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COUNTRY REPORT ON
INDUSTRIAL DEVELOPMENT IN
GHANA*

Prepared by the
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Chapter I

INTRODUCTORY REMARKS^{1/}

This report on Ghana's past and current development performance focuses on the manufacturing sector and serves as a background paper to UNIDO's technical assistance programme to that country. In addition, it aims to provide a model according to which country studies might be planned and developed.

Ghana covers an area of 286,600 square kilometres, of which 59 per cent are agricultural land and 10 per cent are forests (excluding woodland pastures). It is primarily an agricultural country, and cocoa, of which it is the world's largest producer, is by far the most important export. Inadequate production has caused Ghana's share of the world cocoa market to fall during recent years, and in spite of fluctuating world prices measures have been taken to rehabilitate the cocoa sector. Other crops include copra, palm oil and kernel, coffee and kola nuts.

The mining and timber industries are next in importance after agriculture, with gold, bauxite, manganese, diamonds and hardwoods as major sources of foreign exchange. Manufacturing is of lesser significance; however, it is growing mainly in the textile, food, beverages and aluminium sectors. The Volta aluminium smelter of Tema is capable of producing 145,000 tons per year.

Ghana has appreciable hydro-electric potential. Electricity development has made considerable progress, particularly in the public sector. The installed capacity is 976 MW, and during 1972 a total of 3,300 million kWh was produced.

^{1/} Based also on information contained in: International Bank for Reconstruction and Development (IBRD), Towards Efficient Self-Reliance: The Role of Manufacturing in Ghana, 1974; and United States Agency for International Development (AID), Ghana, Rev. No. 316, January 1975.

There are two deep-water harbours, at Takoradi and Tema, which are the only ports handling imports and exports. The port at Tema is considered to be one of the finest in West Africa. The Ghana railway, linking the coast with the mining areas, has a total length of 950 kilometres. There are no railroads in the north or central regions. However, the country has over 32,000 kilometres of motorable roads, of which 3,300 kilometres are paved. Good roads run along the coast and from Accra through Kumasi to Tamale and Bole in the north connecting the agricultural and mining areas with the ports and urban centres.

Ghana shows the characteristics typical of a developing economy. The level of per capita income is some \$ US 230. About 82 per cent of the population live in the rural areas and 60 per cent of the total active population are engaged in agricultural activities, which sector generated 47 per cent of the national income in 1975. The manufacturing sector is fragmented and stagnant; in 1975, its share of total income (10.3 per cent) was generated partly by industry proper, but largely by artisan-type production.

The growth of the country's industrial production remains heavily compromised by scarcity of resources and by a relatively large external sector.

The immediate priority is to maximize utilization of installed capacity by intensive efforts to use local raw materials wherever possible, keeping imports for the most essential needs. Major projects using local raw materials are badly needed in Ghana. These should be grounded on both agro-based and heavy industries, such as the development of pulp and paper production, using tropical hardwoods, and cement, and aluminium from local bauxite deposits.

State participation in the major sectors of the economy is considerable, and a policy of economic indigenization is being pursued. A decree issued in 1975 required a wide range of foreign-owned commercial and industrial enterprises to sell between 40 and 50 per cent of their capital to Ghanaians before July 1976.

In 1971, Ghana's economy was badly affected by a sharp decline in world cocoa prices, but considerable trade surpluses were achieved in

1972 and 1973 as a result of rising export prices, stringent import controls and the government's repudiation of most of the country's medium-term debt. However, a trade deficit was recorded in 1974, owing to the steep rise in oil costs, to reduced commodity prices, and to a slump in the timber trade.

A record budget expenditure of 1,213.4 million new cedis (¢)^{2/} was announced for the fiscal year 1975/1976, of which ¢ 322 million were to be spent on development projects, with the largest allocations to roads, agriculture, education and water schemes. Tax reforms, cuts in public spending, investment incentives and a projected economic growth rate of 6.5 per cent were also announced. A five-year development plan, introduced in 1975, aims at promoting national economic independence, especially in food and investment, and at improving the infrastructure and expanding the production base, especially in the agricultural, mining and fishing sectors.

^{2/} The exchange rate in December 1975 was \$ US 1 = ¢ 1.154.

Chapter II

CHARACTERISTICS AND BASIC TRENDS OF THE ECONOMY

Composition and growth of the population

The 1970 census registered a total population of 8,559,000 inhabitants. Estimates indicate an average annual rate of growth of about 2.4 per cent, which would mean a population figure for 1975 of 9,530,000.

Table 1 shows that during the decade 1960-1970, the female population increased faster than the male population. Another aspect deserving mention is the proportional distribution of the population in urban and rural centres: Table 2 shows that the distribution in 1965 was 15 and 85 per cent respectively, and in 1970, 17.4 and 82.6 per cent respectively. However, while total population increased annually by 2.4 per cent, the annual growth of urban and rural population was 5.2 and 1.6 per cent respectively.

Table 1. Estimates of total population

	Male		Female		Total	
	Persons	Per cent	Persons	Per cent	Persons	Per cent
Census, 20 March 1960	3,400,270	50.5	3,326,545	49.5	6,726,815	100.0
Census, 1 March 1970	4,247,809	49.6	4,311,504	50.4	8,559,313	100.0

Source: International Labour Organisation (ILO), Yearbook of Labour Statistics, 1969 and 1975.

Table 2. Estimates of population structure

Mid-year population	1965		1970	
	Millions	Per cent	Millions	Per cent
Total	7.74	100.0	8.63	100.0
Urban	1.16	15.0	1.50	17.4
Rural	6.58	85.0	7.13	82.6

Source: UNIDO, computed.

Table 3 indicates that the economically active population increased between the years 1960 and 1970 by 22.4 per cent (1.9 per cent annually), but that the female labour force increased more rapidly than the male (40 per cent as against 10.7 per cent). This implies a slower rate of increase for the economically active population than for the population as a whole. However, estimates for 1975 suggest an active population of 4,409,000 persons.^{3/}

Table 3. Economically active population

	Total		Male		Female	
	Persons	Per cent	Persons	Per cent	Persons	Per cent
Census, 20 March 1960	2,723,026	100.0	1,677,058	61.6	1,045,968	38.4
Census, 1 March 1970	3,331,618	100.0	1,859,395	55.8	1,472,223	44.2

Source: ILO, Yearbook of Labour Statistics, op.cit.

^{3/} ILO, Labour Force Estimates and Projections 1965-1985, Part II (Africa).

The breakdown of the labour force by economic activity is difficult to estimate. In 1960, some 58 per cent of the active population were employed in agriculture and related activities (see Tables 4 and 5). Cultivation is by peasant farmers, many with holdings of less than five acres, which cover much of the forest area of the western and eastern regions. Among the non-agricultural activities which provided employment for the remaining 42 per cent, the most outstanding were trade and finance (13.6 per cent of the labour force), services of various kinds (12.2 per cent) and manufacturing (8.6 per cent). Other activities, such as mining, and transport and communications, absorbed smaller percentages. By 1970 the proportion of the total active population employed in agriculture and related activities had declined slightly to 54.8 per cent. In 1967, for which more complete statistical information exists, 56 per cent of the active population were employed in agricultural activities while manufacturing accounted for only 9 per cent.

Table 4. Distribution of active population, by economic activity
(Per cent)

Sector	1960	1967
Agriculture, forestry and fishing	58.0	56.0
Mining	1.8	a/
Manufacturing	8.6	9.0
Construction	3.3	4.0
Transport, communications and utilities	2.5	3.0
Trade and finance	13.6	a/
Miscellaneous services	12.2	a/

Source: AID, Ghana, Rev. No. 321, September 1975.

a/ The total of mining, trade and finance, and miscellaneous services amounts to 23 per cent.

Table 5. Structure of the economically active population, by status, by sex and by industry
(Thousands)

	Employers and workers on own account		Salaried employees and wage-earners		Family workers		Other		Total						
	Male	Female	Male	Female	Male	Female	Male	Female	Male	Female					
Agriculture, forestry, hunting and fishing	709.8	398.0	1,107.8	144.8	7.8	152.6	148.8	169.8	318.5	-	-	1,003.3	575.6	1,578.9	
Mining and quarrying	7.5	1.0	8.5	38.4	1.4	39.7	-	0.2	0.2	-	-	45.9	2.5	48.4	
Manufacturing	90.8	86.9	177.6	43.6	9.3	52.9	2.0	2.8	4.7	-	-	136.4	98.9	235.2	
Construction	19.7	0.1	19.8	66.7	2.6	69.3	0.2	-	0.2	-	-	86.6	2.7	89.4	
Electricity, gas, water and sanitary services	0.4	-	0.4	13.5	0.2	13.7	-	-	-	-	-	13.9	0.2	14.1	
Commerce	54.3	258.1	312.4	39.1	4.2	43.3	2.1	13.7	15.8	-	-	95.5	276.0	371.5	
Transport, storage and communications	16.4	-	16.4	50.5	0.9	51.4	0.7	-	0.7	-	-	67.5	0.9	68.4	
Services	21.2	11.7	32.9	102.1	17.2	119.3	0.8	2.2	3.0	-	-	124.0	31.1	155.1	
Activities not adequately described	-	-	-	-	-	-	-	-	-	109.6	54.3	163.8	109.6	54.3	163.8
Total	920.1	755.8	1,675.8	498.7	43.6	542.2	154.6	188.7	343.1	109.6	54.3	163.8	1,682.7	1,042.2	2,724.8

Source: ILO, Yearbook of Labour Statistics, 1969.

Composition and trends of national income

Share of gross domestic product by sector

The gross domestic product (GDP) amounted to some ₦ 2,827 million in 1972. If this is related to population estimates for the same year (9,090,000 inhabitants), a per capita GDP of ₦ 311 is obtained, which is equivalent to some \$ US 233 (see Table 6).

As regards the respective contributions to the GDP of the various economic activities (see Table 7), it should be pointed out that the agricultural sector was in 1972 the source of about half of the entire GDP; trade and finance contributed 14.1 per cent while manufacturing accounted for only 10.3 per cent. If one compares the respective figures for the year 1965, the contribution of the agricultural sector was somewhat lower (40.8 per cent) while that of manufacturing remained about the same (9.7 per cent).

If this sectoral breakdown of the GDP is considered in relation to the manpower employed in some of the sectors concerned, striking differences of productivity become apparent. Taking 1967, which is the most recent year for which relative data exist, in the economy as a whole, the GDP per active person amounted to some ₦ 520, while the corresponding sectoral figures ranged from about ₦ 370 in the case of agriculture to ₦ 690 in that of the manufacturing industries.

The relatively low productivity registered in the agricultural sector, which in 1967 provided employment for not less than 56 per cent of the total active population, means that to improve productivity in the overall economy special importance should be given to developing and improving the structure of the agricultural sector. In addition, manpower should be shifted to other sectors sufficiently developed to absorb it without ill effects in the form of disguised unemployment.

Growth of GDP

The figures given above are broadly illustrative and must be viewed in the light of time series if the degree of rapidity with which changes have come about is to be assessed.

Table 6. GDP, by kind of economic activity (producer's values in current prices)
(Millions of new cedis)

Economic activity	Year							
	1965	1966	1967	1968	1969	1970	1971	1972
GDP total	1,466.4	1,518.4	1,504.3	1,700.2	2,000.7	2,259.3	2,501.5	2,827.0
Agriculture, forestry, hunting and fishing	597.9	656.7	604.6	710.1	918.5	1,060.0	1,104.9	1,345.3
Mining and quarrying	35.3	41.0	42.9	42.1	40.1	38.0	40.6	63.4
Manufacturing	142.5	154.6	179.3	213.8	230.4	247.6	275.1	289.9
Electricity, gas and water	6.4	9.3	11.6	16.8	18.9	23.2	23.5	25.6
Construction	88.1	73.6	74.0	72.9	76.2	93.8	117.9	104.0
Wholesale and retail trade; restaurants and hotels	272.6	244.9	227.1	237.8	290.2	342.3	414.3	398.6
Transport, storage and communications	65.9	61.5	59.6	62.6	79.9	96.9	112.1	121.1
Other ^{a/}	257.7	276.8	305.2	344.1	338.4	357.5	410.4	479.1

Source: United Nations, African Statistical Yearbook, 1974, Part 2 (West Africa).

a/ Financing, insurance, real estate and business services; community, social and personal services, and public administration and defence.

Table 7. Changes in composition of GDP, by economic activity
(Per cent)

Economic activity	Year									
	1965	1966	1967	1968	1969	1970	1971	1972	1973	1974
GDP total	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Agriculture, hunting, forestry and fishing	40.8	43.2	40.2	41.8	45.9	46.9	44.2	47.6	46.9	44.2
Mining and quarrying	2.4	2.7	2.9	2.5	2.0	1.7	1.6	2.2	1.7	1.6
Manufacturing	9.7	10.2	11.9	12.6	11.9	11.0	11.0	10.3	11.0	11.0
Electricity, gas and water	0.4	0.6	0.8	1.0	0.9	1.0	0.9	0.9	1.0	0.9
Construction	6.0	4.8	4.9	4.3	3.8	4.2	4.7	3.7	4.2	4.7
Wholesale and retail trade, restaurants and hotels	18.6	16.1	15.1	14.0	14.5	15.2	16.6	14.1	15.2	16.6
Transport, storage and communications	4.5	4.1	4.0	3.7	4.0	4.3	4.5	4.3	4.3	4.5
Other	17.6	18.2	20.3	20.2	16.9	15.8	16.4	16.9	15.8	16.4

Source: UNIDO, based on United Nations, African Statistical Yearbook, op.cit.

Although the over-all development of the country is on the whole relatively moderate, in the period 1965-1972 the GDP in current prices expanded by an annual average of 9.8 per cent while the per capita GDP increased annually by some 7.3 per cent. However, in terms of constant prices, real growth was very slight and sometimes even non-existent. Most recent ECA data,^{4/} for 1974 and 1975, show that between 1965 and 1972 the GDP increased, in terms of constant 1970 factor cost, by 3 per cent. Assuming that the population grew at a rate of 2.4 per cent yearly, the per capita GDP increased by only 0.6 per cent. During the same period (1965-1972), agricultural production expanded annually by 12.3 per cent. Since this rate is higher than that registered for the whole economy, the relative share of agriculture in the total GDP became increasingly important. Further, assuming that the growth of the active population in agriculture rose yearly at a rate of 1.1 per cent (see Table 8), it may be concluded that a fairly intensive improvement took place in the productivity of the sector. However, a large part of the expansion of the agricultural product was due to increasing prices of cocoa (which rose by 7.6 per cent annually).^{5/}

Table 8. Economically active population in agriculture

Year	Total		Agriculture	
	Thousands	Per cent	Thousands	Per cent
1960	2,732	100.0	1,680	61.5
1970	3,492	100.0	1,914	54.8

Source: Food and Agricultural Organization (FAO), Production Yearbook, 1971, Vol. 28-1.

^{4/} United Nations Economic Commission for Africa (ECA), "Estimates of gross domestic product by kind of economic activity at constant 1970 factor cost and related growth rates for Africa (1974-1975)" (unpublished paper).

^{5/} AID, Ghana, Rev. No. 315, December 1974.

Although the output of the manufacturing industry doubled between 1965 and 1972, it developed at a slower pace than agriculture. This is the main explanation for the fact that its share in the total GDP remained practically unchanged. It is sufficient to mention that, although the progress achieved by industry (with a growth rate of 10.5 per cent) was very marked in absolute terms, it did not succeed in changing the structure of Ghana's economy.

The remaining sectors of the economy were also marked by high increases in absolute value between 1965 and 1972, but all in all there were no real changes in the sectoral composition of the GDP during the period. More or less all branches of economic activity expanded in absolute terms without producing any change in their relative importance.

Availability of goods and services

In an economy such as that of Ghana where the external sector plays a very important role, it is essential that measurements of the GDP be supplemented by other factors which present a more accurate picture of actual supplies of goods and services. Such factors relate mainly to the effects of fluctuations in terms of trade and the net balance of exports and imports.

It is evident from Table 9 that in general the terms of trade have improved since 1965. The result has been an increase in Ghana's purchasing capacity thanks to which the volume of available goods and services has expanded in every year subsequent to 1965 up to and including 1972, with the single exception of 1967 (an annual growth of 3.8 per cent). However, the above positive effects were hampered by an unfavourable balance of payments situation which, owing to the dependence of the economy on imported materials and equipment, resulted in a substantial over-all deficit on current accounts until 1972 (see Table 14).

The situation improved greatly in 1972 and 1973 partly because of an increase in exports of agricultural commodities and raw materials combined with stringent import restraints, but also because of the high world prices for cocoa, timber, gold and bauxite. However, there is the danger that inflation and the increase in oil prices may greatly reduce the favourable evolution of Ghana's terms of trade.

Table 9. GDP and availability of goods and services
(Millions of new cedis at current prices)

Year	GDP	Trade balance	Availability of goods and services
1965	1,466	- 132.4	1,598.4
1966	1,518	- 92.3	1,610.3
1967	1,504	- 37.3	1,541.3
1968	1,700	- 0.9	1,700.9
1969	2,001	- 46.8	2,047.8
1970	2,259	22.6	2,236.4
1971	2,502	- 97.1	2,599.1
1972	2,827	121.2	2,705.8
1973	-	136.8	-

Source: United Nations, African Statistical Yearbook, op.cit.

Income distribution

In analysing the market for various kinds of manufacture, or the possible demand for imported goods, it is important that the pattern of income distribution among the various sections of the population be known.

The data available are not accurate enough to allow for a very thorough analysis. However, on average, the GDP per active person in 1967 amounted to some ₵ 520, with two extreme figures of ₵ 377 for agriculture and ₵ 700 for miscellaneous services. Further, considering that no less than 80 per cent of the population, or about 7.3 million persons, were still living in rural areas, the per capita income must have been extremely small. In contrast, the remaining 20 per cent of the population generated 52.4 per cent of the total GDP, representing an average per capita income 3.4 times greater than that of the rural sector. It is true that the rate of growth of consumption was fairly intensive (see Table 10) and even outstripped that of the GDP, but the general characteristics of income distribution do not seem to have undergone any significant change between 1965 and 1972.

Table 10. Consumption expenditure

(Millions of new cedis
at current prices)

	1968	1969	1970	1971
Final governmental consumption expenditure	285	285	290	324
Final private consumption expenditure	1,198	1,459	1,664	1,916
Increase in stocks	<u>2</u>	<u>41</u>	<u>48</u>	<u>42</u>
Total	1,485	1,785	2,002	2,282

Source: United Nations, Yearbook of National Accounts Statistics, 1974, Vol. I.

Investment

By subtracting from the availability of goods and services (Table 9) the respective values of total consumption expenditures (Table 10), the net domestic investment in million cedis was found to be 216 for 1968, 263 for 1969, 234 for 1970, and 317 for 1971.

Owing to a complete lack of any systematic information on capital stock, rough estimates of its extent have been made on the basis of indirect statistical information (see footnote to Table 11). The relatively high product-capital ratio may be attributable to the large proportion of small-scale industry and artisan activity, the capital stock of which is very limited. However, the statistical data on which these estimates are based relate mainly to registered industry which, if taken by itself and providing the relevant figures could be separated, would show a much lower ratio.

Hence, one cannot easily reach any well-founded conclusion on capital stock. However, it can be said that, although more efficient utilization of capacity would contribute to raising the product-capital

ratio, the development of infrastructural facilities and of those sectors utilizing a higher capital intensity would tend to reduce it.

The relevant figures of Table 11 show that in general the growth of capital stock was smaller than that of the GDP during the same period; or the growth of the latter was not always accompanied by a similarly intensive investment effort, but was largely the effect of improvement in the product-capital ratio. This rose from 0.77 in 1968 to 0.89 in 1971, reaching 0.9 in 1972.

Table 11. Investment co-efficient trends

Year	GDP	Capital stock a/	Gross investment	Product-capital ratio	Investment co-efficient in per cent
	(1)	(2)	(3)	(4)=(1):(2)	(5)=(3):(1)
Millions of new cedis at current prices					
1968	1,700	2,200	216	0.77	12.7
1969	1,999	2,590	263	0.77	13.1
1970	2,259	2,680	234	0.84	10.4
1971	2,500	2,800	317	0.89	12.7
1972	2,827	3,120	n.a.	0.90	-

Source: United Nations, Yearbook of National Accounts Statistics, op.cit.

a/ On the basis of the available data on capital consumer and gross investment for the years 1968-1972, capital stock was estimated by using an average rate of depreciation of about 5.0 per cent. This rate was calculated by assuming that capital is consumed according to the approximate formula:

$$\frac{K_t}{x} = \frac{K_{t_0}}{x} + \sum_{t_0}^t I$$

where K is capital consumed, I is gross investment and x is the average rate of depreciation of capital.

It is striking that the product-capital ratio increased when the GDP was expanding more slowly, while remaining stagnant when the development of the GDP was more intensive. These dissimilar trends, related to the calculated values of the investment co-efficient, suggest that the expansion achieved by the GDP between 1969 and 1970 was largely attributable to a more intensive utilization of available capacity and also that because of scarcity of capital accumulation the effect of investment is immediately followed by an increase in production. However, although the product-capital ratio may be calculated, it is sometimes difficult to draw conclusions since output in the developing countries depends greatly on agricultural production as well as on political considerations which shape changing policies.

Trade

Imports and exports

Foreign trade played an important role in Ghana's economy between 1965 and 1973, in the course of which exports and imports increased substantially. Exports in current prices increased by about 13 per cent yearly, rising from ₵ 249.4 million to ₵ 660.1 million. However, 70 per cent of exports consisted of cocoa and timber, both of which had been attracting very high international prices, while exports from the manufacturing sector proper constituted less than 1 per cent of the total. This shows an extremely disappointing performance after a long and intensive industrialization effort during which the principal objective of industrial production had been to free the level and composition of consumption and production from foreign exchange constraints, and to achieve a substantial diversification of exports which had long been dependent on cocoa and other primary or extractive commodities.^{6/}

Imports tended to increase less rapidly, but with important fluctuations from year to year, depending on the policies followed (see Tables 12 and 13). Between 1969 and 1973, the import of consumer goods increased

^{6/} IBRD, op.cit.

annually by 7.4 per cent, fuels by 12.4 per cent, raw materials and intermediates by 12 per cent and capital goods by 6.9 per cent. Table 13 shows clearly that the share of raw materials and intermediates increased from 34.2 per cent of total imports in 1969 to 40.8 per cent in 1973, becoming by far the most significant import sector. This increase took place at the expense mainly of imports of capital goods, which decreased from 32 per cent of the total in 1969 to 25.6 per cent in 1973. Machinery and equipment, building materials as well as tele-communications equipment were most severely affected. However, in 1970 a sharp increase in imports of these goods was registered.

Table 12. Composition of trade, by broad economic sectors
(US dollars)

	Imports			Exports		
	1969	1970	1973	1969	1970	1973
Agricultural commodities	17,240	21,719	35,898	182,659	317,793	376,614
Extractive products						
Non-metals	1,511	688	2,209	13,590	14,178	11,184
Metals	181	447	709	8,659	9,357	9,055
Fuels	19,406	20,898	34,720	2,023	654	3,664
Manufactured goods	273,105	313,802	298,967	87,103	82,342	134,208

Source: UNIDO, computer print-outs; and United Nations, Yearbook of International Trade Statistics, 1974, Vol. I.

Moreover, in view of the slower growth of capital goods imports, a continuous drop in their share, combined with stagnation or a slower growth of the aggregate capacity to import, might, since the investment co-efficient depends essentially on the quantity of capital goods imported, have

Table 13. Composition of trade by broad economic categories
(Thousands of US dollars)

	Imports			Exports		
	1969	1970	1973	1969	1970	1973
Consumer goods	66,551	88,117	96,746	826	1,830	2,036
Non-durable	53,329	75,926	88,032	763	1,756	1,532
Durable	4,204	3,371	2,639	13	17	306
Semi-durable	9,018	8,820	6,075	50	57	198
Fuels	19,406	20,898	34,720	2,028	654	3,664
Raw materials and intermediates	87,020	108,419	160,051	207,502	343,259	402,308
Raw materials	63,736	81,522	128,898	205,478	342,605	398,665
Intermediates	23,284	26,897	31,153	2,024	654	3,643
Capital goods						
Building materials	8,151	8,232	8,699	38,686	37,770	122,334
Machinery and equipment	53,135	65,931	57,085	51	116	70
Agricultural machinery	4,648	3,858	6,908	-	-	-
Transport and communications	12,250	16,533	24,011	-	112 ^{a/}	2
Telecommunications	3,157	4,208	3,678	-	-	-

Source: UNIDO, computer print-outs; and United Nations, Yearbook of International Trade Statistics, op.cit.

a/ Probably referring to re-exports for repairs, maintenance, etc.

unfavourable consequences for the further economic development of Ghana. If the investment co-efficients in Table 11 are compared with the imports co-efficients in Table 14, it is seen that investment co-efficients follow the variation in imports co-efficients with a time-lag of one year. The sharp increase of the investment co-efficient in 1971 was due to the large share of capital goods (especially of machinery and equipment) in the aggregate imports of 1970.

Table 14. Foreign trade
(Millions of new cedis
at current prices)

Year	<u>Exports</u> (1)	<u>Imports</u> (2)	<u>Trade balance</u> (3)	<u>Imports co-efficient</u> ^{a/} (4)	<u>Exports co-efficient</u> ^{b/} (5)
1965	249.4	381.8	-132.4	17.0	26.0
1966	209.2	301.5	- 92.3	13.8	19.9
1967	224.2	261.5	- 37.3	14.9	17.4
1968	313.0	313.9	- 0.9	18.4	18.5
1969	307.6	354.4	- 46.8	15.4	17.7
1970	441.7	419.1	22.6	19.6	18.5
1971	345.4	442.5	- 97.1	13.8	17.7
1972	514.0	392.8	121.2	18.2	13.9
1973	660.1	523.3	136.8	-	-

Sources: United Nations, African Statistical Yearbook, op.cit.

$$a/ (4) = \frac{(2)}{GDP} \times 100.$$

$$b/ (5) = \frac{(1)}{GDP} \times 100.$$

Direction of trade

Table 15 shows that in 1973 about 80.9 per cent of Ghana's exports were shipped to the developed countries of Europe and to North America.

Table 15. Direction of trade
(Millions of US dollars)

Principal economic regions	Trade									
	General imports c.i.f.					General exports f.o.b.				
	1969	1970	1971	1972	1973	1969	1970	1971	1972	1973
World	342.7	406.4	428.5	272.7	424.6	292.6	415.1	331.8	381.5	554.2
Western Europe	189.9	218.3	242.5	139.2	223.1	196.0	242.5	182.3	217.1	305.3
CPE of Europe	21.7	23.7	16.5	16.9	14.3	9.2	43.6	13.6	46.0	60.6
USA and Canada	70.4	78.7	69.9	59.1	76.2	51.3	87.5	90.8	66.3	91.8
Latin America	5.4	18.7	13.2	4.2	10.8	3.1	0.6	2.1	5.6	4.5
Developing Asia	12.6	13.2	9.9	8.8	19.4	2.7	3.8	3.0	4.1	6.9
CPE of Asia	4.3	6.7	8.3	3.6	8.0	1.1	2.4	2.7	1.9	6.3
Developed Asia	22.2	27.4	43.8	18.5	33.6	26.3	30.5	31.6	35.0	50.3
Developing Africa	16.2	19.4	23.5	22.1	37.9	2.9	4.2	5.7	5.5	28.5
Republic of South Africa	-	0.3	0.9	0.3	1.3	-	-	-	-	-

Source: United Nations, Yearbook of International Trade Statistics, op.cit.

Only 5 per cent were shipped to the developing countries of Africa. Western Europe's buying position decreased by 11 per cent between 1969 and 1973 while that of the centrally planned European economies increased by 7.6 per cent. However, during the same period total exports to the developed countries of Europe and to North America decreased by 4.2 per cent to the advantage of the developing countries of Africa.

Although imports from the developed countries of Europe and North America declined by 11.3 per cent during the same period, they still amounted to 70 per cent of total imports. It was the relative importance of imports from the centrally planned economies of Europe which was weakened most severely.

Chapter III

INDUSTRIAL STRUCTURE AND TRENDS

Employment distribution by branch of industry

The industrial statistics available in Ghana refer only to the large-scale manufacturing establishments employing 30 or more workers. An attempt to evaluate the small-scale industry sector with the help of indirect background data leads to the conclusion that its significance is very far from negligible.

In 1967, total employment in manufacturing amounted to an estimated 260,000 persons.^{1/} As only 40,219 persons were employed in large establishments, this implies that small-scale enterprises employed about 85 per cent of the total manpower in manufacturing.

Table 16 shows the estimated labour force distribution by sector of small-scale enterprises in 1960. By comparing the total employment figures of 1960 and 1967, the annual growth was found to be barely 1.5 per cent, while employment in large-scale manufacturing enterprises registered growth rates, between 1963-1967 and 1963-1970, of 6 and 8.3 per cent respectively (see Table 17). The major contributors to the absolute increase in manufacturing employment between 1963 and 1970 were the textiles and clothing sector and, to a lesser degree, those of food and chemical products, while the annual rate of growth of employment in these sectors was 21 per cent, representing 23 per cent of total manufacturing employment.

Value of industrial production and structure of the manufacturing sector

The composition of the value of production in current prices of large-scale enterprises by branch is given in Table 18. Production

^{1/} AID, Ghana, Rev. No. 321, September 1975.

value increased from ₪ 93 million in 1963 to ₪ 324.5 million in 1970, the average annual rate of growth during these years being 19.5 per cent. The real growth, however, was much more modest if the upward price movements during this period are considered. The major contributing sectors to the growth of the manufacturing output were, in order of importance, textiles, paper and paper products, non-metallic minerals and food. No data are available on the output of smaller establishments, but estimates indicate a total value of production of ₪ 63.5 million in 1963.^{8/}

Table 16. Estimated share of small-scale enterprises in total manufacturing employment by sector in 1960

Branch	Total employment 1960 census	Estimated per cent in small establishments
Food	36,162	94
Beverages	8,057	82
Tobacco	842	31
Textiles and clothing	95,727	99
Wood products	14,688	2
Furniture and fixtures	27,041	90
Pulp, paper and printing	2,766	29
Chemical products	7,925	88
Leather products (excluding footwear)	302	100
Rubber products	495	6
Building materials	8,742	92
Metal manufacturing	7,928	86
Electrical products	742	100
Transportation equipment	12,241	83
Miscellaneous manufacturing	<u>10,289</u>	<u>99</u>
Total manufacturing	233,947	78

Source: IBRD, op.cit.

8/ IBRD, op.cit.

Table 17. Composition of personnel employed in industry (large-scale enterprises)

Branch	Number of establishments				Number of persons engaged				Number of persons engaged per establishment			
	1963	1966	1967	1970	1963	1966	1967	1970	1963	1966	1967	1970
Food	23	23	25	44	2,103	2,818	2,701	4,203	91	123	108	96
Beverages ^{1/}	8	10	10	12	1,648	2,070	2,210	2,851	206	207	221	238
Tobacco	2	4	3	4	608	1,429	1,764	1,214	304	357	588	304
Textiles	5	9	11	27	1,397	2,921	3,969	11,255	279	325	361	412
Clothing and footwear	6	12	24	51	699	1,387	1,848	4,775	117	116	77	94
Leather and leather products	3	3	4	12	154	164	178	576	51	55	45	48
Wood manufactures	44	52	48	66	12,843	12,561	10,498	12,843	292	242	219	195
Furniture and fixtures	24	27	22	22	2,839	3,064	1,741	1,662	118	113	79	76
Paper and paper products	3	5	5	6	227	554	772	773	76	111	154	129
Printing and publishing	9	11	10	23	1,973	2,666	2,896	3,291	219	242	290	143
Chemicals and chemical products	13	22	27	34	1,808	1,972	2,723	2,733	139	90	101	80
Petroleum and coal products	1	1	1	1	221	381	368	389	221	381	368	389
Rubber products	5	6	5	7	709	834	689	1,143	142	139	135	163
Non-metallic mineral products	15	19	19	17	841	1,973	1,489	2,059	56	104	78	123
Basic metals	3	2	2	2	266	416	406	668	89	208	203	334
Metal transforming	11	18	20	41	3,250	3,785	5,350	4,483	295	210	268	109
Miscellaneous	1	6	6	9	279	467	573	281	279	78	96	51
Total manufacturing	176	230	248	388	31,864	39,482	40,219	55,886	181	172	162	144

Source: United Nations, *Growth of World Industry, 1972, Vol. I.*

^{1/} Excluding manufacture of raw gin.

Table 18. Estimated total value of manufacturing output
(of large-scale enterprises)
(Millions of new cedis at current prices)

Branch	Gross output					
	1963	1966	1967	1968	1969	1970
Food	5.44	12.40	20.93	25.02	33.93	38.33
Beverages ^{a/}	13.89	21.48	18.49	24.42	25.29	33.45
Tobacco	14.56	20.50	20.99	25.90	25.65	25.95
Textiles	2.92	8.90	19.08	32.84	33.94	63.78
Clothing and footwear	2.14	5.17	8.93	14.68	19.45	11.06
Leather and leather products	0.44	0.42	0.47	0.66	0.78	1.22
Wood manufactures	20.17	22.71	23.66	24.11	30.45	31.84
Furniture and fixtures	2.79	2.90	2.34	2.44	2.38	2.61
Paper and paper products	0.85	2.81	4.98	6.17	9.05	10.74
Printing and publishing	4.09	5.44	5.62	6.71	6.97	7.80
Chemicals and chemical products	8.95	14.90	19.76	19.76	27.98	28.34
Petroleum and coal products	2.04	5.22	6.06	6.38	6.54	6.75
Rubber products	0.53	1.53	0.25	0.24	0.61	8.28
Non-metallic mineral products	1.31	2.96	3.40	9.75	12.78	14.39
Basic metals	0.54	0.86	1.50	1.08	1.21	2.63
Metal transforming	11.40	12.47	15.28	20.40	22.04	28.74
Miscellaneous	<u>0.98</u>	<u>1.35</u>	<u>1.26</u>	<u>2.31</u>	<u>3.80</u>	<u>1.15</u>
Total manufacturing	93.04	142.02	170.81	222.90	262.85	324.47

Source: United Nations, Growth of World Industry, op.cit.

a/ Excluding manufacture of raw gin.

In any case, the composition of industry is most satisfactorily indicated by the value-added in each branch of activity. This enables a stricter appraisal to be made of the relative importance of specific industrial branches which register a high value of production because the transforming process depends mainly on the cost of raw materials.

The relevant figures are shown in Table 19 and corroborate what has already been indicated regarding the increasing importance of the textile and food sectors. The table shows, however, the diminishing significance of other sectors, such as beverages, tobacco and wood manufacture, although their share in the percentage composition of value-added is quite high. This, in a sense, might be interpreted as a favourable trend towards some kind of diversification.

Another important question in relation to the composition of manufacturing output is that of its distribution by types of product. The relevant figures are shown in Table 20, where a distinction is made between consumer goods, intermediate goods and capital goods, and where the data again suggest a trend towards diversification.

While in 1963 the composition of manufacturing value-added was 77.9 per cent consumer goods, and 16.4 per cent intermediate products, the respective distribution in 1970 was 56.7 per cent and 35.5 per cent. The output of capital goods remained negligible in the vicinity of 7 per cent. Nevertheless, these data are clearly indicative of the pronounced tendency of Ghanaian industry to concentrate its efforts on the production of consumer goods.

Comparison of the employment data with the figures of value-added shows that differences in productivity from one branch to another vary substantially. The highest figures for the value-added per person employed (see Table 21) are registered in the tobacco industries, followed by those relating to the manufacture of petroleum and coal products and, thereafter, to the beverages and paper industries. In contrast, those recorded for the manufacture of textiles, clothing, food and chemical products are relatively low. These disparities are primarily related to the average size of the establishments and the varying degrees of mechanization and capital intensity characterizing the activities in question; this is true particularly of both the tobacco and petroleum-based industries.

Table 22 gives a breakdown of raw materials and intermediate products in industry as a whole and in its main branches over a number of years. Comparing the figures in this table for 1970 with those of Table 14 for the same year, it can be seen that not more than 30 per cent

Table 19. Composition of manufacturing value-added by branch of industry

Branch	Value-added (Millions of new cents at current prices)						Percentage composition of value-added					
	1963	1966	1967	1968	1969	1970	1963	1965	1967	1968	1969	1970
Food	2.19	3.32	3.97	7.40	12.94	16.40	4.2	3.9	4.1	6.4	9.4	10.1
Beverages ^{a/}	8.33	15.34	13.69	18.07	17.90	23.62	16.0	17.9	14.0	15.7	13.0	14.5
Tobacco	11.71	18.01	17.70	21.55	21.70	21.06	22.5	21.0	18.1	18.7	15.8	12.9
Textiles	1.35	4.52	10.88	15.93	13.17	25.19	2.6	5.2	11.1	15.8	5.6	15.4
Clothing and footwear	0.94	1.86	4.36	6.73	9.06	5.80	1.8	2.2	4.5	5.8	6.5	3.5
Leather and leather products	0.18	0.17	0.19	0.26	0.38	0.53	0.3	0.2	0.2	0.2	0.3	0.3
Wood manufactures	12.10	14.69	13.00	8.86	16.16	17.74	23.3	17.1	13.3	7.7	11.8	10.9
Furniture and fixtures	1.62	1.72	1.26	1.28	1.34	1.52	3.1	2.0	1.3	1.1	1.0	0.9
Paper and paper products	0.52	1.42	2.67	3.26	4.88	4.84	1.0	1.7	2.7	2.8	3.6	3.0
Printing and publishing	2.83	4.00	4.38	5.17	4.20	4.64	5.4	4.7	4.5	4.5	3.1	2.8
Chemicals and chemical products	3.65	7.03	8.48	7.29	11.42	10.45	7.0	8.2	8.7	6.3	8.3	6.4
Petroleum and coal products	1.88	4.35	5.42	5.27	6.01	6.26	3.6	5.1	5.5	4.6	4.4	3.8
Rubber products	0.42	0.81	0.16	0.16	0.36	4.91	0.8	0.9	0.6	0.1	0.3	3.0
Non-metallic mineral products	0.61	1.46	1.70	3.79	5.54	5.35	1.2	1.7	1.7	3.3	4.0	3.3
Basic metals	0.26	0.26	0.86	0.46	0.43	1.23	0.5	0.3	0.9	0.4	0.3	0.8
Metal transforming	2.94	5.99	7.99	8.57	9.23	11.31	5.7	7.0	8.2	7.4	6.7	6.9
Miscellaneous	0.49	0.72	0.69	0.98	2.58	0.70	0.9	0.8	0.7	0.9	1.9	0.4
Total manufacturing	52.02	85.67	97.89	115.05	136.30	163.10	100.0	100.0	100.0	100.0	100.0	100.0

Source: United Nations, Growth of World Industry, op.cit.

^{a/} Excluding manufacture of raw gin.

Table 20. Composition of manufacturing value-added, by type of goods
(Millions of new cedis at current prices)

Branch	1963			1966			1967			1969			1970		
	(1) ^{a/}	(2) ^{a/}	(3) ^{b/}	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)	(1)	(2)	(3)
Food	2.19	-	-	3.32	-	-	3.97	-	-	12.94	-	-	16.40	-	-
Beverages ^{b/}	8.33	-	-	15.34	-	-	13.69	-	-	17.90	-	-	23.62	-	-
Tobacco	11.71	-	-	18.01	-	-	17.70	-	-	21.70	-	-	21.06	-	-
Textiles	-	1.35	-	-	4.52	-	-	10.88	-	-	13.17	-	-	25.19	-
Clothing and footwear	0.94	-	-	1.86	-	-	4.36	-	-	9.06	-	-	5.80	-	-
Leather and leather products	0.18	-	-	0.17	-	-	0.19	-	-	0.38	-	-	0.53	-	-
Wood manufactures	12.10	-	-	14.69	-	-	13.00	-	-	16.16	-	-	17.74	-	-
Furniture and fixtures	1.62	-	-	1.72	-	-	1.26	-	-	1.34	-	-	1.52	-	-
Paper and paper products	-	0.52	-	-	1.42	-	-	2.67	-	-	4.88	-	-	4.84	-
Printing and publishing	2.83	-	-	4.00	-	-	4.38	-	-	4.20	-	-	4.64	-	-
Chemicals and chemical products	-	3.65	-	-	7.03	-	-	8.48	-	-	11.42	-	-	10.45	-
Petroleum and coal products	-	1.88	-	-	4.35	-	-	5.42	-	-	6.01	-	-	6.26	-
Rubber products	-	0.42	-	-	0.81	-	-	0.16	-	-	6.36	-	-	4.91	-
Non-metallic mineral products	0.01	0.60	-	-	1.46	-	-	1.70	-	-	5.54	-	-	5.35	-
Basic metals	-	-	0.26	-	-	0.26	-	-	0.86	-	-	0.43	-	-	1.23
Metal transforming	-	-	2.94	-	-	5.99	-	-	7.99	-	-	9.23	-	-	11.31
Miscellaneous	0.49	-	-	-	-	-	0.69	-	-	2.58	-	-	0.70	-	-

Source: United Nations, Growth of World Industry, Op.cit.

^{a/} (1) Consumer goods; (2) Intermediate goods; (3) Capital goods.

^{b/} Excluding manufacture of raw gin.

Table 21. Productivity by branch of industry
(New cedis at current prices)

Branch	Value-added per person employed			
	1963	1966	1967	1970
Food	1,041	1,178	1,470	3,902
Beverages ^{a/}	5,055	7,411	6,195	8,285
Tobacco	19,260	12,603	10,034	17,348
Textiles	966	1,547	2,741	2,238
Clothing and footwear	2,831	1,341	2,359	1,215
Leather and leather products	1,169	1,037	1,067	920
Wood manufactures	942	1,168	1,238	1,381
Furniture and fixtures	579	561	724	915
Paper and paper products	2,291	2,563	3,459	6,261
Printing and publishing	1,434	1,500	1,512	1,410
Chemicals and chemical products	2,019	3,565	3,114	3,824
Petroleum and coal products	8,507	11,417	14,728	16,093
Rubber products	592	971	871	4,296
Non-metallic mineral products	725	740	1,142	2,549
Basic metals	977	625	2,188	1,841
Metal transforming	905	1,583	1,493	2,523
Miscellaneous	1,756	1,542	1,204	2,491

Source: United Nations, Growth of World Industry, op.cit.

^{a/} Excluding manufacture of raw gin.

of total raw material requirements were purchased locally. Because of this excessive reliance on imported raw materials, industry has been plagued by underutilization of installed capacity. The vulnerability of Ghana's industry is unavoidable if the percentages of locally purchased raw materials remain at these low levels while the capacity to import decreases or even fails to increase sufficiently.

Table 22. Composition of raw material inputs by branch of industry
(Millions of new cedis at current prices)

Branch	Input of raw materials (Gross output less value-added)					
	1963	1966	1967	1968	1969	1970
Food	3.25	9.08	16.96	17.62	20.99	21.93
Beverages ^{a/}	5.56	6.14	4.80	6.35	7.39	9.83
Tobacco	2.85	2.49	3.29	4.35	3.95	4.89
Textiles	1.57	4.38	8.20	16.91	20.77	43.59
Clothing and footwear	1.20	3.31	4.57	7.95	10.39	5.26
Leather and leather products	0.26	0.25	0.28	0.38	0.40	0.69
Wood manufactures	8.07	8.02	10.66	15.25	14.29	14.10
Furniture and fixtures	1.17	1.18	1.08	1.16	1.04	1.09
Paper and paper products	0.33	1.39	2.31	2.91	4.17	5.90
Printing and publishing	1.26	1.44	1.24	1.54	2.77	3.16
Chemicals and chemical products	5.30	7.87	11.28	12.47	16.56	17.89
Petroleum and coal products	0.16	0.87	0.64	1.11	0.53	0.49
Rubber products	0.11	0.72	0.09	0.08	0.25	3.37
Non-metallic mineral products	0.70	1.50	1.70	5.96	7.24	9.04
Basic metals	0.28	0.60	0.64	0.62	0.78	1.40
Metal transforming	8.46	6.48	7.29	11.83	12.81	17.43
Miscellaneous	<u>0.49</u>	<u>0.63</u>	<u>0.57</u>	<u>1.36</u>	<u>1.22</u>	<u>0.45</u>
Total manufacturing	41.02	56.35	75.60	107.85	125.55	160.51

Source: Tables 18 and 19.

a/ Excluding manufacture of raw gin.

The distribution of raw material inputs by branches of industry shows that here again textile and food manufacture are the sectors with the highest rate of increase, with raw material inputs accounting for 27 and

13.7 per cent respectively of total manufacturing inputs for 1970, followed by chemicals (11.2 per cent) and metal manufacturing (10.9 per cent). These four branches cover together about 63 per cent of total raw material inputs for the same year.

Fixed capital formation

Data on capital at the disposal of industry are of particular importance for an examination of the salient features of the manufacturing sector. However, relevant information is scanty and unreliable.

In 1969 the stock of fixed capital for the average employed person was reported to be about ₦ 880 at current prices.^{9/} Assuming that in the same year the number of employed persons was 52,500 (see Table 17), it is estimated that the stock of fixed capital of the large-scale manufacturing sector reached ₦ 42 million or less than 1 per cent of estimated gross domestic capital (see Table 11).

Unfortunately, it proved impossible to estimate the distribution of fixed capital by branches of industry, which would have enabled a more careful study of the problem. However, Table 23 shows that the intensity of capital investments varies from year to year, confirming the diversification trend of the manufacturing sector.

Although the investment effort of certain branches remained more or less the same, for others, such as those of clothing and beverages, it was greatly intensified. The recorded gross additions to fixed assets in manufacturing were only 8.2 per cent and 5.9 per cent of the estimated gross domestic capital formation in the whole economy for 1967^{10/} and 1968 respectively (see also Table 11).

^{9/} IBRD, op.cit.

^{10/} Ibid.

Table 23. Gross fixed capital formation and percentage composition by branch of industry

Branch	Gross fixed capital formation (Thousands of new cedis at current prices)			Percentage composition of gross fixed capital formation		
	1963	1967	1968	1963	1967	1968
Food	238	645	1,079	1.6	3.5	8.5
Beverages ^{a/}	234	1,031	1,473	1.6	5.5	11.6
Tobacco	150	359	64	1.0	1.9	0.5
Textiles	314	7,210	1,098	2.2	38.6	8.6
Clothing and footwear	72	698	2,402	0.5	3.8	18.9
Leather and leather products	18	117	164	0.1	0.6	1.3
Wood manufactures	2,087	5,445	2,321	14.4	29.1	18.3
Furniture and fixtures	103	168	229	0.7	0.9	1.8
Paper and paper products	26	277	860	0.2	1.5	6.8
Printing and publishing	838	206	586	5.8	1.1	4.6
Chemicals and chemical products	2,533	1,040	1,297	10.6	5.6	10.2
Petroleum and coal products	7,703	-	46	53.2	-	0.4
Rubber products	16	36	3	0.1	0.2	0.0
Non-metallic mineral products	383	200	119	2.7	1.0	0.9
Basic metals	-	-	79	-	-	0.6
Metal transforming	242	816	509	1.7	0.1	1.4
Miscellaneous	<u>526</u>	<u>444</u>	<u>378</u>	<u>3.6</u>	<u>2.4</u>	<u>3.0</u>
Total	14,483	18,692	12,703	100.0	100.0	100.0

Source: United Nations, Growth of World Industry, op.cit.

^{a/} Excluding manufacture of raw gin.

Chapter IV

INDUSTRIALIZATION POLICIES^{11/}

The past development of Ghana has been marked by: slow growth in government revenues and rapid growth in government expenditures; mis-allocation of development funds; high dependence on imports and stagnating exports and over-reliance on a few traditional export items (cocoa, timber, gold and diamonds); over-dependence on foreign aid; a low level of productivity especially in agriculture; the lack of a rational industrialization policy leading to inefficient import substitution; and underutilization of productive capacity.

The years 1972-1974 were designated "agricultural years" and prospective government policies fell into six categories: increasing agricultural output to feed the people and produce raw materials for industry; containing the balance of payments problem; increasing export earnings; reducing the budget deficit; rehabilitating and expanding other vital sectors of the economy; and establishing proper priorities in the provision of social services.

In recognition of the basic structural imbalances and the continued weaknesses of the economy, the most recent development plan calls for:

- (a) Greater efficiency in the use of scarce resources by fixing appropriate prices which more accurately reflect opportunity costs and the rate of inflation;
- (b) Competitive stimulus to industry by allowing firms greater freedom in managerial and entrepreneurial decision-making;
- (c) Fuller utilization of relatively abundant land, natural resources and manpower by programmes which will enhance the quality and efficiency of indigenous substitutes;
- (d) Larger contributions by small-scale units in industry and agriculture;

^{11/} Based also on information contained in IBERD, op.cit.; and UNIDO, Industrial Investment Information, Ghana, January 1976.

- (c) Fuller utilization of existing capacity; and
- (f) Adequate supply of spare parts.

The degree of efficiency of the capital market, the extent of the participation of foreign capital and other similar factors form the institutional environment for industrial development. These factors may be divided into two main categories: requirements for financing industrial development; and protective and development measures taken by the State.

Industrial development financing

In absolute terms, financing increased from ₵ 4-5 million in 1964-1965 to about ₵ 80 million in 1971-1972. There was also a marked change in the portfolio composition of commercial banks in favour of the financing of the manufacturing sector, the share of which in commercial bank loans increased from about 4 per cent in 1964-1965 to 32 per cent in 1971-1972.

Traditionally, the operations of commercial banks in Ghana have been geared mainly to the financing of commerce. However, during the eight-year period 1964-1972, the rate of growth of commercial bank loans to commerce increased only slightly over that of total loans while those to the manufacturing sector increased at more than double the rate of growth of total loans. As a result, the share of commerce in total loans increased by 2.6 per cent per annum and the share of manufacturing increased by 21 per cent per annum. The share of construction and of all other sectors in total loans declined at a rate of 11 per cent per annum and 5.5 per cent per annum respectively. It is quite clear that large-scale manufacturing has attracted and continues to attract a major share of the loanable capital of commercial banks in Ghana.

Until 1969 the Bank of Ghana had concerned itself almost entirely with the traditional functions of a central bank, leaving development finance functions to other financial institutions such as the National Investment Bank (NIB) and the Agricultural Development Bank (ADB). The

Bank of Ghana has since decided to become involved in the development of the industrial and agricultural sectors of the economy in order to supplement the available medium- and long-term credit. A Development Finance Department (DFD) has been created within the Bank to offer leadership to the other financial institutions of the country in the effort to achieve a balanced growth of all sectors of the economy and to establish an effective link between finance and project development. A primary role of DFD is to ensure that small borrowers become more creditworthy and that such credit fulfils the objective of economic growth.

The operations of DFD are divided into three main activities: (1) institutional financing; (2) a technical advisory unit; and (3) a credit guarantee scheme. Institutional financing involves making direct loans to ADB and NIB to increase their resources for the development of agriculture and industry. By the end of 1972, the Bank of Ghana, through DFD, had made loans to ADB amounting to £ 22.9 million, of which £ 19.9 million were earmarked for various activities related to "Operation Feed Yourself" in 1972. Loans to NIB amounted to £ 33 million, of which £ 20 million were granted in 1972. These loans in 1972 substantially increased the lending capability of the two major development finance institutions. It should be noted, however, that despite the DFD's avowed concern with small borrowers these loans do not appear to have been specifically directed towards them. NIB, for example, does not make loans of less than £ 10,000 and ADB credit to small farmers in 1972 (£ 3.8 million) represented only 13 per cent of total lending in that year. In addition to lending activities, the Bank of Ghana holds equity participation in ADB (£ 3.5 million out of a total of £ 18.4 million) and in NIB (£ 1.5 million out of £ 12.1 million).

DFD through its technical advisory unit is engaged in the identification of new areas of investment and the preparation of preliminary feasibility studies. Feasible projects initiated by DFD are then promoted through negotiations with credit institutions, which may be granted credit for the purpose of financing a project. This unit is also responsible for supervising projects with the object of ensuring their success and the proper utilization of funds granted under the guaranteed

loan scheme. The primary purpose of this technical unit is to fill a void in the operations of the three commercial banks in Ghana, which handle 95 per cent of credit to small borrowers but which do not possess the machinery for undertaking the appraisal of projects or for following them up. Limitations of manpower, however, have restricted the actual operations of this unit.

Another important function of DFD is the operation of the credit guarantee scheme for small borrowers. The objective of this programme is to encourage financial institutions, in particular the commercial banks, to be more liberal in granting loans to small Ghanaian entrepreneurs. This scheme basically provides insurance cover to credit institutions against possible losses which may occur as a result of default by small borrowers. All three commercial banks in the country, as well as ADB and NIB, are eligible to obtain guarantees under this programme.

Government emphasis on the development of the priority sectors of the economy has resulted in a reorientation of the usual commercial banking activities of the Ghana Commercial Bank (GCB) of which the government is the only shareholder. In 1969, credit policy was reviewed in this context, and medium-term financing introduced to meet the credit requirements of industrial enterprises and businessmen whose financial needs extended over a longer period than is usually associated with normal commercial banking practices. The Development Finance Unit (DFU) of GCB was reorganized to meet these new objectives. In addition to processing applications for medium-term loans, DFU carries out detailed studies of the operations of customers, especially in the industrial and agricultural fields. Post-financing activities involving business management services are also available to assist customers in running their enterprises on sound business principles.

GCB, with the support of the government, has continued to explore ways in which its development role can be expanded. In October 1972, GCB succeeded in securing amendments to the decree establishing it, which permit it to engage more fully in development financing and to participate directly in industrial undertakings by way of equity subscription. The GCB decree of 1972 permits it to grant medium- and long-term credit of up

to 20 per cent of savings deposits it holds. Further changes in the structure and operation of DFU are envisaged in order to allow it to perform adequately its expanded role. The proposed expanded financial activities of GCB are potentially significant as it controlled about 55 per cent of total assets of the commercial banking system in 1972; and hence it is the major commercial banking institution in the country. By the middle of 1971, however, GCB had committed over £ 57 million in short-term financing and only £ 7 million in medium-term financing to the industrial sector (including mining and construction), thus reflecting the traditional orientation of the past. In addition, over £ 6 million in credit facilities had been granted to small borrowers under the terms of the credit guarantee scheme of the Bank of Ghana for the establishment and development of enterprises, or to increase production and efficiency in various small undertakings.

NIB is the main development finance institution in Ghana. It was established in 1963 as an autonomous joint State-private bank. Its fundamental role is to act as a catalyst in the development process. Accordingly, its basic objectives are: (a) to assist in the establishment of new enterprises and to facilitate the participation of external and internal capital; (b) to encourage Ghanaian business concerns; and (c) to identify emerging investment opportunities and bring together capital, capable management and technical expertise.

NIB operates in all sectors of the Ghanaian economy, whether public or private, industry or agriculture. It is empowered to grant medium- and long-term loans, to purchase securities or interests in enterprises, to engage in guarantee activities and underwrite bonds and equity securities, and to conduct technical feasibility studies. The authorized share capital is £ 20 million, of which 75 per cent has been taken up by the government and the remainder by the private sector. The paid-in equity capital is £ 2.06, of which £ 1.5 million were invested by private investors and the rest by the government and the Bank of Ghana. The Bank may increase its share capital when necessary and it can borrow up to three times its paid-up equity and reserve funds.

The lending activities of NIB are restricted to medium- and long-term loans for between 3 and 25 years. The minimum size of a loan to be

considered by NIB is ₵ 10,000 and the maximum is ₵ 1 million. The general policy guidelines prohibit the re-financing of existing loans in an enterprise, or the undertaking of the foreign exchange risks of its lending activities. Moreover, the Bank is not permitted to acquire management control over any enterprise and will not finance more than 90 per cent of total investment in a project. NIB's policy in taking equity participation in enterprises it finances is to underwrite ultimately the sale of these shares to Ghanaian investors. The loan terms and conditions are not rigid and depend upon the project risk and the cost to the Bank from its own funds.

A thorough evaluation of the performance of NIB as a source of funds for the manufacturing sector during the past decade is hindered by the limited nature of the available information. This information indicates that the characteristics of the early years of NIB operations reflected the economic environment in Ghana during 1963-1966, when significant projects were taken up by the Government or by large expatriate firms that did not need NIB assistance.

NIB operations during 1967-1970 reflected a deliberate change in lending policies to favour private and joint ventures in various sectoral activities, in accordance with general economic guidelines. This policy entailed intensive project preparation and promotional work by the Bank staff, particularly within the Development Service Institute. At the same time, however, there was a general improvement in the quality of loan proposals by Ghanaian entrepreneurs compared with the earlier period. The quantity of loan applications from Ghanaians also increased substantially after 1968 and was strongly boosted by the Ghanaian Business Promotion Act of 1970, which reserved specific industrial service and commercial activities for domestic investors. Loan applications tripled between 1969 and 1970 when many Ghanaians sought financial assistance to buy expatriate business. NIB was also active in collaborating with foreign institutions with regards to external loans, joint ventures and staff training.

The Capital Investment Board (CIB) was established in 1963, but its functions were reformulated in 1973. It now contributes to the following objectives:

- (a) The development of the productive capacity of the economy through the efficient utilization of Ghana's resources and economic potential;
- (b) The full and efficient utilization and expansion of the productive capacity of existing enterprises;
- (c) The efficient saving on imports, the increase of exports and the improvement of services which will assist the strengthening of the balance of payments position;
- (d) The encouragement of a fair country-wide distribution of investments having in mind the need to develop the rural areas and to avoid undue concentration of investments in the urban areas; and
- (e) A high level of employment and the importation of technical skills to Ghanaian citizens.

CIB offers prospective investors a variety of safeguards and incentive schemes designed to enhance their investment outlook by improving the return on their projects in some way. The underlying rationale for providing concessions is to make low-yielding investments, which are nevertheless socially desirable and more attractive to the investor, by permitting a rapid recovery of capital and a higher return. A variety of incentives are available under CIB regulations:

- (a) An employment tax credit for a maximum of ten years in order to stimulate investment in labour-intensive industries;
- (b) An income tax holiday for a maximum of five years;
- (c) Capital allowances in respect of buildings, machinery, structures, etc., at rates additional to the rates provided under the Income Tax Decree;
- (d) Deductions to chargeable income for capital expenditures on scientific research equal to 25 per cent of such expenditures for a maximum of four years;
- (e) Exemptions of up to 100 per cent from import and customs duties and purchase tax for imported goods that are essential for the implementation and operation of a project;
- (f) Exemptions of up to 100 per cent from export, excise duties and sales tax on goods produced by an approved project for a maximum of ten years;
- (g) Deferment of payment of registration fees and stamp duty on capital; and
- (h) Exemptions from property tax on buildings.

CIB can grant the above benefits in varying amounts and over varying periods but not to the extent of tending towards the establishment of monopolies. Moreover, safeguards are provided for foreign investors with respect to expropriation, compensation for nationalization, arbitration and repatriation of profits.

Protective and development measures for industry

The government's policies strive towards strengthening local entrepreneurship, creating a dynamic private sector but one that is not under foreign control. During recent years a large number of foreign-owned enterprises have passed into Ghanaian hands.

The Capital Investment Decree of 1973 (NRCD 141) reserves certain types of enterprises for full Ghanaian ownership; others must be jointly owned by Ghanaians and foreigners. Further, the procedures for approval to establish new enterprises, initiated by contact made with the Capital Investment Board, are highly complex. The transfer of capital, profits, and external loans and interest thereon is guaranteed under the Capital Investment Act; however, the non-availability of foreign exchange has, in practice, frequently interfered with such transfers.

Between 1964/1965 and 1969/1970 the tax contribution of manufacturing firms declined from ₵ 5.4 million to ₵ 4.3 million in line with the over-all drop in revenue from this source. This decline contrasts with the rapid expansion of manufacturing output during this period. Company tax constituted 5 per cent of the gross value of production in 1964 and 9.2 per cent of value-added. In 1969, the percentages had fallen to 1.5 per cent and 3.1 per cent respectively. As tax rates increased during this time, the fall is partly a result of the decline in chargeable income, i.e., gross profits less depreciation, interest and other taxable allowances. This seems to reflect a reduction in the profitability of manufacturing operations. A second cause could be the increased allowances and tax holidays granted to new industry as part of the investment incentive programmes for the Capital

Investment Board has used its powers of tax exemption quite liberally since its establishment in 1962. Up to 1970, the Board had approved 89 applications involving an investment of about £ 150 million. Tax exemptions were normally granted for periods of three to five years. These exemptions have resulted in substantial revenue losses. From the 22 applications approved in 1969 (capital investment £ 30.8 million), the revenue losses (for all taxes, not just company tax) were estimated at £ 15.2 million for the duration of the tax exemptions.

It may be questioned whether these tax exemptions and allowances are effective in attracting additional investment above the level determined by the over-all political and economic climate and market opportunities in each sector; and if so, whether the gains justify the drawbacks of (a) reduced government revenue, and (b) encouragement of unduly capital-intensive investment.

Total revenue from company income tax shows a decline in yield from £ 47 million in 1969/1970 to £ 32.5 million in 1972/1973. A more recent breakdown by economic sector is not available, but it is interesting to note the difference in 1969/1970 in the yield from the manufacturing and mining sectors. Mining paid more than five times the amount of company tax in that year although its gross output was only 18.0 per cent of that of manufacturing. As the rates of tax on chargeable income were much the same, the discrepancy suggests that mining is a much more profitable activity than manufacturing in Ghana. However, profitability in manufacturing may have been adversely affected by a higher incidence of import duties, excise tax and sales tax.

Rates of duty on industrial raw materials and equipment have been low, usually either 5 or 10 per cent ad valorem, compared with duties on imported consumer goods ranging between 50 per cent and 150 per cent during the 1960s. Several large manufacturing firms have been exempted from import duties for varying periods of time under the Capital Investment Act or other dispensations.

In 1968, some 28 per cent of imports were duty free. Between 1966/1967 and 1971/1972 the total receipts from import duties read as follows (in million cedis):

<u>1966/67</u>	<u>1967/68</u>	<u>1968/69</u>	<u>1969/70</u>	<u>1970/71</u>	<u>1971/72</u>	Estimate <u>1972/73</u>
67.3	59.4	55.9	67.5	104.8	89.0	62.6

It has been impossible to isolate duties on material and machinery inputs to the manufacturing industry from the totals, but in view of the low rates on these items and the extensive exemptions, the burden on industry is not likely to have exceeded £ 20 million in 1972/1973. This represents 5 per cent of the estimated value of manufacturing industry output.

This tariff structure and policy has had four important consequences. First, the establishment of industries for final assembly of semi-finished components has been encouraged. The industries produce low value-added, particularly if measured at international prices (e.g., motor vehicle and radio assembly). Secondly, low or zero duties on raw materials combined with an over valued currency have discouraged backward linkages with Ghanaian agriculture. Close relationships of confidence built up with overseas suppliers on the basis of quality and service as well as price are difficult to break once the initial period of duty exemption expires. Thus industry has remained extremely import-intensive. Thirdly, the highly differentiated tariff structure provided an incentive and an opportunity for importers to evade duty by wrongly describing imports as articles attracting lower taxes. Fourthly, a duty of only 5 per cent on machinery has biased investment towards capital-intensive technology, hampered the development of indigenous substitutes using a higher labour input, reduced the labour-absorption capacity of industry, and prevented the emergence of a machine-building sector in Ghana.

Some steps have been taken to tackle these problems. Duties were raised on some raw materials and lowered on finished products. The 1973/1974 budget simplified and narrowed the range of duties from the previous 5-150 to 20-50 per cent. Licence fees introduced were calculated as a percentage of the value of the import licence. Fees were levied at percentage rates of 5, 10, 15, 20, and 30, according to commodity groups, with the higher levies being imposed on luxury products. The import duty on machinery (5 per cent) was abolished, but a licence levy of 20 per cent effectively raises the cost of imported equipment.

Excise duty is levied on a variety of local manufactures. Until 1969/1970 the excise duty net covered 34 items at rates varying from 5 to 20 per cent ad valorem, except for cigarettes, which carried rates of between 45 and 75 per cent. Ten additional items were added in 1970/1971. Battery-operated short-wave radios were removed in the 1973/1974 budget. In addition, a local duty on cocoa processed in Ghanaian factories is imposed.

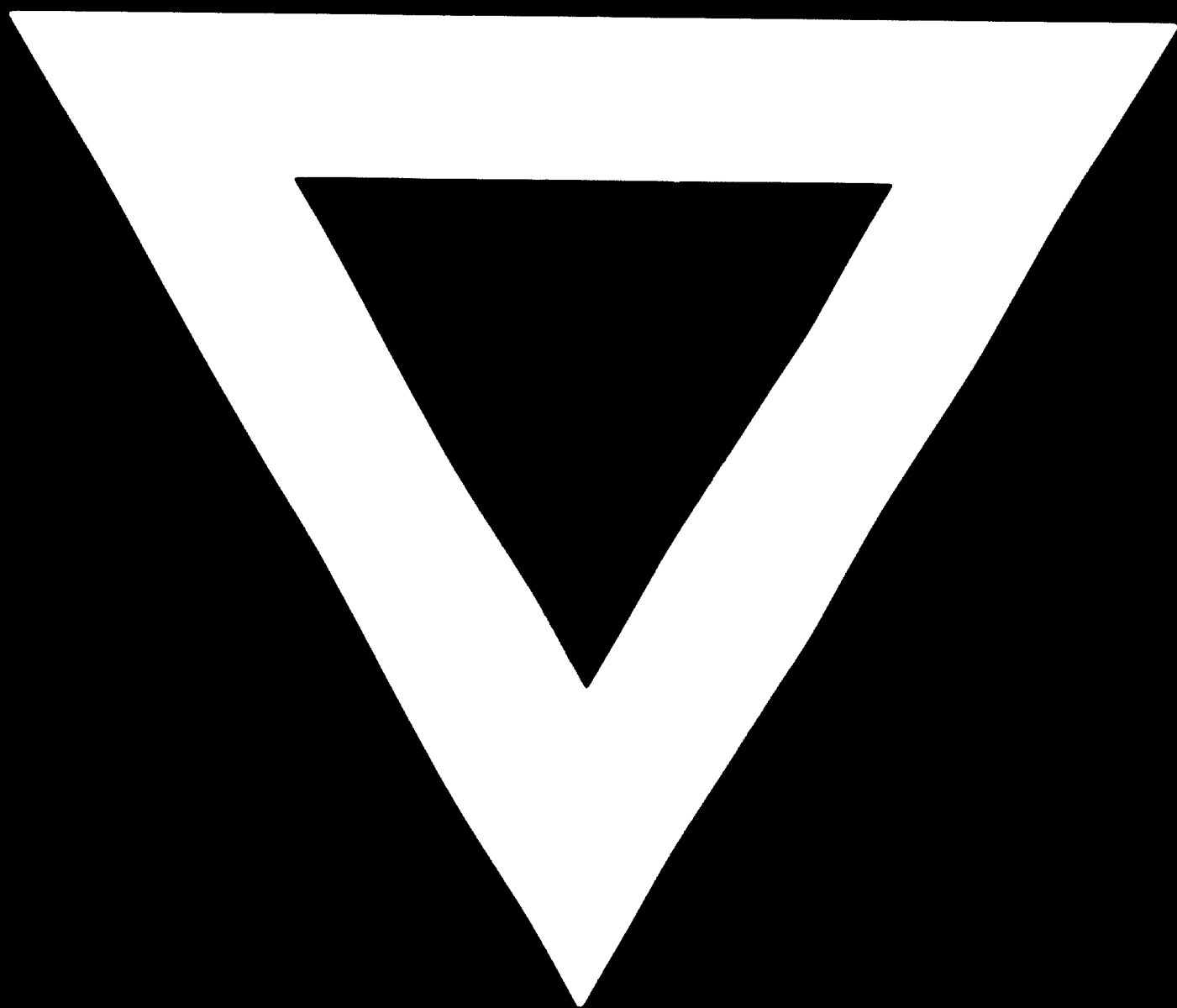
Excisable items are also subject to a sales tax varying between 5 and 7.5 per cent. Until 1973, these taxes were levied on imports as well as on local manufactures, and estimated receipts for 1972/1973 were \$ 10.9 million from imports and \$ 20.1 million from local products. However, the 1973/1974 budget announced that imports would no longer attract sales taxes.

The manufacturing sector is subject to a heavy burden of indirect taxes. This burden is not equally shared between firms, not only because of wide variations in rates of tax from product to product but also because of the extensive use of tax exemptions as investment incentives. The result is that the profitability of some firms is severely squeezed whereas others are unduly feather-bedded. The expansion, replacement and improvement of manufacturing capacity has not, therefore, been closely related to the efficiency with which existing capital resources have been utilized.

In conclusion, it is difficult to see how the tax burden on industry could be reduced without a reduction in the public and social services which are being financed from the revenue. The relative burden on the cocoa farmer is greater still. More could be done, however, to spread the load more equitably, and to encourage greater efficiency, by a further simplification and unification of tax rates and by substituting labour subsidies for both tax rebates and capital incentives as the main instrument of investment promotion.



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