

On the Regional Structure of the Japanese Economy

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On the Regional Structure of the Japanese Economy¹⁾

Toshifumi Yada

I. INTRODUCTION

There is no doubt that the high economic growth from the late 1950's to the early 1970's brought about many regional problems such as income disparity between regions, overcrowding in urban areas, increasing of de-populated areas and devastation of the environment in Japan. Most of these problems have not yet been resolved in the period of low economic growth from the late 1970's to 1980's.

A few economists have endeavoured to analyze these problems and a new field of economics, called regional economics, was created. There are two schools in Japan's regional economics. One school analyzes problem regions such as the metropolitan areas, industrial districts and depressed areas. The other school analyzes the regional structure of the Japanese economy which has brought about regional problems.

This report intends to clarify the characteristics of regional structure of the Japanese economy and to describe the industrial structure of Kyūshū region from the view point of the latter school.

II. THE REGIONAL STRUCTURE OF THE JAPANESE ECONOMY

1. The Change of Industrial Structure in Japan

In the period of high economic growth, Japanese industrial structure changed very much. The manufacture sector grew much more rapidly than the agriculture sector, so the working population of the primary industry decreased from 41% in 1955 to 14% in 1975. On the other hand, the working population of the secondary industry increased from 23% in 1955 to 34% in 1975 (Table 1). In addition, as the growth rate of heavy and chemical industries were higher than light industries, the former industries increased in the number of employees, as well as value added from 1957 to 1973 (Table 2). Particularly, machinery industries such as the motor car, the shipbuilding and the electrical machinery industries played 'a locomotive role' in the Japanese economy during this period.

But from the late 1970's, that is the low economic growth period, most of the heavy and chemical industries, including the iron and steel, the petrochemical and the shipbuilding industries have faced very severe depression in production through the rise of energy cost, the decrease of demand, and the competition with products from Asian NICs. On the other

Table 1. The Working Population by Industrial Sector in 1955, 75, 85
thousands

	1955	%	1975	%	1985	%	75/55	85/75
Primary	16,111	41	7,354	14	5,418	9	0.5	0.7
Secondary	9,220	23	18,097	34	19,206	33	2.0	1.1
Tertiary	13,930	35	27,690	52	33,489	58	2.0	1.2
Total	39,261	100	53,141	100	58,113	100	1.4	1.1

Source: Population Census of Japan, 1955, 75, 85

Table 2. Value Added by Manufacturing Industry in 1957, 73, 82
million yen

	1957	%	1973	%	1982	%	73/57	82/73
Food	287	10	3,031	8	7,345	10	10.6	2.4
Textiles	330	11	2,345	6	2,958	4	7.1	1.3
Timber	99	3	1,238	3	1,405	2	12.5	1.1
Pulp and Paper	121	4	1,149	3	1,973	3	9.5	1.7
Publishing and Printing	144	5	1,556	4	4,141	5	10.8	2.7
(Light Industries	1,117	37	10,800	29	21,884	29	9.7	2.0)
Chemicals	307	10	3,302	9	6,521	9	10.8	2.0
Petroleum	43	1	479	1	1,439	2	11.1	3.0
Ceramic	153	5	1,946	5	3,647	5	12.7	1.9
Iron and Steel	305	10	2,891	8	4,746	6	9.5	1.6
Non-ferrous metals	104	3	1,137	3	1,630	2	10.9	1.4
Fabricated metal product	127	4	2,635	7	4,708	6	20.7	1.8
Ordinary machinery	269	9	3,995	11	8,447	11	14.9	2.1
Electrical machinery	211	7	4,153	11	10,627	14	19.7	2.6
Transport equipment	270	9	3,681	10	7,636	10	13.6	2.1
(Heavy Industries	1,900	63	26,483	71	54,339	71	13.9	2.1)
Total	3,017	100	37,283	100	76,223	100	12.4	2.0

Source: Census of Manufacturers, 1957, 73, 82

hand, the motor car, the electric machinery and the semiconductor industries have continued to grow through increasing exports to USA and EC countries, which has resulted in trade imbalance. Therefore the percentage of the machinery industries in the total value added of manufacturing industries increased from 32% in 1973 to 35% in 1982 (Table 2). In this period, product and process innovations occurred with electronics, which resulted in rapid crease of productivity in manufacturing industries. Therefore the number of employees in these industries did not increase in proportion to the growth of output. On the other hand, the number of employees of the tertiary industry much increased, because of the growth of output and low productivity (Table 1).

2. The Characteristics of Industrial Distribution

There have been some characteristics in the industrial distribution since the period of high economic growth in Japan.

The agglomeration of machinery industries

The first characteristic of the regional structure of the Japanese economy is that most of manufacturing industries have been located in the Pacific coastal belt, stretching from Kantō to Northern Kyūshū. Particularly, the metal processing industries such as metal products and machinery have been highly agglomerated in three major industrial districts, Kantō Littoral, Tōkai and Kinki Littoral, as well as the merchandise industries such as furniture, garments, rubber, leather, publishing and printing industries (Table 3). For instance, we find that the percentage of three districts in value added of the transport equipment reaches 68.9%, and that of the electrical machinery shows 60.4%. The basic resources industries such as oil, chemicals, iron and steels, and non-ferrous metals are concentrated in five industrial districts, including the former three districts plus Sanyō and Northern Kyūshū. As Table 3 shows, the percent of five districts in the iron and steel industry is 75.9% and that of chemicals is 78.4%. On the other hand, the local resource industries such as food, textiles, timber and ceramic are distributed dispersedly. We find that there were always high proportion of these industries in regions besides the Pacific coastal belt.

As mentioned above, it is very important for the regional structure of the Japan's economy that the machinery industries were always highly agglomerated in three major industrial districts, particularly in the Tokyo metropolitan district which expands from Kantō Littoral to Kantō Inland. This is because these industries have played the leading role in the national economy since the 1960's and have brought about high regional agglomeration through linking closely with many parts makers and highly-trained machinery workers in a region, so to speak the contact advantages of regional agglomeration. As a result, the high proportion of workers in manufacturing industries has been concentrated in three major industrial districts where most of machinery firms have been able to enjoy the contact advantages.

The concentration of central management functions

The second characteristic of the regional structure of the Japanese economy is the concentration of central management functions in the Tokyo metropolitan area. Table 4 clearly shows that a substantial number of head offices of big private enterprises are concentrated in Tokyo. If we add the number of head offices in Yokohama and Kawasaki, the percentage of big cities in the Tokyo metropolitan area reaches about 60% in Japan. On the other hand, Osaka, Kyoto and Kōbe in the Osaka metropolitan area contributes to about 23% in Japan.

In general, head offices have functions to administer production and distribution systems, to obtain information and to make decisions; this is the functions of central management. Therefore, economic central management functions are concentrated in the two metropolitan areas, particularly in the Tokyo metropolitan area.

Table 3. The Regional Share of Value Added by Manufacturing Industry in 1982

%

	Hokkaidō	Tōhoku	Kantō Inland	Kantō Littoral	Hoku riku	Tōkai	Kinki Inland	Kinki Littoral	Sanyō	Sanin	Shikoku	Kyūshū Northern	Kyūshū Southern
	Food	5.9	7.3	*10.0	çç21.1	3.8	*14.1	4.6	13.7	5.2	0.9	2.9	3.3
Textiles	0.3	* 4.1	5.6	ç 5.3	**16.6	çç21.9	çç17.5	ç16.9	3.5	1.0	4.0	0.7	2.7
Timber	8.2	*10.7	9.3	7.8	5.6	ç18.0	7.6	7.3	6.4	2.2	6.0	3.2	7.6
Pulp and Paper	çç 6.4	4.8	* 6.2	*21.3	4.2	20.8	* 4.4	14.6	3.3	1.1	* 7.3	1.8	ç 3.8
Publishing & Printing	2.7	3.2	3.2	53.4	2.3	8.0	3.2	ç14.6	2.3	0.4	1.4	3.1	2.3
Chemicals	0.6	3.0	* 4.5	**29.7	ç 3.9	**17.4	4.0	ç19.4	çç8.4	0.0	3.1	ç 3.5	ç 2.7
Petroleum	1.6	ç 2.1	3.6	*39.0	3.6	çç 4.2	ç 6.1	**15.1	*11.7	0.1	** 6.8	ç 2.1	* 4.0
Ceramic	* 4.0	* 6.4	* 9.6	ç15.3	4.1	ç21.3	* 7.5	çç8.6	* 6.9	1.0	3.0	çç 4.9	* 7.6
Iron and Steel	ç 1.3	2.6	* 6.0	çç19.6	2.5	**14.5	** 8.0	çç21.1	**10.9	1.0	0.8	çç 9.8	2.1
Non-ferrous metals	0.4	3.9	*13.7	çç23.4	**11.8	16.2	2.2	çç14.2	* 5.7	0.0	* 3.5	ç 1.4	* 3.5
Fabricated metal products	1.9	2.9	** 8.3	çç26.0	* 8.1	**14.8	* 4.6	çç21.7	4.1	0.5	1.8	3.0	2.5
Ordinary machinery	1.1	1.8	**10.7	çç23.9	5.3	16.3	4.9	ç21.3	* 6.6	0.5	2.9	2.4	2.4
Electrical machinery	0.3	* 6.3	**16.0	çç37.2	2.4	9.8	* 7.5	çç13.4	1.9	0.6	1.1	1.0	2.7
Transport equipment	0.4	1.2	** 9.3	ç23.7	1.0	**38.8	2.3	çç 6.4	çç11.2	0.2	1.8	1.3	çç 2.3
Total	1.9	4.2	** 9.5	26.5	4.4	*17.3	5.7	çç15.1	6.1	0.6	2.6	ç 2.9	3.4
(1975	2.9	2.9	4.1	28.1	4.2	15.3	4.4	20.6	5.9	0.6	2.2	5.2	3.6)

Source: Census of Manufacturers, 1957, 82

Division of regions as follows:

Kantō Inland-Ibaragi, Tochigi, Gunma, Yamanashi and Nagano Prefectures

Littoral-Tokyo, Kanagawa, Saitama and Chiba Prefectures

Kinki Inland-Shiga, Kyoto, Nara and Wakayama Prefectures

Littoral-Osaka and Hyōgo Prefectures

Kyūshū Northern-Fukuoka Prefecture

** increase by above 5 point in the period 1957-82

* increase by 2-4.9 point in the period 1957-82

ç decrease by 2-4.9 point in the period 1957-82

çç decrease by above 5 point in the period 1957-82

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Table 4. The Number of Head and Branch Offices of 1722 Big Enterprises in the Major Cities in 1980

	H	B		H	B		H	B
Sapporo	18	820	Shizuoka	2	284	Okayama	2	241
Sendai	6	685	Hamamatsu	5	110	Hiroshima	14	656
Chiba	4	244	Nagoya	63	974	Takamatsu	6	346
Tokyo	786	1083	Kyoto	38	229	Matsuyama	3	109
Kawasaki	23	63	Osaka	249	1069	Kitakūshū	9	26
Yokohama	35	343	Sakai	12	66	Fukuoka	20	772
Niigata	8	320	Amagasaki	15	27	Kumamoto	4	122
Kanazawa	9	220	Kōbe	39	282	Kagoshima	2	132

Source: Abe (1984), and *Annual Corporation Reports 1980* (Nihon Keizai Shinbunsha)

H: the number of head offices, B: the number of branch offices

According to the report of Japanese Economic Research Conference (Nihon Keizai Chōsa Kyōgikai), 1984, the main reasons for head offices to be concentrated in Tokyo are the convenience of “proximity to information from business circles and customers”, “contact to the government” and “transactions such as buying & selling”. And it should not be overlooked that “convenience for international transactions” is an important reason for the concentration of head offices in Tokyo. Considering these reasons it may be said that the economic central management functions will be more highly centralized in the Tokyo metropolitan area due to the increase of international trading and the importance of government and business information.

As for branch offices, which are part of central management functions, they are located not only in the two metropolitan areas, but also in Sapporo, Sendai, Nagoya, Hiroshima and Fukuoka, the so-called “regional primates cities” (Abe, 1984). There are quite a few branch offices in Niigata, Shizuoka, Kanazawa, Okayama and Takamatsu which may be called “provincial cities of an intermediate size” (Abe, 1984). As these regional cities are the economic and traffic center of Hakkaidō, Tōhoku, Chūbu, Chūgoku-Shikoku and Kyūshū, respectively, most of big private enterprises have located their branch offices in these cities for the convenience of trading and obtaining information in regions.

From the above, it may be said that the hierarchy of central management functions in big private enterprises has reflected the vertical regional structure of big cities, that is, Tokyo-Osaka-regional cities-provincial cities. As the hierarchy system in central management functions of big private enterprises developed, the population of regional and provincial cities has increased in the period of low economic growth since the late 1970's. This tendency will continue in future.

The distribution of service industries

The third characteristic of the regional structure of the Japanese economy is in the distribution of service industries.

According to Browning and Singlemann's classification, there are four types in the ter-

tiary industry excluding utilities. The first type is a group of distributive services to which transportation and storage, communication, wholesale and retail trade belong. The second type is a group of producer services such as banking and insurance, real estate, engineering and architectural, accounting and bookkeeping, legal services. The industries of the third type are called personal services; that is, eating and drinking places, hotels and lodging places, barber and beauty shops, domestic, repair, entertainment and recreational services. Medical and health, welfare, religious, postal services, education, non-profit organization and government are classified into the fourth type named social services (Gershuny and Miles,

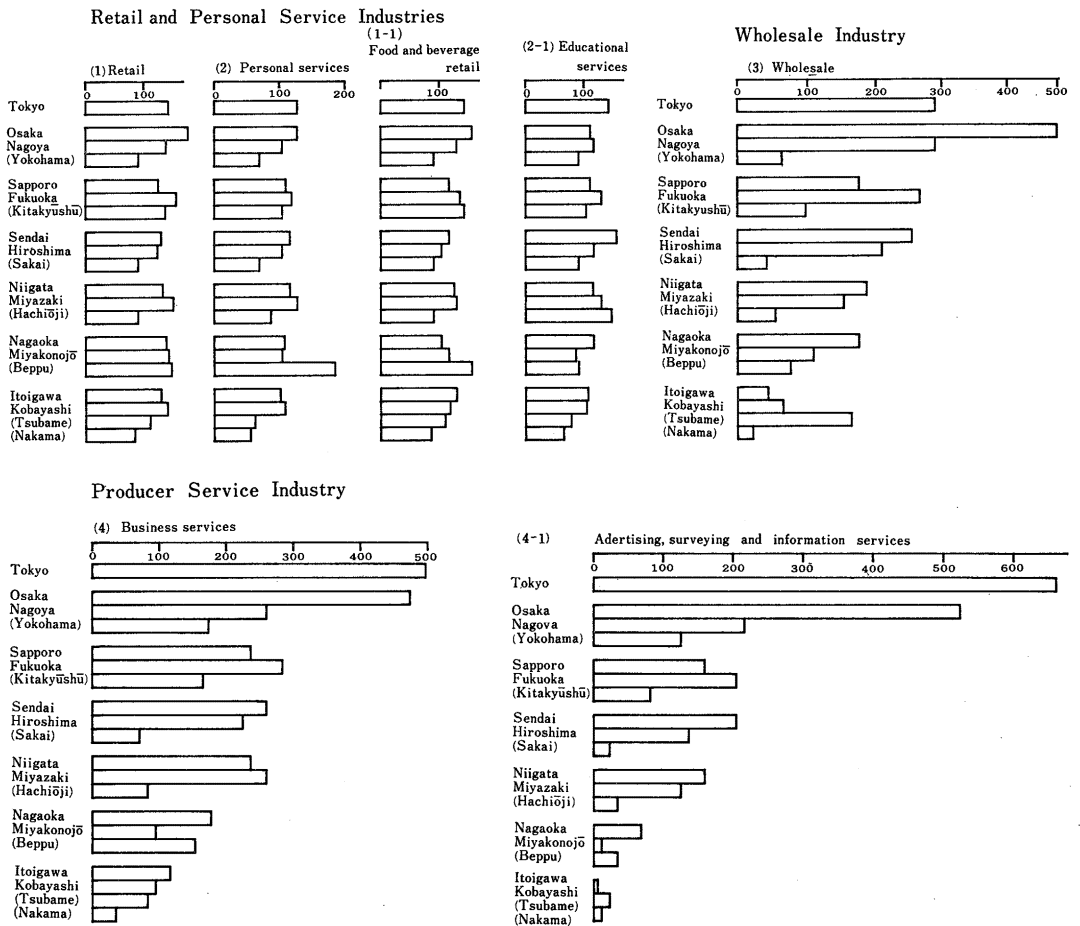


Figure 1. The Distribution of Service Industries in a Hierarchy of Cities

$$K_{ij} = (A_{ij}/P_i \div A_j/P) \times 100$$

K_{ij} : the distribution index of service industries in cities

A_{ij} : the number of workers of j -industry in i -city in 1981

P_i : the population in i -city in 1980

A_j : the number of j -industry in Japan in 1981

P : the population in Japan in 1980

Source: Population Census of Japan, 1980, and Establishment Census of Japan, 1981

1983).

Generally speaking, personal services, social services and retail trade are located dispersedly in proportion to the distribution of population. On the other hand, wholesale trade and producer services are apt to be agglomerated in big cities, particularly in Tokyo, Osaka, regional and provincial cities. This is because they are located in close contact with economic central management functions in these cities (Figure 1).

Since economic central management functions and producer service and wholesale trade industries have been highly agglomerated, they played the role of 'basic industry' in these cities. Personal service, social service, and retail trade industries are considered as 'non-basic industry'. As a result, the tertiary industry has grown and population has increased in these regions recently. On the other hand, in the regions, except the regional and provincial cities, and the Pacific coastal belt, the tertiary industry has not grown because of the depressed state of agriculture and local resource type of manufacturing industries.

3. The disparity between regions and other regional problems

In the regional structure of the Japanese economy, we can find disparities between regions. The disparity between the Pacific coastal belt where heavy and chemical industries have been agglomerated, and other regions where agriculture, forestry, fishery and the local resource type of manufacturing industries have been dominated. It should be understood that this sort of disparity is reflected by the disparity between industries.

But if we examine more closely, we can find other disparities between regions. In the Pacific coastal belt, there is the disparity between the two metropolitan areas, where economic central management functions and many sorts of service industries have been concentrated, and peripheral regions, such as Kantō Inland, Tōkai, Sanyō and Northern Kyūshū, where heavy and chemical industries have been mainly located. It may be said that this has been caused by the transfer of added value from factory districts to head offices in big private enterprises. This is because they pay interest to financial business, rent to real estate business, and advertizing, social, research and development expenses to producer service industries in head offices, while they pay wages to workers in factory districts. It should not be overlooked that the disparity between the Tokyo metropolitan area and the Osaka metropolitan area has grown, as the location for head offices has been more and more highly agglomerated in the capital international city, Tokyo.

In remote regions which are outside the Pacific coastal belt, there has been another disparity between regional, provincial, prefectural cities and rural areas with local small cities. In general, people usually immigrate from rural areas to the former cities because agriculture, forestry and fishery industries have been depressed and the city life style has spread to the countryside. As a result, the number of de-populated villages has steadily increased and the inconvenience of the rural life has become severe. Moreover, there occurred environmental problems because of insufficient care of forests, rivers and farmlands.

As mentioned above, the national economy consists of many sorts of industrial districts and it means the interregional division of labor. However, as Kawashima pointed out, "this

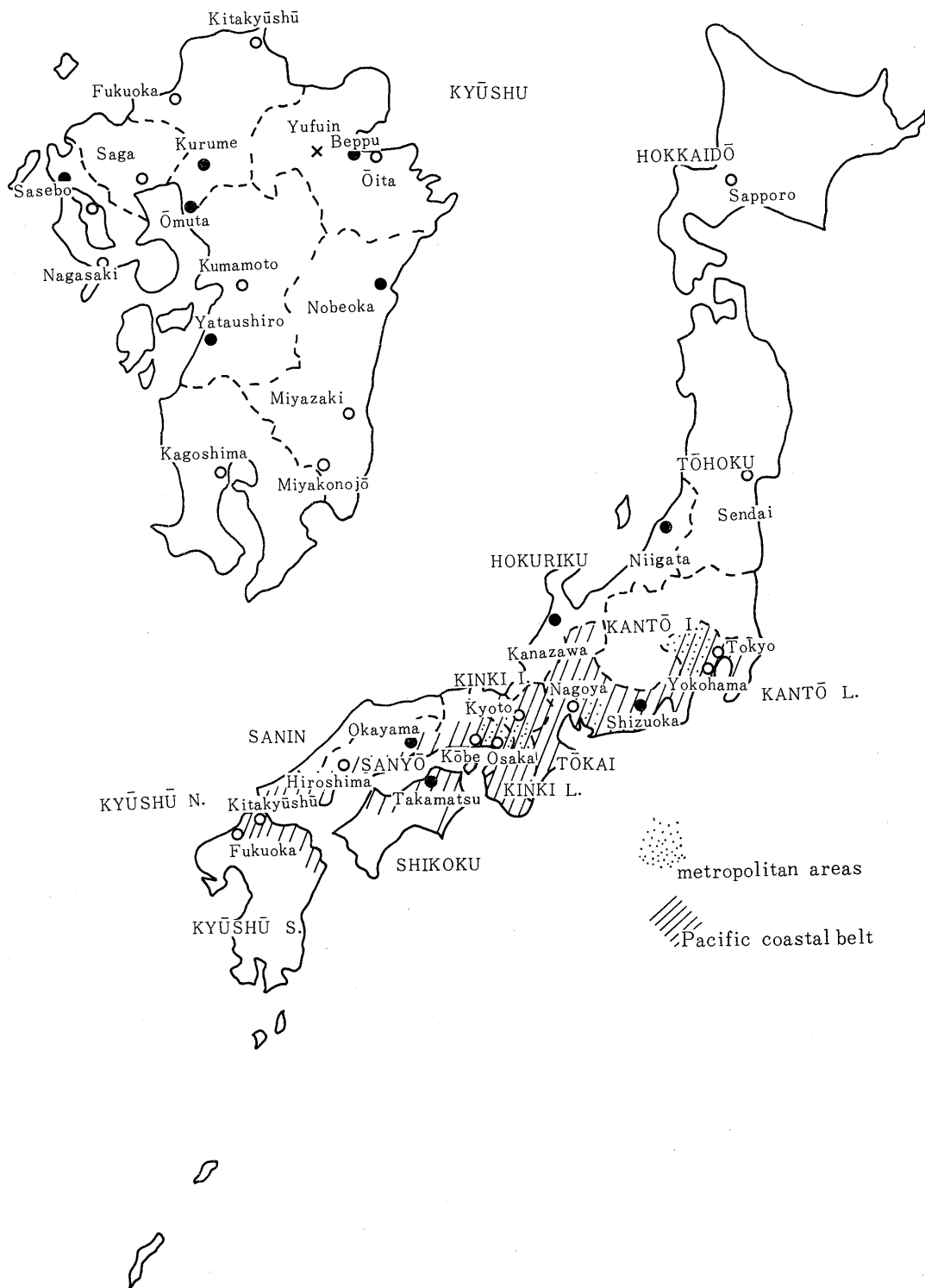


Figure 2. Japan, Regions and Big Cities

does not mean that the economy of Japan consists of a single-layered spatial pattern", but "it may be said that the economy of Japan is multi-layered, with each 'layer' formed of smaller and smaller economic regional units" (Kawashima, 1980). In each region, which is a part of "multilayered" regional structure, there is to some extent a circulation of goods and service, capital and income, and a "nucleus-city" with economic central management functions in response to 'the layer'. Tokyo (the capital of Japan), Osaka (the western center of Japan), regional cities, provincial cities, prefectural capitals and local cities are "nucleus cities" of regions in layers.

As the hierarchy of economic and governmental central management functions has reflected the vertical relation between "nucleus cities", regions in layers have also been organized vertically. This means that there has been very strong centralization of "decision-making, management and control in the case of the economy and government", and "the quantitative and qualitative concentration of facilities and activities in the case of society and culture" (Kawashima, 1980). On the other hand, the interdependence of decision-making, management and control in economic activities of regions has been loosing. Probably, this is the most important regional problem.

III. THE REGIONAL ECONOMY OF KYŪSHŪ

1. Characteristics of the industrial structure in Kyūshū

Kyūshū island is located in the southwest of Japan and consists of seven prefectures, Fukuoka, Saga, Nagasaki, Ōita, Kumamoto, Miyazaki and Kagoshima prefectures. Population is about 13.3 million, which is 10.8% of the entire country in 1985. Kyūshū produced about 9.1% of the gross national product of Japan in 1983. Therefore, Kyūshū holds about 10% of the Japanese economy.

As for the industrial structure of Kyūshū, the ratio of workers in primary industry in 1980 was 18%, 1.6 times higher than that of the national economy. The ratio of the tertiary industry was about 56%, the same level to that of the entire country. The ratio of the secondary industry, however, was only 26%, while that of Japan showed 34%. Above all, it may be said that the secondary industry, particularly the manufacturing industry, developed insufficiently when compared to the national economy. This is because most of the area in Kyūshū have specialized in agriculture, forestry and fishery, though the northern Kyūshū is a highly industrialized and urbanized district as the west end of the Pacific coastal belt in Japan.

Examining the manufacturing industries closely, it becomes clear that local resource industries such as food, timber, pulp and paper, ceramic have developed sufficiently in Kyūshū. Many industries of the basic resource type; that is, iron and steel, chemicals and non-ferrous metals have been located so abundantly in Kyūshū that it is well known as the specialized district of these industries in Japan.

On the contrary, most of machinery industries, excluding shipbuilding and semiconductors, have been underdeveloped when compared to Kantō (Inland and Littoral), Tōkai and

Table 5. The Indices of Production by Industry in Kyūshū in 1980

	①	②	③	④	⑤ %	⑥
billion yen						
Agriculture	2,768	626	958	2,436	74.3	1.53
Food	2,969	920	843	3,046	69.8	0.92
Timber	839	221	242	818	73.0	1.10
Pulp & Paper	457	204	128	532	61.8	0.63
Printing	320	182	28	474	61.6	0.15
Ceramic	1,239	193	395	1,038	81.3	2.05
Metals	3,962	858	1,786	3,026	71.9	2.08
Mining	405	841	137	1,111	24.1	0.16
Petroleum	777	1,565	170	2,172	27.9	0.11
Chemicals	1,225	1,094	738	1,581	30.8	0.67
Metal products	583	517	239	860	39.9	0.46
Ordinary m.	1,014	926	524	1,416	34.6	0.57
Electrical m.	745	987	481	1,251	21.1	0.49
Transport m.	1,246	920	677	1,489	38.2	0.74
Precision m.	39	155	7	187	17.1	0.05
Construction	5,853	—	—	5,853	100.0	—
Electricity	1,371	—	18	1,354	99.9	—
Tertiary	20,622	1,725	1,526	20,820	91.7	0.88
Total	47,628	13,295	9,622	51,293	74.1	0.72

① ; production in Kyūshū, ② ; inflow from other regions

③ ; outflow to other regions, ④ ; demand in Kyūshū

⑤ ; ratio of self sufficiency in Kyūshū = $(① - ③) \div ④$

⑥ ; ratio of outflow to inflow = $③ \div ②$

Source: Inter-industry Relations Table between Regions, 1980

Kinki Littoral industrial districts (Table 3). As mentioned earlier, machinery industries have strong influence on the economic development of a region because of their very rapid growth and high regional agglomeration. Thus the underdevelopment of machinery industries has been an important weakpoint in the economy of Kyūshū, and it has been the main reason for the slow development of the Kyūshū economy when compared to other three major regions, Kantō, Tōkai and Kinki since 1960's.

It may be said that this weakpoint is the most important regional problem in Kyūshū. As for the semiconductor industry, the production of the integrated circuit (IC) started from the late 1960's in Kyūshū and reached 545 billion yen in 1985, which was about 30% of the entire country and the same level as the production of shipbuilding or cement industry in Kyūshū. The semiconductor industry, however, is not expected to be 'a locomotive role' of the Kyūshū economy. The reason is that this industry does not employ many workers and it is not link with many parts makers. In addition, the current tendency of the industry is to shift the location from Kyūshū to Tōhoku as a result of the completion of Tōhoku Expressway and Tōhoku Shinkansen (Bullet Train).

The agglomeration of service industries in few cities

As compared to Tōhoku, including the Niigata prefecture, Kyūshū is more highly urbanized. While in the former region where the population was about 12.7 millions in 1985, there is only one big city, Sendai, with a population of 700,000. In Kyūshū, where the population is 13.3 million, there are two cities, Fukuoka and Kitakyūshū, with population over one million, and two cities Kumamoto and Kagoshima with population 500,000.

Since most of service industries are predominantly located in urban areas, the existence of these big cities in Kyūshū means, quite naturally, that service industries have been considerably developed in Kyūshū and highly agglomerated in these cities.

We may think a group of cities in Kyūshū as constituting a system. The system forms a hierarchy reflected by that of governmental and economic management functions and various commercial activities. Fukuoka has been at the apex of the Kyūshū hierarchy where many branch offices and several head offices of large corporations are located. Also, most of wholesalers and producer service industries for the southwest area of Japan; that is, Kyūshū, Okinawa, and the western part of the Chūgoku-Shikoku region are agglomerated. As a result, Fukuoka city has rapidly grown since the early 1970's and is forming a metropolitan area by combining with another million population city, Kitakyūshū. It may be said that this is the fourth metropolitan area following Tokyo, Osaka, Nagoya. If we name it "the Seinan (south-west) metropolitan area", we can find the *T. O. N. S.* megalopolis in the Pacific coastal belt in Japan.

Four leading cities, Kumamoto, Kagoshima, Nagasaki and Ōita, are management and commercial centers of the middle, the south, the west and the east of Kyūshū, respectively. Eight cities of 100,000-200,000 population, Miyazaki, Sasebo, Kurume, Saga, Ōmuta, Beppu, Nobeoka, Miyakonojō and Yatsushiro follow these leading cities, and a group of local small cities is near the bottom of the hierarchy where retail and service activities serve people in these cities and their surrounding towns or villages.

Wheeler and Muller states that due to the high demand growth and low productivity of the tertiary industry, "it has become the single largest employer of the economic sectors (ahead of primary and secondary) in the industrialized countries of the world" (1986). We can find this movement in Japan, too.

Considering the rapid development of service industries in Kyūshū, it may be very advantageous to the region. Thus to further develop the Kyūshū economy, it is necessary to prosper the service industries greatly.

The movement for promoting the industrial development in rural areas

Agriculture and forestry industries in Kyūshū have been depressed through the large import of grain, fruit and wood, also construction and social service industries have been depressed by decreasing of the public investment and expenditure which has been brought about by the financial trouble of the Japanese government. These industries are distributed so dispersedly all over the country that they have supported economies of rural areas. Therefore, most of villages, towns and small local cities in Kyūshū are troubled with the severe

economic depression.

People in these regions, however, have been endeavoured to revive regional economies by refreshing agriculture, forestry and the local resource manufacturing industry. In this case, the major method has been to develop a profitable special production in each village, by the campaign "one speciality in one village" (1-sson 1-pin). In several villages and towns for instance Ōyama village and Yufuin town in Ōita prefecture, people have managed to revive their regional economies by the assistance of local governments. But most of villages and towns have not yet succeeded in refreshing industries and escaping the economic depression.

IV. CONCLUSION

High-tech machinery industries (for example, manufactures of equipment for factory or office automation and communication) will grow rapidly and take 'a locomotive role' in the Japanese industrial structure. Service industries, particularly producer service industries, will grow with high speed too. Therefore, the Japanese economy will be more regionally centralized since these growing industries are located in the three metropolitan areas, particularly in the Tokyo metropolitan area.

It is necessary for solving regional problems that the highly centralized regional structure should be restricted and the well balanced regional structure should be constructed. As outlined above, it is clear that there are three main strategies.

Firstly, machinery industries should be induced to be located outside the three metropolitan areas for the sake of developing remote regions. This is because these industries are expected to have enormous influence on regional economies by employing many workers and linking with many parts makers.

Secondly, it is urgent that a part of the governmental and economic central management function and producer service industries should be decentralized from the Tokyo metropolitan area to regional cities and provincial cities. If this is realized, they will be play the important role in developing service industries in these cities; and consequently, make Sapporo, Sendai, Hiroshima and Fukuoka the growth pole in Hokkaidō, Tōhoku, Chūgoku-Shikoku and Kyūshū, respectively, in the period of service industrialization. It is suitable that other service industries such as distributive, personal and social service industries are dispersed to prefectural and local cities.

Thirdly, important strategies for the economic revival of rural areas are to increase productivity of agriculture, forestry and local manufacturing industries; to produce various sorts of specialities; to develop sightseeing or recreational industries. In other words, the movement for promoting the industrial development in rural areas, the so-called 'regionalism', should be strongly assisted by national and local governments.

As Kawashima pointed out (1980). "the regional policy of Japan during the period of high economic growth rate was a through industrial policy". The first (1962) and the second (1969) Comprehensive National Plan made important contributions to the high economic

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growth by improving the infrastructure in major existing industrial districts; constructing new industrial districts in their outskirts; and providing the transport and communication network throughout the country. Therefore, the Japanese regional policy has contributed to form a highly centralized regional structure and make regional problems severe. Only the third Comprehensive National Plan (1977) was aimed to revive rural areas by promoting settlement of people in villages or small local cities. Thus it may be said that it has been a welfare policy, but it has sufficiently succeeded in people's settlement in rural areas by reason that it has failed in developing industries to employ many people. In this spring the fourth Comprehensive National Plan will be introduced. It is expected that it will propose three main strategies mentioned above.

As for Kyūshū, it is important to develop the regional economy that machinery industries should be grown linking with the agglomeration of the IC industry; and that many types of service industries should be promoted in "the Seinan metropolitan area", provincial cities Kumamoto, Kagoshima, other four prefectural cities (Nagasaki, Ōita, Miyazaki, and Saga), and local cities by the fourth Comprehensive National Plan. Further, it should not be overlooked that the movement for promoting the industrial development in rural areas should be assisted by this policy.

Notes

1) This paper was reported in the International Conference on Comparative Regional Studies that were held at Tōhoku University, Sendai, September 1986.

I had the good fortune to take advice from Mr. Roy. S. Hanashiro, University of Hawaii.

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