamic typical of any import substitution process. That strategy lasted until the first half of the eighties due to a structural adjustment policy which strongly disapproved of that industrialization system for the region.

The purpose of this paper is to add to the understanding of the Sub-Saharan import substitution process. It has been, therefore, organized as follows: the industrialization strategy in Sub-Saharan Africa is presented in section 1; the contributing factors to the failure of import substitution are pinpointed in section 2; results are shown in the next section; lastly, a brief conclusion is drawn focusing on the major hindrances to that process in the region.

1. The Import Substitution Strategy

Between the 1920s and the forties, although we may refer to this period as a initial stage of industrial development in Sub-Saharan Africa, it is clear that this phase involved conflicts of interests between national and international orientation — of the metropolitan government and international business groups — producing a “stop and go” effect on the process — that is, making it alternate between progression and regression. Since one of the objectives of the

metropolitan policy was to hinder the process in order to monopolize the manufactured goods market, Sub-Saharan African countries came into the fifties without actually having what could be defined as “basic” industry.

This fact allows us to discuss the challenges African governments would face the moment they gained independence and committed themselves to developing their nations, primitive and impoverished by colonial policies. The first problems they would have to deal with when they tried to devise an industrialization plan would be: i) a nonexistent local business class; ii) reduced savings capacity; iii) absence of human capital; and iv) no knowledge of technology.

In the early sixties, in the wake of the independence, Sub-Saharan Africa still had a primary exportation economy. The dynamism of its development depended on the demand for their export commodities by the central countries. The exporting activity was concentrated in a small number of products - crops and minerals - which made the region extremely vulnerable to crises in the ex-metropolises with which they maintained trade relations, and volatile international prices for their products.

In this context, the Sub-Saharan Africa’s industrialization, which starts soon after the period of change in power from the metropolises to the autochton population¹ arises from an anti-colonial ideology, anti-exploitation, and a rupture with foreign capital, seen as neocolonial. It was in the presence of such constraints and the pressure of declining terms of trade for primary goods — which reduced their import capacity even more — that new policies began to counteract the severe underdevelopment. The new African governments, confronted with the calamitous situation of their countries, concluded that the road to development was to base their economies on new production activities in other sectors. On contemplating the fairly successful development in the Latin American countries, they decided to adopt import substitution as a strategy to overcome poverty in the region; therefore, the sixties mark the first attempt at an industrialization policy for most countries in Sub-Saharan Africa. The objective was to ban the export structure based on obsolete farming, and use import substitution as support to expand and diversify its production.

1.1. Import Substitution Financed by External and Public Resources

The governments, aware of the constraints previously pointed out, especially the shortage of domestic savings by most of the countries, decided not to part from foreign capital definitively, recognizing that it would be crucial to the acquisition process of resources to finance the plants that would constitute the industrial park, the procurement of technology from industrialized countries, and the certainty of staff to manage the businesses and coordinate their production lines. They also recognized that a rupture with ex-metropolises would affect the obtainment of resources – in the form of aid – from international institutions by the State. It is the financial aid, actually, that

¹ In the period between the late fifties and early sixties, Sub-Saharan Africa was the least industrialized region in the world according to World Bank (1994).

would set in motion part of the ambitious development plan devised by these countries, particularly for their industry.

Therefore, in the early sixties, the governments took steps not only to expand foreign businesses¹ from their initial base in the — external and internal — commercial sectors, and distribution to the manufacturing sector, but also to attract more private foreign capital. As pointed out by Stein (1992), the public policy to stimulate foreign investment encompassed the following measures: tax exemption, preferential access to credit, low customs duty rate, favorable exchange rate for investors, and duty-free import of capital goods.

These actions resulted in the installation of a capital-intensive technology. Therefore, following a typical import substitution model, a capital-based industry was established, sacrificing a comparative advantage in the use of labor and natural resources².

Foreign capital was directed at industries that produced nondurable consumer goods, and industries that produced goods which could not be imported, such as the construction material industry and that of some mineral processing. Nevertheless, the imported technology was lucrative only for large-scale production, that is, it was technology developed for mass consumption. As the market was small in Africa, due mainly to low income, there was no public for manufactured goods, thus making production at profitable levels unviable. Multinationals tried to export manufactured goods in the region, but lack of a transportation infrastructure connecting the countries that shared a border, and poor port conditions were obstacles to exportation to the other countries of the region. The multinationals noticed these difficulties right from the beginning, and changed the course of their activities, concentrating on the exploration of valuable minerals and petroleum³.

Since foreign capital was being favored, the exiguous local private capital played a minor role in development at this industrial stage. Its activities were concentrated on small-scale production, trading, regional distribution, and also on the transportation sector. In spite of the fact that it was not supported, this class was not liquidated, and would form a local faction with nationalist ideas. Although at first avoided by the State, that group would ally themselves with the government in the creation of parastatals — in some countries⁴.

¹ That does not mean that, during this period, there was no domestic investment in manufacturing. The State began to invest in enterprises by virtue of revenues obtained through primary goods exports.

² What would result, sooner or later, in negative implications for the current account, and affect the sustainability of the industry itself.

³ According to Gulhati & Sekhar (1982), in Kenya and Zambia, the multinationals set up industries that produced goods intended for export. In Zambia, these businesses were nationalized from the second half of the sixties on, and began to produce only for the internal market. Something similar occurred in Tanzania.

⁴ According to Stein (1992), the educated elite joined politics and bureaucracy, and held positions that provided them with other sources of income, trading, and property, establishing a boss-customer relationship — it is the example of their alliance with foreign capital based on *patronage*. This limited the nationalist opposition to the dominion of the foreign capital over the economy.

The data presented by Pearson (1969) show that the industry grew considerably during that period. In DR Congo, the average annual growth rate of the industry was 11% between 1948/59; in Zimbabwe, its average annual growth rate was 8.7% between 1948/63; in Nigeria, 6% between 1950/57; and in Kenya, 5% between 1956/63. With regard to Zimbabwe, between 1945 and 1965, the share of manufacturing in GDP rose from almost 3% to 20%, while that of the mining sector fell from approximately 13% to 7%, and agriculture, from 20% to 12% (Stoneman, 1982, p. 282; Coulson, 1982).

Pearson (1969) indicates that the countries of the East African Union — Kenya, Uganda, and Tanzania — already had very diversified manufacturing in 1963/64. In the nondurable goods sector - foodstuffs, drinks, tobacco, textiles, shoes, clothing, paper, and leather were produced; in the intermediate goods sector - rubber, chemicals, oil, electrical materials, and metal and non-metallic mineral products; and in the capital goods sector - some electrical machines and transportation equipment.

Coulson (1982), however, mentions that, in the late first half of the sixties, the governments were dissatisfied with the problems of the balance of payments, and the behavior of foreign capital. Current account balance showed a large deficit because the import substitution process required a great import of machines, parts, and other intermediate inputs for production, in addition to skilled labor, thus causing great pressure on external accounts. With respect to foreign capital, there was a negative flow between the inflow and the outflow of foreign exchange. Moreover, foreign businesses preferred importing synthetic inputs – produced in central countries and used for production – to using natural domestic inputs (such as rubber and sisal), overburdening the balance of current account, and also breaking the connection between sectors. That made it difficult for the various activities to grow internally, and prevented the natural expansion of the economy and the income.

In general, it was noticed that foreign capital and the market would not provide the economic transformation required to overcome underdevelopment effectively. It was then that nationalist groups emerged and decided to change the course of the economic policy by opting for a nationalized process of import substitution.

1.2. Import Substitution Led by the State

In general, from the second half of the sixties on, the governments assumed total control of the industrial development, and introduced several modifications to the institutions and the economic policy. Herbst (1990) and Stein (1992) comment that the economic policy adopted two guiding principles: the first one was related to the foreign trade policy, and emphasized three aspects: i) multiple exchange rates effectively choosing imports, giving preferential treatment to capital and intermediate goods, and certain basic inputs, strongly discriminating luxury goods; ii) imposition of administrative import control through quotas, licenses, and tariffs; and iii) price control and prohibition of imports of goods similar to those produced domestically. The

second guiding principle was an investment policy, for which the State defined three priorities: i) to make large investments in manufacturing; ii) to create and widen the basic infrastructure for the industry; and iii) to orient towards basic investments through the creation of public institutions connected exclusively with industrial development. The purposes of these institutions were as follows: to stimulate foreign businesses to retain the profit in the country by reinvesting productively in the manufacturing sector, otherwise they would be controlled by the government; to nationalize banks and insurance companies dominated by foreign capital; to gather and allocate domestic savings; and to manage official foreign aid and the projects funded within the scope of the aid.

At the time, the nationalization process of foreign businesses was part of a strategy by the governments as a result of some factors: first, it was closely associated with the State's dissatisfaction with the foreign businesses that sent the profits to their countries of origin instead of reinvesting them productively, and the small number of jobs created by those businesses. The second aspect was related to the ideological change by several countries, such as Tanzania, Zambia, Ghana, among many others, tending towards a socialist orientation or something similar (Forrest, 1982; Gulhati & Sekhar, 1982; Coulson, 1982).

Ghai (1991), and Paulson and Gavin (1999) mention that, due to the nationalization wave, the governments began to favor public capital and private domestic capital, encouraging the latter to ally itself to the State by participating in the formation of parastatals — which occurred in less radical socialist countries. Thus, participation of the local population in the management of businesses also began to be stimulated, concomitantly with the rejection of management by foreigners — including in Kenya and the Ivory Coast, which had a more capitalist orientation. Some subterfuges were, therefore, used, such as: i) deny nationality to alien minorities; ii) demand work permit to non-nationals; and iii) impose restrictions on foreign businesses in the trading, distribution, and transportation sectors.

Thus, behind industrialization lay production for the domestic market and the creation of jobs, which began to be considered more important to the point where some governments proposed autarky. The most radical ones forgot about their initial goal, that the import substitution process was a means of organizing and diversifying the domestic production core, in addition to serving as an orientation, later on, towards the international market. As a result, the State turned its full attention to industry, and made great investments in factories for large-scale production, some of which in association with foreign capital and/or national capital. This made the industrial park expand considerably, with the multiplication of the number of plants intended mainly for the production of nondurable consumer goods — such as textiles, paints, plastics, light drinks, beer; construction materials — such as ceramics, faucets, pipes, floor tiles, roof tiles; pharmaceuticals; fertilizers and agro-industrial products. The exploration of minerals, such as iron, was also expanded, and the State invested in oil production and petroleum-based products.

D'Almeida (1986, p.56) indicates that the number of state-owned companies in Tanzania, for example, rose from 80 in 1967 to 400 in 1981. In

Kenya, they increased threefold, from 20 – at the time of independence in 1963 – to 60 in 1969. In Ghana, where there were no state-owned companies at its independence in 1959, there were approximately 100 in the early sixties. In other countries, such as Zambia, Senegal, the Ivory Coast, Mali, Mauritania, and Uganda, there was a marked increase in the number of those companies¹.

The oil shock in 1973 posed serious problems for the balance of payments, and although it was weakened, the import substitution process continued at the expense of foreign indebtedness. In the late seventies, the situation of the balance of payments worsened dangerously due to the second oil shock, affecting imports of capital and intermediate goods, and other inputs used by local industries. That resulted in decreasing growth rates of the value added in the manufacturing sector, and a very high idleness level of businesses. With its sector completely stagnant due to lack of foreign exchange to import intermediate and capital goods, the industry's performance was far below expectations.

Nigeria, Kenya, and Zambia – of all the African countries – were the ones which became more industrialized; in the other countries, there was a slight industrial development in the sector of nondurable consumer goods, such as drinks, textiles, etc. It was only in Nigeria and Kenya that a qualitative performance of the manufacturing sector persisted, and the incipient industrial base slowly widened and included durable consumer goods, other intermediate goods, and some capital goods (Forrest, 1982; Arrighi and Saul, 1973).

The industry led by the State grew substantially in size, but in terms of production, its contribution was very modest. This small growth is due not only to external and internal constraints, but also to low productivity, poor business administration, and the fact that the industry focused more on employment than on business.

2. Difficulties in Implementing the Import Substitution Industry

According to Vitta (1990), the industrial and economic development did not occur as recorded throughout history, with the agricultural sector giving support to the industrial development process by supplying food and raw materials, transferring capital, generating foreign exchange, and providing a consumer market. The only transfer that was possible to achieve from the agricultural sector to the industry was labor, by virtue of a high population growth rate in the region; however, the output per worker which in principle should increase in the agricultural sector, did not occur, thus causing high inconsistency in the economic system. Therefore, with industrial development and larger urban areas, there was a growing need for agricultural goods, either as food for the urban population, or as raw material, to be feasible to continue the industrialization process. The low productivity of the agricultural sector did

¹ For further details, see Nellis (1986, p. 56).

not allow the growing demand to be met, and even caused problems of food safety in several countries.

In Africa, the government's policy on resource transfer somehow segregated the agricultural sector which – with the reduction in credit lines for farmers, both for planting and purchasing of machines and tools – continued its production at a low capital-labor ratio. Public investments in technological innovation in the agricultural sector were not extended to peasants, either, who were the majority and who grew crops using outdated practices and technology. Moreover, the policy of overvalued exchange rate, aimed at favoring the local industry, led to a reduction in the competitiveness of African agricultural exports in the international market. These aspects discouraged crop production not only for export, but also for domestic consumption.

The exchange constraint affected imports of inputs and other resources required for industrial production, thus imposing three obstacles to industrial development: first, the production level could only be maintained through adequate import level of inputs; second, the investments and industrial activities did not have to necessarily be linked to the remaining sectors and economic activities, as the way it was organized, the industry depended, almost entirely, on foreign countries — although very superficial, there was a connection between industries and other local sectors, for example, such as agriculture; third, as imports consisted of inputs that were essential to production and investment, difficulty in acquiring enough foreign exchange to import them resulted in idle capacity, job/income reduction and, in consequence, a decline in the Sub-Saharan African economies.

The shortage of human capital and lack of skilled staff with some experience in bureaucracy adversely affected the business organization — especially that of state-owned companies, the coordination of production processes, and particularly the way public ones were run. Shortage of staff also affected the industry indirectly, as the government was unable to devise a suitable strategy and plan for the growth of the sector. Without qualified executives, it was difficult to establish an institutional structure and bureaucracy capable of regulating and administering the import substitution process (Gulhati, 1990 and Helleiner, 1994). According to these authors, governmental agencies – which were created at the heart of the industrial policy to compensate for a lack of an organized capital market – were also inefficient at allocating the capital (from foreign aid, the agricultural, mining and oil sectors) to the industries.

Another obstacle to industrial development, according to Vitta (1990), was the technological level of the industry, which also stayed very low. Learning about technology and acquiring technological advances were very costly processes, although technology was an integral part of the capital goods imported. In this author's opinion, although they fully recognized the need to introduce advanced technology – with state-of-the-art methods and procedures for the production and distribution of goods and services – the governments did not put much effort into setting a specific goal and defining the plan of action in order to achieve that goal. Naturally, the reasons behind that could be

attributed to the lack of a clear technological policy and planning for the sector, as well as an eminent lack of funds.

Bruton (1998) points out that the measures taken for implementation of the import substitution industry in African countries lacked economic rationality, and were much more *ad hoc* than in any other part of the world. Vitta (1990) states that the development of the African industry depended on results left to chance, the direct consequence of steps taken without any concern over cause and effect. It seems to us that the failure of the African industrialization was closely related to the fact that the process went beyond the limits of human resource capacity, endowment of financial resources, and market size. In addition to these aspects, there was a high level of interference from the State in the market and a poorly developed economic infrastructure.

3. Results of Import Substitution

Some indicators show that the industrial development in Africa was inferior to the industrial progress made by other peripheral countries which adopted the same strategy. In 1960, the developing countries accounted for 6.9% of value added in global manufacturing, this share rising to 8.8% in 1975¹. Sub-Saharan Africa's share in 1960 was of only 0.7%, and in 1975, 0.8% (Fransman, 1982, p.1). It can be observed on table 1 that the increase in Africa's share of value added in global manufacturing was almost nil between 1960 and 1976.

Figure 1 shows that Sub-Saharan Africa is a region with one of the smallest shares in global manufacturing. Nonetheless, the sector grew at fairly high average rates of about 7% per year between 1960 and 1980. From 1985 on, manufacturing growth declined due to structural adjustment.

Another indicator of African manufacturing's performance is the average share of Sub-Saharan Africa in export of manufactured goods in global industrial exports. This indicator demonstrates that exports of Sub-Saharan Africa's manufacture fell from 1.12% in 1970/71 to 0.60% in 1975/76 (Fransman, 1982, p.2).

In the mid-eighties, after 25 years of leaning towards an industrialization strategy through import substitution, the African manufacturing sector was just a small enclave in the economy of the region, accounting for only 7.5% of GDP in 1983. In several countries, the share of manufacturing in GDP, compared to that in the 1960s, even decreased, indicating that the process receded throughout time (Iheduru, 1999).

Faced with so many constraints, the results could not be any better; in fact, the development of the African industrial park was poor, gaining peculiar features through the interaction between structural aspects of the region, external constraints and difficulties with domestic policies. First, the cost of

¹ For the same period, the corresponding values for industrialized economies are 75% and 63.7% respectively, and for centrally planned economies, 18% and 28% respectively (Fransman, 1982, p. 1).

production was high, as it depended mostly on imports of inputs and machines. Second, plants were oversized, poorly designed, and badly located as a result of governmental corruption. Most of these production units were inefficient because of their obsolete machinery, which was either donated by partner countries or bought within the scope of the aid the project was part of. Third, inefficiency was also connected with the type and quality of the local administration, which lacked capability, experience, and training. In addition, management was not well qualified, and the labor force was unskilled and illiterate. And last, the low income level, the market size of each country, as well as the closing of some borders between countries of the region due to civil unrest, and the weak development of the transportation infrastructure connecting the neighboring countries did not allow economies of scale. These aspects, added to overvalued exchange rates – which reduced the competitiveness of crop exports, causing a shortage of foreign exchange for imports of machines and raw materials – and oversized plants, resulted in excess industrial capacity and failure.

Final Considerations

After independence, most African countries believed industry was the engine of economic growth that would lead them to development. Therefore, they adopted an industrialization strategy as a substitute for importation in light of Latin America's experience.

However, contrary to what occurred in Latin American countries, Africa's strategy failed due to great structural constraints of the domestic market, and strong external restrictions. Physical and human capital was much smaller than that of other underdeveloped countries. The literacy rate was very low, labor unskilled, and experienced management very restricted. Moreover, the institutions and bureaucracies intended for development were fragile, as a reflection of the shortage of qualified personnel.

The low domestic savings level and declining terms of trade for exports of primary goods caused the investments in the industrial sector to be below expectations, even with the help of foreign aid. This constellation of constraints and the dynamic of the process itself paradoxically made the import substitution strategy increase (instead of reducing) Africa's dependence on developed countries and the international market.

The African industrial park was characterized as being inefficient and using outdated technology, and operated below its capacity due to oversizing, lack of economies of scale, and the great need to import inputs and machines (which were not generally replaced as the shortage of foreign exchange prevented their importation). Whatever effort put into the industrial sector was surpassed by the problems above, thus making production costs far too high.

Finally, it is important to note that most of the problems in the industrial sector emerged from actions and choices of the political elite: measures towards industrialization through import substitution, and

investments in manufacturing and subjacent sectors, were handled as political weapons, either by the government or the political party. In fact, the domain of industry was a way of legitimating the politicians rather than a rational economic policy aimed at the development of the industrial sector. The measures were somehow randomly taken, and sooner or later would end in failure of the sector, as well as in a generalized economic crisis, as the entire region had a highly deficient and inefficient sector financed by the external debt.

Bibliography

- ARRIGHI, G. and SAUL, J. (1973), *Essays on the Political Economy of Africa*, Monthly Review Press.
- BRUTON, H. J. (1998), 'A Reconsideration of Import Substitution', *Journal of Economic Literature*, N° 2, Vol. 32, p. 903-936.
- COULSON, P. (1982), 'The State and Industrialization in Tanzania', in Fransman, M., (1982), *Industry and Accumulation in Africa*, Heinemann International Literature & Textbooks.
- D'ALMEIDA, A.F. (1986), 'La Privatization des Enterprises Publiques en Afrique au Sud du Sahara', *Le Mois en Afrique*, Nos. 245 and 246, June and July.
- FORREST, T. (1982), 'Recent Development in Nigerian Industrialization', in Fransman, M., (1982), *Industry and Accumulation in Africa*, Heinemann International Literature & Textbooks, p. 323-344.
- FRANSMAN, M. (1982), *Industry and Accumulation in Africa*, Heinemann International Literature & Textbooks.
- GHAI, D. (1991), *The IMF and the South: The Social Impact of Crisis and Adjustment*, London: Ed. Zed Books.
- GULHATI, R. (1990), 'Who Makes Economic Policy in Africa and How?', *World Development*, Vol.18, N° 8, p. 1147-1161.
- GULHATI, R. & SEKHAR, U. (1982), 'Industrial Strategy for Late Starters: The Experience of Kenya, Tanzania and Zambia', *World Development*, Vol.10, N° 11, p. 949 - 972.
- HELLEINER, G. K. (1994), 'From Adjustment to Development in Sub-Saharan Africa', *UNCTAD Review*.
- HERBST, J. (1990), 'The Structural Adjustment in Africa', *World Development*, Vol.18, N° 7, p. 949-958.
- IHEDURU, O. M. (1999), *The Politics of Economic Restructuring and Democracy in Africa*, Greenwood Press.
- NELLIS, J. R. (1986), 'Public Enterprises in Sub-Saharan Africa', World Bank Discussion Paper N° 1, Washington DC.
- PAULSON, J. A. & GAVIN, M. (1999), 'The Changing Role of the State in Formerly-Socialist Economies of Africa', In PAULSON, J. A. *African Economies in Transition*, Vol. 1, St. Martin's Press.
- PEARSON, D. S. (1969), *Industrial Development in East Africa*, Oxford University Press.
- STEIN, H. (1992), 'Deindustrialization, Adjustment, the World Bank and the IMF in Africa', *World Development*, Vol. 20, N° 1, p. 83-95.

STONEMAN, C. (1982), 'Industrialization and Self-Reliance in Zimbabwe', in Fransman, M., (1982), *Industry and Accumulation in Africa*, Heinemann International Literature & Textbooks.

VITTA, P. B. (1990), 'Technology Policy in Sub-Saharan Africa: Why the Dream Remains Unfulfilled', *World Development*, Vol.18, N° 11, p.1471-1480.

WORLD BANK (1994), 'Adjustment in Africa: Reforms, Results and the Road Ahead', A World Bank Policy Research Report, Washington, DC: The World Bank.

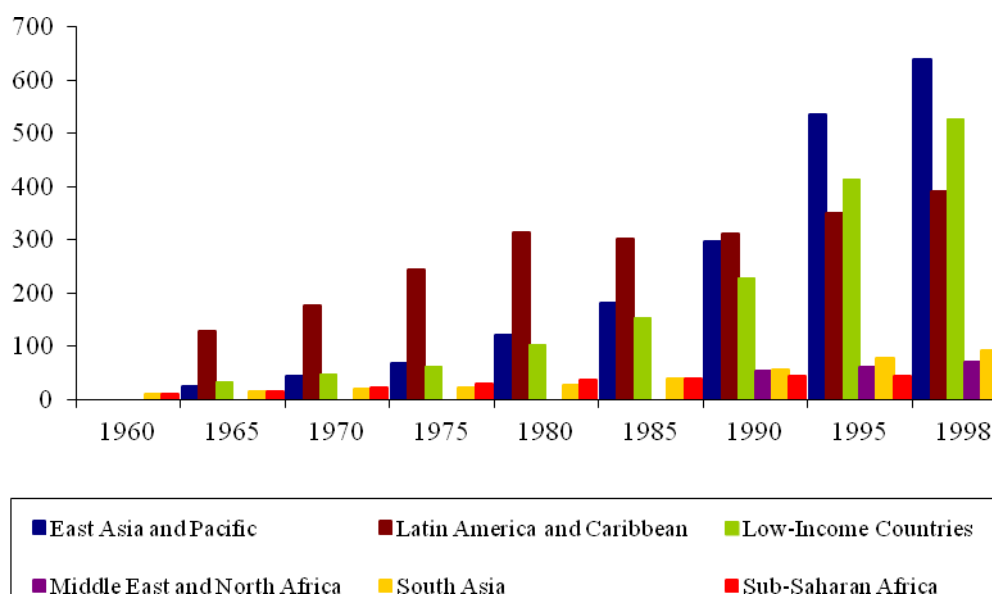
WORLD BANK (2000), *The World Bank Indicators*, Washington, DC: The World Bank.

Table 1. *Share of Sub-Saharan African Countries and other Developing Countries in Global Manufacturing, Value Added (%)*

Year	Sub-Sahara	Other Developing Countries	Total
1960	0.70	6.20	6.90
1970	0.69	6.64	7.33
1971	0.70	6.60	7.30
1972	0.70	7.10	7.80
1973	0.71	7.21	7.92
1974	0.72	7.54	8.26
1975	0.80	7.96	8.76
1976	0.71	7.96	8.67

Source: Fransman (1982, p. 2)

Figure 1. *Manufacturing, Value Added of Some Regions in the World (USD billions, 1995)*



Source: Drawn from the World Bank (2000).