

Community Based Economic Renaissance and Job Creation in Japan

Takeo Kikkawa

Hitotsubashi University

I. Introduction: Economic Recovery and Widening of Regional Divergences

Japan's economic upturn that began in February 2002 continued for a prolonged period of time, and by November 2006, the continuous period of economic expansion surpassed the previous record of 57 months set between November 1965 and July 1970. There are, however, two facts that should be noted regarding this latest economic recovery. One is that compared with the economic recovery of 1965-70, the economic growth rate is considerably lower. The other is that in the process of recovery, inter-firm, inter-industrial, inter-regional, and various other forms of divergences are widening.

Of these divergences, this paper focuses on regional divergences. The objective of this paper is to analyze why regional divergences in improvement in the state of employment came to be and, based on the analysis, to identify the conditions of regional recovery that lead to job creation.

The regional comparison of the unemployment rate and the effective job offer-job seeker ratio from 2001 onwards, based on a reference material used in the Monthly Economic Report of the Cabinet Office of the Government of Japan in July 2006 (Cabinet Office 2006), reveals that:

- (i) The unemployment rate of Kanto, Tokai, Hokuriku, and Chugoku Regions are lower than the national average, while that of Hokkaido, Tohoku, Kinki, Kyushu, and Okinawa Regions are higher than the national average.
- (ii) The effective job offer-job seeker ratio of Kanto, Tokai, Hokuriku, and Chugoku Regions are higher than the national average, while that of Hokkaido, Tohoku, Kinki, Kyushu, and Okinawa Regions are lower than the national average.

Because the unemployment rate declined and the effective job offer-job seeker ratio rose for the country as a whole during the period of economic recovery after 2002, it is a fact that improvement was generally made in the state of employment. However, there are large regional divergences in the

improvement made in employment. As for the effective job offer-job seeker ratio, the gap is actually widening. There is a significant difference in the improvement made in the state of employment between Kanto, Tokai, Hokuriku, and Chugoku Regions on one hand, which had figures above the national average, and Hokkaido, Tohoku, Kinki, Kyushu, and Okinawa Regions on the other, which had figures below the national average.¹

Why did regional divergences in the improvement made in the state of employment come to be? To consider this question, we examine, in Sections II and III, the recent increase/decrease in the number of employees in Japan by industry and prefecture.

II. Analysis of Increase/Decrease in the Number of Employees by Industry in 1999-2004

1. Increase/Decrease in the Number of Employees by Industry

Data on the increase/decrease in the number of employees, which reflect how sound the state of employment is, can be obtained from the Establishment and Enterprise Census of the Statistics Bureau of the Ministry of Internal Affairs and Communications. In this section, we use Ministry of Internal Affairs and Communications (2006), which is the latest report of the census, to examine the increase/decrease in the number of employees in Japan from 1999 to 2004 by industry.

Table 1 shows the increase/decrease in the number of employees by industry and prefecture in 1999-2004. We can see from the table that the number of employees decreased by 1,739,184 in the last five years in Japan and that the rate of decline was 3.2%. Even though improvement in employment was made to a certain degree in the period after 2002, the employment size of Japan as a whole contracted during the period from 1999 to 2004.

The industries with a decline in the number of employees were, in the order of industries with the largest declines, the manufacturing industry (-1,333,831), wholesale and retail trade (-956,542), construction (-707,087),

¹ The unemployment rate and the effective job offer-job seeker ratio of Shikoku Region remained close to the national average during this period (Cabinet Office 2006).

Table 1. Increase/decrease in the number of employees by industry and prefecture (1999-2004)

Industry	Number of employees		Number of employees in 2004	Number of prefectures	
	Number of increase	Rate of increase (%)		With increase	With decrease
Agriculture	+15,431	+10.2	166,338	33	14
Forestry	-2,790	-13.8	17,410	13	34
Fisheries	-9,723	-20.2	38,468	8	39
Mining	-17,385	-31.6	37,549	0	47
Construction	-707,087	-13.9	4,382,413	0	47
Manufacturing	-1,333,831	-11.8	9,940,449	0	47
Electricity, gas, heat supply and water	-25,636	-11.9	188,914	6	41
Information and communications	+152,509	+12.4	1,382,316	19	28
Transport	-94,395	-3.2	2,822,174	14	33
Wholesale and retail trade	-956,542	-7.3	12,218,819	2	45
Finance and insurance	-278,523	-16.3	1,431,140	0	47
Real estate	+16,251	+1.7	965,827	26	21
Eating and drinking places, accommodations	-100,377	-2.0	4,816,722	17	30
Medical, health care and welfare	+935,309	+29.0	4,156,236	47	0
Education, learning support	+110,973	+8.8	1,367,742	44	3
Compound services	-30,595	-7.9	355,781	14	33
Services (not elsewhere classified)	+587,227	+8.2	7,779,098	44	3
All industries	-1,739,184	-3.2	52,067,396	3	44

Source: Compiled from Statistics Bureau, Ministry of Internal Affairs and Communications (2006).

finance and insurance (-278,523), eating and drinking places and accommodations (-100,377), transport (-94,395), compound services (-30,595), electricity, gas, heat supply and water (-25,636), mining (-17,385), fisheries (-9,723), and forestry (-2,790). Among the industries with a decline of more than 100,000, finance and insurance, construction, and manufacturing had a rate of decline of more than 10%. On the other hand, the industries with an increase in the number of employees were, in the order of industries with the largest increases, medical, health care and welfare (935,309), services (not elsewhere classified) (hereafter called “other services”) (587,227), information and communications (152,509), education and learning support (110,973), real estate (16,251), and agriculture (15,431). Among the industries with an increase of more than 100,000, medical, health care and welfare and information and communications had a rate of increase of more than 10%.

2. Three Patterns of Increase/Decrease in the Number of Employees

Table 1 tells us that there were three patterns of increase/decrease in the number of employees as regards different industries in prefectures from 1999 to 2004.

The first is the industries in which the number of employees increased in the majority or all of prefectures. This corresponds to medical, health care and welfare (increase in 47 prefectures and decline in 0), other services (increase in 44 and decline in 3), and education and learning support (increase in 44 and decline in 3).

The second is the industries in which the increase/decrease in the number of employees differed from prefecture to prefecture. This corresponds with agriculture (increase in 33 and decline in 14), real estate (increase in 26 and decline in 21), information and communications (increase in 19 and decline in 28), eating and drinking places and accommodations (increase in 17 and decline in 30), transport (increase in 14 and decline in 33), compound services (increase in 14 and decline in 33), and forestry (increase in 13 and decline in 34).²

The third is the industries in which the number of employees decreased in the majority or all of prefectures. This corresponds to manufacturing (increase in 0 prefecture and decline in 47), construction (increase in 0 and decline in 47), finance and insurance (increase in 0 and decline in 47), mining (increase in 0 and decline in 47), wholesale and retail trade (increase in 2 and decline in 45), electricity, gas, heat supply and water (increase in 6 and decline in 41), and fisheries (increase in 8 and decline in 39).

III. Analysis of Increase/Decrease in the Number of Employees by Prefecture in 1999-2004

1. Increase/Decrease in the Number of Employees by Prefecture

Following on the analysis of the increase/decrease in the number of employees by industry, we examine, in this section, the increase/decrease in the number of employees by prefecture in Japan in 1999-2004.

Table 2 shows the rate of increase in the number of employees in all

² Industries listed are those with increase in more than 10 prefectures as well as decrease in more than 10 prefectures.

**Table 2. Rate of increase in the number of employees by prefecture
(1999-2004)**

			(%)					
Prefecture	All industries	Manufacturing industry	Prefecture	All industries	Manufacturing industry	Prefecture	All industries	Manufacturing industry
Hokkaido	-5.9	-13.1	Ishikawa	-4.6	-12.1	Okayama	-5.7	-12.4
Aomori	-4.1	-16.9	Fukui	-5.5	-13.4	Hiroshima	-5.5	-12.9
Iwate	-5.4	-12.8	Yamanashi	-2.6	-8.7	Yamaguchi	-6.2	-10.1
Miyagi	-3.0	-12.4	Nagano	-4.1	-11.4	Tokushima	-7.4	-16.8
Akita	-7.9	-18.9	Gifu	-3.0	-9.0	Kagawa	-9.0	-17.7
Yamagata	-5.4	-14.1	Shizuoka	-2.8	-8.1	Ehime	-5.2	-18.3
Fukushima	-4.3	-13.0	Aichi	-2.8	-6.3	Kochi	-7.3	-13.9
Ibaraki	-3.6	-11.4	Mie	-3.3	-6.4	Fukuoka	-2.4	-9.7
Tochigi	-4.7	-11.5	Shiga	-0.7	-7.9	Saga	-2.8	-10.1
Gunma	-3.4	-12.4	Kyoto	-4.5	-13.6	Nagasaki	-4.5	-16.0
Saitama	-1.4	-10.6	Osaka	-7.6	-16.5	Kumamoto	-0.8	-7.8
Chiba	-0.6	-14.6	Hyogo	-5.7	-14.2	Oita	-2.6	-6.4
Tokyo	+2.0	-8.3	Nara	+0.4	-13.6	Miyazaki	-2.8	-14.2
Kanagawa	-3.6	-18.0	Wakayama	-6.3	-16.3	Kagoshima	-2.0	-9.4
Niigata	-5.2	-11.1	Tottori	-4.9	-17.3	Okinawa	+3.2	-1.9
Toyama	-5.2	-12.6	Shimane	-4.8	-19.8	National Average	-3.2	-11.8

Source: Compiled from Statistics Bureau, Ministry of Internal Affairs and Communications (2006).

Note: The shaded figures in the “all industries” column are those of prefectures in which the percentage change was positive or in which the rate of decline was smaller than the national average. The shaded figures in the “manufacturing industry” column are those of prefectures in which the rate of decline was less than 10%.

industries and in the manufacturing industry from 1999 to 2004 by prefecture. We can see from the table that, in the last five years, the number of employees increased only in 3 prefectures, namely, Okinawa Prefecture, Tokyo Metropolis, and Nara Prefecture, out of 47 prefectures in Japan (Tokyo Metropolis is included as a prefecture). Besides these three prefectures, the rate of decline in the number of employees was less than 1% in Chiba Prefecture, Shiga Prefecture, and Kumamoto Prefecture (the national average was a decline of 3.2%). It can be said that the state of employment in these six prefectures was relatively favorable compared with other prefectures. In this section below, we closely examine the increase/decrease in the number of employees by industry in each of the six prefectures to elucidate why the state of employment was favorable in these prefectures.

Table 3. Increase/decrease in the number of employees by industry in prefectures where the number of employees increased (1999-2004)

Industry	Okinawa		Tokyo		Nara	
	Number of increase	Rate of increase (%)	Number of increase	Rate of increase (%)	Number of increase	Rate of increase (%)
Agriculture	+507	+47.6	+241	+8.8	-44	-11.7
Forestry	-4	-26.7	-106	-48.2	+33	+18.6
Fisheries	+44	+23.0	-93	-85.3	-23	-57.5
Mining	-154	-36.2	-1,088	-30.2	-28	-30.4
Construction	-3,075	-6.2	-48,168	-9.4	-3,676	-11.8
Manufacturing	-530	-1.9	-79,469	-8.3	-13,137	-13.6
Electricity, gas, heat supply and water	+239	+13.3	+694	+2.8	-299	-18.5
Information and communications	+2,877	+34.4	+147,581	+29.9	-53	-2.2
Transport	-725	-3.0	-14,944	-3.7	-1,247	-8.2
Wholesale and retail trade	+2,238	+2.0	-139,389	-7.1	+3,288	+3.3
Finance and insurance	-2,664	-19.5	-48,697	-12.5	-1,292	-11.2
Real estate	-467	-4.2	+22,960	+10.6	-416	-6.4
Eating and drinking places, accommodations	-2,874	-4.5	+8,509	+1.1	+1,608	+4.5
Medical, health care and welfare	+12,113	+32.6	+88,723	+26.2	+13,328	+50.1
Education, learning support	+374	+2.8	+28,150	+11.6	+883	+7.2
Compound services	-739	-18.9	-341	-2.8	+178	+7.1
Services (not elsewhere classified)	+6,580	+10.1	+186,231	+14.4	+2,456	+5.0
All industries	+13,740	+3.2	+150,794	+2.0	+1,559	+0.4

Source: Compiled from Statistics Bureau, Ministry of Internal Affairs and Communications (2006).

2. Six Prefectures with Favorable State of Employment

Table 3 shows increase/decrease in the number of employees by industry in Okinawa Prefecture, Tokyo Metropolis, and Nara Prefecture, which were the prefectures in which the number of employees increased from 1999 to 2004. In these three prefectures, the relatively favorable state of employment was realized because particular developments different from the national trend were observed. By comparing Table 3 with Table 1, we examine these “particular developments” observed in each of the three prefectures.

In Okinawa Prefecture, in which the rate of increase in the number of employees from 1999 to 2004 was the highest in the country at 3.2%, an exceptional increase in the number of employees in wholesale and retail trade and the fact that the rate of decline in the number of employees in the

manufacturing and construction industries was well below 10% had a significant meaning. The rise in the number of employees in information and communications and agriculture is also noteworthy.

In the Tokyo Metropolis, which had the second highest rate of increase in the number of employees in the country at 2.0%, the increase in the number of employees in information and communications was particularly noticeable. The decline in the number of employees in the manufacturing and construction industries was below 10%, and the increase in the number of employees in other services, real estate, and eating and drinking places and accommodations was also substantially above the national average.

In Nara Prefecture, in which the number of employees also increased, albeit at a rate of 0.4%, there was, as in Okinawa Prefecture, an exceptional increase in the number of employees in wholesale and retail trade. In addition, the increase in the number of employees in medical, health care and welfare was particularly high. There was also an increase in the number of employees in eating and drinking places and accommodations and compound services.

Table 4 shows increase/decrease in the number of employees by industry in Chiba Prefecture, Shiga Prefecture, and Kumamoto Prefecture, which were the prefectures in which the number of employees decreased from 1999 to 2004 but the rate of decline was less than 1%. In these three prefectures, too, a relatively favorable state of employment was maintained because particular developments different from the national trend were observed. Again, we point out, by comparing Table 4 with Table 1, the “particular developments” in each of the prefectures.

In Chiba Prefecture, the rate of increase in the number of employees was high in medical, health care and welfare. The number of employees grew markedly in transport and agriculture. The rates of decline in the number of employees in construction and wholesale and retail trade were also low.

In Shiga Prefecture, the rate of decline in the number of employees in manufacturing was low. There was a substantial growth in the number of employees in medical, health care and welfare, other services, education and learning support, real estate, and agriculture. In addition, the number of employees also increased in eating and drinking places and accommodations.

In Kumamoto Prefecture, the rates of decline in the manufacturing industry and wholesale and retail trade were low. In addition, the number of employees increased in transport, eating and drinking places and accommodations, and

Table 4. Increase/decrease in the number of employees by industry in prefectures where the rate of decline in the number of employees was less than 1% (1999-2004)

Industry	Chiba		Shiga		Kumamoto	
	Number of increase	Rate of increase (%)	Number of increase	Rate of increase (%)	Number of increase	Rate of increase (%)
Agriculture	+1,127	+21.4	+719	+60.2	+411	+11.7
Forestry	-9	-8.6	-13	-15.7	-190	-28.8
Fisheries	-216	-31.9	-56	-33.3	-389	-23.5
Mining	-748	-43.3	-135	-37.7	-359	-29.9
Construction	-15,686	-9.6	-6,492	-13.9	-9,617	-13.1
Manufacturing	-45,060	-14.6	-13,778	-7.9	-8,793	-7.8
Electricity, gas, heat supply and water	-1,259	-15.7	-111	-7.1	-229	-10.5
Information and communications	-1,962	-6.9	+135	+3.7	-1,933	-19.6
Transport	+3,656	+2.8	-774	-3.0	+1,327	+4.5
Wholesale and retail trade	-9,193	-2.0	-5,717	-4.9	-5,402	-3.1
Finance and insurance	-9,121	-16.4	-1,668	-13.2	-3,007	-15.3
Real estate	-458	-1.3	+735	+12.1	-14	-0.2
Eating and drinking places, accommodations	-5,821	-3.0	+1,208	+3.0	+848	+1.5
Medical, health care and welfare	+43,182	+39.6	+11,559	+42.1	+14,623	+22.0
Education, learning support	+5,721	+9.8	+2,866	+29.4	+1,056	+8.3
Compound services	-2,388	-22.6	-356	-7.1	+234	+2.3
Services (not elsewhere classified)	+27,668	+9.9	+8,084	+12.6	+6,186	+7.4
All industries	-10,567	-0.6	-3,794	-0.7	-5,248	-0.8

Source: Compiled from Statistics Bureau, Ministry of Internal Affairs and Communications (2006).

compound services.

3. Factors Improving the State of Employment in the Six Prefectures

In the preceding subsection, we looked at six prefectures with a relatively favorable state of employment in 1999-2004 and picked up “particular developments different from the national trend” that could be observed in these prefectures. These “particular developments” can be considered as unique factors improving the state of employment that had an effect in the six prefectures. Table 5 summarizes these factors.

Table 5 categorizes industries according to the three patterns of increase/decrease in the number of employees by prefecture (“the industries in which the number of employees increased in the majority or all of prefectures,”

Table 5. Factors for improving the state of employment in six prefectures with favorable state of employment

Industry	Okinawa	Tokyo	Nara	Chiba	Shiga	Kumamoto
<i>Industries in which employees increased</i>						
Medical, health care and welfare			○	○	○	
Education, learning support					○	
Services (not elsewhere classified)		○			○	
<i>Industries in which increase/decrease differed from prefecture to prefecture</i>						
Agriculture	○			○	○	
Real estate		○			○	
Information and communications	○	○				
Eating and drinking places, accommodations		○	○		○	○
Transport				○		○
Compound services			○			○
<i>Industries in which employees decreased</i>						
Manufacturing	○	○			○	○
Construction	○	○		○		
Wholesale and retail trade	○		○	○		○

Note: Industries in which there were developments that were different from the national trend and that contributed to improving the state of employment are marked with “○.”

“the industries in which the increase/decrease in the number of employees differed from prefecture to prefecture,” and “the industries in which the number of employees decreased in the majority or all of prefectures”) mentioned above. With this in mind, if we extract factors improving the state of employment that commonly had an effect in the six prefectures with a relatively favorable state of employment, it will be as shown below.

Firstly, there are three factors that had an effect in four out of six prefectures (factors with four circles in Table 5):

- (i) Increase in the number of employees in eating and drinking places and accommodations, which was “an industry in which the increase/decrease in the number of employees differed from prefecture to prefecture,”
- (ii) Low rates of reduction in the number of employees in the manufacturing industry, which was “an industry in which the number of employees decreased in all prefectures” (in other words, relative success of the manufacturing industry in the four prefectures), and

- (iii) Exceptional increase or low rates of reduction in the number of employees in wholesale and retail trade, which was “an industry in which the number of employees decreased in the majority of prefectures” (in other words, relative success of the wholesale and retail trade industry in the four prefectures).

There are also three other factors that had an effect in three out of six prefectures (factors with three circles in Table 5):

- (iv) High rates of increase in the number of employees in medical, health care and welfare, which was “an industry in which the number of employees increased in all prefectures,”
- (v) High rates of increase in the number of employees in agriculture, which was “an industry in which the increase/decrease in the number of employees differed from prefecture to prefecture,” and
- (vi) Low rates of reduction in the number of employees in the construction industry, which was “an industry in which the number of employees decreased in all prefectures” (in other words, relative success of the construction industry in the three prefectures)

(i) to (vi) above can be considered as positive factors that generated regional divergences in improvement in the state of employment in Japan from 1999 to 2004.³ It can be said that (i) to (vi) provide the clues to extracting the mechanisms for recovery of regional economies that lead to job creation.

IV. Mechanisms for Recovery of Regional Economies

1. Two Models Extracted in “Community Based Economic Renaissance”

With regard to the mechanisms for recovery of regional economies, we published *Community Based Economic Renaissance* (Kikkawa and RENGO-RIALS 2005) as a result of investigations and research carried out from 2002 to 2004 in a project organized by the RENGO-RIALS titled, “Research on Changes in Industrial Structure and Regional Economies.” The analytic method used in the above publication was characteristic in that it gave

³ Obviously, by focusing on the prefectures in which the state of employment deteriorated from 1999 to 2004 in Japan, it is possible to extract negative factors that generated regional divergences in improvement in the state of employment. However, because the objective of this paper is “to identify the conditions of regional recovery that lead to job creation,” we concentrate on the analysis of the positive factors.

emphasis to and integrated the regional perspectives and employment perspectives.

Kikkawa and RENGO-RIALS (2005) focused on regional areas because they were just the suitable subjects of analysis in case studies that tried to seek out, from successful cases, the logic of recovery with wide applications based on a micro-level approach. When companies are made the subject of analysis, among which the gap between the “winners” and “losers” are widening, it is generally difficult to apply the lessons learned from the successes of the “winners” to the “losers,” in other words, to generalize the lessons. In contrast, since regional communities share the commonality of being a place where citizens live, it is relatively easy for regional communities to learn from successful experience of advanced regional communities. Moreover, research results that are being accumulated in recent years on (a) the theory of industrial accumulations (Itami, Matsushima, and Kikkawa 1998, etc.), (b) the theory of industrial clusters (Yamasaki 2002, etc.), and (c) the theory of networks of small- and medium-sized enterprises (Nishiguchi 2003, etc.) has indicated that regional communities can be important centers for reinforcement of industrial competitiveness.

It should, however, not be overlooked that the research on (a), (b) and (c) above carried out by the authors of the chapters of Kikkawa and RENGO-RIALS (2005) (Shigeru Matsushima, Akira Yamasaki, Toshihiro Nishiguchi, and Takeo Kikkawa) developed arguments in depth about reinforcing industrial competitiveness based on regional communities, but did not necessary have a clear view on linking that to the macro-level outcomes of job creation. From this reflection on the past research, Kikkawa and RENGO-RIALS (2005) gave emphasis to the employment perspective. It aimed to actively link (i) the regional perspective and (ii) employment perspective and present the logic of the recovery of the Japanese economy that begins with a micro-level approach and then generates macro-level outcomes.

What kind of mechanisms that create the virtuous cycle of reinforcement of industrial competitiveness and employment creation did Kikkawa and RENGO-RIALS (2005) extract? The mechanisms can be broadly divided into two.

The first is the mechanism with the following developments: relative success of the manufacturing industry → revitalization of the regional economy → job creation. It typically had an effect in Shiga Prefecture and can

be called the “Shiga model.”

The second is the mechanism with the following developments: innovation in the tertiary industry → revitalization of the regional economy → job creation. It typically had an effect in Nagahama City and can be called the “Nagahama model.” Incidentally, it is only by coincidence that Nagahama City is located in Shiga Prefecture.

As we examined in the preceding section, factors (i) to (vi) improving the state of employment had an effect in the six prefectures with a relatively favorable state of employment in Japan in 1999-2004. Of these factors, it is highly probable that (iv) high rates of increase in the number of employees in medical, health care and welfare occurred only in metropolises and their environs.⁴ While (v) high rates of increase in the number of employees in agriculture is a phenomenon that should be noted, its quantitative contribution to improving the state of employment was limited (see Tables 3 and 4). It is assumed that the relative success of the construction industry of the factor (vi) was interlinked with the trend of public investment. If we take these points into consideration, we can say that (i), (ii) and (iii) are important factors for improving the state of employment that will allow us “to seek out, from successful cases, the logic of recovery with wide applications.” Of these three factors, (ii) the relative success of the manufacturing industry is the starting point of the Shiga model extracted in Kikkawa and RENGO-RIALS (2005). (i) Increase in the number of employees in eating and drinking places and accommodations and (iii) the relative success of the wholesale and retail trade industry also overlap with the innovation in the tertiary industry, which is the starting point of the Nagahama model. In the subsections below, we review the details of the Shiga model and Nagahama model, which are closely related with the factors of (i), (ii) and (iii), in order to identify the conditions of regional recovery that lead to employment creation.

⁴ According to the Statistics Bureau, Ministry of Internal Affairs and Communications (2006), the national average rate of increase in the number of employees in medical, health care and welfare from 1999 to 2004 reached 29.0%. However, the prefectures in which the rate of increase exceeded 35% were limited to six prefectures, namely, Nara Prefecture (50.1%), Shiga Prefecture (42.1%), Chiba Prefecture (39.6%), Kanagawa Prefecture (38.8%), Hyogo Prefecture (36.7%), and Shizuoka Prefecture (35.1%).

2. Shiga Model: Industrial Accumulations Supporting the Relative Success of the Manufacturing Industry and Maintenance of Employment

As for the Shiga model, Kikkawa and RENGO-RIALS (2005) mainly focused on its functions of the industrial accumulation (manufacturing accumulation). While the contraction of industrial accumulations was frequently considered as a problem during and after the 1990s, which was known as the “Lost Decade” in Japan, it is also true that, if we closely examine the state of industrial accumulations, we can observe a number of cases in which an industrial accumulation indirectly had an effect on maintaining employment through the path of sustained vigor of the industrial accumulation → revitalization of the regional economy → securing jobs.

In Kikkawa and RENGO-RIALS (2005), we were able to use Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications (2004), which was then the latest report of the Establishment and Enterprise Census conducted by the Statistics Bureau of the Ministry of Public Management, Home Affairs, Posts and Telecommunications (the former title of the Ministry of Internal Affairs and Communications). According to Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications (2004), the number of employees in the manufacturing industry and in all industries in Japan from 1996 to 2001 decreased in all 47 prefectures and in 45 prefectures (excluding Shiga Prefecture and Okinawa Prefecture), respectively.

It should be noted, however, that in seven prefectures, namely, Iwate Prefecture, Tochigi Prefecture, Gunma Prefecture, Shizuoka Prefecture, Shiga Prefecture, Kagoshima Prefecture, and Okinawa Prefecture, the rate of decline in the number of employees in the manufacturing industry from 1996 to 2001 was relatively small, at below 10% (the national average was a decline of 13.9%). In five out of seven prefectures (Iwate, Tochigi, Gunma, Shizuoka, and Shiga), small- and medium-sized enterprises actively developed their business operations based on industrial accumulations in the respective regions of Hanamaki-Kitakami region, the region covering southeastern Gunma and southwestern Tochigi, Hamamatsu and its environs, and the southern coast of Biwa Lake, even during the period between 1996 and 2001. In these regions, the relative success of the manufacturing industry was achieved through sustained vigor of the industrial accumulations, and it was the state of these developments that each chapter of Kikkawa and RENGO-RIALS (2005) shed

light on. (Specifically, the Hanamaki-Kitakami region is dealt with in Chapter 3 by Tsujita [2005], in Chapter 5 by Yamasaki [2005], and in Chapter 6 by Nishiguchi and Tsujita [2005]; southeastern Gunma is dealt with in Chapter 1 by Matsushima [2005]; Hamamatsu and its environs in Chapter 3 by Tsujita [2005]; and the southern coast of Biwa Lake in Chapter 7 by Kikkawa [2005a]).

In Shiga Prefecture, for example, the entire prefecture can be regarded as a wide-area industrial accumulation centered on the southern coast of Biwa Lake. In Shiga Prefecture, small- and medium-sized manufacturing businesses, centered on medium-sized plants, maintained their vigor by the following method:

For medium-sized plants to maintain their vigor in Shiga Prefecture, “survival by diversifying customers” had an important meaning.... As can be understood from the case of the eastern Ohmi region, major manufacturers of a broad range of industries, including automotive, consumer electronics, machinery and apparatus, and chemical engineering, built plants in Shiga Prefecture. A medium-sized firm that at first supplied its products to a major manufacturer raises its technology level and begins to supply the products to another major manufacturer. By diversifying the industries of its customers, this medium-sized firm can smoothen out the effect of economic fluctuations to a certain extent. (This point can more easily be understood if one would recall, for example, that at the time when the recession of the semiconductor industry was becoming more serious in Japan in 2001, the automobile industry was showing steady growth.) It can be considered that medium-sized plants “continued to survive by diversifying their customers” and maintained their vigor. (Kikkawa 2005a, 202-3)

The mechanism whereby the “robustness” of a regional economy is created from the diversity of industrial structure and small- and medium-sized enterprises’ strategy of taking advantage of that diversity, as in the case of Shiga Prefecture, was also observed in the region covering southeastern Gunma and southwestern Tochigi (Matsushima 2005).

On the other hand, in Hamamatsu and its environs in Shizuoka Prefecture

and in Hanamaki-Kitakami region in Iwate Prefecture, a mechanism of entrepreneurship and new business creation, which was characterized by procurement by and interaction among members of a network, was effective. While these two regions were in “contrast with each other with respect to history and size,” they showed “surprisingly similar” trends as regards training and turning out people supporting the industrial accumulations and as regards interaction between “explicit knowledge” and “tacit knowledge” (Tsujiata 2005).

Another point that should be noted from Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications (2004) is that in the seven prefectures in which the rate of decline in the number of employees in the manufacturing industry from 1996 to 2001 was relatively small and in which the manufacturing industry was relatively successful, namely, Iwate Prefecture, Tochigi Prefecture, Gunma Prefecture, Shizuoka Prefecture, Shiga Prefecture, Kagoshima Prefecture, and Okinawa Prefecture, the rate of decline in the number of employees of all industries was also generally lower. The average rate of decline in the number of employees of all industries in the seven prefectures was 1.3%, which was 2.9 points lower than the national average of 4.2%.

Among the seven prefectures, it should be particularly noted that in Shiga Prefecture, in which the relative success of the manufacturing industry was realized through sustained vigor of the industrial accumulation, the number of employees of all industries increased exceptionally from 1996 to 2001 (the rate of increase was 0.8%).⁵ The increase in the number of employees in Shiga Prefecture was realized through the interrelation of sustained vigor of the industrial accumulation → the success of the manufacturing industry → expansion of the manufacturing-related service industry → expansion of employment in the manufacturing-related service industry → expansion of employment in commerce and restaurants → increase in the number of employees in the prefecture as a whole. This interrelation can be summed up as sustained vigor of the industrial accumulation → revitalization of the

⁵ In the case of Okinawa Prefecture, in which the number of employees also rose exceptionally from 1999 to 2001, the success of the construction industry from public works, etc. was more significant than the success of the manufacturing industry (Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications 2004).

regional economy → securing jobs. Shiga Prefecture was a typical case in which “an industrial accumulation indirectly had an effect on maintaining employment,” and Kikkawa and RENGO-RIALS (2005) called it the “Shiga model” (Kikkawa 2005a).

Table 2, shown above, shows the rate of increase in the number of employees by prefecture from 1999 to 2004 for both all industries and the manufacturing industry. The shaded figures in the “All industries” column are those of prefectures in which the percentage change was positive or in which the rate of decline was smaller than the national average. The shaded figures in the “Manufacturing industry” column are those of prefectures in which the rate of decline was less than 10%. As shown in the table, of the 12 prefectures in which the rate of decline in the number of employees in the manufacturing industry was less than 10%, the number of employees of all industries increased or if it decreased, the rate of decline was lower than the national average in all those prefectures except Mie Prefecture.⁶ Since the national average in the rate of decline in the number of employees in the manufacturing industry was 11.8%, it can be said that the manufacturing industry was relatively successful in the 12 prefectures in which the rate of decline was less than 10%. This means that Table 2, which was compiled from Statistics Bureau, Ministry of Internal Affairs and Communications (2006), which was published after Kikkawa and RENGO-RIALS (2005), confirms the fact that relative success of the manufacturing industry is an important factor in maintaining a favorable state of employment. While the task of elucidating the mechanism for recovery of regional economies that had an effect in these 12 prefectures must be left to another time, it is without doubt that the “Shiga model” presented in this paper will provide meaningful implications in the process of elucidation.

3. Nagahama Model: Job Creation through Innovation in the Tertiary Industry

The mechanism for recovery of regional economies that has its starting point in innovation in the tertiary industry typically had an effect in Nagahama

⁶ Even in Mie Prefecture, the rate of decline in the number of employees of all industries from 1999 to 2004 was only 0.1 point higher than the national average (see Table 2).

City. Since the mid-1980s, community development has been carried out in Nagahama City through the participation of its citizens. The project has been so successful that the city has often received awards for serving as a national model. At the center of the project is Kurokabe Inc., a joint public-private venture established in April 1988. The annual number of visitors to Kurokabe Square in the center of Nagahama City surpassed 2 million in FY2001.

Why did Nagahama City succeed in community development? Two main reasons can be mentioned.

The first is that the city effectively utilized the resources within the city. The success of Kurokabe Square, which attracts more than 2 million visitors a year, was the result of bringing together and appropriately combining the tourist resources of the historic black building wall (*kurokabe*) and Hokkoku-kaido Road, financial resources provided by eight local private citizens who each financed ¥10 million to ¥15 million for the establishment of Kurokabe Inc.,⁷ and the favorable geographical location providing easy access by the new express from the three major cities in the Kansai region (Kobe, Osaka and Kyoto). It is also noteworthy that during the process of achieving success, the citizens' volunteer activities, which inherited the tradition of the merchants' culture dating back to the reign of Hashiba Hideyoshi in the 16th century, played a major part. Those who took part in the citizen-led redevelopment of the commercial district gathered around a common axis provided by "Machidukuri Yakuba," an organization that was recognized as an NPO in November 2003.

The second is that Nagahama City achieved economic success by exploiting demand from external market. Because the city is recognized as a national model for vitalization of the downtown commercial district, it is sometimes misunderstood that local people of the city began to shop again in the commercial district near the railroad station. As in other local cities, it is basically the large shopping centers situated along the suburban thoroughfare that continue to attract the purchasing power of Nagahama City citizens. Those who provided the driving force to opening the closed shutters of the stores in the downtown commercial district were the day-trippers from Kobe, Osaka, and Kyoto who came to visit the shopping streets located close to Nagahama

⁷ Kurokabe Inc. had a capital of ¥130 million at the time of its foundation. The remaining ¥40 million came from Nagahama City.

railroad station. In Kurokabe Square in recent years, the tourists' trend to spend less has become more marked, and sales per tourist are declining, resulting in the problem of "increased number of visitors but decreased sales." This issue stems from the fact that the development of the commercial district is supported by demand from the outside the city.

The case of Nagahama City clearly shows that innovation in the tertiary industry can be a starting point in the recovery of regional economies. Nagahama City is a major city in Kohoku (northern coast of Biwa Lake) region of Shiga Prefecture. Due to the sluggishness of business at Kanebo Textile, Ltd.'s Nagahama Plant, the Kohoku region has a manufacturing industry that is the most lackluster in all of Shiga Prefecture. From 1996 to 2001, the Kohoku region had the largest decline in the number of employees in the manufacturing industry (a decline of 5,140) among the prefecture's seven regions, and, as a result of that, the number of employees in all industries also fell (a decline of 1,529). Nevertheless, we should not overlook the fact that during the same period, the number of employees in commerce and restaurants and the service industry in the Kohoku region increased considerably (by 1,607 and 3,147, respectively). Both of these increases were second only to those recorded in the Konan (southern coast of Biwa Lake) region in a comparison of the prefecture's seven regions.⁸ It would not be a gross mistake to say that Nagahama City's success in community development was one of the reasons for the increase.

The case of Nagahama City brings to the surface another mechanism for recovery of regional economies, one different from the Shiga model mentioned above, of innovation in the tertiary industry → revitalization of the regional economy → increase in the number of employees. Kikkawa and RENGO-RIALS (2005) called this the "Nagahama model" (Kikkawa 2005a). The "Nagahama model" gives us important implications for improvement in the state of employment in regional communities that will have innovation in the tertiary industry as the starting point to recovery.

⁸ The data on the increase/decrease in the number of employees in Shiga Prefecture by region from 1996 to 2001 are from Statistics Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications (2004).

V. Conclusion: Conditions of Regional Revitalization of the Type Leading to Job Creation

The objective of this paper is to “identify the conditions of regional recovery that lead to job creation.” In pursuing this objective, we started off by noting the fact that regional divergences were widening during the process of Japan’s economic recovery that began in 2002. We then analyzed the increase/decrease in the number of employees by industry in six prefectures with a relatively favorable state of employment in 1999-2004 (Okinawa Prefecture, Tokyo Metropolis, Nara Prefecture, Chiba Prefecture, Shiga Prefecture, and Kumamoto Prefecture), and gained an understanding that relative success of the manufacturing industry and innovation in the tertiary industry (business expansion of restaurants and accommodation industry, relative success of wholesale and retail trade, etc.) were important factors for improving the state of employment. We then presented two models of recovery of regional economies: the “Shiga model,” which starts with the relative success of the manufacturing industry, and the “Nagahama model,” which starts with innovation in the tertiary industry.

Two elements constituting the “Nagahama model” are extremely suggestive as regards the objective of “identifying the conditions of regional recovery that lead to job creation.” The two elements are (i) effective utilization of intraregional resources and (ii) exploitation of demand from external market. It is considered that these two elements can also be found in industrial accumulations, which played a central role in the “Shiga model.” This is because, as already mentioned at another opportunity, “in industrial accumulations, a unique mechanism consisting of two pillars of the ‘effect of intra-accumulation division of labor’ and the ‘interrelation between the accumulation and the market’ is at work, and these generate their own economic rationality,” and, moreover, “the two pillars subsumes the self-preserving functions of ‘continuous generation of entrepreneurship’ and ‘accumulation of expertise and boosting of reputation,’ respectively” (Kikkawa 2005b, 81). It can be considered that of these two pillars mentioned, the effect of intra-accumulation division of labor corresponds to the effective utilization of intraregional resources of (i) above, and the interrelation between the accumulation and the market to include exploitation of demand from external market of (ii).

From the discussion of this paper, (i) effective utilization of intraregional resources and (ii) exploitation of demand from external market can be mentioned as conditions of regional recovery that lead to job creation. It should, however, be clearly borne in mind that it takes considerable time for a regional community to learn from the mechanisms of economic revival that worked in other advanced regions and based on the knowledge to achieve regional revitalization that lead to job creation. The medium-sized plants and other small- and medium-sized manufacturers that became the core of the Shiga model took several decades, starting in the period of Japan's rapid economic growth, to diversify their customers. Kurokabe Inc., which was the key player in the Nagahama model, was established 20 years ago in 1988. Regional revitalization of the type leading to job creation cannot be realized overnight.

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