

RECENT TRENDS IN THE DEVELOPMENT OF MANUFACTURING INDUSTRIES IN ETHIOPIA

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1. INTRODUCTION

Ethiopia had a population of around 50 million in mid-1989. Its gross domestic product (GDP) per capita at current prices was Birr 225. Agriculture is the most important sector, although its share of GDP has been declining and was 43 per cent in 1989.

The declining trend in the contribution of agriculture to GDP has, however, not been compensated by a growing share of industry in GDP. Modern manufacturing remained small, stagnating at around 8 per cent of GDP and providing 5 per cent of employment in 1989. Most industries remained isolated from the world market and technology, with high costs relative to best-practice operations elsewhere.

The sluggish growth of the manufacturing sector may be attributed, among other things, to inappropriate policy which has been maintained by the past two regimes. The future lies in shifting industrial structure towards high-growth competitive enterprises that are linked to the domestic economy. Reviving investment for this purpose will require restructuring or removing loss-making firms and substantial efforts to mobilize domestic and foreign investible resources.

Mobilization of domestic and foreign investible resources for industrialization requires a favourable climate which induces both domestic and foreign investors to commit their capital in industrial development.

Sustainable industrial development cannot be attained without correct industrial strategy. Lessons from the experience of industrialized and industrializing countries as well as existing opportunities usually form the basis for drawing up such industrial development strategies.

The classical pattern of industrial expansion followed the sequence: specialization in light manufactured goods, then intermediate and finally in heavy capital goods [Ghatak 1978: 20]. This pattern evolved in Britain not in response to state initiatives but as a consequence of changing international opportunities.

In Germany national political forces encouraged economic integration, stimulated trade and investment and provided support from domestic businessmen and industrialists. The role of the state was particularly vital in the heavier industries. These industries developed behind protectionist barriers and contained a significant proportion of public investment. As time passed, German industry became competitive in a wide range of commodities in the international market.

The Soviet Union opted for an autarchic industrialization strategy which maximized the exploitation agriculture and concentrated investment in the industrial branches whose expansion served best the purpose of surpassing the most advanced capitalist states and building socialism.

On the other hand, the history of industrialization in less developed countries (LDCs) has been examined under Import Substitution Industrialization (ISI) and Export Oriented Industrialization (EOI). Some of the most influential authors and policy advisors have been moving rapidly to the position of treating these experiences as closed chapters of development economics [Schmitz 1984: 3]. Some background information of these strategies and their implication on sustained economic growth is in order.

International circumstances prevailing in the period 1913-50 are the most commonly cited explanations for the emergence of import substitution as an industrial strategy in LDCs. The legacy of the two wars and an interim depression led to a break in the long-term relationships between industry and trade. LDCs with relatively large manufacturing sectors felt the disruption in industry-trade relationship most acutely. Thus they opted for a policy of import substitution, in part, to offset declining trade levels.

The export promotion policy of industrialization was the results of both national and international developments of the 1960s. The international spread of manufacturing capacity extended the degree of interdependence and specialization among countries. Tariffs on manufactures were substantially reduced [Ballance, et al 1982: 48].

In the same period, there was a shift in the allocation of funds for research and development (R&D) in advanced countries which had a dramatic impact upon the industrial structure. By 1970, capital goods, electrical engineering, chemistry and agro-chemistry, aerospace and automobile industries absorbed between 76 and 92 per cent of R&D funds allocated to industry in advanced western countries. Structural changes such as these altered some of the basic conditions faced by potential exporters in LDCs.

The West's demand for light manufactures like consumer goods rose, spurred by rapid growth of income. At the same time, the resource claims of other sectors and activities such as science-intensive industries received high priority. Under these circumstances, the West's technological and innovative lead in traditional industries such as textile, clothing, footwear, leather products, etc. was reduced while predominance in many science-intensive activities was extended.

These structural changes in conjunction with the adjustment in international policy made a shift to export promotion a more feasible alternative in the 1960s.

An important distinction between this strategy and its predecessor, import substitution, concerns the supposedly static nature of export promotion as it was pictured during the 1960s. Its proponents made little mention of the possibility that structural changes or shifts in comparative advantage could occur as industrialization continued. Thus little attention was paid to the prospect of LDCs for the production of capital goods. Advocates of import substitution had stressed dynamic considerations, including internal and external economies of scale.

On the other hand, the experiences of the industrialized countries have shaped the thinking which led the OAU to adopt the Lagos Plan of Action (LPA) for the collective industrialization of Africa based on the twin principles of self-reliant and self-sustained industrialization.

But no claim to self-reliance can have meaning unless the industrial structure has been developed to a stage where a country need no longer resort to outside sources for the bulk of its technology, capital, management or other requirements.

The principle of self-sustained industrialization stresses the need to ensure that, in addition to simply generating the growth of industrial output, there will also be adequate recognitions of the links within industry itself and with other sectors of the economy. In particular, the links between industrial and agricultural development should be given sufficient attention. The balanced expansion of both sectors facilitates the processing of agricultural raw materials and the establishment of food processing enterprises. It, in turn, provides a growing market for industrial products and, in the social sphere, helps to integrate the rural and urban communities. An essential part of this balanced expansion of industrial and agricultural production is the establishment of core industries capable of supplying the machinery and other requirements for the modernization of the agricultural sector.

The successful implementation of a self-reliant industrialization campaign requires, as its starting point, the choice of an appropriate strategy. This strategy should be based on two foundations:

- a) It should take account of the natural, human and other resources available as well as any obstacles or constraints on development.
- b) It should reflect the overall political and social objectives of society and hence the influence of these goals on the role which industry should play in their achievement [World Bank 1981].

There is no evidence that indicates the extent to which each independent African state applied or even made reference to the Lagos Plan of Action in its industrialization derive. The common knowledge, however, is that Africa is still the least industrialized continent.

The forgoing discussion provides the framework for reviewing the industrial policies adopted by the past two regimes and the effects of these policies on the industrial development of the country in the rest of this paper.

The paper is organized as follows. Section 2 reviews the industrial policies of both the pre- and post-1974 periods. Recent trends in the development of manufacturing industries are addressed in Section 3; Section 4 deals with the structure of manufacturing industries; and concluding remarks are given in Section 5.

2. REVIEW OF INDUSTRIAL POLICIES IN ETHIOPIA

2.1 Pre-1974

The institutional framework under which the industrial sector operated prior to 1974 was a free enterprise system with an open policy in the sense that no minimum requirement was imposed on the establishment and operation of enterprises [Befekadu Degefe 1986: 1]. The role of the government was mainly to encourage potential investors both from within and outside the country to commit resources in industrial investments. Accordingly, various comprehensive industrial strategies and policies were issued in the form of proclamations and directives. The overall direction of these economic policies and strategies was to develop the industrial sector so that it fits into the international capitalist economic system.

The main features of the external relations of the economy during the initial period was, as is still the case, the export of primary agricultural products and the import of finished products. Since 1950, the country's export earnings were falling while imports increased at a rapid rate, and the foreign exchange resources earned from exports could not fully cover the country's import needs. As a result, in the two and a half decades before 1974, the country registered foreign trade surplus only in the earliest years of 1951, 1953 and 1957, and later in 1973. In the rest of the period, the trade balance was in deficit -- the deficit running as high as Birr 166.5 million (well over 60 per cent of imports) in 1968 and as low as Birr 5.7 million (above 4 per cent of imports) in 1956 (see CSA various issues).

In order to reverse this unfavourable trend and to overcome the foreign exchange problem in the long-run, the substitution of imports by expanding manufacturing activity in the country was perceived as the ultimate remedy. The strategy of import substitution was thus adopted and became the dominant industrial strategy in the country. The importance of this strategy was also underlined from the point of view of utilizing the country's idle natural resources and of creating employment opportunities for the population.

However, the implementation of import substitution was constrained by the limited level of savings and investment possibilities, as the number of national capitalists was very small and the amount they were able to invest very low.

Moreover, these capitalists were prepared to invest largely in areas that promised quick returns such as building construction, real estates and commercial activities. As a result, industrial progress was slow, requiring further steps for enhancing the implementation of the strategy.

Foreign private investment was considered as a potential source of financing industrial development, but there was a need to create proper mechanisms and institutions to attract foreign capital. To this end, several proclamations and legal notices were passed, the essence of which were summarized in the 1967 Investment Proclamation. These were:

- a) income tax exemption for five years starting from the date of commissioning for investments in new projects exceeding Birr 200,000;
- b) income tax exemption for three years for expansion projects exceeding Birr 200,000 starting from the day of commissioning;
- c) relaxation of foreign exchange regulations by the National Bank:
 - to allow foreign investors to transfer and remit their profits abroad;
 - to issue special foreign exchange licenses to import goods for production, to pay foreign credit and to export dividends and profits; and
 - to permit foreign workers to remit their savings abroad in foreign exchange;
- d) loans to buy real estates in Ethiopia for establishing industrial plants;
- e) computing income tax after capital charge has been deducted; and
- f) tariff protection, if necessary, including prohibition to safeguard them from competition from imports.

In essence, these incentives were similar to those commonly employed in all countries which pursue the capitalist way of development. The policies had some contribution for the accelerated rate of industrialization, for 54 new industries were established in the period 1964-74 as compared to only 26 new factories during the period 1950-63.

2.2 Post-1974

In the post-1974 period, the political philosophy changed and ownership gravitated towards the state and what it did not own was to be controlled and directed. More affected by the policy changes was the industrial sector in which public ownership became the predominant form of economic organization after 1975.

With the change of ownership, the basic objective for the development of the sector was also changed. The sector's development objective was underlined to be the satisfaction of the material needs of the population; and profit maximization ceased to dictate the choice and development of industry in the country.

In line with the new policy, 87 manufacturing enterprises were nationalized in 1975. In the following few years their number grew to 134, and by 1983 as many as 159 enterprises were nationalized.

However, many of the nationalized enterprises were very old, as can be observed from Table 1. More than 50 per cent of the enterprises were already operating beyond their technical life and were financially weak because the owners were running them on bank loans while depositing their profits and depreciation charges in banks. Thus they needed immediate renovation and replacement measures, requiring substantial state budget.

Table 1: Age Distribution of Nationalized Industries

Age (in years)	Number of Enterprises
Over 50	7
41 - 49	3
31 - 40	13
21 - 30	18
11 - 20	38
6 - 10	37
1 - 5	14
Total	130

After nationalization, no major deviation from import substitution strategy was observed. While the basic theme of the policy remained the same, some intention to move into the production of intermediate and capital goods were declared in the Ten-Year Perspective Plan (1984/85 - 1993/94). The plan envisages building a strong national economy with adequate inter-sectoral linkages, which implies the building of a strong self-reliant national economy by expanding industries using local inputs and resources and by strengthening inter-sectoral linkages particularly between agriculture and industry as well as mining and industry. Industry was also accorded second top priority next to agriculture in terms of resource allocation in the Ten-Year Perspective Plan. The objectives of the Ten-Year Perspective Plan with regards to industrialization were to:

- a) increase the quantity and quality of basic consumer goods with a view to improve the living standard of the working people;
- b) expand and/or establish handicrafts and small-scale industries;
- c) expand the production of goods that would support the agricultural sector such as farm machines, implements, etc.;

- d) encourage the development of industries that would cater for the construction sector;
- e) expand and/or establish metal, chemical and non-metal industries with the view to lay the basis for heavy industry;
- f) earn or save foreign exchange;
- g) create employment opportunities; and
- h) bring about balanced regional development through regional distribution of industries.

The plan envisages industrial GDP (including manufacturing, mining, construction, electricity and water supplies) to grow at 10.8 per cent. Structural changes were also foreseen, as can be witnessed from Table 2. The plan envisages a drop in the share of agricultural GDP from 48.3 per cent to 39.1 per cent during the plan period while that of industry is expected to rise from 16 per cent to 23.9 per cent over the same period.

Table 2: Percentage Distribution of GDP by Industrial Origin

Year	Total GDP	Agriculture	Industry	Service
1983/84	100	48.3	16.0	35.7
1993/94	100	39.1	23.9	37.0

Source: ONCCP, *Ten-Year Perspective Plan*.

3. RECENT TRENDS IN THE DEVELOPMENT OF MANUFACTURING INDUSTRIES

In the previous two sections, we have briefly discussed the two major industrial development strategies in developing countries, and, in view of these strategies, we had a glimpse of the pre- and post-1974 industrial policies in Ethiopia. In this section, we will try to look at the effect of these policies on the development of the country's manufacturing industries.

3.1 Number of Operating Industrial Establishments

Results of surveys of manufacturing industries indicate that the number operating establishments has declined over the past 20 years. There were 479 manufacturing enterprises in 1970, but only 399 in 1984.

Currently, there are 211 large- and medium-sized manufacturing plants under state control, of which 164 are under the management of the Ministry of Industry while the remaining 47 firms are under other ministries. This number is only 39 per cent of the total number of operating establishments. The extent of state control, however, may not be easily discerned from sheer number. One has to look at the

volume of production and other parameters to judge the importance of state vis-a-vis private ownership in manufacturing industries.

Branchwise, the food industry has the largest number of operating plants. Wood and wood products came second until 1981, followed by the textile industry. However, after 1981, the number of operating establishments in the wood and wood products industry declined substantially while that of textiles showed a marked increase. The textile industry now stands second in terms of the number of operating establishments. Of all industrial branches, the number of operating establishments in the tobacco industry has remained constant and the lowest over the past 20 years.

3.2 Gross Value of Production

The gross value of production for manufacturing industries by industrial branch for the period 1970-89 was compiled; the data was then divided into four sets for each five successive years, and average growth rates were calculated. The results are presented in Table 3.

Table 3: Average Growth Rate of Gross Value of Production By Industrial Branch
(in per cent)

Industrial Branch	1970-74	1975-79	1980-84	1985-89	1970-89
Food	10.6	23.7	8.1	4.8	11.8
Beverage	15.4	14.8	15.4	10.8	14.1
Tobacco	53.4	24.3	15.1	1.8	22.1
Textile	15.2	5.0	6.3	0.9	6.4
Leather & Shoe	24.4	21.2	12.6	15.8	18.2
Wood & Wood Products	14.7	13.4	4.0	2.3	8.3
Paper Printing & Publishing	12.8	45.7	9.4	3.8	18.2
Chemical	52.5	12.6	18.7	2.7	20.0
Non-metallic Mineral Products	3.4	5.9	21.8	14.0	11.7
Metallic & Electrical Products	16.5	14.6	11.1	5.9	11.8
Average	1.9	18.1	12.2	6.3	14.3

Source: CSA, *Statistical Abstract*, various issues for the period 1970-89 (calculations mine)

The gross value of production increased by more than sevenfold in the period 1970-89. To see the effects of the institutional changes that took place in the country, the two decades covered in the study may be divided into two periods, i.e., the periods before and after 1974. The pre-1974 period was one of rapid industrial growth. During this period, the gross value of production of all manufacturing industries showed an average growth rate of 21.9 per cent. The highest growth rate (53.4 per cent) was registered by the tobacco industry; the next highest was that of the chemical industry (52.5 per cent), followed by the leather and shoe industry (24.4 per cent). The lowest contribution to output growth was from non-metallic mineral products (3.4 per cent). Food production was only second from last, registering an average rate of only 10.6 per cent.

The institutional changes that took place after 1974 had significant effects on the growth and development of manufacturing industries. Following the nationalization of the industries which were in private hands, rehabilitation and replacement of old plants and some initiation of new investment projects were made. However, the rate of growth of manufacturing output began to decline. In the first five years immediately after the institutional changes, the average annual growth rate dropped to 18.1 per cent. In the second and third five-year periods, it dropped further to 12.2 per cent and 6.3 per cent respectively.

3.3 Value Added

The trends in the development of manufacturing industries can be best explained by the trends in manufacturing value added (MVA). In the period 1970-74, MVA grew at the rate of 12.5 per cent (see Table 4). In the first five years after institutional changes, the average growth rate of MVA was 16.1 per cent. Except for chemicals and non-metallic mineral products, the average growth of value added in all industrial branches was higher than before the institutional changes. In the second and third five-year periods, the growth rate declined due to rising industrial costs as a result of rising oil prices and imported raw materials, shortage of domestic raw materials, and declining efficiency of plants because of old age and poor management.

The average growth of MVA for the entire period (1970-89) was 12.2 per cent. Average growth of value added for food, tobacco, textile, leather and shoe, wood and wood products, paper and printing as well as metallic and electrical industrial branches have shown a constant decline after 1975-79. Growth rates of value added in the chemical and non-metallic mineral industries have, however, shown an erratic trend, at times rising and at others falling.

3.4 Volume of Production

While the gross value of production and MVA may help as indicators of the general trends in the development of manufacturing industries, they may not portray

the whole picture of the direction of this development. The volume of production and per capita availability of major industrial products may provide further insight.

Table 4: Average Growth Rate of Value Added of Manufacturing Industries By Industrial Branch

Industrial Branch	1970-74	1975-79	1980-84	1985-89	1970-89
Food	4.6	29.2	3.8	1.5	10.0
Beverage	12.6	14.6	15.0	8.8	12.8
Tobacco	9.3	21.6	18.3	14.8	16.4
Textile	8.4	9.5	7.4	-3.3	5.3
Leather & Shoe	11.4	25.4	13.1	9.3	15.0
Wood & Wood Products	7.9	15.1	2.6	-0.7	6.1
Paper Printing & Publishing	27.5	21.7	10.0	0.1	14.2
Chemical	38.2	5.1	40.5	12.8	23.4
Non-metallic Mineral Products	2.5	-1.5	24.9	3.5	8.9
Metallic & Electrical Products	2.3	20.1	6.7	7.7	9.9
Average	12.5	16.1	14.2	5.4	12.2

Source: CSA, *Statistical Abstract*, various issues (calculation mine)

Table 5 shows the per capita availability of major industrial products for selected years. Of these products the per capita availability of only flour and cement has shown an upward trend while that of sugar, clothes and yarn has declined substantially throughout the period under review. No particular trend emerges as far as the rest of the products are concerned. In any case, the figures are the lowest by any standard.

3.5 Employment

Employment in manufacturing industries is another indicator of the trends in the development of the sector. The average growth rate of employment by industrial branch is given in Table 6.

Table 5: Per Capita Availability of Major Industrial Products for Selected Years*

Product	Unit	1968	1979	1981
Flour	kg	2.58	4.44	4.89
Sugar	"	3.83	3.77	3.59
Edible oil	"	0.16	0.40	0.20
Salt	"	3.47	3.79	3.84
Beer	litter	1.14	1.93	1.57
Soft drinks	"	0.95	2.19	1.64
Cigarettes	no.	37.00	61.00	54.10
Cloths	sq m	2.59	2.12	1.61
Yarn	kg	0.27	0.25	0.13
Shoes	pairs	0.10	0.13	0.19
Cement	kg	3.36	7.88	8.34
Bricks	no.	0.20	0.16	0.34
Front bar	kg	0.19	0.36	0.24
Nails	"	0.08	0.10	0.10
Corrugated iron sheet	"	0.31	0.38	0.30

Source: CSA and Ministry of Industry (calculation mine).

*The years are in Ethiopian Calendar.

In the two decades between 1970 and 1989, labour absorption grew at an average rate of 5.4 per cent. In the five years before the institutional changes, employment registered an average growth rate of 4.2 per cent while, in the initial five-year period after 1974, the figure went up to 6.7 per cent. In contrast to employment expansion immediately after 1974, the rate dropped to 4.6 and 4.2 per cent in the next two periods of 1980-84 and 1985-89 respectively.

3.6 Fixed Capital

Fixed capital is maintained and expanded through replacement of the part consumed in the process of production and by additional investment. Its growth therefore shows expansion in the productive capacity of industry.

Table 6: Average Growth Rate of Number of Industrial Employees by Industrial Branch (in per cent)

Industrial Branch	1970-74	1975-79	1980-84	1985-89	1970-89
Food	9.2	9.0	1.2	2.2	5.2
Beverage	-0.8	12.2	6.3	5.9	6.2
Tobacco	3.9	11.1	20.9	-8.7	6.9
Textile	2.2	5.5	5.3	0.7	3.5
Leather & Shoe	6.5	9.3	4.3	5.6	6.4
Wood & Wood Products	7.1	4.7	-11.4	12.4	3.0
Paper Printing & Publishing	0.5	16.1	6.4	5.2	7.4
Chemical	11.2	2.2	4.7	6.0	10.8
Non-metallic Mineral Products	-0.2	-4.1	4.1	3.3	0.5
Metallic & Electrical Products	2.8	0.6	4.5	9.0	4.3
Average	4.2	6.7	4.6	4.2	5.4

Source: CSA, *Statistical Abstract*, various issues.

Fixed capital for all industrial branches grew at an average rate of 12.7 per cent in the period 1970-74. In the five-year period immediately after the institutional changes (1975-1979), the average growth rate was 13.2 per cent whereas in the following two five-year periods, it gradually declined to 9 per cent and 7.1 per cent. The overall growth rate of fixed capital for the whole period (1970-89) was 11.6 per cent. The highest average growth rate was that of the food industry (19.2 per cent) followed by the tobacco industry (14.7 per cent). The lowest growth rate (6 per cent) was observed for non-metallic mineral products. Wood and wood products stood second from last, with an average growth rate of 7.6 per cent.

4. TRENDS IN THE STRUCTURE OF MANUFACTURING INDUSTRIES

National strategy for industrialization remained more or less the same both before and after the institutional changes of 1974. As was reflected in the Ten-Year Perspective Plan, the government chose to emphasize light manufacturing, home market orientation and employment generation. The choice of an industrial strategy will have an added significance for the national economy in accordance with the growing importance of the manufacturing sector.

Table 7: Average Growth Rate of Fixed Capital by Industrial Branch
(in per cent)

Industrial Branch	1970-74	1975-79	1980-84	1985-89	1970-89
Food	19.0	10.7	7.2	5.3	19.2
Beverage	5.4	22.1	9.7	9.8	12.0
Tobacco	28.3	14.0	16.7	2.7	14.7
Textile	7.4	14.3	7.8	6.0	9.0
Leather & Shoe	13.8	15.5	10.3	13.4	13.2
Wood & Wood Products	7.8	12.8	-1.0	10.9	7.6
Paper Printing & Publishing	7.0	18.4	13.0	9.1	12.1
Chemical	16.6	7.7	11.7	5.4	10.2
Non-metallic Mineral Products	6.2	7.6	5.2	5.1	6.0
Metallic & Electrical Products	15.3	9.2	9.4	14.5	11.9
Average	2.7	13.2	9.0	7.1	11.6

Source: CSA, *Statistical Abstract*, various issues.

4.1 The Share of Manufacturing in GDP

The manufacturing sector has accounted for a relatively small share of GDP over the past two decades. Table 8 shows the share of manufacturing in GDP for selected years. It can be observed from the table that the contribution of manufacturing to GDP increased from 3.7 per cent in 1970 to 8.2 percent in 1989. The share of agriculture in GDP declined from 54 per cent to 42.9 per cent over the same period. The decline in the share of agricultural GDP was compensated more by the increase in the contribution of the service sector than that of manufacturing. The share of the service sector in GDP increased from 31.5 per cent in 1970 to 39.8 per cent in 1989. Although there is an upward trend in the contribution of manufacturing to GDP, the economy is still predominantly agricultural as it was 20 years ago.

4.2 Structural Changes within the Manufacturing Sector

Structural changes within the manufacturing sector have consequences for the patterns of investment, employment and policy formulation. The structural change in the sector can be roughly represented by changes in the shares of the industrial branches in total manufacturing output.

Table 8: Gross Domestic Product by Industrial Origin at Constant Factor Cost for Selected Years (in million Birr)

		1970	1974	1979	1984	1989	
Agriculture		Value	1,833.3	1,940.1	1,968.4	3,792.5	4,011.4
		Per cent	54.0	49.3	46.6	45.6	42.9
Industry	Manufacturing	Value	125.2	173.3	215.2	657.5	770.7
		Per cent	3.7	4.4	5.1	7.9	8.2
	Others	Value	369.8	460.4	442.0	779.2	840.9
		Per cent	10.9	11.7	10.5	9.4	9.0
	Total	Value	495.0	633.7	657.2	1,436.7	1,611.6
		Per cent	14.6	16.1	15.6	17.3	17.2
Services		Value	1,068.9	1,362.2	1,593.6	3,085.9	3,724.7
		Per cent	31.5	34.6	37.8	37.1	39.8
Grand Total		Value	3,397.2	3,936.0	4,219.2	8,315.1	9,347.7
		Per cent	100	100	100	100	100

Source: CSA, *Statistical Abstract*, various issues.

- Note: 1) The 1970 and 1974 figures are calculated at 1960/61 constant factor cost. For the rest of the years, the calculations are at constant 1980/81 factor cost.
 2) Other industries include mining and quarrying, handicraft and small-scale industry, building and construction, and electricity and water.

Table 9 shows the share of each industrial branch in gross value of production for selected years. The share of chemical, non-metallic mineral, metallic and electrical products increased from around 20 per cent in 1970 to 34 per cent in 1984, before it declined to 32 per cent in 1989. The share of the textile industry dropped from 33.68 per cent in 1970 to 13.3 per cent in 1989. This may be taken as an indication of some structural changes which might have taken place within the manufacturing sector. However, the chemical, metallic and electrical products as well as paper and printing are highly import-dependent and have the weakest link with other industrial branches and economic sectors. These industries consumed only 6 per cent of the total value of inputs supplied by the other economic sectors [Ayalneh 1986: 33]. The increase in share of these industrial branches may therefore be constrained by the availability of foreign exchange and may not be sustained.

Although the gross value of manufacturing output has been growing at a reasonably fast rate, the structure of industry has remained essentially the same. The pattern of industrial development, a pattern limited to import substitution of non-durable consumer goods, has resulted in the creation of a manufacturing sector that has led not only to increased external dependence but also has discouraged indigenous technological and resource development [Bacry 1986: 10-11].

Table 9: Share of Each Industrial Branch in Gross Value of Production
(in per cent)

Industrial Branch	1970	1974	1979	1984	1989
Food	24.41	18.62	26.37	22.60	22.10
Beverage	10.80	9.88	10.28	11.80	15.50
Tobacco	2.93	3.20	4.99	5.80	4.90
Textile	33.68	30.91	21.02	16.30	13.30
Leather & Shoe	3.87	4.16	5.06	4.80	7.30
Wood & Wood Products	2.84	2.39	2.20	1.50	1.30
Paper Printing & Publishing	1.92	1.63	3.80	3.40	3.30
Chemical	8.51	20.77	19.70	26.70	24.20
Non-metallic Mineral Products	4.93	2.86	1.45	2.10	3.00
Metallic & Electrical Products	6.11	5.58	5.13	5.00	5.10

Source: CSA, *Statistical Abstract*, various issues (calculations mine).

In general, therefore, most of the expanding manufacturing activities were those closely related to processing of raw materials, e.g., food, beverages, tobacco, wood products, etc. However, the disturbing trend is the slow growth of textiles, clothing and footwear which could be important sources of export and employment, as is the case in many newly industrializing countries.

4.3 Import Intensities

The manufacturing sector in Ethiopia highly depends on imported capital goods and raw materials. The effect of such a pattern of industrial development is well-known. In order to build a contemporary plant, the equipment for production and know-how must be secured from abroad. If, in addition to this, raw material supply is also based on imports, the new plant will hardly prove remunerative, given the present technological standard of the country. Moreover, in industries based on live labour, the costs of production are high in spite of the low wages and standard of living. This, any way, is a disadvantage in international commodity exchange and when, in addition, raw materials must be procured from abroad, the foreign exchange balance of the industry is almost certain to be negative [Bognar 1969: 276]. According to the structural analysis of the industrial sector in Ethiopia for 1983/84, the manufacturing sector as a whole imported industrial inputs and spare parts worth Birr 445.53 million [Ayalneh 1986: 44].

Of the total import bill Birr 125.45 million (28 per cent), Birr 87.02 million (20 per cent), Birr 63.99 million (14 per cent), Birr 36.11 million (8 per cent) was for the

metal, textile, chemical and beverage industrial branches respectively (see Table 10). Looking at the proportion of imported inputs in the total input employed by the various manufacturing industries, it can be seen that it ranges from 5 per cent in the food industry to as high as 66 per cent in the metal industry. Within this range the import contents of the tobacco, paper and printing and chemical industries are 28 per cent, 37 per cent and 42 per cent of their respective total input employment. Thus the Ethiopian manufacturing industries are highly import-dependent, particularly those which are expected to produce intermediate goods, i.e., the chemical, metal, electrical and paper industries.

Table 10: Share of Directly Imported Inputs in Total Inputs by Industrial Branch (1983/84)

Industrial Branch	Imports (in million Birr)	Percentage share in total imported inputs	Percentage share of imported inputs in total industry input
Food	29.75	6.7	5.2
Beverage	36.11	8.1	10.8
Tobacco	26.57	6.0	28.1
Textile & Fiber	87.02	19.5	21.6
Leather & Shoe	32.23	7.2	19.3
Wood Works	4.74	1.1	15.0
Non-metals	6.92	1.6	13.1
Paper & Printing	32.73	7.3	37.4
Chemical	63.99	14.4	42.2
Metal	125.45	28.2	66.1
TOTAL	445.53	100	

Source: Ayalneh Yeshaw, *Structural Analysis of the Industrial Sector in Ethiopia*. (with minor modifications).

5. SUMMARY AND CONCLUSION

Industrialization is regarded as the key to economic development and cultural change. It has therefore become a declared aim of all countries. The preoccupation of development economists has been how to maintain economic growth in advanced countries and the industrialization of developing countries. Sectoral priorities and development strategies have been central issues of their concern, particularly in relation to promoting economic growth in developing countries. With respect to development strategies, the weakening of trade links between advanced and developing countries has led to the initiation of the import substitution strategy. Export-oriented industrialization, on the other hand, was a strategy initiated in the 1960s due to trade policy shifts and also due to structural changes in the

manufacturing industries of advanced countries. It was argued that the import substitution industrialization strategy has a dynamic element in the sense that it foresees the process of industrial development as passing through the stages of consumer, intermediate and capital goods production.

In light of this, Ethiopia's pre- and post-1974 industrial development strategy has been reviewed, and the effects of the strategies adopted on the development of the manufacturing sector has been assessed.

Ethiopia adopted import substitution as a strategy for the development of the industrial sector as early as the 1960s. In spite of the radical institutional changes in 1974, there was basically no change in strategy.

The trends in the development of manufacturing industries in the past 20 years has been analyzed in terms of the number of operating establishments, gross value of production, volume of production, value added, fixed assets, and employment. The number of operating establishments has declined over the two decades. All the other indicators have shown fast growth and expansion in the last few years before 1974, apparently, due to the minimum restrictions on the establishment and operation of enterprises. This trend, however, did not continue after the institutional changes in 1974. During this period, the state took control of most of the industrial establishments and assumed the responsibility of rehabilitating and expanding existing plants as well as establishing new ones. However, the state proved to be an uninspired entrepreneur and a bad manager. The growth in output slowed down, particularly in the last five years.

Interesting picture has been noted from the per capita supply of the major industrial products from domestic industries. The per capita supply for these products has remained extremely low, indicating the failure of import substitution strategy to satisfy domestic demand for these basic items.

Structural changes, both inter-sectoral and inter-industrial, have also been analyzed. The data indicate that the share of agriculture in GDP has declined, but this decline was compensated by growth and expansion of services and not by that of manufacturing. This, in fact, is not a sign of a healthy economy. As far as inter-industry structural changes are concerned, although the data suggest that the shares of chemicals, metallic minerals and non-metallic products have increased while the shares of consumer goods were declining, it cannot safely be concluded that there has been a structural change in favour of the former, for the production of these goods is heavily import-dependent. Moreover, this import-dependence implies that these industries do not have very strong links with other domestic industries and sectors and that their expansion is of very little comfort as it could easily be arrested by foreign exchange shortages.

Both in terms of structural change and growth, the performance of Ethiopia's manufacturing sector has been disappointing. There is however, no good reason why,

with sound policies the rate of growth of industry should not recover in the 1990s and rise gradually towards higher figures. For this to be achieved, industrial policies need to be overhauled in the early 1990s.

Ethiopia's strategy of industrial development has so far been "inward-looking" in the sense that it was a strategy focussed primarily on the development of import-substituting industries. An alternative at the other extreme is that of an "outward-looking" strategy, usually taken to mean that importance is given to providing incentives for the development of the export sector. However, successful development seem to require a careful combination of the two.

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