(B) INDUSTRIAL PRODUCTION[1]

Introduction

The analysis of industrial production given below is based on the surveys of manufacturing industry in the private and public sectors conducted by the Central Bank and the Ministry of Industries and Fisheries. The method of collecting data was by postal enquiry. The Central Bank survey covers the calender year of 1968. With the limited time available it was neither possible to extend the coverage nor to obtain comprehensive information. This was more difficult because of the preponderance of very small scale businesses in such industries as Tobacco and Food preparations and the need to resort to hand tabulation in the processing of data.

The object of this analysis of industrial production is to give an up to date picture of the structure and working of manufacturing industry – the number, the size, employment, wages, use of raw materials etc. – and to study the contribution of each industry or group of industries to the performance of the whole industrial sector. Although an evaluation of the performance of the industrial sector in 1968 is done on the basis of a comparison with previous years, it must be noted that the totals for any two years, are not strictly comparable mainly because of differences in the coverage of industrial units. The allocations of imported industrial raw materials prior to the introduction of the Foreign Exchange Entitlement Scheme in May 1968 would also distort year to year comparisons. In 1968, a large number of beedi manufacturers included in the Central Bank Survey ceased production when their individual allocations for the import of wrapper leaf were reduced[2] and they were also unable to buy it at competitive prices in the open market. However, these were mainly small scale enterprises and their contribution to total production would have been any way insignificant. Since the coverage of all other important categories of industry increased this year there is a large increase in the recorded value of industrial production. At the same time this increase would also reflect the greater availability of imported raw materials in 1968. Practically, all industries depend in varying degrees upon imported raw materials. In 1967, several industries were working below capacity because foreign exchange quotas for the importation of raw materials, though substantially liberalised, were still inadequate to permit capacity production. In 1968, foreign exchange allocations to the private sector industries for import of raw materials and machinery, including imports under Open General Licence were nearly 300% more than in 1967. Furthermore with the introduction of the FEEC Scheme in May 1968, a wide range of basic raw materials which had been under strict exchange and import control since 1962, were allowed on Open General Licence. Wherever firms sent in half-yearly returns it was noticed that both quantity and value of production in the second

1 This year, the system of classification adopted in previous years has been revised to broadly conform to the International Standard Industrial Classification. 9 major groups have been delineated where all homogenous types of industrial activity have been classified in to one group with clearly identifiable characteristics.

2. Evidently, new allocations were made to about 3000 new manufacturing units not covered by our Survey.

half were nearly always much higher than that in the first half. It must also be noted that prices of most imported goods increased following the devaluation of the Ceylon rupee in November 1967. Local industrialists also increased their prices as factor cost went up due to the grant of a devaluation allowance to employees and the rise in rupee costs of imported inputs after the devaluation. Thus to a certain extent the increase in the recorded value of industrial production reflects this increase in prices which affects both raw materials purchasing cost and the cost of factor inputs.

The Principal Trends

Table II (B) 1 shows a massive increase of Rs. 444.4 million in the value of industrial production in 1968 - a 46.6 per cent increase over the recorded value of industrial production in 1967. This increase in production was the outcome of factors operating on both demand and supply sides. The demand for consumer goods such as food and textiles were influenced by the increase in real incomes. In fact 52.9 per cent of the increase in the recorded value of industrial production in 1968 was accounted for by the consumer goods categories, Food, beverages and tobacco and Textiles, wearing apparel and leather industries (for brevity, hereafter called Textile industry). On the supply side factors such as the greater availablity of raw materials, better labour relations etc. have operated to increase output in 1968. An analysis of Table II (B) 2 on the value of production classified by type of industry and principal products brings out four main developments (summarised in Table II(B) 2 (1).

First, a large increase of Rs. 119.4 million in the recorded value of production of the Food preparations industry.

Second, moderate increases in Vegetable oils and fats, Spinning, weaving and finishing of textiles, Miscellaneous chemical products, Rubber products' Basic metal products, Fabricated metal products other than machinery and equipment (hereafter, Fabricated metal products) and Machinery (except electrical) and transport equipment (hereafter, Machinery and equipment)

Third, small increases in Biscuits, cocoa, chocolate and sugar confectionery, (hereafter, Biscuits and confectionery) Beverages, Tobacco, Knitted fabrics and articles and made-up garments and other apparel except footwear (hereafter Garments and apparel), Paper and paper products, Petroleum and coal products, Plastic products, Cement, cement products and asbestos products and Electrical machinery, apparatus, appliances and supplies (hereafter, Electrical machinery).

Fourth, against the background of expansion in the several lines of industrial activity mentioned above several important industrial groups have tended to stagnate over the period, namely Preserved and canned fruit, vegetables, meat, fish and other sea foods (hereafter, Preserved foods), Footwear and leather products, Wood and plywood, Industrial chemicals, Ceramics, Glass and glass products, Bricks and tiles and Ilmenite.

Industrial Production and

Industrial Group	Number of Firms				Number of Employees			
	1965	1966	1967	1968	1965	1966	1967	1968
I. Manufacture of Food, Beverages and Tobacco	727	711	822	588*	20688	21838	26401	24878
II. Textiles, Wearing apparel and Leather Industries	228	249	393	496	18121	21102	20052	35528
III. Manufacture of Wood and Wood products including Furniture	1	1	14	20	624	744	2453	2575
IV. Manufacture of Paper and Paper products	60	54	78	90	2347	2369	2660	4146
V. Manufacture of Chemicals, Petroleum, Coal, Rubber and Plastic Products ..	191	204	246	284	7697	7509	8117	11213
VI. Manufacture of Non-Metallic Mineral Products except Petroleum and Coal ..	13	13	61	53	2241	2216	6118	6084
VII. Basic Metal Products	—	—	—	1	—	—	–	950
VIII. Manufacture of Fabricated Metal Products, Machinery and Equipment ..	124	144	183	253	4491	5124	7648	15529
IX. Manufactured Products, n.e.s. ..	36	21	33	19	626	516	506	445
Total	1381	1394	1830	1804	56835	61418	73955	101348

*Wage bill is in respect of only 365 firms.

Table II (B) 1

Employment 1965–68 Statistical Supply

Total Man-days (Thousand)				Wage Bill (Rupees Million)				Production Value (Rupees Million)				Wage per Man – day (Rupees)				Man – days per Employee			
1965	1966	1967	1968	1965	1966	1967	1968	1965	1966	1967	1968	1965	1966	1967	1968	1965	1966	1967	1968
5521	5831	7251	7122	35·2	38·5	52·0	46·8	415·5	389·9	422·3	609·6	6·38	6·60	7·17	6·57	267	267	275	286
4932	5504	5324	9301	20·9	25·5	25·8	46·0	171·5	178·9	177·1	224·3	4·24	4·63	4·85	4·95	272	261	266	262
187	222	458	752	1·8	2·0	3·1	6·6	5·2	6·5	10·4	16·9	9·63	9·00	6·77	8·78	300	298	187	292
667	674	673	1187	4·1	4·3	5·2	8·9	29·3	33·8	34·7	54·6	6·15	6·38	7·73	7·50	284	284	253	286
2047	1964	1916	3124	13·1	13·8	15·9	30·8	125·3	137·2	136·7	203·3	6·40	7·03	8·30	9·86	266	261	236	279
633	595	1581	1670	5·9	5·0	11·2	17·1	40·2	32·5	69·5	92·8	9·32	8·40	7·08	10·24	282	269	258	275
—	—	—	260	—	—	—	3·4	—	—	—	27·3	—	—	—	13·08	—	—	—	274
1189	1194	1970	3932	7·1	7·6	14·1	28·2	58·7	69·8	102·0	167·1	5·97	6·37	7·16	7·17	265	233	258	253
160	139	144	114	0·5	0·7	0·7	0·6	1·3	1·7	1·5	2·7	3·13	5·04	4·93	5·26	256	269	281	256
15336	16123	19315	27462	88·6	97·4	128·0	188·4	847·0	850·3	954·2	1398·6	5·78	6·04	6·62	6·86	270	263	261	271

Source: Central Bank of Ceylon.

Value of Industrial Production 1964-68 Classified

Industrial Group	Value of Production (Rupees Million)				
	1964	1965	1966	1967	1968
1. **Manufacture of Food, Beverages and Tobacco**	257.7	415.5	389.9	422.3	609.6
(a) Food Preparations	46.3	109.2	134.5	130.6	250.0
(b) Vegetable oils and fats	114.4	190.4	142.3	139.7	162.0
(c) Preserved and canned fruit, vetables, meat, fish and other sea food	3.8	5.4	5.1	6.7	8.4
(d) Biscuits, cocoa, chocolate and sugar confectionery	30.9	34.9	38.6	33.3	44.3
(e) Beverage industries	16.1	23.6	17.1	20.0	34.4
(f) Tobacco	46.2	52.0	52.3	92.0	110.5
2. **Textiles, Wearing Apparel & Leather Industries**	78.3	171.5	178.9	177.1	224.3
(a) Knitted fabrics and articles and made-up garments and other apparel except footwear	54.9	55.5	56.1	48.1	55.7
(b) Spinning, weaving and finishing of textiles	–	91.3	95.1	97.1	136.2
(c) Footwear and leather products	23.4	24.7	27.7	31.9	32.4
3. **Manufacture of Wood and Wood Products Including Furniture**	3.9	5.2	6.5	10.4	16.9
(a) Manufacture of wood	–	–	–	3.6	8.0
(b) Plywood	3.9	5.2	6.5	6.8	8.9
4. **Manufacture of Paper and Paper Products**	30.1	29.3	33.8	34.7	54.6
5. **Manufacture of Chemical, Petroleum, Coal, Rubber and Plastic Products**	102.3	125.3	137.2	136.7	203.3
(a) Industrial chemicals	1.0	1.6	1.9	1.9	2.3
(b) Miscellaneous chemical products	73.7	91.2	101.9	98.2	118.9
(c) Petroleum and coal products	–	–	–	–	8.3
(d) Rubber products	17.0	19.1	18.9	20.7	41.3
(e) Plastic products	10.6	13.4	14.5	15.9	32.5
6. **Manufacture of Non-metallic Mineral Products**	26.3	40.2	32.5	69.5	92.8
(a) Ceramics	2.4	2.4	2.3	4.4	8.5
(b) Glass and glass products	–	–	–	–	4.8
(c) Cement, cement products and asbestos products	23.0	36.5	28.8	53.5	70.0
(d) Manufacture of ilmenite	0.9	1.3	1.4	1.4	2.2
(e) Bricks and tiles	–	–	–	10.2*	7.3
7. **Basic Metal Products**	–	–	–	–	27.3
Iron and steel basic industries	–	–	–	–	27.3
8. **Manufacture of Fabricated Metal Products, Machinery and Equipment**	38.5	58.7	69.8	102.0	167.1
(a) Fabricated metal products other than machinery and equipment	38.5	44.7	49.0	54.1	79.4
(b) Machinery (except electrical) and transport equipment	–	–	–	19.8	45.6
(c) Electrical machinery apparatus, appliances and supplies	–	14.0	20.8	28.1	41.8
9. **Manufactured Products, N.E.S.**	0.4	1.3	1.7	1.5	2.7
TOTAL	537.5	847.0	850.3	954.2	1,398.6

* Includes glass and glass products.

TABLE II (B) 2

by Type of Industry and by Principal Products

% within Industry					% of Total Industrial Production				
1964	1965	1966	1967	1968	1964	1965	1966	1967	1968
100.0	**100.0**	**100.0**	**100.0**	**100 0**	**47.9**	**49.1**	**45.9**	**44.3**	**43.6**
18.0	26.3	34.5	30.9	41.0	8.6	12.9	15.8	13.3	17.9
44.4	45.8	36.5	33.1	26.6	21.3	22.5	16.7	13.0	11.6
1.5	1.3	1.3	1.6	1.4	0.7	0.6	0.6	0.7	0.6
12.0	8.4	9.9	7.9	7.3	5.7	4.1	4.5	3.5	3.2
6.2	5.7	4.4	4.7	5.6	3.0	2.8	2.0	2.8	2.4
17.9	12.5	13.4	21.8	18.1	8.6	6.1	6.2	8.9	7.9
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**14.6**	**20.2**	**21.0**	**18.6**	**16.0**
70.1	32.4	31.4	27.2	24.8	10.2	6.5	6.6	5.0	4.0
–	53.2	53.1	54.8	60.7	–	10.8	11.2	10.2	9.7
29.9	14.4	15.5	18.0	14.5	4.4	2.9	3.2	3.4	2.3
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**0.7**	**0.6**	**0.8**	**1.1**	**1.2**
–	–	–	34.6	47.3	–	–	–	0.4	0.6
100.0	100.0	100.0	65.4	52.7	0.7	0.6	0.8	0.7	0.6
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**5.6**	**3.5**	**4.0**	**3.6**	**3.9**
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**19.0**	**14.8**	**16.1**	**14.3**	**14.5**
1.0	1.3	1.4	1.4	1.1	...	0.2	0.2	0.2	0.2
72.0	72.8	74.3	71.8	58.5	13.7	10.8	12.0	10.3	8.5
–	–	–	–	4.1	–	–	–	–	0.6
16.6	15.2	13.8	15.2	20.3	3.3	2.2	2.2	2.2	3.0
10.4	10.7	10.5	11.6	16.0	2.0	1.6	1.7	1.6	2.3
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**4.9**	**4.7**	**3.8**	**7.3**	**6.6**
9.1	6.0	7.1	6.3	9.1	0.4	0.3	0.3	0.5	0.6
–	–	–	–	5.2	–	–	–	–	0.3
87.5	90.8	88.6	77.0	75.4	4.3	4.3	3.4	5.6	5.0
3.4	3.2	4.3	2.0	2.4	0.2	0.1	0.1	0.1	0.2
–	–	–	14.7	7.9	–	–	–	1.1	0.5
–	–	–	**100.0**	**100.0**	–	–	–	–	**2.0**
–	–	–	100.0	100.0	–	–	–	–	2.0
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**7.2**	**6.9**	**8.2**	**10.7**	**12.0**
100.0	76.1	70.2	53.0	47.5	7.2	5.3	5.8	5.7	5.7
–	–	–	19.4	24.2	–	–	–	2.1	3.3
–	23.9	29.8	27.5	28.3	–	1.6	2.4	2.9	3.0
100.0	**100.0**	**100.0**	**100.0**	**100.0**	**0.1**	**02**	**0.2**	**0.1**	**0.2**
					100.0	**100.0**	**100.0**	**100.0**	**100.0**

Source: Central Bank of Ceylon.

TABLE II (B) 2 (1)

Classification of Industries according to Increase in Value of Production

0 – Rs. 5 million	Rs. 5 – Rs. 20 mn.	Rs. 20 – Rs. 100 mn.	> Rs. 100 mn.
1. Preserved Foods	1. Biscuits & Confectionery	1. Vegetable Oils & fats.	1. Food Preparations
2. Footwear & Leather	2. Beverages	2. Spinning and weaving	
3. Manufacture of Wood and Plywood	3. Tobacco	3. Miscellaneous Chemical products	
4. Industrial Chemicals	4. Garments & Apparel	4. Rubber products	
5. Ceramics	5. Paper & paper products	5. Iron and Steel	
6. Glass & Glass Products, Bricks & Tiles	6. Petroleum & Coal	6. Fabricated metal products	
7. Ilmenite	7. Plastic products	7. Machinery and Equipment	
	8. Cement, cement products and Asbestos		
	9. Electrical machinery		

Undoubtedly, part of the increase in the value of production in several lines of industrial activity shown above is purely statistical in the sense that new firms or new products are covered by our survey. The change in the number of reporting firms and in the value of production of each major group of industry is summarized at Table II (B) 2 (2).

TABLE II (B) 2 (2)

Number of Reporting Firms & Value of Production

Industrial Group	Change in No. of Reporting Firms	Change in Value of Production Rs. mn.
I. Manufacture of Food, beverages & tobacco	−234	+187.3
II. Textiles, wearing apparel & leather industries	+103	+ 47.2
III. Manufacture of Wood & wood products including furniture	+ 6	+ 6.5
VI. Manufacture of Paper and paper products	+ 12	+ 19.9
V. Manufacture of Chemicals, petroleum, coal, rubber & plastic products	+ 38	+ 66.6
VI. Manufacture of Non-Metallic mineral products except petroleum and coal	− 8	+ 23.3
VII. Basic Metal products	+ 1	+ 27.3
VIII. Manufacture of Fabricated metal products, machinery and equipment	+ 70	+ 65.1
IX. Manufactured products n.e.s.	− 14	+ 1.2

The number of reporting firms in the Textile Industry increased from 393 to 496 while the recorded value of production of this group increased from Rs. 177.1 million to Rs. 224.3 million. The largest increase in the value of production

occurred in the group Food, beverages and tobacco; however, the number of reporting firms in this group fell rather sharply from 822 in 1967 to 588 in 1968. This was due to the exit of small scale beedi manufacturers from the industrial scene. In 1968, the Department of Rural Development and Small Industries reduced the allocations of individual permit holders and gave new allocations to 3000 other manufacturing units, not covered by our Survey. The limitation of supplies of this vital raw materials through smaller individual allocations forced several small scale manufacturers to go out of production. Despite this decline in the number of reporting firms in the beedi industry, the recorded value of production of the tobacco industry itself showed a sizeable increase of Rs. 18.5 million, largely owing to the growth momentum generated in the cigarette manufacturing industry. The number of reporting firms in the Wood and plywood group increased from 14 to 20. This increase was associated with an increase of Rs. 6.5 million in the value of production. Likewise the number of reporting firms in Chemical, petroleum, coal, rubber and plastic products group, (hereafter, Chemicals industry) increased from 246 to 284 and the value of its production increased by Rs. 66.6 million. This large increase in the Chemical group is undoubtedly linked to the rapid growth of other branches of industry. Chemicals are used by branches of manufacture such as soaps, matches, textiles, as well as certain branches of the chemical industry itself such as pharmaceuticals, paints, toilet preparations, insecticides etc. Non-metallic mineral products except petroleum and coal (hereafter, Non-metallic minerals) had fewer firms reporting this year, but the recorded value of production of this group increased by Rs. 23.3 million largely owing to an increase in the output of its sub-group, Cement, cement products and asbestos products. Within the sub-group itself, asbestos production is not increasing as fast as the progress in the buildings industry might warrant owing to the deliberate policy of the Government to restrict the import of raw materials for this industry in order to foster the development of the local tile industry.

Fabricated metal products group had 70 more firms reporting this year while the value of its output increased by Rs 65.1 million. The principal sub-group here contains barbed wire, wire nails, galvanised products etc. Thus, the increase in value of production of this group must be associated with the upsurge in constructional activity evident in recent years. The other engineering sections of this industrial group had a whole range of miscellaneous products such as manufactured parts for boats, sewing machines, bicycles, cars etc.

In order to make an estimate of the real increase in the value of production in 1968, a sample of 134 firms whose value of production in 1967 was over Rs. 5 lakhs was taken to observe the change in both the quantity and value of their production over the period. It was not always possible to compare quantities of output between the two years because most firms have either not used the same unit of measurement in both years or have failed to supply this information at all. Wherever a meaningful comparision was possible it was noticed that several pace-setting firms in the important growth sectors of industry had a larger quantity of output in 1968, the percentage increase in output nearly always more than offset the increase in prices. Table II (B) 2 (3)

shows the change in the value of production of this sample of firms classified according to the major industrial groups. The overall percentage increase in the value of production for this sample was 34.3 as against 46.6 for all reporting firms.

TABLE II (B) 2 (3)

Rupees Thousand

	1967	1968	% increase
1. Food, beverages and tobacco ..	93,047	145,955	56·9
2. Textile Industry ..	100,197	114,993	14·8
3. Wood and wood Products ..	2,711	6,257	130·8
4. Paper and paper products ..	25,288	30,960	22·4
5. Chemical Industry ..	105,375	138,805	31·7
6. Non-Metallic Mineral products ..	56,003	78,089	39·4
7. Fabricated Metal products ..	69,511	91,969	32·3
8. Manufactured products n.e.s. ..	528	678	28·4
Total ..	452,660	607,706	34·3

Changing Pattern of Industrialisation

A further analysis of Table II (B) 2 shows that basically no great changes have taken place in the structure and pattern of industrialisation since 1967. As in the previous year, the processing of foodstuffs continues to be the most important branch of industry. The manufacture of Food, beverages and tobacco accounts for nearly 44 per cent of the total value of industrial production in 1968, the same as in 1967. However, trends since 1964 show a change in the pattern of industrialisation. While the first two categories of industry namely, Food, beverages and tobacco and Textiles industry show a falling trend over the period, the last three categories namely, Non metallic mineral products, Basic and Fabricated metal products have increased their relative importance. The relative importance of the Food processing industries has declined to about half the shares held in 1964, while the share of the Textile industry has also declined to about 90 per cent of its former size. On the other hand, the relative importance of Basic and Fabricated Metal products groups, has risen from 7.2 per cent in 1964 to 14.0 per cent in 1968. Thus the Metal products groups constitute the most dynamic sectors in industrial growth.

These broad changes are also discernible in Table II (B) 3 where the value of industrial production is classified by type of industry and principal products. While in 1964, the industries broadly defined as Consumer goods represented nearly 63.3 per cent, and Investment goods, very broadly defined to include construction materials, metals and equipment amounted to about 10 per cent of the total value of industrial production in 1968, the percentage value of the consumer goods category had fallen almost steadily to 49.7 per cent. On the other hand, the value of Investment goods category had increased to 16.1 per cent.

TABLE II (B) 3

Value of Industrial Production 1964-68

By Major Economic Categories

	Rupees Million					Per cent				
	1964	1965	1966	1967	1968	1964	1965	1966	1967	1968
A. Consumer Goods ..	340·1	456·9	480·3	528·9	694·8	63·3	53·9	56·5	55·4	49·7
I· Food, Drink and Tobacco ..	133·0	143·9	144·0	185·7	238·4	24·8	17·0	16·9	19·5	17·0
a. Food preparations(1) ..	36·0	28·0	30·9	33·7	40·8	6·7	3·4	3·6	3·5	2.9
b. Preserved and canned fruits, vegetables, meat, fish and other sea foods(2) ..	3·8	5·4	5·1	6·7	8·4	0·8	0·6	0·6	0·7	0·6
c. Biscuits and Sugar Confectionery	30·9	34·9	38·6	33·3	44·3	5·7	4·1	4·5	3·5	3·2
d. Aerated Waters ..	13·4	16·0	11·6	14·5	17·3	2·5	1·9	1·4	1·5	1·2
e. Arrack, Beer, Stout etc.(3) ..	2·7	7·6	5·5	5·5	17·1	0·5	0·9	0·6	0·6	1·2
f. Tobacco ..	46·2	52·0	52·3	92·0	110·5	8·6	6·1	6·2	9·7	7·9
II· Garments(4) ..	54·9	55·5	56·1	48·1	55·7	10·2	6·5	6·6	5·0	4·0
III· Footwear and Leather Products ..	23·4	24·7	27·7	31·9	32·4	4·3	2·9	3·3	3·3	2·3
IV Miscellaneous Chemical Products(5)	73·7	91·2	101·9	98·2	118·9	13·7	10·8	12·0	10·3	8·5
V. Manufacture of Paper and Paper Products(6) ..	19·2	16·2	22·3	20·8	19·4	3·6	1·9	2·6	2·2	1·4
VI· Fabricated Metal Products other than Machinery and Equipment(7)	9·2	9·0	7·7	7·7	9·1	1·7	1·0	0·9	0·8	0·7
VII· Plastic Products ..	10·6	13·4	14·5	15·9	32·5	2·0	1·6	1·7	1·8	2·3
VIII· Glass and Glass Products ..	—	—	—	—	4·8	—	—	—	—	0·3
IX· Ceramics ..	2·4	2·4	2·3	4·4	8·5	0·4	0·3	0·3	0·5	0·6
X· Rubber Products(8) ..	13·3	8·0	7·0	14·0	28·2	2·5	1·0	0·8	1·4	2·0
XI. Spinning, Weaving and Finishing of Textiles ..	—	91·3	95·1	97·1	136·2	—	10·8	11·2	10·2	9·7
XII· Manufacture of Wood ..	—	—	—	3·6	8·0	—	—	—	0·4	0·6
XIII· Manufactured Products n.e.s.(9) ..	0·4	1·3	1·7	1·5	2·7	0·1	0·1	0·2	0·1	0·2
B. Intermediate Goods ..	146·3	316·1	296·5	297·2	478·8	27·2	37·3	34·9	31·2	34·2
I· Food Preparations(10) ..	124·7	271·6	245·9	236·6	371·2	23·2	32·1	28·9	24·8	26·5
II· Fabricated Metal Products other than Machinery and equipment(11)	4·9	9·3	8·5	8·5	8·9	0·9	1·1	1·0	0·9	0·6
III· Manufacture of Paper and Paper Products(12) ..	10·9	13·1	11·5	13·9	35·2	2·0	1·5	1·4	1·5	2·5
IV· Plywood ..	3·9	5·2	6·5	6·8	8·9	0·7	0·6	0·8	0·7	0·6
V· Manufacture of Ilmenite ..	0·9	1·3	1·4	1·4	2·2	0·2	0·2	0·2	0·1	0·2
VI· Industrial Chemicals(13) ..	1·0	1·6	1·9	1·9	2·3	0·2	0·2	0·2	0·2	0·2
VII· Electrical Machinery, Apparatus, Appliances and Supplies ..	—	14·0	20·8	28·1	41·8	—	1·6	2·4	3·0	3·0
VIII· Petroleum and Coal Products ..	—	—	—	—	8·3	—	—	—	—	0·6
C. Investment Goods ..	51·1	74·0	73·5	128·1	225·0	9·5	8·7	8·6	13·4	16·1
I· Fabricated Metal Products other than Machinery and Equipment(14)	24·4	26·4	32·8	37·9	61·5	4·5	3·1	3·8	4·0	4·4
II· Ruber Products(15) ..	3·7	11·1	11·9	6·7	13·0	0·7	1·3	1·4	0·7	0·9
III· Cement, Cement Products and Asbestos Products ..	23·0	36·5	28·8	53·5	70·0	4·3	4·3	3·4	5·6	5·0
IV· Machinery (except electrical) and Transport Equipment ..	—	—	—	19·8	45·9	—	—	—	2·0	3·3
V· Bricks and Tiles ..	—	—	—	10·2	7·3	—	—	—	1·1	0·5
VI. Iron and Steel basic Industries(16)	—	—	—	—	27·3	—	—	—	—	2·0
Totlal ..	537·5	847·0	850·3	954·2	1,398.6	100·0	100·0	100·0	100·0	100·0

Source: Central Bank of Ceylon.

* Includes Glass and Glass Products.

1· Dairy products, ice cream, salt etc.
2· Jams, Jellies, sauces, fruit cordials etc.
3· Production figures for arrack relate to 1968 only.
4· Shirts, banians etc.
5· Pharmaceuticals, cosmetics, soaps and cleaning compounds, matches, toothpaste etc.
6· Writing Paper, exercise books etc.
7· Aluminium ware.
8· Car and cycle tyres and tubes, toys and household goods.
9· Brushes, slates, printing blocks, toys, musical instruments etc.
10· Cattle and poultry foods, vegetable oil, ice, desiccated coconut etc.
11· Containers.
12· Printing paper, cartons, other packing boxes and wrapping paper.
13· Caustic soda and Chlorine
14· Barbed wire and wire nails, galvanised products etc.
15· Tyre retreading.
16· Rolled Sections and wire products.

The pattern of industrial output changes in the process of industrialisation. As industrialisation advances by stages, the normal pattern of change is a relatively rapid growth in the demand for capital goods, chemicals and durable consumer goods and a relatively small demand for food, textiles and clothing. However, factors other than demand are also responsible for this changing pattern of output in the different stages of industrialisation. At first, manufacture is necessarilly confined to processes requiring simple techniques and little expertise, thus favouring the production of a whole range of consumer goods. Before long, however, the optimum-sized firms of the chemical and capital goods industries appear on the industrial scene. This trend is accelerated by the expansion of markets, technological change and the diffusion of industrial skills. Viewed in the broadest perspective, this development may also be considered as the outcome of those economic and political factors compelling internationally operating combines to establish plants nearer the consuming centres. In fact, the survey reveals that the local branches of foreign firms imparted a high growth momentum to the industrial sector in 1968.

Two conclusions emerge from the foregoing analysis of the structure and pattern of industrialisation. First, the most dynamic sectors in industrial growth are Fbricated metal products, Machinery and equipment and Electrical machinery. Second, the pattern of industrial growth is shifting away from consumer goods towards capital goods industries.

The Size of the Industrial Unit

The size distribution of manufacturing firms according to the value of output and wage bill is given at Tables II (B) 4 and II (B) 5, respectively.

As in previous years, smal scale industry is concentrated in the consumer goods sector and is the main supplier of such commodities as coffee, chilly and curry powders, macaroni, noodles and spaghetti, pappadam etc. and knitted and made-up garments. In the Tobacco industry a reduction in individual import allocations created a shortage of wrapper leaf to individual manufacturing units. The inevitable outcome was the development of a black market in this vital raw material. Evidently, it became more profitable for the small scale entrepreneur to sell his allocation rather than engage in the production of beedi. Thus the new policy of allocations weakened small scale enterprise and at the same time favoured the development of the large scale establishment. The Central Bank survey shows that the share of the seven largest firms in the total value of beedi production increased from 25.9 per cent in 1967 to 41.6 per cent in 1968.

According to Table II (B) 4, there are 97 firms with an annual output of over Rs. 2 million. The total output of these 97 firms is nearly Rs. 722 million or 54.7 per cent of the total value of production. By contrast, in 1967 there were 59 firms with an output of over Rs. 2 million; their relative share in total production was much higher amounting to nearly 67 per cent. Likewise, the percentage of firms carrying a total output between Rs. 250,000 and Rs. 2 million also dropped from 25.3 in 1967 to 17.2 in 1968. Thus, the relative share of the

smaller firms in total output increased from 8.3 in 1967 to 28.1 in 1968. However, the degree of concentration of production in certain lines of industry is much higher than is indicated by these figures.

TABLE II (B) 4

Size Distribution of Manufacturing firms, 1968 Based on Value of Output

Industrial Group		Value of Output			
		Rs. <250 Th	Rs. 250 t. <2 mnh	Rs. 2 mn. & over	Total
I. Manufacture of Food Beverages and Tobacco ..	No. of firms	479	83	26	588
	% of output	51·3	9·4	29·3	100·0
II. Textiles, Wearing Apparel and Leather Industries ..	No. of firms	398	83	15	496
	% of output	13·8	21·6	64·6	100·0
III. Manufacture of Wood and Wood Products Including Furniture	No. of firms	14	4	2	20
	% of output	4·8	11·2	84·0	100·0
IV. Manufacture of Paper and Paper Products	No. of firms	58	29	3	90
	% of output	9·7	48·9	41·4	100·0
V. Manufacture of Chemicals, Petroleum, Coal, Rubber and Plastic Products ..	No. of firms	206	59	19	284
	% of ou put	11·8	19·4	68·8	100·0
VI. Manufacture of Non— Metallic Mineral Products Except Petroleum and Coal ..	No. of firms	36	11	6	53
	% of output	3·4	9·1	87·5	100·0
VII. Basic Metal Products ..	No. of firms	—	—	1	1
	% of output	—	—	100·0	100·0
VIII. Manufacture of Fabricated Metal Products, Machinery and Equipment ..	No. of firms	154	74	25	253
	% of output	9·2	33·5	57·3	100·0
IX. Manufactured Products N.E.S. ..	No. of firms	15	4	—	19
	% of output	29·6	70·4	—	100·0
Total ..	No. of firms	1360	347	97	180·4
	% of output	28·1	17·2	54·7	100·0

Source: Central Bank of Ceylon.

In Table II (B) 4 (1) data on production, employment and wages of selected firms are assembled to show the oligopolistic character of local industry. It will be seen that a considerable part of large scale production is concentrated in specific categories of industry specialising in the production of specific items. Excluding the larger units in the public sector, the largest firms are to be found in the following industries: Soft drinks and carbonated waters, Beer and Stout, Cement and Asbestos, Footwear and Leather, Electrical Machinery and equipment, Rubber products and Chemical products. In the Rubber products industry, four firms account for 76.8 per cent of total production. In Soft drinks and carbonated waters, the degree of concentration is even higher; 4 firms account for 89. 5per cent of total production. In serval other industries, the same process of growth and consolidation has taken place. In Footwear and leather products, for example, 4 firms account for nearly 74 per cent of total output and one of

these has as much production as the other three. Together these 164 firms included in our sample study, account for 55.4 per cent of the value of industrial production, 42.3 per cent of total employment and 61.6 per cent of total wages. In several lines of industry large scale operations have been favoured by the nature of producing methods and technological developments within the industry. In some Industries, particularly Chemicals, the process of manufacture yields joint products. In order to obtain optimum returns from industry the firms must branch out in new directions. Thus the scale of operation is enlarged and the tendency in these industries is towards large scale manufacture.

Table II (B) 4 (1)

Employment, Wage Bill & Value of Production of Selected Firms

Industry	No. of Firms (1)	Employment (2)	Wage Bill Rs. Th. (3)	Value of Production Rs. Th. (4)	(4) as a % of total value of Production
1. Food preparations ..	10	3,409	7,186	80,615	32·2
2. Vegetable oils and fats ..	7	2,824	11,961	19,010	11·7
3. Preserved and canned food ..	4	273	322	5,018	59·5
4. Biscuits and confectionery ..	5	866	1,074	29,818	67·3
5. Beverages	7	1,746	5,744	28,796	83·8
6. Tobacco	8	5,260	9,106	92,454	83·7
7. Garments and apparel ..	10	1,601	2,181	17,962	32·2
8. Spinning and weaving ..	11	4,159	11,268	87,470	64·2
9. Footwear and leather ..	4	2,090	5,488	23,909	73·8
10. Wood	3	1,238	2,999	5,408	67·3
11. Paper and paper products ..	13	2,209	6,277	37,247	68·2
12. Miscellaneous chemicals ..	15	3,016	13,944	94,823	79·7
13. Petroleum and coal products ..	3	347	3,301	8,265	100·0
14. Rubber products	4	1,738	5,351	31,713	76·8
15. Plastic products	7	930	912	13,201	40·6
16. Glass and glass products ..	2	558	765	3,842	80·0
17. Cement and asbestos ..	2	1,894	8,532	65,476	93·5
18. Bricks and tiles	3	929	1,999	5,208	71·1
19. Fabricated metal products ..	23	3,569	8,154	56,736	71·4
20. Machinery and transport equipment	12	3,055	6,862	36,150	78·8
21. Electrical machinery ..	11	1,194	2,663	31,726	75·8
Total	164 (9·1*)	42,905 (42·3*)	116,089 (61·6*)	774,847	55·4
Grand Total	1,804	101,348	188·4 (mn)	(1398·6 mn)	100·0

Source: Central Bank of Ceylon.

*Expressed as percentage of grand total.

An analysis of Table II (B) 5 will help to complete this account of the size distribution of firms. As might be expected, the largest frequency of firms occurs in the group where the total wage bill is less than Rs. 15,000; however, they account for only 3·1 per cent of the total wage bill. On the other hand, there are only 56 firms in the group where the total wage bill is Rs.500,000, but these account for 63 per cent of the total wages paid by all reporting firms.

TABLE II (B) 5

Size Distribution of Manufacturing Firms, 1968 Based on Wage Bill

INDUSTRIAL GROUP		Rs <15 th.	Rs 15 th. <50 th.	Rs. 50 th. <500 th.	Rs 500 th. & over	Total
I. Manufacture of Food, Beverages and Tobacco ..	No. of firms	235	75	61	14	385
	% of Wage Bill	2·6	4·3	16·5	76·6	100·0
II. Textiles, Wearing Apparel and Leather Industries ..	No. of firms	222	189	75	10	496
	% of Wage Bill	3·7	11·0	38·0	47·3	100·0
III. Manufacture of Wood and Wood Products Including Furniture ..	No. of firms	5	9	4	2	20
	% of Wage Bill	0·6	4·3	7·5	87·6	100·0
IV. Manufacture of Paper and Paper Products ..	No. of firms	38	32	18	2	90
	% of Wage Bill	3·5	9·5	30·2	56·8	100·0
V. Manufacture of Chemicals, Petroleum, Coal, Rubber and Plastic Products ..	No. of firms	146	71	55	12	284
	% of Wage Bill	6·1	6·5	20·6	66·8	100·0
VI. Manufacture of Non-Metallic Mineral Products Except Petroleum and Coal ..	No. of firms	21	9	18	5	53
	% of Wage Bill	0·8	1·7	15·8	81·7	100·0
VII. Basic Metal Products ..	No. of firms	–	–	–	1	1
	% of Wage Bill	–	–	–	100·0	100·0
VIII. Manufacture of Fabricated Metal Products, Machinery and Equipment ..	No. of firms	68	84	91	10	253
	% of Wage Bill	1·8	8·7	47·6	41·9	100·0
IX. Manufactured Products, n. e. s. ..	No. of firms	11	4	4	–	19
	% of Wage Bill	16·4	16·2	67·4	–	100·0
TOTAL ..	No. of firms	746	473	326	56	1601
	% of Wage Bill	3·1	6·9	27·3	62·7	100·0

Source : Central Bank of Ceylon.

The foregoing analysis shows the predominance of large scale industry as measured by the size of employment and size of production. The most striking feature of size distribution, which a detailed analysis alone will bring out, is the tendency for small scale firm to lose ground in certain important sectors of industry. In the beedi industry, this has been the incidental outcome of the policy measures which favoured the development of the larger sized firm; in the Chemical industries, this is the inevitable result of technological economies of scale leading to the development of the large scale firm.

Use of Raw Materials

1,298 firms have supplied information regarding the use and origin of raw materials this year as against only 563 firms in 1967. These data are classified in Table II (B) 6. The degree of availability of imported raw materials is one of the major constraints in the fuller utilization of plant and machinery. This is clearly seen in Table II (B) 6. The total value of raw materials used by reporting firms was Rs. 427.7 million of which Rs. 152.0 million or 35.5 per cent was classified under local and Rs. 275.7 million or 64.5 per cent was classified under

TABLE II (B) 6

Production and Raw Materials - 1968

Rupees Thousand

Industrial Group	No. of Firms	Production	Raw Materials		
			Local	Foreign	Total
I. Manufacture of Food, Beverages and Tobacco	159	148,704	49,443 (59·9)	33,104 (40·1)	82,547 (100·0)
II. Textiles, Wearing Apparel and Leather Industries	467	160,529	36,923 (41·7)	51,559 (58·3)	88,482 (100·0)
III. Manufacture of Wood and Wood Products Including Furniture	19	16,638	5,848 (88·5)	763 (11·5)	6,611 (100·0)
IV. Manufacture of Paper and Paper Products	77	51,165	8,985 (32·9)	18,304 (67·1)	27,289 (100·0)
V. Manufacture of Chemicals, Petroleum, Coal, Rubber and Plastic Products	270	186,423	28,231 (37·6)	46,757 (62·4)	74,988 (100·0)
VI. Manufacture of Non-metallic Mineral Products except petroleum and coal	48	90,466	6,499 (21·0)	24,463 (79·0)	30,962 (100·0)
VII. Basic Metal Products	1	27,286	721 (3·7)	18,638 (96·3)	19,359 (100·0)
VIII. Manufacture of Fabricated Metal Products, Machinery and Equipment	238	161,835	14,952 (15·7)	80,554 (84·3)	95,506 (100·0)
IX. Manufactured Products N. E. S.	19	2,670	385 (19·6)	1,581 (80·4)	1,966 (100·0)
Total	1,298	845,716	151,987 (35·5)	275,723 (64·5)	427,710 (100·0)

Source: Central Bank of Ceylon

Notes: Figures in brackets denote percentages.

foreign. The foreign raw material component was very high in the following groups of industry: Basic Metal Products (96.3 per cent), Fabricated metal products (84 per cent), Non-metallic Mineral products (79 per cent), Paper and paper products (67.1 per cent) and Chemical products (62.4 per cent). With the solitary exception of Wood and wood products all other groups of industry had a foreign raw material component of over 40 per cent. At the same time the ratio of the value of foreign raw materials to the value of production of some of these groups is also high. These ratios are as follows: Basic Metal products,68.3 per cent, Fabricated metal products, 49.8 per cent, Paper and paper products, 35.8 per cent and Textiles industry, 32.1 per cent.

The fact that the foreign raw material component of local industry is high implies that changes in the rate of industrial growth will be related, among other things to the availability of foreign raw materials. Thus, the large increase in industrial production in 1968 is partly the outcome of those policy measures which allowed a more liberal allocation of foreign exchange to local industrialists. As mentioned elsewhere in this Report, in nearly all manufacturing industries the substantial increase in the value of production occurred in the second half of 1968 after the introduction of the FEEC Scheme.

Employment

Industrial employment for the firms covered by our survey amounted to about 101,348 persons; an increase of 27,393 over the previous year. Part of this increase is statistical, since this year's survey had a wider coverage of those indusrial groups with a high labour intensity of production. Output per employee increased from Rs. 12,902 in 1967 to Rs. 13,800 in 1968. In the Food beverages and tobacco group there was a sharp fall in employment from 26,401 in 1967 to 24,878 in 1968; however, the largest increase in production was recorded in this group. This seemingly conflicting movements in the two variables is partly attributable to the sharp decline in the number of reporting firms in the Tobacco industry-where labour intensity of production is very high. It must also be noted that the man-days per employee for this group of industry increased from 275 to 286, which partly offset the substantial decline in employment within the group. Thus, the total man-days for this group declined by only 129,000. The highest employment generating industries were the Textiles and the Fabricated metals group. In the former an increase of Rs. 47. 2 million in the aggregate value of production is associated with an increase 15,476 additional employees or 56.5 per cent of the increase in the total labour force of industry. In the latter, an increase of Rs. 65.1 million in output was associated with 7,881 additional employees. However, in both groups man-days per employee fell, in the former from 266 to 262 and in the latter from 258 to 253. For all other groups of industry (excluding Manufactured products n.e.s.) man-days per employee increased. Consequently there is an overall increase of 10man-days per employee in 1968 and total man days increased from 19,315,000 in 1967, to 27,462,000 in 1968 a percentage increase of 42.2. The foregoing analysis suggests that the increase in the value of industrial production in 1968 can be partly attributed to an increase in the productivity of labour.

Wages

The total wage bill of the reporting firms increased from Rs.128.0 million to Rs. 188.4 million or by 47.2 per cent, corresponding to the increase of Rs. 444.4 million or 46.6 per cent in the total value of industrial production. Wage per man day was higher for the industrial group Basic metal products, a single public sector firm accounting for this relatively high wage rate. The largest increase in wage per man day occurred in the group Non-metallic mineral products. Here there were three public sector firms with relatively higher wage rates. An increase of Rs. 1.55 per man day occurred in the Chemicals Group. The wage per man day in this group is Rs. 9.86, the third highest of all industrial groups; however, this average conceals the high wages paid by some of the foreign pharmaceutical and other chemical firms in this group of industries. Three of them, had a wage per man day of over Rs. 20. In fact, the highest wages per man day for all reporting firms were paid by these foreign firms. Wages per man day fell in two groups of industries, viz., Food preparations, from Rs. 7.17 to Rs. 6.59 and Paper and paper products from Rs. 7.73 to Rs.7.50. Within the Food preparations group wages per man day ranged between Rs. 3.60 (Biscuits and confectionery) to Rs. 10.60 (Vegetable oils and fats). The Beverage industry also had a high wage per man day of Rs. 10.22. A comparison of Table II (B) 3 and Table II (B) 4 (1) shows that wage rate is high in industries where a few firms account for a large percentage of total employment and total wage bill. Thus, the highest increase in wages per man day of Rs.3.16 occurred in the Non-metallic products group where seven firms control 80.3 per cent of total production, 55.6 per cent of employment and 66.0 per cent of the total wage bill. At the other end we have the Food preparations group, where the degree of concentration is much less, and 41 firms control only 4.19 per cent of total production. It is perhaps significant that the wage per man-day for this group of industry has fallen.

Power and Fuel

The use of power and fuel is given at Table II (B) 7. As in previous years a large number of firms have not reported on the use of power. Only 506 firms completed this part of the questionnaire as against 326 in the previous year. Electricity was again the main source of power used by these firms. The value of electrical power used was Rs. 6.7 million. Petrol and oil were also important sources of power for industry in 1968. The value of petrol and oil used was Rs.6.2 million in 1968, compared to Rs. 3.6 million in 1967. The cost of power per rupee value of output was .029 cts. in 1968 as against .037 cts. in 1967.

TABLE II (B) 7

Production and Fuel 1968

Rupees Thousand

Industrial Group	No. of Firms	Production	Fuel Used				
			Electricity	Coal and Gas	Petrol and Oil	Other	Total
I. Manufacture of Food, Bevarages and Tobacco ..	82	88,494	1,082	84	125	123	1,414
II. Textiles, Wearing apparel and Leather Industries ..	146	103,543	998	28	235	684	1,945
III. Manufacture of Wood and Wood products Including Furnture ..	11	10,502	95	4	4	4	77
IV. Manufacture of Paper & Paper products ..	32	32,187	537	–	769	1	1,307
V. Manufacture of Chemicals, Petroleum, Coal, Rubber and Plastic Products ..	93	139,922	2,051	297	1,061	509	3,918
VI. Manufacture of Non-Metallic Mineral Products Except Petroleum and Coal ..	17	34,567	1,198	–	725	78	2,001
VII. Basic Metal Products ..	1	27,286	–	–	2,481	–	2,481
VIII. Manufacture of Fabaicated Metal Products, Machinery and Equipment ..	117	95,030	746	509	800	285	2,340
IX. Manufactured Products n.e.s. ..	7	759	7	–	6	–	13
TOTAL ..	506	532,290	6,684	922	6,206	1,684	15,496

Source : Central Bank of Ceylon.