# Change in the Spatial System of Wholesaling in Japan

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**Abstract** The concentration of economic powers in Tokyo at the national level after World War II has been pointed out. In wholesaling, concentration in Tokyo was a phenomenon seen mainly in the 1960s. After that peiod decentralization of the wholesaling of consumer goods emerged. On the other hand, the concentration of wholesaling into provincial centers was seen at the regional level. The main cause was the concentrated agglomeration of sales branches with territories covering around regions. However, the concentration at the regional level slowed down after the end of the postwar rapid economic growth. Moreover, many prefectural centers raised their prefectural shares of wholesaling in the 1960s through the agglomeration of sales branches with territories covering around prefectures. The number of prefectural centers which have dropped their prefectural shares by the suburbanization of wholesaling and the stagnation of local economy has increased since the 1970s.

**Key words**: Japan, wholesaling, sales branch, Tokyo, Osaka, Nagoya, provincial centers, prefectural centers

## 1 Introduction

The spatial structure of wholesaling and changes in wholesaling after World War II in Japan have been examined, especially in relation to the national urban system, as the Japanese wholesaling system is spatially organized to correspond to the hierarchy of cities (Kuwajima 1981; Hayashi & Hino 1988; Nishihara 1994).

Some interesting features of the Japanese wholesaling system were pointed out by previous studies. For example, the present dominance of Tokyo as the national wholesale trade center came into being after the early 1960s with the rapid growth of the Japanese economy (Hayashi & Hino 1988; Hino 1989). Before that, Osaka, the second largest metropolis in Japan, had the same position in wholesale trade as Tokyo. The country was divided into two market areas for Tokyo and Osaka, covering eastern Japan and western Japan, respectively. This spatial composition was referred to as the bipolar structure of the Japanese spatial economy (Tsuji 1966).

Meanwhile, four provincial centers, Sapporo, Sendai, Hiroshima and Fukuoka, established the status of prominent wholesale trade centers within their respective

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regions ; Hokkaido region, Tohoku region, Chugoku region and Kyushu region (Yoshida 1972 ; Hasegawa 1974 ; Morikawa 1977 ; Hino 1978 ; Hayashi & Hino 1988). These cities gained a higher ranking position in the national wholesaling system over the three sub-centers in the Tokyo and Osaka metropolitan areas ; Yokohama, Kyoto and Kobe. The concentrated agglomeration of sales outlets operated by large manufacturers and wholesalers was pointed out as the main reason for the growth of provincial centers.

In this way, remarkable changes in the location of wholesaling occurred during the period of rapid economic growth. However, it has not been fully examined whether or not these changes continued after the end of the period of rapid growth in the Japanese economy brought on by the oil shock (Hino 1989). Previous studies focused mainly on changes at the national and regional levels, and thus, changes in the location of wholesaling at the prefectural level have not yet been sufficiently examined (Hino 1989).

This study examines changes over time in the concentration of wholesaling in the primary centers at the national, regional and prefectural levels. The time period examined is the 31 years from 1960, the early time of the rapid economic growth, to 1991, the year of most recent available Census of Commerce.

This paper is divided into four sections. The first examines the changes in the national share of wholesaling for the three largest metropolises, Tokyo, Osaka and Nagoya. The time in which Tokyo so remarkably raised its status to become the national wholesaling center, the recent changes in Tokyo's status, and the causal factors behind the above two changes will be examined. The second deals with the rapid growth of four provincial centers as regional wholesaling centers and their recent developments. The fact that a large part of the wholesaling establishments consists of the sales branches of manufacturers and wholesalers in provincial centers will be shown. The third deals with the changes in the prefectural centers' shares of the total wholesaling within the prefectures. The concentration of wholesaling within prefectures will be tested there. Finally, the findings are summarized from a point of view of spatial articulation of wholesaling.

## 2 Changes in national shares of the three largest metropolises

### 2.1. Concentration of wholesaling in Tokyo during the period of rapid growth of Japanese economy

Table 1 shows the changes in total national wholesaling shares of the three largest metropolises, Tokyo, Osaka and Nagoya. In 1960, Tokyo and Osaka each had an equal 27 percent of the national wholesale total. During the 1960s the national share of Tokyo steadily increased, thus reaching 36 percent in 1970. In the same year,

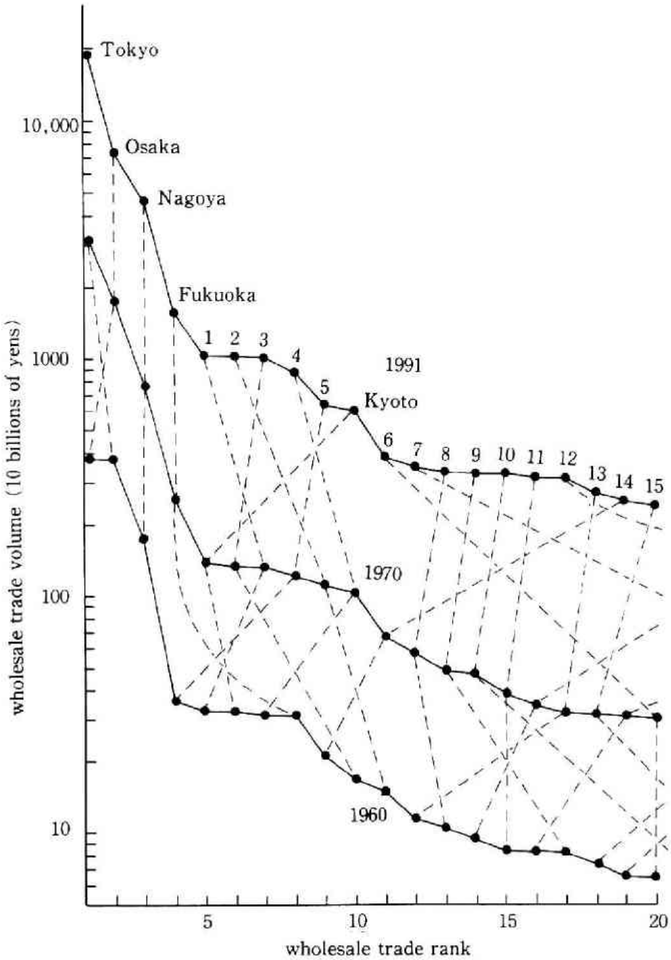


Fig. 1 Rank and size of the top twenty wholesale trade centers in Japan.
Source: The Japanese Commercial Census, 1960, 1970 and 1991.
1 Sapporo, 2 Sendai, 3 Hiroshima, 4 Yokohama, 5 Kobe, 6 Shizuoka, 7 Chiba, 8 Kanazawa, 9 Niigata, 10 Takamatsu, 11 Okayama, 12 Omiya, 13 Hamamatsu, 14 Kitakyushu, 15 Kumamoto.

Osaka, on the other hand, sharply decreased to a mere 14 percent (Fig. 1).

The above disparity between Tokyo and Osaka during the 1960s was tied closely to changes in the national industrial structure. The heavy-chemical industry had grown rapidly after the late 1950s. This lead to a remarkable growth in the wholesaling of machinery and equipment, and minerals and metals. As a result, in 1970, the above wholesalings had the largest ratios in the total composition of wholesaling by

Table 1 National wholesaling shares

| Period | All whole-saling | Consumer goods | | | | | |
|---|---|---|---|---|---|---|---|
| | | Apprl. | Agr. | Food | Drugs | Furn. | Misc. |
| Tokyo | | | | | | | |
| 1960 | 27.1 | 29.9 | 24.0 | 24.5 | 26.6 | 25.1 | 36.7 |
| 1970 | 35.5 | 34.5 | 28.0 | 25.7 | 30.5 | 29.8 | 44.8 |
| 1982 | 37.3 | 32.5 | 25.0 | 25.5 | 20.6 | 19.5 | 44.3 |
| 1991 | 34.0 | 34.5 | 23.6 | 23.0 | 17.2 | 22.2 | 37.1 |
| Osaka | | | | | | | |
| 1960 | 27.2 | 32.0 | 12.7 | 14.7 | 17.4 | 14.8 | 25.8 |
| 1970 | 20.1 | 23.9 | 10.7 | 13.3 | 13.6 | 15.4 | 17.8 |
| 1982 | 14.0 | 24.3 | 7.6 | 9.8 | 10.4 | 13.0 | 13.8 |
| 1991 | 13.1 | 24.4 | 8.1 | 8.0 | 8.4 | 12.5 | 13.1 |
| Nagoya | | | | | | | |
| 1960 | 9.7 | 7.0 | 4.1 | 6.8 | 7.2 | 14.5 | 7.0 |
| 1970 | 9.0 | 8.4 | 5.1 | 7.5 | 6.6 | 11.8 | 7.7 |
| 1982 | 7.3 | 6.9 | 4.7 | 5.7 | 6.1 | 7.9 | 6.5 |
| 1991 | 8.3 | 6.8 | 4.5 | 5.8 | 6.6 | 6.5 | 7.9 |

Apprl.: apparel and accessory, Agr.: agricultural and aquatic products, Food: household furnishings, Misc.: miscellaneous wholesalers, Text.: textile products, machinery and equipment, Bld.: building materials, Recy.: recycled materials.
Source: The Japanese Commercial Census, 1960, 1970, 1982 and 1991.

Table 2 Changes in the composition

| Period | All whole-saling | Consumer goods | | | | | |
|---|---|---|---|---|---|---|---|
| | | Apprl. | Agr. | Food | Drugs | Furn. | Misc. |
| 1960 | 100 | 5.2 | 8.3 | 10.9 | 2.3 | 1.4 | 9.8 |
| 1970 | 100 | 5.2 | 9.8 | 9.1 | 3.1 | 1.6 | 8.6 |
| 1982 | 100 | 4.1 | 11.0 | 9.5 | 2.9 | 2.0 | 9.2 |
| 1991 | 100 | 4.4 | 10.1 | 9.4 | 3.5 | 2.1 | 9.3 |

The legends and sources are the same as those for Table 1.

of the three largest metropolises

Unit : %

| Industrial goods | | | | | |
|---|---|---|---|---|---|
| Text. | Chem. | Minrl. | Mchn. | Bld. | Recy. |
| 13.0 | 37.0 | 31.9 | 31.1 | 27.3 | 34.5 |
| 15.0 | 42.3 | 49.3 | 37.8 | 26.8 | 33.8 |
| 15.9 | 46.0 | 53.0 | 39.9 | 23.8 | 24.3 |
| 19.0 | 49.2 | 52.4 | 33.7 | 22.4 | 21.9 |
| 47.2 | 34.4 | 31.0 | 20.1 | 16.2 | 18.3 |
| 45.4 | 30.4 | 21.3 | 16.4 | 15.4 | 16.5 |
| 44.2 | 25.0 | 12.6 | 12.0 | 9.7 | 12.6 |
| 45.8 | 20.8 | 12.4 | 11.0 | 9.7 | 14.3 |
| 15.3 | 8.1 | 8.8 | 12.5 | 9.7 | 7.3 |
| 10.9 | 9.8 | 7.8 | 12.3 | 8.7 | 4.8 |
| 8.0 | 7.9 | 6.9 | 10.5 | 6.2 | 6.7 |
| 8.1 | 8.1 | 7.5 | 12.5 | 8.3 | 6.8 |

food and beverages, Drugs : drugs and toiletries, Furn. : furnituer and
Chem. : chemical products, Minrl. : minerals and metals, Mchn. :

of wholesaling

Unit : %

| Industrial goods | | | | | |
|---|---|---|---|---|---|
| Text. | Chem. | Minrl. | Mchn. | Bld. | Recy. |
| 18.0 | 5.9 | 17.8 | 16.2 | 4.7 | 1.2 |
| 9.0 | 5.0 | 19.0 | 22.5 | 6.4 | 0.8 |
| 4.1 | 5.7 | 23.2 | 21.3 | 6.2 | 0.6 |
| 3.2 | 6.3 | 17.0 | 27.3 | 6.9 | 0.5 |

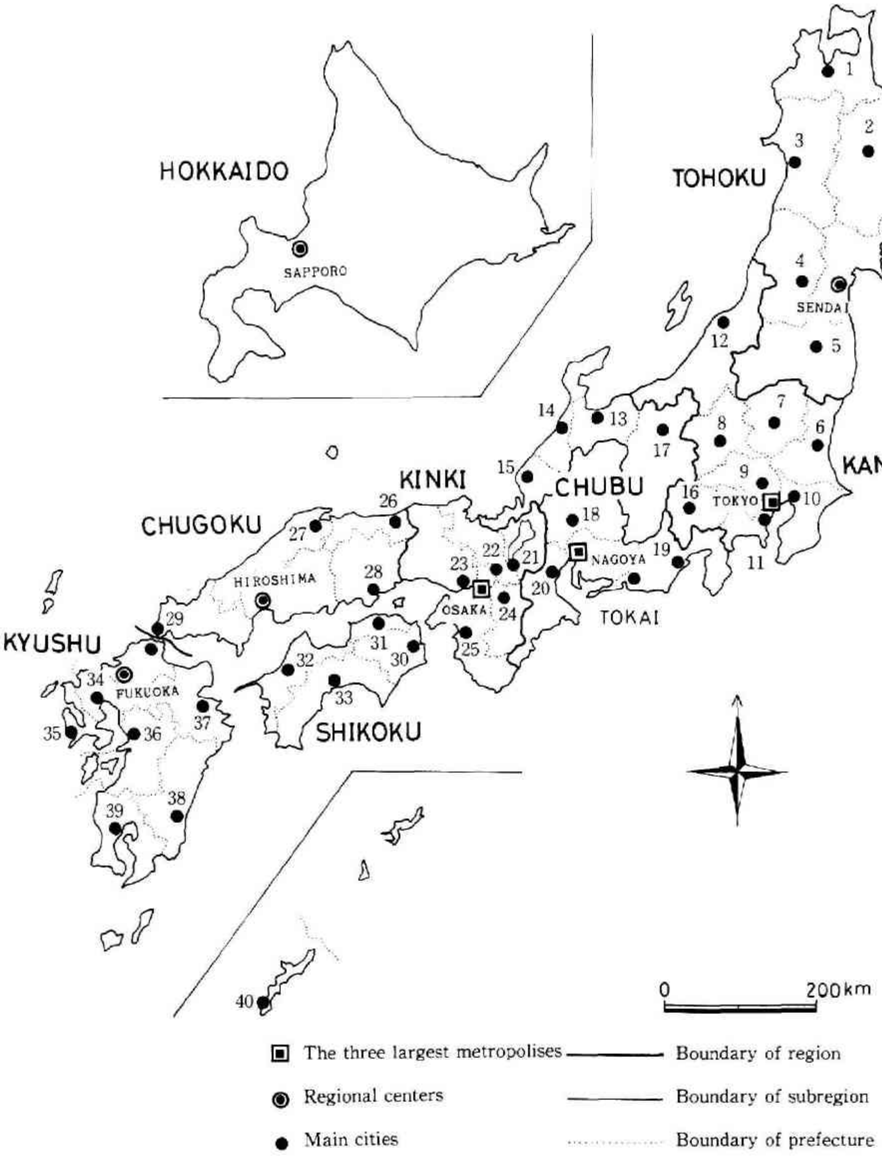


Fig. 2 Locations of major cities in Japan.

Note: The numbers in the figure correspond to those in Table 9.

industry (Table 2). As Tokyo was the wholesale trade center for heavy-chemical products, the above structural change in the composition of wholesaling brought on an increase in Tokyo's share of the national wholesale trade. In particular, the big trading companies (*Sogo shosha*), which had a large market share in the trade of minerals, metals, machinery and equipment played a major role in raising the status of Tokyo (Taguchi 1980).

Meanwhile, Osaka was the prominent national trade center for textile products. In 1960, about 31 percent of Osaka wholesaling consisted of sales of textile products excluding apparel. Therefore, the relative decline in textile product wholesaling resulted in the decrease of Osaka's share in the national wholesale total.

A similar phenomenon was seen for Nagoya, the third ranked wholesale trade center after Osaka. Tokai district, with Nagoya as its central city (Fig. 2), was the largest production area of textiles in Japan.[1] Thus, Nagoya had a relatively large national share in the wholesaling of textile products (Table 1). For this reason, just as in Osaka's case, Nagoya dropped its national share due to the relative decline in the wholesaling of textile products.

### 2.2. Limitation of concentration in Tokyo after the 1970s

With the 1970s the rise of Tokyo's national share in wholesaling had slowed down, thus the share remained at 37 percent in 1982 (Table 1). Compared with its share in 1970 it increased by less than two percent. Furthermore, it was only in the wholesaling of heavy-chemical products that Tokyo's national share continued to rise for the 1970s. Meanwhile Tokyo's share of the national total of consumer products wholesaling decreased for the same period.

As for the rise of Tokyo's share of the wholesaling of heavy-chemical products and raw materials, the big trading companies played a major role as we mentioned before. Table 3 shows the Tokyo and Osaka shares of general merchandise into

Table 3. Tokyo and Osaka shares of general merchandise

Unit : %

| Period | Ratio in the whole country | Tokyo | | Osaka | |
|---|---|---|---|---|---|
| | | Ratio | Share | Ratio | Share |
| 1970 | 16.7 | 28.4 | 61.8 | 22.5 | 28.3 |
| 1982 | 19.0 | 39.7 | 78.9 | 18.8 | 15.5 |
| 1991 | 17.2 | 40.5 | 79.9 | 16.6 | 12.5 |

Ratio : ratio of general merchandise sales to the total wholesales, Share : the national share of the trade in general merchandise, Source : the Japanese Commercial Census, 1970, 1982 and 1991. The data concerning with general merchandise have been available after 1970.

which the big trading companies are classified. Between 1970 and 1982 Tokyo's share of the trade in general merchandise increased from 62 percent in 1970 to 79 percent in 1982. Coupled with this was an increase in the ratio of general merchandise sales within the wholesales total for Tokyo ; from 28 percent in 1970 to 40 percent in 1982 (Table 3). These trends must have been visible in the 1960s, although unfortunately there is no official data to verify that.[2] According to Abe's study (1984), the number of employees in the Tokyo offices of nine major trading companies increased more than that of Osaka offices in the 1960s. Furthermore, over the same period, big trading companies based in Osaka began to shift some of their headquarters functions to Tokyo. As a result, except for one company, all the other companies had already registered more employees in Tokyo offices in 1970.

However, the degree of concentration of big trading companies' sales in Tokyo has remained the same as in the 1980s. For example, Tokyo's national share of general merchandise was 79 percent in 1982 and remained at 80 percent in 1991. The slight decrease of Tokyo's national share in the wholesaling of heavy-chemical products for the 1980s is closely tied to the stagnation of general merchandise.

Moreover, the suburbanization of wholesaling in the Tokyo metropolitan area has continued. This is another cause of the stagnation of Tokyo's national share. The limitation of the concentration of general merchandise in Tokyo and the suburbanization of wholesaling are not likely to be reversed. In that sense, a renewed increase of Tokyo's national share of wholesaling should not be expected in the future.

On the other hand, Osaka's share of total national wholesaling remained the same as in the 1980s, although some of the slight decrease was due to the suburbanization of wholesaling. Osaka City's share of total Osaka Prefecture wholesaling decreased from 89 percent in 1982 to 86 percent in 1991. Therefore the relative decline of Osaka' s wholesaling at the national level was thought to cease in the 1980s.

Nagoya also decreased its share of national wholesaling in the 1970s. However Nagoya's decrease was relatively small. It could be attributed to the growth of the machinery industry, especially the automobile industry in the Tokai district.[3] Toyota City, in which Toyota Motor Corporation is based, is located near to Nagoya. Moreover, Nagoya's share in the national wholesaling total increased by one percent between 1982 and 1991. This reflects the growth of industries centered on the automobile industry in the region.

## 3 Growth of provincial centers as regional wholesale trade centers

### 3.1. Rapid growth of four provincial centers and differences among them

It was pointed out in the introduction of this pepar that the four provincial centers, Sapporo, Sendai, Hiroshima and Fukuoka, established themselves as regional wholesale trade centers. The ranking of these cities in wholesaling at the national level also increased to become superior to those of Yokohama, Kyoto and Kobe (Fig. 1).

Table 4 shows the respective regional shares for the four provincial centers of wholesaling within the respective regions, Hokkaido, Tohoku, Chugoku and Kyushu. From the statistics in the table it can be seen that the four provincial centers raised their statuses as regional wholesale centers mainly in the postwar period of rapid economic growth. In particular, the rise of the regional shares of Fukuoka and Hiroshima was marked in the 1960s; these increased from 34 percent and 28 percent respectively, in 1960, to 49 percent and 42 percent in 1970. However the increase of the regional shares of Sapporo and Sendai was only about 6 percent for the same period.

Since the 1970s the regional shares of Fukuoka and Hiroshima have slightly decreased or remained at the same level as in 1970. On the contrary, those of Sapporo and Sendai have continued to increase although the degree of increase has gradually become smaller as time passes. As for the differences between the former and the latter cities, several causal factors seem to be involved: local economy in provincial centers, changes in industrial structure and the growth of other cities within their regions.

### 3.2. Agglomeration of sales branches in provincial centers

The concentrated agglomeration of the sales branches of large manufacturers and wholesalers has been pointed out as the main reason for the rapid growth of provincial centers as regional wholesale trade centers. According to the 1991 Establishment Census the number of employees engaged in sales branches classified as wholesaling in the four provincial centers were as follows; 80, 494 persons in Fukuoka, 48, 478 persons in Sendai, 45, 776 persons in Sapporo and 36, 157 persons in Hiroshima (Table 5). The ratios of the above to the total of employees in wholesaling were 58 percent in Fukuoka, 50 percent in Sendai, 43 percent in Sapporo and 44 percent in Hiroshima. That is, the number of emplyees involved in the agglomeration of wholesale branches was about a half of all workers involved in wholesaling in the provincial centers. Moreover, according to the investigatory reports on wholesalers in Sendai issued by the Sendai Chamber of Commerce (1984), the sales of wholesaling branches were larger than those of local wholesalers. Therefore the market share of the branches of the total amount of wholesaling must be larger than the above employee number ratio would indicate.

Also, in the case of Sendai branches, data can be presented concerning the opening years of branches and their territories. Most of the wholesale branches were established after World War II (Table 6). Only one percent of the total number of the branches had been established before the end of the War. From the late 1950s to the early 1970s, the period of rapid economic growth, the number of branches increased

Table 4 Regional shares of the four

| City Period | All Woholesaling | Consumer goods | | | | | |
|---|---|---|---|---|---|---|---|
| | | Apprl. | Agr. | Food | Drugs | Furn. | Misc. |
| Sapporo | | | | | | | |
| 1960 | 46.7 | 30.2 | 35.1 | 40.7 | 54.9 | 27.0 | 59.7 |
| 1970 | 52.0 | 55.2 | 28.0 | 40.9 | 57.1 | 56.5 | 60.4 |
| 1982 | 59.4 | 69.2 | 37.7 | 56.3 | 61.4 | 59.5 | 64.7 |
| 1991 | 60.1 | 78.5 | 40.7 | 56.0 | 62.3 | 68.1 | 64.2 |
| Sendai | | | | | | | |
| 1960 | 28.2 | 25.6 | 12.2 | 22.9 | 22.9 | 16.6 | 23.4 |
| 1970 | 34.2 | 30.9 | 16.8 | 31.7 | 38.1 | 41.0 | 32.3 |
| 1982 | 38.4 | 38.0 | 17.5 | 34.2 | 34.9 | 39.8 | 38.2 |
| 1991 | 40.8 | 40.1 | 18.6 | 36.6 | 44.0 | 38.6 | 41.2 |
| Hiroshima | | | | | | | |
| 1960 | 28.1 | 35.8 | 14.7 | 21.8 | 29.3 | 24.6 | 23.8 |
| 1970 | 41.9 | 42.4 | 20.6 | 34.8 | 45.3 | 35.9 | 41.8 |
| 1982 | 41.8 | 37.8 | 20.5 | 37.2 | 39.9 | 41.4 | 43.2 |
| 1991 | 44.8 | 26.3 | 22.0 | 37.6 | 40.3 | 43.5 | 57.4 |
| Fukuoka | | | | | | | |
| 1960 | 34.0 | 32.8 | 16.3 | 27.1 | 39.7 | 25.0 | 38.4 |
| 1970 | 51.2 | 46.4 | 43.2 | 44.4 | 44.5 | 37.1 | 60.8 |
| 1982 | 48.6 | 64.1 | 29.7 | 41.4 | 41.0 | 35.5 | 55.7 |
| 1991 | 45.7 | 66.6 | 24.6 | 41.9 | 35.9 | 38.8 | 51.0 |

The legends and sources are the same as those for Table 1.

Table 5 Agglomeration of sales branches in provincial centers in 1991

| City | Total employees in wholesaling | Employees in sales branches | Ratio of sales branch |
|---|---|---|---|
| Sapporo | 107,831 | 45,776 | 42.5% |
| Sendai | 83,584 | 48,478 | 58.0% |
| Hiroshima | 81,881 | 36,157 | 44.2% |
| Fukuoka | 138,799 | 80,494 | 58.0% |

Source: The 1991 Establishment Census of Japan.

provincial centers in wholesaling

Unit : %

| Industrial goods | | | | | |
|---|---|---|---|---|---|
| Text. | Chem. | Minrl. | Mchn. | Bld. | Recy. |
| 27.5 | 64.1 | 51.1 | 64.2 | 40.5 | 25.0 |
| 68.6 | 70.6 | 68.0 | 60.5 | 53.8 | 34.1 |
| 79.0 | 74.6 | 76.0 | 62.5 | 55.0 | 50.6 |
| 73.3 | 72.7 | 72.4 | 66.2 | 59.1 | 50.6 |
| 15.9 | 28.1 | 35.1 | 47.2 | 30.9 | 19.1 |
| 11.3 | 46.7 | 51.6 | 47.9 | 36.9 | 11.9 |
| 16.9 | 49.7 | 62.8 | 45.8 | 34.6 | 15.2 |
| 39.2 | 56.7 | 64.1 | 48.2 | 40.7 | 14.6 |
| 19.2 | 31.2 | 30.5 | 43.4 | 26.2 | 19.4 |
| 17.1 | 41.0 | 59.0 | 46.6 | 40.3 | 12.7 |
| 15.1 | 43.5 | 52.8 | 49.6 | 38.8 | 16.6 |
| 13.7 | 47.5 | 58.1 | 53.1 | 36.3 | 16.7 |
| 37.4 | 46.9 | 32.8 | 49.1 | 22.7 | 9.3 |
| 54.8 | 65.0 | 63.3 | 53.1 | 41.5 | 13.6 |
| 37.9 | 62.0 | 64.4 | 51.6 | 40.0 | 36.5 |
| 47.2 | 60.5 | 62.5 | 51.1 | 39.2 | 17.9 |

Table 6 Opening years of sales branches in Sendai in 1990

| Opening year | Num. of sales br. | Ratio (%) |
|---|---|---|
| ～1994 | 30 | 1.1 |
| 1945～1954 | 124 | 4.6 |
| 1955～1964 | 521 | 19.3 |
| 1965～1974 | 1,035 | 38.3 |
| 1975～1984 | 814 | 30.1 |
| 1985～1990 | 135 | 5.0 |
| unknown | 43 | 1.6 |
| Total | 2,702 | 100.0 |

Source : Tohoku Keizai Kenkyusho (1990) : "Kaisha Eigyosho Meikan in 1990". This is the directory of branch offices in Sendai. The data were obtained through quentionnair survey.

Table 7 Territories of sales branches in Sendai in 1990

| Territoy | Num. of sales br. | Ratio (%) |
|---|---|---|
| Tohoku region 1) | 2,205 | 81.6 |
| 5 pref. in Tohoku | 64 | 2.4 |
| 4 pref. in Tohoku | 59 | 2.2 |
| 3 pref. in Tohoku | 105 | 3.9 |
| 2 pref. in Tohoku | 53 | 2.0 |
| Miyagi Pref. | 123 | 4.5 |
| Sendai & vicinity | 16 | 0.6 |
| Others | 52 | 1.9 |
| Unknown | 25 | 0.9 |
| Total | 2,702 | 100.0 |

1) It includes sales branches with the territory covering Tohoku and Hokkaido, or Tohoku and Nigata Prefecture.
The source is the same as that for Table 6.

rapidly. After that period the number of newly-established branches has gradually become fewer. This change coincides with the previously mentioned movement of Sendai's regional share in wholesaling.

Furthermore, a large number of Sendai's wholesale branches have the territory covering around the Tohoku region (Table 7). Therefore, the agglomeration of wholesale branches in Sendai can be regarded to have given the city the nature of the wholesaling center in Tohoku region. The rise of Sendai's status as a regional wholesaling center with its agglomeration of branches is also shown by changes in the inter-prefectural trade within the Tohoku region (Hino 1994). Table 8 shows the shifts of main buying sources of wholesaling establishments in six prefectures within

Table 8 Main buying sources of wholesalers in Tohoku region

| Prefecture | Buying sources | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Tokyo | | | Miyagi | | | Own pref. | | |
| | 1960 | 1970 | 1985 | 1960 | 1970 | 1985 | 1960 | 1970 | 1985 |
| Aomori | 34.9 | 30.6 | 24.7 | 9.0 | 14.8 | 18.7 | 27.0 | 27.2 | 31.8 |
| Iwate | 34.0 | 34.0 | 23.1 | 10.6 | 19.4 | 24.2 | 27.9 | 27.7 | 26.8 |
| Miyagi | 42.4 | 39.2 | 37.9 | 20.6 | 21.9 | 24.6 | — | — | — |
| Akita | 38.4 | 34.7 | 28.3 | 7.4 | 13.9 | 19.7 | 29.4 | 31.7 | 25.8 |
| Yamagata | 37.3 | 26.8 | 21.6 | 10.3 | 23.5 | 26.7 | 29.7 | 29.0 | 25.1 |
| Fukushima | 39.0 | 34.8 | 28.2 | 9.4 | 15.6 | 20.8 | 28.3 | 25.9 | 28.5 |

Source: The Japanese Commercial Census, 1960, 1970 and 1985.

Tohoku.[4] Tokyo was the main buying source for wholesalers in Tohoku in 1960. However, the ratio of buying volume from Tokyo gradually has decreased since 1960. Instead, that from Miyagi Prefecture increased. This indicates that Sendai has come to assume the function of intermediary between Tokyo and the Tohoku region through its sales branches.

The points discussed above for Sendai apply also to the other provincial centers, although there might be some differences among them.

## 4 Concentration of wholesale trade into prefectural centers or not

### 4.1. Differences in the prefectural center's shares of total wholesaling within the prefectures

As we stated before, the trend toward concentration of wholesale trade into the dominant centers occurred during the period of rapid economic growth at the national and regional levels. From these phenomena it might be thought that the same trend would occur at the prefectural level. In this chapter the issue will be examined.

Before this examination, however, it is better to introduce the differences in the present degrees of concentration of wholesaling into the cities with the largest wholesales in the prefectures. Hereafter the above cities are called the prefectural centers.

Table 9 shows the cities' prefectural shares of wholesales and their changes. There are large differences in the prefectural wholesaling shares of these cities. The following eight cities have the highest prefectural shares with 70 percent or more of the wholesaling : Kyoto, Takamatsu, Kanazawa, Kochi, Kagoshima, Fukui, Tokushima, Kumamoto and Okayama. These cities are the largest in their prefectures as regards population. As for Kyoto, Kanazawa and Fukui, these three cities have a large agglomeration of wholesalers dealing with locally produced textiles. This is one of the main reasons that their prefectural shares are so relatively high. With regard to Takamastu, it is a wholesale trade center which has a lot of branch offices covering the territory all around Shikoku Island which consists of four prefectures. The relatively high prefectural share of the city is to some extent attributed to the above agglomeration of branches. In the case of Okayama Prefecture, the second largest city, Kurashiki, had a population of 416 thousand people in 1990. This is why Okayama with 518 thousand people is not so predominant in population within the prefecture. However, Kurashiki is an industrial city with a large waterfront heavy-chemical industrial area, and is considerably inferior to Okayama in commercial activities.

After the above cities the several prefectural capitals have the next highest prefectural shares with 60 percent or more of wholesales : Oita, Toyama, Miyazaki, Kofu, Akita and Wakayama. These cities are the largest cities in their prefectures,

Table 9 Prefectural shares of prefectural centers in wholesaling

| Prefectural center | Prefectural share in 1991 | Change in prefectural share | | |
|---|---|---|---|---|
| | | 1960-70 | 1970-82 | 1982-1991 |
| 1 Aomori | 37.7 | 0.0 | −2.3 | −4.9 |
| 2 Morioka | 36.7 | 8.9 | −17.1 | 1.5 |
| 3 Akita | 63.1 | −1.3 | 7.1 | 1.6 |
| 4 Yamagata | 49.5 | 4.1 | 6.0 | −2.9 |
| 5 Koriyama | 37.0 | 3.8 | −1.2 | 7.4 |
| 6 Mito | 35.4 | −5.6 | 3.7 | −3.2 |
| 7 Utsunomiya | 54.4 | 4.9 | 5.6 | −3.9 |
| 8 Takasaki | 32.7 | 0.2 | −0.5 | 1.9 |
| 9 Omiya | 26.7 | 6.9 | 7.1 | 4.1 |
| 10 Chiba | 42.6 | 5.5 | 12.0 | −4.6 |
| 11 Yokohama | 53.4 | −8.3 | −4.2 | −10.3 |
| 12 Niigata | 50.5 | 1.6 | 3.9 | 0.7 |
| 13 Toyama | 65.8 | 13.2 | 4.0 | −1.1 |
| 14 Kanazawa | 82.1 | −2.1 | −1.7 | −0.1 |
| 15 Fukui | 76.4 | −1.0 | 4.8 | −2.7 |
| 16 Kofu | 64.9 | −6.0 | −0.3 | −2.5 |
| 17 Nagano | 40.2 | 11.0 | −8.4 | 7.1 |
| 18 Gifu | 51.9 | −6.5 | −7.4 | −2.6 |
| 19 Shizuoka | 34.0 | 3.2 | 9.0 | 0.3 |
| 20 Yokkaichi | 30.6 | 4.0 | 3.4 | 1.8 |
| 21 Otsu | 31.3 | −7.2 | −0.2 | 3.9 |
| 22 Kyoto | 87.7 | −1.5 | −1.4 | −0.9 |
| 23 Kobe | 54.4 | −9.4 | −3.9 | −2.9 |
| 24 Nara | 31.6 | 5.8 | −16.6 | −2.7 |
| 25 Wakayama | 61.3 | −3.5 | 4.5 | −5.7 |
| 26 Tottori | 39.8 | −0.7 | 2.2 | 1.7 |
| 27 Matsue | 45.0 | 9.0 | −5.8 | −2.5 |
| 28 Okayama | 70.0 | −11.8 | 12.3 | 0.2 |
| 29 Shimonoseki | 24.3 | −15.1 | 6.5 | 1.3 |
| 30 Tokushima | 77.2 | 5.3 | −7.1 | −0.2 |
| 31 Takamatsu | 82.8 | 11.2 | 1.4 | −2.6 |
| 32 Matsuyama | 53.6 | 5.2 | 7.0 | 1.5 |
| 33 Kochi | 78.5 | 5.3 | −2.0 | −1.7 |
| 34 Saga | 54.0 | 19.5 | −5.7 | −6.1 |
| 35 Nagasaki | 55.8 | 10.6 | −7.8 | 4.2 |
| 36 Kumamoto | 72.1 | 8.5 | −12.4 | 6.9 |
| 37 Oita | 68.5 | 3.6 | 12.4 | 1.0 |
| 38 Miyazaki | 64.6 | 16.5 | 7.4 | 2.1 |
| 39 Kagoshima | 78.2 | 2.7 | 0.4 | −1.3 |
| 40 Naha[1)] | 49.9 | — | — | −13.4 |

1) There are no data for Naha in 1960 and 1970. The Okinawa Prefecture had not been surveyed by the Ministry of International Trade and Industry until 1972 when Okinawa was returned to Japan.
Source: The Japanese Commercial Census, 1960, 1970 1982 and 1991.

too. On the contrary, however, some prefectural centers with competing cities within their own prefectures have lower shares: Aomori (competitor; Hachinohe), Koriyama (Fukushima), Takasaki (Maebashi), Nagano (Matsumoto), Shizuoka (Hamamatsu), Yokkaichi (Tsu), Tottori (Yonago) and Shimonoseki (Ube and Tokuyama). The shares of theses cities are below 40 percent.

In addition, prefectural centers in the primary trade areas of the two largest metropolises have lower shares: Omiya, Otsu and Nara. In the case of Nara Prefecture, wholesalers within the prefecture bought about 50 percent of their total goods from Osaka Prefecture in 1985. In such a situation it is difficult even for prefectural trade centers to become prominent centers.

In addition, Morioka, in spite of being the largest city in Iwate Prefecture, has an even lower share of 37 percent. This is mainly attributed to the suburbanization of wholesaling. In Japan since the 1960s, wholesaler's estates have been constructed under the national government's policies aiming at modernization of the distribution system (Nakagawa 1972; Hasegawa 1984). These estates have been located in the suburbs of main cities which have relatively low rents, open spaces and good access to highways. In Morioka the estate is located in a suburb which is beyond the administrative boundary of the city. If the wholesaling conducted by wholesalers located in that suburb were included in the wholesaling of Morioka, the prefectural share would increase by about 25 percent. Suburbanization of wholesaling is also seen in other prefectural centers although there exist differences in the degree of increase among cities. A large part of the wholesale outlets located in prefectural centers have the functions of warehousing and delivery of goods in addition to sales transactions. In the case of the prefectural centers, there are relatively fewer wholesale offices specializing only in transaction and management functions and tending to remain within the CBD as compared with the provincial centers. This is why the suburbanization of wholesale establishments physically handling goods directly leads to a decrease in the share of the prefectural centers if their administrative areas do not include their suburbs.

### 4.2. Changes in prefectural shares of the prefectural centers

Although there exist some differences in the movements of prefectural shares among the prefectural centers over time, within many prefectures the concentration of wholesaling into the cities had occurred in the 1960s. As evidence, twenty-four cities increased their prefectural shares during the 1960s, while fourteen prefectural centers decreased their share for that period. However, there were only two cities, Okayama and Shimonoseki, that decreased by 10 percent or more. Furthermore, the relative decline of local industries can be considered to be the causal factor for the decrease of their shares. As for Okayama, the relative decline of the textile industry[5] and the growth of Kurashiki, its competitor within the prefecture, were the main causes. Kurashiki had increased its sales of heavy-chemical products due to industrial development on a national project. And Shimonoseki was the base for deep-sea fishing so that marine product manufacturing and wholesaling of its products developed. For this reason, food wholesaling occupied 48 percent of total wholesales in Shimonoseki in 1960. However, the industry declined after the 1960s, and by this relative decline of food wholesaling, the prefectural share of Shimonoseki decreased.

In the 1970s and 1980s, the number of prefectural centers whose share declined exceeded the number of those whose share increased. In that sense the concentration of wholesaling might be said to have stopped with the end of the rapid economic growth. However, there are several cities which increased their shares by five percent or more after that period: Koriyama, Omiya, Shizuoka, Yokkaichi, Matsuyama, Oita and Miyazaki. As for the prefectures which contain the above cities, therefore, the concentration can be regarded to continue after the early 1970s. In addition, there exist several cities which showed an opposite trend in the movements of shares between the 1970s and the 1980s. For example, Kumamoto increased its prefectural share by six percent in the 1980s although it had decreased by twelve percent in the 1970s. There are only ten prefectural centers that decreased their shares in the 1970s and 1980s, indicating the decentralization of whosaling at the prefectural level.

### 4.3. Causes for changes in the shares of prefectural centers

Lord (1984) pointed out the following five causes concerning shifts in the wholesale trade status of US metropolitan areas: (1) the growth in demand for ultimate consumer and industrial goods, (2) differences in the wholesale product structure of metropolitan areas, (3) the suburbanization of wholesaling, (4) the interregional shift of some functions of wholesaling, (5) the corporate location decision.

Excluding the inter-regional shifts of wholesaling, the other causes can also be recognized as the causes of changes of the prefectural centers' shares within the prefectures. For example, the influence of suburbanization of wholesaling was previously referred to in the explanation for the decrease of the prefectural share of Morioka.

On the other hand, the continuous decrease in the share of Shimonoseki was, as previously cited, partly accounted for by the wholesale product structure of the city characterized by the relatively large ratio of food wholesaling. As for the relationship between the growth of cities and their prefectural shares, the decrease of Aomori's prefectural share might be provided as an illustrative example. Aomori is one of the rare prefectural capitals whose population decreased in the 1980s (Morikawa 1991). The decline of the local economy expressed by the decrease in population of the metropolitan area is one of the main causes for the decrease of Aomori's share of the

Table 10 Concentration of sales branches into prefectural centers within prefectures

| Prefectural center | Number of employees in wholesaling | Number of employees in sales branch | Ratio of sales branch to the total whole-saling | Concentration rate of sales branch in prefeture | Concentration rate of local wholesaler in prefecture |
|---|---|---|---|---|---|
| 1 Aomori | 14,879 | 5,444 | 36.6 | 42.1 | 32.2 |
| 2 Morioka | 10,430 | 4,684 | 44.9 | 36.1 | 25.8 |
| 3 Akita | 17,224 | 5,787 | 33.6 | 57.9 | 51.3 |
| 4 Yamagata | 16,620 | 4,382 | 26.4 | 44.5 | 47.3 |
| 5 Koriyama | 18,945 | 7,831 | 41.3 | 44.4 | 27.5 |
| 6 Mito | 20,064 | 8,155 | 40.6 | 32.2 | 26.7 |
| 7 Utsunomiya | 26,821 | 9,584 | 35.7 | 50.4 | 42.6 |
| 8 Takasaki | 17,524 | * | * | * | 43.8 |
| 9 Omiya | 27,713 | 16,426 | 59.3 | 26.0 | 13.1 |
| 10 Chiba | 33,220 | 15,167 | 45.7 | 34.5 | 25.7 |
| 11 Yokohama | 87,339 | 30,744 | 35.2 | 41.0 | 48.3 |
| 12 Niigata | 33,805 | 12,364 | 36.6 | 45.0 | 34.2 |
| 13 Toyama | 21,906 | 7,348 | 33.5 | 61.3 | 49.7 |
| 14 Kanazawa | 33,710 | 11,803 | 35.0 | 75.9 | 67.0 |
| 15 Fukui | 19,324 | 3,911 | 20.2 | 64.8 | 63.1 |
| 16 Kofu | 12,534 | 2,488 | 19.9 | 54.3 | 54.4 |
| 17 Nagano | 19,842 | 5,804 | 29.3 | 26.1 | 32.7 |
| 18 Gifu | 32,542 | 5,619 | 17.3 | 40.1 | 45.7 |
| 19 Shizuoka | 35,281 | 13,487 | 38.2 | 32.0 | 24.5 |
| 20 Yokkaichi | 12,539 | * | * | * | 36.4 |
| 21 Otsu | 6,108 | 1,660 | 27.2 | 19.7 | 26.3 |
| 22 Kyoto | 97,714 | 14,952 | 15.3 | 74.7 | 86.5 |
| 23 Kobe | 76,541 | 17,753 | 23.2 | 43.2 | 47.1 |
| 24 Nara | 5,839 | 1,915 | 32.8 | 43.2 | 24.8 |
| 25 Wakayama | 14,542 | 2,697 | 18.5 | 55.2 | 51.4 |
| 26 Tottori | 6,460 | 1,854 | 28.7 | 34.5 | 36.1 |
| 27 Matsue | 8,579 | 2,723 | 31.7 | 45.7 | 37.2 |
| 28 Okayama | 38,985 | 12,524 | 32.1 | 63.8 | 61.3 |
| 29 Shimonoseki | 10,558 | * | * | * | 32.4 |
| 30 Tokushima | 16,691 | 3,110 | 18.6 | 62.0 | 69.4 |
| 31 Takamatsu | 30,827 | 14,484 | 47.0 | 80.3 | 60.5 |
| 32 Matsuyama | 23,825 | 8,270 | 34.7 | 59.6 | 44.8 |
| 33 Kochi | 17,620 | 3,495 | 19.8 | 70.5 | 74.3 |
| 34 Saga | 9,163 | 2,721 | 29.7 | 42.1 | 38.5 |
| 35 Nagasaki | 15,967 | 4,805 | 30.1 | 45.3 | 37.8 |
| 36 Kumamoto | 34,800 | 10,919 | 31.4 | 70.2 | 63.5 |
| 37 Oita | 18,662 | 6,435 | 34.5 | 70.4 | 50.3 |
| 38 Miyazaki | 17,083 | 5,829 | 34.1 | 56.2 | 48.6 |
| 39 Kagoshima | 32,581 | 9,441 | 29.0 | 65.0 | 68.6 |
| 40 Naha | 13,628 | 2,031 | 14.9 | 42.6 | 41.3 |
| Mean | 25,211 | 8,072 | 31.4 | 50.1 | 48.4 |

Note: * unknown
Source: The 1991 Establishment Census of Japan

prefecture's total wholesaling.

The corporate location decision for sales branches is observed to be one of the most important causes because the sales branches of wholesalers and manufactures come to be one of the main components of wholesaling in prefectural centers. The ratio of the sales branch employees to the total employees involved in wholesaling is around 31 percent on average (Table 10). According to previous studies on branch offices in prefectural centers (Hino 1993), most branches have been set up since the 1960s. Furthermore, many of them have territories covering around the prefectures. Those prefectural centers which have a concentrated agglomeration of sales branches within their own prefectures are thought to raise the prefectural share of wholesaling with the increase of agglomeration (Ikezawa & Hino 1992).

In order to confirm this theory, the concentration rates of sales branches calculated from employee numbers in prefectural centers within their own prefectures are shown in Table 10. For many prefectural centers these rates are higher than those of local wholesalers. This means that sales branches concentrated within prefectures more than local wholesalers. Those prefectural centers with the above concentrations of branch offices have raised their prefectural shares by a relatively large rate since the 1960s : for examples, Koriyama, Omiya, Matsuyama and Oita. However, those prefectural centers whose concentration rates of branches are lower than those of local wholesalers show only a slight increase or decrease of their prefectural share of wholesaling, including a few of the exception prefectures, Yamagata and Nagano : for illustrative examples, Gifu and Otsu. In other words, the increase rates of prefectural shares correspond to the degree of the concentrated agglomeration of branches.

## 5 Conclusion

The one-point concentration of people, money and information into Tokyo in the late 1980s has been vigorously discussed in reference to regional development, urban problems of Tokyo and the world city theory. Along with that, wholesale trade was also generally thought to be concentrated into the Tokyo metropolitan area. However, in the case of wholesaling, decentralization rather than concentration was to be the general trend during the 1980s. In addition, although the relative decline of the importance of Osaka has always been pointed out in relation to one-point convergence, Osaka's share of national wholesaling became stable in that period. That is, it was only in the period of postwar rapid economic growth that Tokyo's share of national wholesaling rose so remarkably that it could be regarded as a one-point convergence to Tokyo. After that period Tokyo's share has not increased except in the area of the wholesaling of heavy-chemical products.

One reason for slowing the tendency to concentrate wholesaling into Tokyo is the growth of the four provincial centers, Sapporo, Sendai, Hiroshima and Fukuoka as regional wholesale centers. The growth of the provincial centers is largely due to nationwide manufactures and wholesalers establishing a concentrated agglomeration of sales branches with territory covering the regions. As a result, the functions of marketing for the provinces, which Tokyo and Osaka had performed before, shifted to the provincial centers. In keeping pace with this shift the provincial centers established statuses as prominent regional trade centers. Meanwhile, it was for the period of rapid economic growth that the provincial centers remarkably increased their regional shares in wholesaling. After that period the regional share of Fukuoka and Hiroshima remained the same or slightly decreased. In that sense, the concentration of wholesaling into the provincial centers might be recognized as a phenomenon mainly seen in the period of rapid economic growth, just as the concentration into Tokyo at the national level occurred at the same time.

In the case of the prefectural centers, the agglomeration of sales branches has increased since the 1960s, so that a third of the wholesaling outlets in these cities consist of branches at present. This agglomeration of sales branches is the main reason, as well as the case of provincial centers at the regional level, that prefectural centers raised their prefectural share of wholesaling in the 1960s. However, there was a large variation in the movements of their prefectural shares after the 1960s because these are affected by the respective prefectures' own particular factors ; the suburbanization of wholesaling, ups and downs of the local economy and the growth of rivals in wholesaling within prefectures. In spite of these influences there are several cities that have continued to increase in their prefectural shares. These cities show that the concentration of wholesaling has proceeded at the prefectural level since the 1960s.

## Note

1) The Tokai region is defined here as the area consisting of the following four prefectures ; Aichi, Shizuoka, Gifu and Mie. In 1960 the Tokai region had occupied a national share of 39 percent of the production value of the textile industry excluding apparel products. This national share was top, exceeding that of Kinki with a national share of 31 percent.
2) It is only after the Commercial Census 1968 that the statistics concerning with the general merchandise became available. This is why concentration data concerning general merchandise in Tokyo for the 1960s was not able to be directly shown from official statistics.
3) At present the Tokai region is the second largest area for the agglomeration of machinery industry after the Kanto region. However, the region was inferior to the Kinki region in the value of machinery production before 1970. After that time the machinery industry of the Tokai region had rapidly grown, so that area became to be superior to the Kinki region. The national shares of the three largest regions in the value of production of

machinery are as follows: Kanto; 44% in 1960, 44% in 1970, 40% in 1980 and 37% in 1990; Tokai; 16%, 19%, 22% and 25%; Kinki, 24%, 20%, 17% and 14%.

4) The quentionnaire concerning to the inter-prefectural trade in the survey for the Commercial Census was simplified after 1985. As a result, it was impossible to examine wholesales by prefectures and buying sources. This is why we could not present the data for 1991.

5) Okayama Prefecture is one of the main areas producing textile products including apparel. For this reason, textile products wholesaling was an important part of the overall wholesaling within Okayama City. For example, the ratio of wholesaling of textile products to the wholesaling total was 16 percent in Okayama City in 1960. The national average was 10 percent.

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(*: in Japanese with English abstract, **: in Japanese without English abstract, ***: in English)

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