

ECONOMIC GROWTH CENTER

YALE UNIVERSITY

Box 1987, Yale Station
New Haven, Connecticut

CENTER DISCUSSION PAPER NO. 279

INDUSTRIAL DEVELOPMENT IN A DUAL SOCIETY: THE INDONESIAN CASE

Nagatoshi Suzuki*

March 1978

Note: Center Discussion Papers are preliminary materials circulated to stimulate discussion and critical comment. References in publications to Discussion Papers should be cleared with the author to protect the tentative character of these papers.

*This paper is part of a study on the industrial development of Southeast Asia sponsored by the Institute of Developing Economies, Tokyo, to which I belong. I appreciate highly the sponsorship of the Institute and the very warm atmosphere of the Economic Growth Center where I was given an opportunity to pursue this study as a Visiting Fellow. I was very grateful to Professor Hugh Patrick and Professor Gustav Ranis of the Center for comments on this paper.

Industrial Development in a Dual Society:

The Indonesian Case

Nagatoshi Suzuki

I. Introduction

The coexistence of the modern and the traditional sector in a society is a feature commonly found in Southeast Asian countries. On the main roads of municipalities or large cities, we will find very modern, western-style buildings filled with modern equipment and machinery. In the show windows are displayed a lot of modern sophisticated goods including imports. But if we enter into a side road just behind these large buildings, we will find humble cottages with roofs and walls of palm leaves or bamboo. This contrast becomes more conspicuous if we compare the urban with the rural area. One popular example may be that of very dark nights without electricity in the countryside contrary to the bright and dazzling nights in the cities. In such a society, the industrial commodities demanded by these two sectors are often quite different even though they are intended to satisfy the same demand. The people in the traditional sector will mainly demand certain traditional foods, clothing, earthen or metal wares, and agricultural tools produced by traditional technology while the internationally standardized modern products will be demanded in the modern sector. Therefore, it is clear that the social dualism might have some influence on the industrial development of the society.

This paper will scrutinize this problem with reference to Indonesia, in terms of persons engaged in both kinds of industries. Indonesia is often mentioned as one of the most typical countries that show a dualism

in the society.¹ Therefore, the analysis of the Indonesian case will be all the more interesting in our context. The time span of the discussion will begin just before World War II and end at the present time. The whole industrial activity of the society can be divided into two types--the traditional and the modern industry. The main part of the traditional industry is composed of small and household industries in the Indonesian statistical classification. There, a household industry (kerajinan rumah tangga) is defined as an establishment with family or related members as workers and without any paid employees, and a small industry (industri kecil) as an establishment with less than 5 persons employed, in the case of a power-equipped establishment, or with less than 10 persons, in the case of no power equipment. In addition to these, some medium and large industries, especially those without power equipment,² should be included in the traditional industries. Thus, we assume two cases: Case I includes medium industries without power equipment,³ and Case II includes all establishments without power equipment. As for the pre-war situation of the two kinds of industries, Sitsen's valuable estimates are available.⁴ His small

¹See, for example, J. H. Boeke, Economie van Indonesië, Haarlem, 1953; idem, Economics and Economic Policy of Dual Societies, Haarlem, 1953.

²In Indonesian statistics power equipment is defined as "machine producing mechanical energy without using human or animal power".

³In the case of having no power equipment, a medium industry is defined as the establishment where 10 to 99 persons are engaged.

⁴See P.H.W. Sitsen, "De kleine nijverheid in inheemsche sfeer en hare expansiemogelijkheden op Java", in Djawa, vol. 17, pp 137-200; idem, The Industrial Development of the Netherlands Indies, Paper for Eighth Conference of the Institute of Pacific Relations, 1942.

native industries (kleine nijverheid in inheemsche sfeer) may be considered to conform to our traditional industries. When the traditional industries are defined as above, the rest are the modern industries.

Three reference years, 1940, 1964, and 1971 are chosen according to data availability; the development during each period, 1940 to 1964, and 1964 to 1971, is scrutinized.¹ 1964 is the year when the first industrial census was held in Indonesia, but the year may be approximated as a turning point because a completely new economic policy had started in Indonesia since the event of September 30, 1965.

II. General View of the Development of the Traditional and the Modern Industry in Indonesia

Table I shows the development of both types of industries over the whole period in terms of persons engaged and by regions of Java & Madura and the Other Islands. What impresses us first is that such a large share as four-fifths of all the people employed is occupied by the traditional industries.² In Java & Madura, traditional industries' employment was 87 per cent in 1940, 82 (Case I) or 84 per cent (Case II) in 1964, and 78 (Case I) or 80 per cent (Case II) in 1971. In the case of the Other Islands, it was even higher: 91 per cent (both Cases) in 1964, and 88 (Case I) or 89 per cent (Case II) in 1971.

¹As in Table I, the years really adopted may differ a little from them owing to the data availability of each type of industry.

²According to my estimate, in 1964 the small and household industries occupy 98 per cent of the number of establishments, 61 per cent of the gross production and 71 per cent of the value added of the total.

Table I

Persons Engaged in the Traditional and the Modern Industries in Indonesia

	Persons engaged (1,000)			Persons engaged per 10,000 people (Population)		
	1940 ¹	1964 ²	1971 ³	1940 ¹	1964 ²	1971 ³
	Case I	Case II	Case I	Case I	Case II	Case I
	Case I	Case II	Case I	Case I	Case II	Case I
Traditional Industries						
Java-Madura	1,535	2,275	2,427	2,506	343	341
Other Islands	884	887	970	980	242	243
Total	3,159	3,234	3,397	3,486	306	313
Modern Industries						
Java-Madura	225	513	441	618	46	78
Other Islands	88	90	87	128	40	25
Total	313	603	528	736	44	60
Total						
Java-Madura	1,760	2,788	3,124	389	419	401
Other Islands		974	1,098		267	246
Total		3,762	4,222		366	345

Sources: P. H. W. Sitsen, "De kleine nijverheid in inheemsche sfeer"; idem, The Industrial Development of the Netherlands Indies; Biro Pusat Statistik, Sensus Perindustrian Tahun 1964; idem, Survey Perindustrian Kecil dan Kerajinan Rumah Tangga; idem, Statistik Industri.

Notes: ¹1936 in the case of the traditional industries. ²1963 in the case of the modern industries.

³1972 in the case of the traditional industries.

But other and more revealing facts are found when we examine the data in terms relative to the population. First, we will find that the number of persons engaged per unit of population is higher in Java & Madura than in the Other Islands. Namely, the number is not only far more in absolute terms in Java & Madura, but the supremacy is still clearly found even in terms relative to the population of each region. This is true of the modern industries as well as of the traditional ones, but more conspicuous in the former.

Another more suggestive fact with the traditional industries is that the number of persons engaged per unit of population showed considerably stable figures during the period under review. It was almost the same in both 1936 and 1964 in Java & Madura. Though it decreased in 1971, the rate was low and only one per cent per year between 1964 and 1971 in both areas. On the other hand, the modern industrial activity during the period showed a higher rate of increase than the increase of population. Not only did the absolute number of persons engaged in the modern industries in 1940 almost double by 1963 and triple by 1971, but also the number per unit of population increased, in the case of all Indonesia, by 1.3 (Case I) and 0.7 per cent (Case II) per year during the period 1940-1963, and by 2.0 (Case I) and 2.3 per cent (Case II) per year during the period 1963-1971.¹

¹In the case of Java & Madura, the rates were higher: 2.2 (Case I) and 1.6 per cent (Case II) during the first period, and 2.2 (Case I) and 2.7 per cent (Case II) during the second period.

III. Characteristics of the Development Pattern of the Traditional Industries

Behind the general trend just mentioned, some interesting facts can be found if each individual industry is examined. Table II shows the trend of development of the traditional industries in the period 1936 - 1964 by grouping them into several industrial divisions. In 1936, textile, food and beverages, and wood, bamboo, wicker work etc. were the three biggest components, and they occupy respectively 30.0, 26.4 and 20.8 per cent of the total persons employed. And 11.0 per cent were engaged in the made-up textile goods industry. Thus, these four industrial groups accounted for 88.3 per cent of the total persons engaged in the traditional industries. In the remaining 11.7 per cent, there were non-metallic mineral products, metal working, and other miscellaneous industries. In 1964 the composition changed a lot, and the share in the total, in order, became as follows: food and beverages (34.0 and 33.0 per cent in Case I and II respectively), wood, bamboo, wicker-work etc. (23.8 and 23.1 per cent), other miscellaneous industries (16.5 and 16.0 per cent), textile (13.0 and 13.3 per cent), non-metallic mineral products (8.2 and 8.0 per cent), made-up textile goods (4.4 and 4.3 per cent) and metal working (2.5 and 2.4 per cent). Special attention should be given to the fact that the main reason for the change in the composition was in a drastic decline in the textile and made-up textile goods in contrast to the increase of all the other industries.

This decline can also be clearly seen by examining the persons employed in terms relative to the population. As regards metal working, the

Table II

Structure of Persons Engaged in Traditional Industries
in Java and Madura, 1936 and 1964

	Percentage of Total (%)			Persons Engaged per 10,000 People (Population)			Annual Increase	
	1936	1964		1936	1964		1936-64 (%)	
		Case I	Case II		Case I	Case II	Case I	Case II
Food and Beverages	26.4	34.0	33.0	89	116	116	1.0	
Textile	30.0	13.0	13.3	101	44	47	-2.9	-2.7
Made-up Textile Goods	11.1	4.4	4.3	37	15	15	-3.2	
Wood, Bamboo, Wicker- work, etc.	20.8	23.8	23.1	70	81	81	0.5	
Non-metallic Mineral Products	3.9	8.2	8.0	13	28	28	2.8	
Metal Working	2.6	2.5	2.4	9	9	9	0	
Miscellaneous	5.2	14.0	16.0	18	48	56	3.5	4.1
Total	100.0	100.0	100.0	336	341	352	0.1	0.2

Sources: Sitsen, "De kleine nijverheid"; Biro Pusat Statistik, Sensus Industri Tahun 1964.

number of persons engaged per unit of population is the same in 1936 as that in 1964. Food and beverages, and wood, bamboo, wicker work etc. showed only a slight increase: one per cent per year with the former and 0.5 per cent with the latter. With regard to non-metallic mineral products and other miscellaneous industries, rather spectacular increases are seen. The former more than doubled during this period; that is, it increased by 2.8 per cent per year. The latter almost tripled with an annual rate of increase of 3.6 per cent (Case I) or 4.1 per cent (Case II). But, in contrast to these industries, a drastic decrease is found with textile and made-up textile goods. During this period, the former decreased by 2.8 per cent (Case I) or 2.7 per cent (Case II) per year and thus to a level of less than half of 1936. The decrease of the latter was yet more severe when it dropped down to 4.1 per cent of the 1936 level with an annual rate of decrease of 3.2 per cent (both Cases).¹

This decreasing trend of textile and made-up textile goods groups in the traditional industries still existed after 1964, with even higher speed than before. According to my estimate by using the data of the Survey of Small and Household Industries, the persons engaged in both of these traditional industries in Java & Madura were 222 or 230 thousand (Case I and II respectively) in 1972 as compared

¹Thus, if we exclude both of these industries, the rest show an average annual rate of increase of 1.3 per cent (Case I) or 1.4 per cent (Case II) during this period. As regards Case I, it is just the same rate as that of the modern industries. (See above).

with 397 or 412 thousand in 1964. The average annual rate of decrease is as high as 7.0 per cent in both cases.

The decrease becomes more impressive when these industrial groups are examined in comparison with other groups. Table III shows the number of establishments and persons engaged in the Small and Household Industries, which are the main components of the traditional industry,¹ by grouping them into several kinds of industries in Java & Madura in 1964 and in 1972. Among all the industrial groups, it is only the textile and made-up textile goods which showed a decline. They decreased sharply, namely by 9.3 per cent per year in the number of establishments and by 5.2 per cent in the number of persons employed.² On the other hand, all the other industries as a total increased by 1.1 per cent and 2.4 per cent per year respectively. The peculiarity of textile and made-up textile goods industries will be more clearly perceptible when we calculate the number of persons engaged per 10,000 people. It is very impressive that the number is practically stable in the case of all the other groups except those industries just mentioned above in which the persons engaged

¹In 1964, small and household industries filled 88 per cent (Case I) or 85 per cent (Case II) of the total traditional industries in Java & Madura. In 1972 the share was 94 or 91 per cent. Concerning textile and made-up textile goods only, the share was a little lower with 65 or 64 per cent in 1964 and 77 or 74 per cent in 1972 in respective cases.

²This rate is lower than that of the traditional industries above which include the establishments without power equipment. Thus, this will indicate that the downward tendency of those establishments is stronger than that of the small and household industries.

Table III

Development of Small and Household Industries in Java and Madura, 1964-1972

	Number of Establishments (1,000)		Number of Persons (1,000)		Number of Persons Engaged per 10,000 People	
	1964	1972 ¹	Annual Increase %	1964	1972	Annual Increase %
Food and Beverages	319	334	0.6	732	922	2.9
Textile and Made-Up Textile Goods	140	64	-9.3	261	170	-5.2
Leather and Leather Products	1	4	14.0	2	10	20.9
Wood and Wood Products	303	312	0.4	530	626	2.1
Paper Products, Printing, Publishing	2	3	8.9	5	9	7.6
Other Manufacturing Industries	176	221	2.8	473	541	1.7
Total ²	942	938	-0.1	2,004	2,278	1.6
				306	291	-0.6

Sources: Biro Pusat Statistik, Sensus Perindustrian Tahun 1964; idem, Survey Industri Kecil dan Kerajinan Rumah Tangga, various years.

Notes: ¹Estimation. ²May differ from the sum because of rounding off the number.

decreased sharply in 1972 to almost half of that in 1964.

What is the reason for this sharp decline? Why do only textile and made-up textile goods show a downward tendency among all the traditional industries?

As one probable answer, we may point out their special characteristics which might be called the "standardized products" in a dual society.¹

First, the traditional and the modern products in this kind of industry are similar to each other. Most cloth produced by the modern sector is not so different from that produced by the traditional sector. The same is true for clothes. Thus, the demand for the traditional product is easily switched over to that for the modern one. Secondly, on the production side also, the commodities have the same easy transferability. It is not difficult to change production from the traditional to the modern method. The modern machinery related to these industrial groups is virtually an improvement or automation of the traditional tools. Thus, we may suppose that in these textile and made-up textile goods industries, the traditional products are easily taken over by the modern products or the imports, usually produced more efficiently and cheaply.

Before an examination of the development of modern production, two facts seem notable here. One is that the trend of modernization in textile and made-up textile goods can be found even before World War II. In Table IV, we will notice that compared with the other industrial groups, textile and made-up textile goods industries have a different aspect in 1936. Sitsen classified native industries into three groups

¹Compare them with "standardized products" in the product-cycle theory.

Table IV

Persons Engaged in the Traditional Industries
in Java and Madura, 1936

	Household Industry	"Bakul" Industry	Manu- facture	Total of Each Industry (1,000)	House- hold	"Bakul"	Manufac- ture
	Percentage of Total						
Food & Beverages	323	32	50	405	79.8	7.9	12.3
Textile	25	260	176	461	5.4	56.4	38.2
Made-up Textile Goods	120	50	-	170	70.6	29.4	-
Wood, Bamboo, Wicker- work, etc.	119	200	-	319	37.3	62.7	-
Non-metallic Mineral Products	20	40	-	60	33.3	66.6	-
Metal working	20	20	-	40	50.0	50.0	-
Miscellaneous	40	40	-	80	50.0	50.0	-
Total	667	642	226	1,535	43.5	41.8	14.7
Textile and Made-up Textile Goods	145	310	176	631	23.0	49.1	27.9
Others	522	332	50	904	57.7	36.7	5.5

Source: Sitsen, "De kleine nijverheid."

according to the form of production. The workers in a household industry are mainly composed of family members and they work in a small workshop built in their own house or on their land. They sell their products themselves to the neighbors within the village or in the adjacent villages. Workers in a "bakul" industry have the same working system as a household industry, but sell most of their products to the middlemen called "bakul" or "tengkulak" who usually provide raw materials to them. In a manufacture, production is done in a factory with wage earners as the main workers, but they do not use any important mechanical aids except hand tools. Therefore, it may be assumed that "bakul" and manufacture industries belong to a more modernized class than a household industry. If this assumption is admissible, it can be said that compared with the other native industries, the textile and made-up textile goods industries were exceptionally modernized in 1936. Only 25 thousand (5.4 per cent) of the total 461 thousand workers are in the household industries, and 260 thousand (56.4 per cent) and 176 thousand (38.2 per cent) workers are in the "bakul" and the manufacture industries respectively. On the other hand, the situation is different in the case of the other industries where 59.8 per cent are in household, and 35.6 per cent and 4.7 per cent are in "bakul" and manufacture industries.

The other supporting fact for our reasoning is that the order of declining tendency by region in Indonesia with regard to the textile and made-up textile goods seems to correspond to the degree of modernization of each region. In Table V, we divided each of Java & Madura and the Other Islands into two subregions, the urban and the rural districts, and

Table V

Persons Engaged per 100,000 People by Urban and Rural Area in the Small and Household Textile and Made-up Textile Goods Industries

	1964	1971		1974		Annual Increase (%)		
		Java & Madura	Java & Madura Islands	Other Islands	Java & Madura	Other Islands	Java & Madura	Other Islands
Urban Area	661	360	330	347	72	92	81	-34.7
Rural Area	370	308	617	415	128	387	220	-19.1
Total	400	315	565	405	120	337	202	-20.7

-14-

Sources: Biro Pusat Statistik, Sensus Perindustrian Tahun 1964; idem, Survey Perindustrian Kecil dan Kerajinan Rumah Tangga.

checked the tendency by using the number of persons engaged in the industry per 100,000 people in 1964, 1971 and 1974. The clearest correspondence between the number of persons engaged and the modernization is found in 1974. The order of the former is as follows: 72 in the urban district in Java & Madura, 92 in the urban district in the Other Islands, 128 in the rural district in Java & Madura and 387 in the rural district in the Other Islands. This order corresponds to the degree of modernization of the district in Indonesia. However, in 1964 and 1971, the figures are not in this order. In 1971, for example, the number in the urban district in Java & Madura is larger than that in the rural district in the region. But this can be explained by the rate of decrease by each district. The highest rate is that in the urban district of Java & Madura. The others in decreasing order are the urban district in the Other Islands, the rural district in Java & Madura and the rural district in the Other Islands. Thus the more modernized the region is, the higher the decreasing rate of the number of persons engaged is.

IV. Characteristics of the Development of Modern, Large Industries

Our discussion will now focus on the development of modern, larger scale industries. In Table VI, the development of the number of establishments and persons engaged during the first period 1940 - 1963 is shown by industrial groups. It is notable that, during this period, not only did the total almost double, but each industrial group increased at more or less the same rate. Even if we examine each group

by calculating the number of persons engaged per ten thousand people, the increase of the number in most industrial groups can be disclosed. Textile and made-up textile goods industries are not the exception. The number increased from 8 to 10 (Case I) or 9 (Case II). This means that the persons engaged in the modern industries of this group increased even more rapidly than the population.

Another interesting fact is found when we investigate the development of large and medium industries after 1964 by dividing them into four kinds: large industries with power equipment, large industries without power equipment, medium industries with power equipment, and medium industries without power equipment. Table VII shows the change in the number of persons engaged in these four kinds of industries during the period 1963 - 1971. During this period, the number of persons engaged in large and medium industries as a total increased by 8 per cent over those in 1963. But the increase is composed of the absolutely different movements of the respective kinds of industries. Of the four kinds, the greatest increase can be found in large industries with power equipment. It increased by 53.1 per cent during this period, that is, by 5.5 per cent per year. The next is with large industries without power equipment, but the rate is far smaller. It increased by 18.9 per cent, that is, by 2.2 per cent per year. As for medium industries, both kinds of establishments showed a decrease, but the decreasing rate is much higher in the case of those without power equipment. Those with power equipment declined by 0.1 per cent (negligible in annual percentage), but as regards those without power equipment the rate was as high as

Table VI

Development of Modern Industries between 1940 and 1963

	Number of Establishments				Number of Persons Engaged					
	Annual Increase				Annual Increase Per 10,000 people					
	1940	1963	Case I	Case II	1940-63 (%)	Case I	Case II	1940-63 (%)	1940	1963
	2,685	4,012	4,003	1.8	1.8	64,918	186,138	184,763	4.7	4.7
Food									9	18
Beverages	340	236	235	-1.6	-1.6	5,005	5,783	5,563	0.6	0.5
									1	1
Tobacco	117	532	291	6.8	4.0	53,547	108,760	57,158	3.1	0.3
									8	11
Textile & made-up textile goods	264	1,505	1,434	7.9	7.6	57,792	107,634	91,386	2.7	2.0
									8	10
Wood & wood products	151	941	940	8.3	8.3	7,083	16,489	16,288	3.7	3.7
									1	2
Printing & publishing	310	657	656	3.3	3.3	15,842	23,731	23,616	1.8	1.8
									2	2
Leather & leather products	25	120	120	7.1	7.1	1,583	3,573	3,573	3.6	3.6
									-	-
Rubber & rubber products	14	690	588	17.8	17.6	3,371	57,255	53,403	13.1	12.8
									-	6
Chemical products	72	316	314	6.6	6.6	6,038	21,091	20,852	5.6	5.5
									1	2
Non-metallic mineral products	123	312	310	4.1	4.1	12,371	16,243	16,040	1.2	1.1
									2	2
Metal products except machinery	46	568	568	11.5	11.5	3,710	19,100	19,100	7.4	7.4
									1	2
Machinery	592	838	837	1.5	1.5	46,499	25,012	24,812	-2.7	-2.7
									7	2
Miscellaneous		295	290				11,980	11,163		
									1	1
Total	4,739	10,941	10,586	3.7	3.7	312,978	602,816	527,717	2.9	2.3
									44	60
									52	52

50.6 per cent, that is, 8.4 per cent per year.

How about textile and made-up textile goods in the modern or larger industries? We found before that these two groups of industries were a marked exception among all the groups of small and household industries. The number of the persons engaged in these groups fell sharply during both of the two periods. However, as a modern industry, it expands as well as the others even after 1963. Textile showed an increase of 8.0 per cent (Case I) or 17.6 per cent (Case II) of 1963 by 1971 or 1.0 or 2.1 per cent per year, and made-up textile goods 16.1 per cent (both cases) or 1.9 per cent per year (see Table VII). However, this expansion was only in the large industries with power equipment or the most modernized of all the four categories mentioned above in regard to the large and medium industries. As for the category, a 23.0 per cent (or 2.6 per cent per year) increase was attained during the period with textile and as high as 49.4 per cent (or 5.0 per cent per year) with made-up textile goods. On the contrary, we find a decrease in all the other three categories. It was the greatest with the medium industries without power equipment which showed such a high rate as 62.2 per cent during the whole period or 11.4 per cent per year as regards textile, and 38.0 per cent or 5.8 per cent per year as regards made-up textile goods. Therefore, the most modernized of the four categories increased its share rapidly from 28.6 to 52.4 per cent with the former and from 40.3 to 61.1 per cent with the latter.

Table VII

Change of the Number of Persons Engaged in Large and Medium Industries according to the Possession of
Power Equipment between 1963 and 1971

	Textile					Made-up Textile Goods				
	1963	1971	Increase	Percent- age of 1963	Annual Increase (%)	1963	1971	Increase	Percent- age of 1963	Annual Increase (%)
Large Industry										
With power equipment	391,555	599,633	208,078	53.1	11.2	70,423	86,591	16,168	23.0	5.3
Without power equipment	75,099	89,273	14,174	18.9	4.4	16,248	9,245	-7,003	-43.1	-13.1
Medium Industry										
With power equipment	136,162	136,075	- 87	-0.1	- -	16,096	15,184	-912	-5.7	-1.4
Without power equipment	297,480	147,084	-150,396	-50.6	-16.1	143,276	54,167	-89,109	-62.2	-21.6
TOTAL	900,296	972,029	71,733	8.0	1.9	246,043	165,187	-80,856	-32.9	-9.5

Sources: Biro Pusat Statistik, Sensus Perindustrian Tahun 1964; idem, Statistik Industri.

V. Two Poles in Industrial Development

Therefore, we may say that two poles are found in Indonesian industrial development in general. One is the development of large, modern industries and the other is the development of traditional, small and household industries. On the other hand, the middle-class industries of medium-size or having no power equipment declined sharply and made the poles more conspicuous.

However, textile and made-up textile goods were single exceptions. They showed one-way development of modernization. The part which expanded is only the large industries with power equipment and the others, including traditional industries, did show a sharp decline.

The facts seem to suggest that, except with some products like textiles or made-up textile goods, a traditional product and a modern one are in general different from each other as a commodity even though they are intended to satisfy a similar demand; therefore, a modern product or industry cannot become a substitute for a traditional one. The former cannot originate from the latter by upgrading or modernizing it. Both types of industries have to develop side by side in order to produce both kinds of products in a dual society.

In this situation, the following problems, among others, may apt to arise: the demand for modern products will fall short of the production. The total demand for a certain type of commodity has to be divided in such a dual society into two parts, one for the traditional and the other for the modern product. In the industrial development accompanied by the increase of the standard of living, the leading sector should probably be the modern industry, but it is feared that the development

may be hampered by the lack of demand for the product. This will be even more the case because the economies of scale usually work in the modern industries. The recent strong assertion of export-oriented industrialization by the Southeast Asian countries seems to be related at least partly to this lack of demand deficit.¹ Moreover, the trend and the fact found above in the Indonesian case will also render some valuable general suggestions as to what should be taken into account in the industrial policy of a dual society.

¹As to the other causes, see N. Suzuki, Asian Economic Development and Export-Oriented Industrialization--With reference to Southeast Asia, Institute of Developing Economies, 1976.