# The Transition and Current Situation of Regional Employment Policies in Japan

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#### 1. Introduction

13

During prolonged economical recession in the 1990's, the total unemployment rate in Japan continued to increase from 2.1% in 1991 and reached the worst rate of 5.4% in 2002. Factors that aggravated the employment situation vary from one region to another. As structure-related factors, the Ministry of Health, Labour and Welfare pointed out (in 2003) that workers were decreasing in the area where manufacturing industries were concentrated while businesses were moving abroad for internationalization of the economy, attempting to gain competitiveness against low-priced foreign products. It also pointed out that unemployment grew into a serious problem in the regions where greater reliance was put on construction industries due to the reduction in public investment. Backed by the increase in exports and expanded equipment investment, the economy subsequently began to gain an upward momentum in Japan, and the total unemployment rate was reduced for the first time in 13 years, down to 5.3% in 2003, showing an improvement in the employment situation. The trend of improvement is seen notably in the regions concentrated with export-related industries that brought economic recovery, but improvements are delayed in other regions and disparities are found between regions in the course of recovery (Ministry of Health, Labour and Welfare, 2004).

To spread the economic recovery throughout Japan, the government has established "Regional Revitalization" policy as one of its important tasks.

Based on the idea of decentralization in recent years, the government has changed its policy initiatives, moving from conventional regional measures standardized by the government to regional revitalization plans independently established by local governments, including prefectures and municipalities that recognize the actual conditions and needs of the region. Meanwhile the government gives various supports by reforming regulations, transferring authorities, and providing convenience for supportive measures given by different ministries and agencies.1 In fact, starting from 2003, local governments are allowed to establish their own deregulation measures, and since 2004 a number of local governments have been establishing and putting into effect "Regional Revitalization Plans" that include various policies and measures.

In this chapter, we make an overview of regional employment measures established since the World War II in Japan and discusses the recent changes that have been made in regional employment measures. It is organized as follows. Section 2 describes regional disparities found in the employment situation in Japan, highlighting its transition and characteristics. Section 3 gives an overview of the history of regional employment measures established nationwide since the war, and Section 4 explains recent regional employment measures and practices that are influenced by the idea of decentralization. Finally, Section 5 describes the perspective of future development of regional employment and presents some issues that should be addressed.

<sup>&</sup>lt;sup>1</sup> Headquarters for the Regional Revitalization, *Approach for Regional Revitalization*, November 26, 2003, http://www.kantei.go.jp/jp/singi/tiikisaisei/siryou/torikumi.pdf.

#### 2. Regional Disparities of Employment Situation

Figure 1 shows the transition of the total unemployment rate in ten different regional blocks. Since the 1990's the unemployment rate increased in all regions without exception, while the disparity structure was relatively stable. Compared with the national average, the unemployment rate is lower in Hokuriku, Tokai, Northern Kanto and Chugoku, while it is higher in Hokkaido, Kinki, and Kyushu. Some regions show different aspects as well. The unemployment rate was higher than the national average in Southern Kanto including Tokyo since the 1990's, but more recently it has become closer to the national average, while the rate has notably aggravated in Tohoku. The unemployment rate is increasing in Kinki in particular among the regions of high unemployment rates.

The fact that the disparities have remained stable suggests that the unemployment rate is sticky in each region. Figure 2 shows the relationship of the unemployment rate to the past employment rate in 47 prefectures for every five years since 1990, the year recording the lowest unemployment rate. In each period, the unemployment rate is high in the region where the rate was also high five years ago (or vice versa), and this confirms the stickiness.<sup>2</sup>

This regional structure of unemployment is also seen

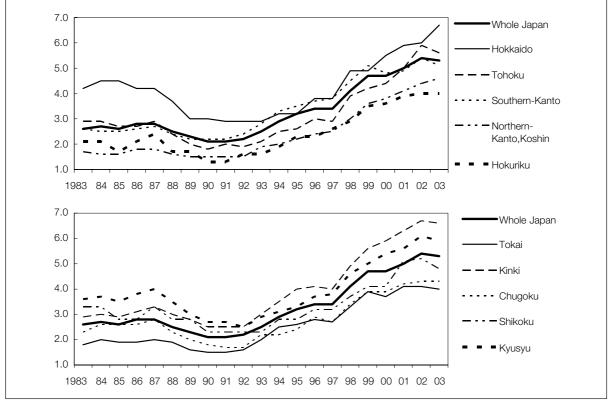
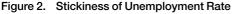


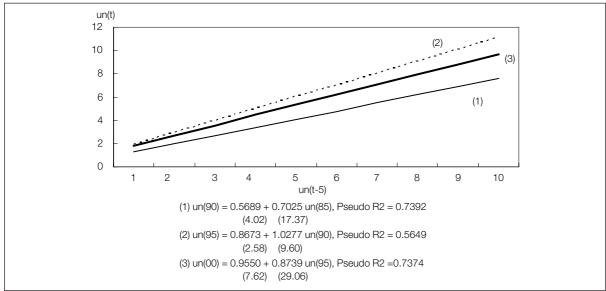
Figure 1. Unemployment Rate in Ten Japanese Macro Regions: 1983-2003

Note: Unemployment rate is shown as the average of the year.

Source: Statistics Bureau, Ministry of Internal Affairs and Communications, Labour Force Survey, 1983-2003.

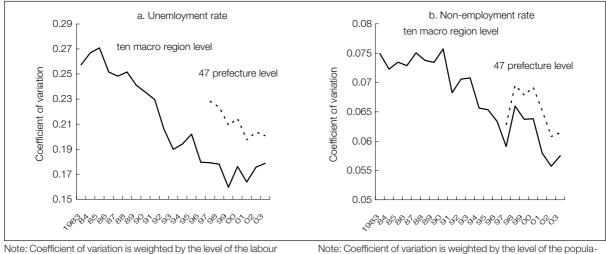
<sup>2</sup> OECD has examined chronological correlation of the unemployment by region for the period from 1960 to 1987 (1989). It suggests that Japan and Finland have the strongest chronological correlation in unemployment.





Note: t-values are in parentheses.

Source: Statistics Bureau, Population Census.



#### Figure 3. Regional Disparities

Note: Coefficient of variation is weighted by the level of the labour force in the corresponding year.

Source: Statistics Bureau, Ministry of Internal Affairs and Communications, *Labour Force Survey*.

Note: Coefficient of variation is weighted by the level of the popula tion of 15 years old or more in the corresponding year. Source: Statistics Bureau, Ministry of Internal Affairs and Communications, *Labour Force Survey*. with the situation of non-employment. Associated with aggravation of unemployment, the non-employment rate increased for the population of age 15 and above in all regions since the 1990's. The correlation factor between non-employment and unemployment by prefecture is 0.72 in 1980, 0.77 in 1985, 0.71 in 1990, 0.68 in 1995 and 0.70 in 2000, showing a positive correlation and no remarkable changes in the last 20 years. Therefore, the regions with higher unemployment also showed higher under-utilization of labor resources.

While the unemployment and non-employment rates increased in each region, their disparities were reduced. Figure 3(a) shows the variation coefficient weighted by regional labor population, and it indicates that the unemployment disparities by regional block decreased in the last 20 years. The disparities, however, have been increasing since 1999, and attention needs to be paid here. The variation coefficient of the prefectural unemployment rate (provisional value) also implies that the disparities are reduced and restrained in recent years, indicating that the regional disparities of employment situation are enlarged in the phase of economic recovery. On the other hand, Figure 3 (b) shows that the disparities of non-employment also show notable reduction in the 1990's, but it again increased in the late 1990's, suggesting regional disparities of the discouraged effect from the labor market due to aggravated unemployment. The disparities were substantially reduced after that period, but some enlargement of disparities is seen in the phase of economic recovery.

The above suggests that the disparity structure of the unemployment and non-employment rates has remained stable in the last 20 years, while their regional disparities decreased in the 1990's due to the aggravation of unemployment in all regions.<sup>3</sup> At the same time, in the late 1990's when unemployment became a serious issue and during the phase of economic recovery, either the reduction was limited or the disparities were enlarged.

### 3. Regional Labor Market Policies in Japan

National policies affect the whole nation, making various influences to regions. "Regional Policies" are conventionally defined as follows (OECD, 1990):

- Incentive measures such as subsidies, tax exemption and grants provided to businesses setting up or adding business establishments in particular "designated regions."
- Government-financed infrastructure investment in designated regions
- Restriction of new construction and investment in overcrowded regions
- Transfer of state-owned industries to problematic regions or decentralization of government offices

Similar to many other industrialized countries, "regional policies" in Japan are administered and operated by such ministries as the Ministry of International Trade and Industry (currently the Ministry of Economy, Trade and Industry), Ministry of Construction (currently the Ministry of Land, Infrastructure and Transport) and Ministry of Labour (currently Ministry of Health, Labour and Welfare). In this section, regional measures<sup>4</sup> are narrowly defined as labor market measures that are put into effect for specific regions mainly by the Ministry of Labour. An overview of the transition of such measures is described here.

<sup>&</sup>lt;sup>3</sup> The reduction of regional disparities of unemployment rate due to labor mobilization was examined by Ohta and Ohkusa (1996), using the data for the period of the late 1970's and the late 1980's. According to their studies, labor tends to move to the area exhibiting relatively low unemployment and relatively higher wages, making it clear that it is adjusted by the market. According to the statistics of population movements, however, movements increased within the prefecture but decreased across prefectures since the beginning of the 1990's, making it difficult to consider it as a factor of reduction in the unemployment rate disparities of the 1990's.

<sup>&</sup>lt;sup>4</sup> The Ministry of Labour defines that "the regional employment plan is a system of employment measures provided, with the main aim of correcting disparities between regions in quality and quantity of labor force, focusing on the regions having regional employment issues, such as the region where a large number of people leaving their work and unemployed reside or where job opportunities are insufficient against the number of job seekers (Shirai 1988, Employment Security Bureau of Ministry of Labour 1990, and Ito 1992).

# 3.1. Regional Employment Measures After the War

Table 1 shows regional employment measures put into effect from the end of the World War II until the 1980's. Japan's conventional regional employment measures are largely divided into two categories (Shirai, 1988).

The first category consists of the measures that are designed to correct regional disparity of labor force, and they were actively promoted for mobilization of labor force for the period from the mid-1950's to 1960's. To be specific, reorganization of wide-area employment placement system (1960) and grants for labor mobilization (1966) were launched to move the workers who left jobs from coal mines due to energy revolution or workers lacking job opportunities in local regions to the metropolitan areas with large demand of labor due to rapid economic growth. As a result, one million people moved every year in the 1960's from local regions to the three major metropolitan areas of Tokyo, Osaka and Nagoya, pushing the population of the metropolitan areas to the peak in the mid 1960's, and creating overpopulation in

the metropolitan areas and depopulation in local regions. Correcting regional economic disparities became an important issue.

The New Comprehensive National Development Plan was established in 1969 for equal use of land in the country to solve the problems of depopulation and overpopulation, and consequently the emphasis on corrective measures against regional disparities shifted towards measures for transferring the labor demand to local regions. In the 1970's, a series of measures were established, providing preferential treatment for industries, moving factories from metropolitan areas to designated agricultural areas or areas with less industries, and promoting establishment of factories in local regions. As a result, the annual movement of population to the metropolitan areas was rapidly reduced to some 300 thousands by the mid 1970's, and the disparities of residents' income from prefecture to prefecture were reduced as people began to settle in local regions (Kato, 1984).

There is another trend during the period after the war. It consists of the measures established after the first oil crisis in 1974, following the period of prolonged stable growth. These measures were emergency employ-

Background	Year	Reform	Measure
Large number of	1947	Employment Security Law,	Job placement
unemployed after the war		Unemployment Insurance Law	Life security
		Emergency Unemployment	Measures for unemployed in the
	1947	Measures Law	metropolitan areas
			Public work to handle other unemployed
Increase of unemployed after		Temporary Measure for People	Job placement
withdrawal of occupation	1958	Leaving Occupation Troops-related	Vocational training
troops and U.N. troops		Job	Life security
Rationalization of coal industry		Temporary Measure for People	Vocational training
due to energy conversion	1959	Leaving Work from Coal Mine	Job placement in enlarged areas
			Transfer allowance
Correction of regional		Amendment of Employment	Job placement in enlarged areas
disparities in labor demand	1960	Security Law and Unemployment	
and supply		Insurance Law	
	1966	Employment Measures Law	Benefits for labor mobilization
	1900		Benefits for job change, etc.
Concentration of population		Law for Promotion of Industry to	Invitation of factories to agricultural regions
in the metropolitan areas	1971	Agricultural Region	(preferential treatment for taxation and
and depopulation in local			finance), support of job hunting
regions	1972	Industry Relocation Promotion Law	Preferential treatment for transfer from the
	1972		industry concentrated regions

Table 1. Timeline of Labor Market Policy for Regional Employment in Postwar Japan

First oil crisis and structurally		Employment Insurance Law	Improvements in the unemployment
depressed industries			insurance system and three employment
issues			insurance projects : (1) employment
			improvement projects, (2) capacity building
	1974		projects, (3) employment welfare projects
			Benefits for business transfer to local regions
			and establishment of new or additional
			business locations
		Amendment of Employment	Grants and benefits for maintaining employ-
	1977	Insurance Law	ment and business conversion
			during recession
		Law for Temporary Measure for	System of the absorption rate of the
	1977	People Leaving Work from	unemployed from public works for
		Designated Depressed Industries	shipbuilding, etc.
		Law for Temporary Measure for	Special treatment for job placement and
		Medium and Small Business in	vocational training
		Designated Regions, and	Extended unemployment benefits
	1978	Law for Temporary Measure for	Maintenance of employment
		People Leaving from Work in	Benefits and grants for business conversion
		Designated Depressed Regions	Employment for public works projects in
			designated regions
Structurally depressed		Law for Special Treatment Measure	Coordination between measures for depressed
industries issues after the		for Stabilization of Employment for	industries and regional measures
second oil crisis	1983	Workers in Designated Depressed	Reinforcement of measures for people
	1000	Industries and Designated	leaving work
		Depressed Regions	Benefits for training before leaving work
			Designation of emergency employment regions
Aggravated employment		A series of emergency regional	Benefits for maintenance of employment
situation in the region		employment measures	Enlargement of designated depressed
concentrated with export-	1986		industries and regions in recession
related industries due to			Designating emergency employment
appreciation of the yen			stabilization regions

Source: Shirai (1988), Ito (1992), Ohtake (2003).

ment measures for a large number of people who were leaving (or might be leaving) their work in certain regions. While the employment situation aggravated, the Employment Insurance Law was established in 1974, setting up a grant system for businesses that maintain their employment. When the law was amended in 1977, it played a role as an unemployment prevention measure. While the recession prolonged, possible mass unemployment became an issue for the structurally depressed industries such as shipbuilding, non-ferrous metal, and petrochemical industries. As a result, a series of temporary laws were established in 1977 and 1978 providing special measures in designated regions based on the jurisdiction of the public employment security offices, such as job placement and vocational training, extension of unemployment benefits, grants and benefits for employment and business transfers, and employment in public works. These temporary measures for people leaving their work were also taken in the period of the second oil crisis (1979) and during the period of recession due to appreciation of the yen in the mid 1980.<sup>5</sup>

<sup>&</sup>lt;sup>5</sup> Kato (1984) and Takanashi (1989). According to Kato (1984), the regions designated as the structurally depressed region includes over 40 regions in the country, including Hokkaido, North Tohoku, Sanyo, and Kyushu, as of August 1983.

#### 3.2. Change for Mid-Term Measures

When the economy entered into a stable growth period, transfer and decentralization of the labor demand was reduced, and the transfer movement of labor calmed down as people wished to settle themselves where they were. Consequently, "creation" of stable opportunities of employment became an issue for the regions where employment opportunities lacked. With this change in the situation after the 1980's, regional employment measures changed gradually from temporary measures to mid-term employment development measures, designed for people leaving their work in the depressed industry sections and regions.

Table 2 shows the transition of regional employment development from the 1980's to the present period. Of these, the Regional Employment Development Promotional Projects, enacted during the period from 1982 to 1986, were designed for the designated model regions consisting of depressed regions, and guidelines were established to promote employment development by the regional employment promotion committee, composed of the local municipality, public employment security office, vocational training schools and representatives from workers and employers. Emphasis was made on grants for the businesses setting up new or additional business establishments and employing workers in the designated regions.6 In this period, the Ministry of International Trade and Industry launched Technopolis Plan (1983) and Industrial Intelligence Establishment Plan (1988) as regional economic promotion measures, promoting regional industries along the lines of the Industrial Relocation Promotion Law. Following this, the Law for Promotion of Local Employment Development was established as a perpetual law in 1988, which was unlike the conventional regional employment measures implemented through temporary legislations. This act was designed to develop employment in the mid-term to long-term range. It consolidated the conventionally designated regions into three categories: (1) "Employment Development Promotion Region" with serious shortage of job opportunities, (2) "Special Employment Development Promotion Region" where depressed industries are concentrated, requiring

employment development, prevention of unemployment and support of re-employment, and (3) "Special Employment Stabilization Region" where employment rapidly aggravated, urgently requiring prevention of unemployment and support of re-employment. The regions categorized in (1) and (2) above were designated based on the jurisdiction of the public employment security office, and the category (3) was based on the municipality (no regions were designated after 1989). Later, several amendments were made, including designation of the depopulated regions caused by the bubble economy (1991) and designation of the manufacturing industries concentrated regions to protect skilled workers, following the trend of deindustrialization (1997).

#### 3.3. Limitations of Standardized Policies and Changes in Regional Policies

While medium- to long-term measures were being implemented for regional industrial and employment development, the administrative system continued to be centralized. Local governments needed to make plans based on the standardized measures of the central government in order to obtain grants and tax benefits from the central government. Consequently, local governments made similar development plans throughout the country that did not reflect the unique features in each region. One of the typical examples is the regional development projects launched under the Resort Development Act (the Comprehensive Resort Area Development Act enacted in June 1987). The majority of the designs of large-scale resort facilities were created by large development companies in Tokyo or Osaka, and the basic concepts of different facilities constructed in different regions were remarkably similar to each other.

The central government adopted a universally similar stance in its regional industrial and labor policies, aiming to transfer labor demand from urban areas to rural areas and encourage industrial development and job creation in underdeveloped regions. At the local level, however, there was rarely unified promotion of economic development, vocational development, and

<sup>&</sup>lt;sup>6</sup> Ohara Institute for Social Research (1984), *The Labour Year Book of Japan*, Vol 54, Part 3, Ch 2.

## 186 Local Governance for Promoting Employment

Background	Year	Reform	Measure
Reduction of job opportunities transferred or decentralized to local regions Increase in the sentiment for settlement	1979	Establishment of regional employment development committee	Established in the depressed industrial regions, agricultural regions and metropolitan areas
	1982	Regional employment development promotion projects	Designating model regions for integrated operation of industrial and employment measures Making policies by administration, labor and management Benefits to employment associated with new or additional business establishment
Stabilization of the regional disparity structure	1983	Technopolis Plan	Preferential treatment for establishment of high-technology industries in the region designated by the prefecture, except the metropolitan areas where industries are concentrated
	1988	Industrial Intelligence Establishment Plan	Preferential treatment for establishment of the service industries that are recognized to have ability of contributing to enhancement in the research, development, information service and design in the region designated by the prefecture, except the metropolitan areas where industries are concentrated
	1988	Law for Promotion of Local Employment Development	Perpetual law for long-term regional employment measures Consolidation of designated regions to three regions Regional employment measures are organized into two categories: (1) regional employment development and (2) prevention of unemployment and promotion of reemployment Benefits for the wage of labor employed for new or additional business establishment and benefits for cost of new or additional establishment
Securing, fostering and stabilizing human resources in the region where labor force flows out	1991	Amendment of Law for Promotion of Local Employment Development	Establishment of new designated region (the region lacking attractive job opportunities) and promotion of project models
Transferring and developing elevated skills after deindustrialization and lack of employment opportunities	1997	Amendment of Law for Promotion of Local Employment Development	Promotion of new designated region (the region concentrated with businesses employing highly skilled workers) and provision of grant

Table 2. Comprehensive Labor Market Policy for Regional Employment

Recession and increase in the unemployment after financial instability	1998 - 2000	Emergency employment measures for five occasions	<ul> <li>Enhancement of benefits for maintenance of employment and new employment</li> <li>Establishment of the benefit system for education and training</li> <li>Benefits for projects consigned to private companies and NPOs by local municpal office (creation of employment)</li> <li>Establishment of the benefit system for employment for newly established</li> </ul>
Advancement of the decentralization Promotion of regional revitalization lead by region	2000	Devolution of Power Law	businesses in the designated industries Clear division of role between the state and region, abolishment of delegated administrative work and transfer of authority, etc (abolishment of local administrator)
	2000	Amendment of the Employment Measures Law	Local governments' obligation to make an effort in implementing employment measures suited to the state of affairs in each region
	2001	Amendment and renaming of Law for Promotion of Local Employment Development	Establishment of new designated regions (the region showing mismatch between labor demand and supply and mismatch of job offer information) and reorganization of existing designated regions Regions designated by the prefecture and the plan approved by the state
	2001	Industrial Cluster Plan	Establishment of human resources network between the government, industries and academia, "Supporting development of practical technique" associated with creation of new products and services, organization of environment for starting businesses including facilities to support entrepreneurs
	2002	Structural Reform Special District Law	Reform of regulations in the special districts, planned by the local authorities and approved by the state
	2003	Programs for promotion of regional revitalization	Regional revitalization plan made mainly by municipalities, supported by the state, providing deregulation, authority transfer, enhancement of measures, etc.
	2003	Amendment of the Employment Security Law	Local governments may provide free job placement services by notifying the Minister of Health, Labour and Welfare.
	2005	Program for Promotion of Regional Revitalization 2005	Realignment of the legal system (Regional Revitalization Law, special tax exceptions, grants, etc.), promotion of measures in line with revitalization plans, and policy evaluation

job placement services. Therefore, coordination and adjustment of various regional policies became an issue.

In addition, as we saw in Chapter 2, the financial conditions of the central and local governments are deteriorating, and cross-border, interregional competition is intensifying. As a result, it is difficult to create jobs through public spending on regional infrastructures and by implementing nationally uniform measures to induce firms to relocate in regional areas.

To break the deadlock brought about by the centrally planned regional policies, a progress has been made since 2000 in decentralizing the administrative system and transferring authority to regional governments on matters of industrial and employment policies. The first step in this direction was the introduction of the Comprehensive Decentralization Law of 2000. It abolished the system of "administrative consignment," whereby local governments acted as the local instrument of the central government, clarified the roles of the central and local governments, and devolved authority of various administrative work from the state to the prefectures and from prefectures to local municipalities. As a result, the relation between the state and local governments changed from a vertical relation of subordination to a horizontal relation of equality and cooperation (possible transfer of financial resources and others from the state to regions is presently being discussed).

The amendment of the Employment Measures Law in the same year also provided for the local governments' obligation to make an effort in implementing employment measures. This was the first time in history that local governments were given responsibility in employment policies. In this context, the amendment of the Employment Security Law of June 2003 stipulated that local governments may provide free job placement services, which until that time were provided exclusively by public employment security offices. Specifically, local governments may, by notifying the Minister of Health, Labour and Welfare, offer free job placement services to promote measures for (1) assisting users of social welfare services, (2) inducing firms to relocate in their regions, (3) improving the welfare of their citizens, and (4) developing industries and the economy. So far, 15 prefectures and 19 local municipalities are providing job placement services, including Kyoto Prefecture (for youth employment), Yamaguchi Prefecture (for employment of people native to the prefecture who will be returning from other prefectures), Fujisawa City in Kanagawa Prefecture (for reemployment), and Izumi City in Osaka Prefecture (for job placement for people having difficulty finding work and for improving the local labor market so that it will be possible to attract firms to relocate in the city).

With the decentralization of the administrative system, the recent regional employment measures emphasize industrial and employment development schemes, utilizing (1) regional initiatives and (2) regional resources (advantages). The Law for Promotion of Local Employment Development was amended in 2001 for specialization in employment development in association with municipalities, and the designating body of designated regions changed from the state to the prefectures. On the other hand, the Ministry of Economy, Trade and Industry launched the "Industrial Cluster Plan" in the same year in an attempt to prepare the environment for creating innovations based on a human resources network and to realize intrinsic economic revitalization in each region, since there were limits to the regional economic promotion measures conducted under the Factory Relocation Promotion Act, which invited businesses to move from the metropolitan areas to regions. Presently, 19 regions are designated, and in collaboration with regional Departments of Economy, Trade and Industry, medium and small businesses in regions (some 5,800 companies), and university researchers (220 universities), efforts are made to (1) establish a human resources network between industries, government and academia, (2) support technological development with the use of unique regional features, and (3) organize facilities to foster entrepreneurs.

Regional economic revitalization using ingenuity and originality of the region became well established after designated structural reform districts (2002 -) and regional revitalization promotion program (2003 -)were set up. The designated structural reform districts are not established as the conventional financial measures but are designed to revitalize regional economy by introducing special exemptions in the district, based on the proposals made by the local municipality. In April 2003, the first series of approval was made for 57 projects to create new industries and activate agriculture, in collaboration with international distribution communities and industry-academia cooperation. From then on until December 2004, when the sixth series of approval was made, as many as 484 new projects were approved. Since it is essential to have autonomous planning and comprehensive industrial and employment measures to revitalize regions, an approval was also given to the "Regional Revitalization Plans" made by the municipalities and prefectures starting in June 2004, and a total of 250 revitalization plans have been approved so far. While the central government did not introduce any fiscal policy measures for regional revitalization in the beginning, it included special tax treatment and grants for regional revitalization in a recent guideline. Government ministries and agencies will also be focusing on implementing measures that relate to regional revitalization from 2005 and beyond.

## 4. Local Initiatives in Industrial and Employment Development Promotion

# 4.1. Promotion of Decentralized Regional Revitalization Plan

As discussed in the previous section, the largest change brought about by the decentralization policy is that local governments now made and conducted their own plans of development, which were designed for the specific needs of the region. Presently, different types of plans are being implemented for new decentralized regional development, and some achievements have been made.

#### (1) Development under the Industrial Cluster Plan

In contrast to the conventional regional development measures where local governments organize the industrial sites to promote manufacturing industries to locate in the region, a new industrial cluster plan began to show a progress with the establishment of the Industrial Cluster Plan in 2001. The concept of a "cluster," meaning a close grouping of similar things such as a cluster of grapes, was first suggested by M. Porter. Its objective is to promote technical development and entrepreneurship rooted in the region in collaboration with industries, government, and academia.

Instead of the conventional development method that invited businesses to locate factories in the region, the Cluster Plan is expected to create endogenous opportunities for industry and employment under the Ministry of Economy, Trade and Industry's program called the "Industrial Cluster Plan" and the Ministry of Education, Culture, Sports, Science and Technology's "Intelligent Cluster Development Project."

There are 19 projects under the Industrial Cluster Plan, and 12 regions designated under the Intelligent Cluster Development Project. The majority of the plans are related to the Japan's four key fields of advanced technological development: life science, information and communications, environment, and nano-technology and material science.

The Industrial Cluster Plan is focused on the following three points: (1) establishing the "human resource network between industries, government, and academia" to exchange quality information on management, technology and marketing outlets, (2) "supporting development of practical technologies" leading to creation of new products and services, and (3) preparing the environment for entrepreneurship such as facilities fostering entrepreneurs. It also plans to provide effective support in developing marketing outlets after the projects are established. Presently, some 5,800 companies, mainly small- and medium-sized companies, and 220 universities are collaborating in 19 regions.

Compared with public investment, the budgets for these projects are rather small, amounting to 31.2 billion yen for the Industrial Cluster Plan in the fiscal year 2003 and six billion yen for the Intelligent Cluster Development Project in the fiscal year 2002. It is also expected to take some time before any effect is seen in terms of creation of industrial employment in the industrial clusters.

Although gradually, the Industrial Cluster Plan in some regions is developing. In the metropolitan area of Tokyo where electronics and precision machinery industries have concentrated from the past, reallocation of universities has facilitated collaboration of industries, government, and academia, and the Metropolitan Activation Project is being promoted, involving 74 municipalities in three prefectures, including Tama region in Tokyo, the central region in Kanagawa Prefecture and western part of Saitama Prefecture. Participated by 265 members from industries, universities, and local governments, the project is promoting research and development of industrial machinery, electronics, communication parts and equipment, and software. Member companies have achieved an approximately 50-percent success rate in merchandizing technology (commercialization), which is about three times higher than the national average.

#### (2) Industrial Cluster Development in Designated Structure Reform Districts

Some regions are combining Industrial Cluster and Designated Structure Reform Districts for regional development. One of the typical examples is the Advanced Medical Designated District in Kobe, Hyogo Prefecture. The region was approved as the Region of Intelligent Cluster Creation Projects and later as the Designated District of Advanced Medical Industry in April 2003. It organizes research and development centers with the collaboration of industries and academia, and promotes the Plan for the Medical Industry City of Kobe, concentrating medical related industries for activation of the economy, improving residents' welfare, and contributing to the international community.

The Designated Structure Reform Districts plan was introduced in 2002. Providing severe regulations against newcomers. Industrial Protection Measures had become a barrier to creation of new industries, and bold measures were required to eliminate regulations completely in the period of transition for industrial structure reform. Since deregulation or complete elimination of regulations nationwide faced strong opposition from those with vested political interest, the Designated Structure Reform Districts project was established in 2002 to provide deregulation on a trial basis in limited regions and subsequently expand it nationwide for activation of the economy. Presently, 484 projects have been approved for new industry creation, international logistics, agricultural development and others in collaboration with industries and academia. The measures are planned voluntarily by local governments, and the central government does not provide any financial measures such as tax benefits or subsidies.

In the Designated District of Advanced Medical Industry in Kobe, professors from national universities are allowed to work for projects utilizing research results in their working hours and use the test and research facilities of the state. In the district, researchers from abroad are also given extensions of stay when visiting the research institutions (from three to five years), and institutions are allowed to expand their activities, including the launch of venture businesses. With the introduction of the Designated District of Advanced Medical Industry project that promoted deregulation, location of the Physical and Chemical Research Institute in the district, and reorganization of the core facilities such as the Kobe Clinical Study Information Center and the Advanced Medical Center, 66 medical related companies have now located in the region and 2,100 jobs have been created.

#### (3) Regional Revitalization in an Agricultural Town

There is also a case of a local government, which had little prospect for attracting firms to relocate in their region and which was being depopulated as a result of out-migration, taking advantage of the deregulation and decentralization of recent years to promote an endogenous revitalization strategy. Tono city in Iwate Prefecture, an agricultural town with a population of less than 30,000, was designated as a Special Zone for Structural Reform in 2003. In the following year, the central government also approved the town's regional revitalization plan. It is now promoting regional development by preserving the typically Japanese rural scenery and using that to develop agriculture and tourism in a "Japanese hometown project."

In the Special Zone of Tono City, dubbed the "Japanese Hometown Revitalization Zone," the township aims to increase the number of people it interacts with by promoting tourism for transient visitors and to maintain and develop rural scenery through the effective use of farmland. Specifically, the town is (i) taking advantage of deregulation to allow farms to operate inns, brew unrefined sake, lease farmland, and to more flexibly purchase rights to farmland and (ii) coordinating in the establishment of Tohoku Tourism University, which is run by a local NPO corporation to develop human resources for agribusiness and tourism, and promoting the settlement of people from urban areas. At the same time, it is (iii) advancing government-industry partnership in assisting entrepreneurial activities that are based on regional resources. Already, a start-up firm has been established through the initiative.

In the regional revitalization plan "Japanese Hometown Revitalization Plan," the town has clearly set out slowing down the decline in population as the objective, which would be realized by increasing the number of visitors, further promoting entrepreneurial activities, and encouraging the increasing number of visitors to settle in the region. As for promotion of entrepreneurial activities, it provides financial assistance through a regional fund, to which citizens and firms can contribute, and systematic assistance for establishment of start-up firms and their initial operation. It also involves volunteers in preparing physical structures and intangible systems needed to promote settlement. These efforts have already resulted in increasing the number of guests and creating jobs for about 50 people a year. The support for entrepreneurial activities is expected to lead to establishment of a firm employing five employees in fiscal 2004 and of other three firms employing about 15 employees in fiscal 2005 and beyond.

#### 4.2. Successes and Limitations of Venturetype Job Creation

The software industry in Sapporo is a good example of the regional industry that has succeeded in industrial concentration, resulting from venture firms endogenously established with not much support from central and regional governments. Most of the IT industries in Hokkaido are located in Sapporo city in the central part of Hokkaido. In the northern area of Sapporo Station in particular, many high-technology software development firms are located. As a result, this area has recently been called the "Sapporo Valley."

The Sapporo Valley is being supported by a number of core firms and groups of firms spun off from the core firms. According to the history of the formation of the core firms, their original body was the "Mycon (Microcomputer) Workshop" initiated in 1976 by Professor Aoki of the Engineering Faculty of Hokkaido University. Most of the managers of the core firms forming the Sapporo Valley were previously students of the Mycon Workshop. After studying in the Mycon Workshop, they established venture firms, which later spun off into many new companies. These companies have come to form the Sapporo Valley.

The concentration of firms in the Sapporo Valley was initiated by these venture firms rising out of the Mycon Workshop and since then has been promoted by a number of subsequent firm groups. In 1982, the Hokkaido System House Association and Hokkaido Software Association were established. In 1986, the City of Sapporo constructed the "Techno Park," an industrial complex for IT industries. BUG and Technova, founded in 1977 by students of the Mycon Workshop, are located in this area.

In the Sapporo Techno Park, the "Sapporo Electronics Center" was constructed as a core facility. Projects and seminars using this facility have promoted mutual exchanges among IT venture managers, engineers, university faculty members, and regional government officers. The mutual exchange initiated by the Sapporo Electronics Center led to the foundation of NCF (Network Community Forum) in 1996, a communitybased voluntary organization. The NCF has set up a number of community-based projects.

The human resources of IT industries forming the Sapporo Valley are closely linked with Hokkaido University. The managers of core firms were trained previously in the Mycon Workshop, while many of the engineers employed in the IT industries are graduates of Hokkaido University. Some graduates were recruited in these industries in Hokkaido, while others were originally employed in large firms in Tokyo and then reemployed in the industries in Sapporo at around the age of 30. Moreover, an increasing number of people who are from Tokyo or other big cities with no personal relation with Hokkaido have recently joined local firms in Sapporo, attracted by the advanced technology of core firms in the Sapporo Valley and favorable living conditions in Sapporo.

The concentration of IT industries in the Sapporo Valley is an example of success. In fiscal 1999, Sapporo had 25 firms with sales of 7.37 billion yen (a 21.4% increase from the previous fiscal year) and 644 employees (a 24.3% increase from the previous fiscal year). These figures on sales and employment were 12.7 and 17.5 percentage points higher than the average figures of entire Hokkaido. Many of the core firms, however, have less than one billion yen in sales and only a few have more than two billion. Therefore, these firms have not been able to contribute significantly to regional employment development. Although their growth has been slowed by the recent IT recession, the core firms are expected to continue their growth in the future and further spin off new ventures.

While the software industries are expected to create jobs, such industries have tended to concentrate in big cities. According to an analysis on the trends of concentration of information and communications industry (Statistical Survey on Firms by the Ministry of Public Management, Home Affairs. Posts and Telecommunications in 2001), there are approximately 60,000 IT firms in Japan employing 1.47 million employees, of which 31.3% of the firms and 42.0% of the employees are in Tokyo. In such a situation, the network of firms clustering in the Sapporo Valley and concentrated around Hokkaido University as the core is relatively small. The close-knit nature of the network, which has supported industrial growth in Sapporo, may turn out to be a hindrance to its further growth. Furthermore, most software developed by firms in the Sapporo Valley is community-based and therefore unlikely to radically increase their sales and income, which is an indication of the limit of their growth. The issue for future growth is how the business network can be expanded between the IT industry in Sapporo, which has already been linked with firms in Tokyo in terms of human resources, and Tokyo and other big cities where many major users are located.

#### 4.3. Local Job Development Supported by Strategic Inducement of Firms to Relocate in Local Regions

#### (1) Invitation of Sharp LCD TV Plant to Kameyama City in Mie Prefecture

Large cities, their neighboring regions, and plantgathering districts have established a basic infrastructure for regional job development, but rural regions located far from large cities have not yet established such an infrastructure. In these rural regions, it is possible to create small numbers of jobs through community businesses; but in order to create a large number of jobs, an effective approach for local governments is to invite firms to the regions. Local governments have so far adopted a passive method of constructing an industrial complex and then waiting and seeing if firms will come to invest in their region. Such a passive method helped some manufacturers to come and construct assembly plants, but it is very much likely that these plants will later be transferred to China or other overseas countries where labor costs are much lower, resulting in deindustrialization. Therefore, it is necessary to strategically invite businesses in growing industries.

Kemeyama city in Mie Prefecture has succeeded in the development of the local economy and employment supported by strategic invitation activities. The Mie prefectural government has rapidly promoted administrative reform since Governor Kitagawa took office, who decided to shift prefectural administration from "centralized power and bureaucratic control" to "decentralized power and autonomous control." This has led to a new project for development of the local economy and employment supported by strategic inducement of firms to relocate in the prefecture. It is the Crystal Valley Project.

The Crystal Valley Project aims to concentrate liquid crystal and other flat panel display (FPD) businesses, one of the growing industries of the 21<sup>st</sup> century. The firm representing such businesses is Sharp, which is trying to become a leading company in the liquid crystal industry. Sharp, which already had a plant in Taki town of Mie Prefecture, announced that the company would focus their management resources on liquid crystal business in order to advance its management strategy of selecting and concentrating business areas. Hearing the company's plans to construct a new plant, the governor and a team working on relocation of firms in Mie Prefecture repeatedly negotiated with Sharp, both officially and unofficially. As a result, Sharp decided to come to Mie Prefecture to construct the new plant there.

The team selected Sharp as a target because: it was engaged in a growing business; it already had a plant in Mie Prefecture; and Tenri city in Nara Prefecture, where the company's development division was located, and the northern part of Mie Prefecture were connected by an expressway. In addition, Kemeyama city fortunately had a privately owned land that could comply with the company's requirements for a 330,000 m<sup>2</sup> flat land to be supplied with 10,000 tons a day of industrial water and to be developed within a year. Furthermore, the Mie prefectural government and Kameyama city government will provide Sharp with subsidies amounting to nine billion yen and 4.5 billion yen, respectively, totaling 13.5 billion yen during 15 years from fiscal 2004.

The Sharp Kameyama plant started full-scale operation in January 2004, adopting the world's first complete assembly line for products covering from large liquid crystal panels to liquid crystal TVs. Sharp's management strategies are to locate all functions from advanced technology development to production in one area and to conceal its high technologies as if in a "black box" without disclosing them as patents so that the company can maintain its leading global status in the industry.

In addition to the production of liquid crystal panels, Sharp plans to transfer their assembly line from its Yaita plant in Tochigi Prefecture to expand the Kemeyama plant in the future as well. The number of Sharp's employees transferred from the Yaita plant and new graduates employed by the firm has increased significantly. The recent advance of relevant businesses in the prefecture has further increased regional employment.

When starting operation in January 2004, Sharp had approximately 500 regular employees. In April, this number is expected to increase to approximately 650 with additions from employment of new graduates. Moreover, in April 2004, the number of employees of 12 cooperating firms located in the site of the Kameyama plant and eight affiliated companies located outside the site will amount to 1,680 and 1,040, respectively, an increase in employment by 2,720 in total. As such, the relocation strategies of the Mie Prefecture will result in creating nearly 3,500 jobs in all employed by Sharp and its cooperating and affiliated companies.

#### (2) Invitation of Call Centers in Okinawa Prefecture

In the case of call centers in Okinawa Prefecture, a local government succeeded in job creation by a method different from the method that strategically focused on relocation of particular firms. The unemployment rate of Okinawa Prefecture is the highest in Japan and is particularly high in the segment of the younger generations. Therefore, urgent local job development is in need. However, since Okinawa is located in the southernmost part of Japan with vast land used as US military bases, there are almost no manufacturing companies that can stably provide Okinawa with employment opportunities. Okinawa's main industries are all related to tour services and agriculture. Many young people work as part timers in Okinawa or as temporary workers at automobile assembly plants outside Okinawa. As a result, they are forced to repeat a cycle of short-term employment and unemployment.

The IT industry was expected to generate jobs in the region that had almost no infrastructure for manufacturing industries. Okinawa Prefecture established a "Multimedia Island Project" in 1998, which aimed to improve communication lines, training facilities, and other infrastructures, and create various preferential measures in order to attract IT businesses in the region. The prefecture focused on call centers. It created and implemented various measures, for example, reduced price of communication lines, preferential tax policies, and subsidies to supplement employees' wages for firms employing people younger than 30 years old. This has contributed to the relocation of eight call centers in the prefecture in 1999 and today the number has increased to 34 call centers that employ 5,800 employees.

People employed are mostly young women. Most of them are working as limited-term contract employees. As the operations of call centers do not require high skills in most cases, the centers are not very active in employing people as regular employees. Thus, this is one of the problems in light of the quality of employment. In light of job creation in a region with high unemployment rates, however, the local government's policy is recognized as having a certain effect.

#### 4.4. Revitalization of Businesses by Foreign Capital

Direct investment of foreign capital in Japan remains much smaller than direct investment of Japanese capital in overseas countries. A gradually increasing number of foreign investors have activated the local economy during the current economic recession that began after the collapse of the economic bubble in the 1990s. A number of electric companies, which were forced to drastically restructure their organizations due to slumping business operations, shifted the location of their plants from Japan to China and to other low-cost countries and sold their plants in Japan to foreign investors.

The closure or transfer of large plants in regions where there are not many job opportunities has direct effect on local employment. Japan's leading electric manufacturers, which had adopted a full-set production system covering from parts to finished products, faced a wave of modularization especially in the personal computer industries, resulting in their manufacturing plants having difficulties securing profits. This wave of modularization, which aimed to procure parts and materials from any competitive part of the world without depending on the established deals within a company or with specific companies, jeopardized the very foundation of plants in Japan in terms of cost.

In these circumstances, Electronic Manufacturing System (EMS) firms from the US and the EU, which focused on technology, equipment, and personnel available at Japanese plants, acquired these plants and personnel from such firms as Sony and NEC and started to produce parts and products for other manufacturers on commission, using the plants and personnel they had acquired. As these firms neither develop nor produce parts and products for particular companies but concentrate on production on commission from a large number of companies, the firms succeeded in increasing the plant operating rate and avoided closure or downsizing of the plants.

A substantial number of resort facilities have also been revitalized as a result of foreign capital activating firms that were almost in closure or bankruptcy. Many of the large hotels and resort facilities, which had all been constructed in the 1980s, were facing a financial crisis resulting from the bubble collapse. These facilities included not only privately operated facilities but also the third-sector facilities financed by local governments.

Foreign firms and funds, which had rich experience and expertise in the management of hotels and resort facilities, acquired bankrupt Japanese facilities at extremely low prices or were entrusted with the operation of such facilities. As a result, operations have restarted at some of them. Examples are Seagaia in Miyazaki Prefecture, Spauza in Kanagawa Prefecture, and Avex in Hokkaido.

#### 4.5. Revitalization of Existing Industrial Concentrations

An analysis of the relationship between the manufacturing ratio and unemployment rate by prefecture shows that a district with a high manufacturing ratio has low unemployment rates. It means that manufacturers still play an important role in employment.

As a result of corporate restructuring during the long economic recession that lasted more than 10 years, Japanese manufacturers have finally found a way of revitalizing their businesses. Typical examples are electric and precision machinery industries. Although Japanese electric firms were slow to introduce modularization, they have succeeded in creating markets for flat-screen televisions with a liquid crystal panel or plasma display panel (PDP), digital cameras, DVD recorders and other digital electric home appliances. This success has contributed to the recovery of business growth. While both personal computers, which are suited to modularization, and digital electric home appliances are based on digital information technology, there are significant differences in the technology used in the two fields.

The personal computer is the product with which modularization was truly effective. As the fundamental technology of the personal computer is owned by Microsoft and Intel, Japanese manufacturers found it difficult to secure market competitiveness with their own technology. Therefore, Japanese manufacturers in this market faced the likelihood of being drawn into price competition in a relatively short time and making little profit or even falling into a deficit.

On the other hand, Japanese firms have maintained technological competitiveness in digital electric appliances by using their original TRON technology in the operating systems and producing system LSIs, which are important basic parts, in their own plants so as to keep technological trade secrets, as it were, in a "black box." The rapid technical change and shorter cycles to bring new products to the market require closer contact between product development and design divisions and production divisions.

Plants located in Japan are most suitable for manufacturing the products for which technologies are rapidly changing, because these plants are able to establish and maintain close contact between their product development and design divisions and production divisions in Japan. A substantial number of electric manufacturers, which started to concentrate their functions of development and production of advanced products in Japan, are expanding or building plants and equipment. Employment opportunities have been increasing steadily in the areas where such plants are located.

Automobile manufacturers, who represent Japan's export business industries alongside electric manufacturers, have significantly increased their overseas production capacity without downsizing their domestic production capacity. International trade friction prompted Japanese automakers to actively promote overseas production, and they have advanced the globalization of production. As a result, Toyota, Nissan and Honda earned a total operating income of a little more than 1.4 trillion yen from their overseas operations in their fiscal year ending March 2004. The above income exceeded the total operating incomes from domestic and international operations of ten leading Japanese electric manufacturers.

Japanese automobile manufacturers have not been forced to radically cut their domestic production capacity either. While maintaining a certain level of mass production capacity and reinvesting their overseas operating profits in their domestic activities, they have increased competitiveness through reinforcement in product development and improvement of their plant and equipment. They have succeeded in the mass production of hybrid vehicles earlier than other automakers and in the development of prototype fuel-cell vehicles, securing an advantageous position to develop the nextgeneration technology.

The business model of automakers assembling 30,000 to 50,000 parts is an "integration-type (or coordination-type) system of manufacturing" that consists of three layers: "manufacturing capability," "improving capability," and "innovation capacity." An increase in their competitiveness depends on how effectively they can build this business model. It requires new vehicle development and production innovation involving their respective group parts manufacturers, and is different from the module-type business model, which is based on the flexible mergers and acquisitions of firms. It is the "integration-type (or coordination-type) manufacturing system" that involves a truly wide range of firms and divisions. In the Aichi Prefecture and neighboring prefectures where many plants of Toyota and Honda and their parts manufacturers are located, the labor market conditions are good, and the effective job offer ratio has recently increased to more than one, showing a labor shortage.

## 5. The Future of Regional Industrial Development and Job Creation and Issues

Public investment in Japan in the last 40 years amounted to 1,000 trillion yen. During the 1990's, in particular, when measures against the recession were introduced after the collapse of the bubble economy, it amounted close to 400 trillion yen, consisting mainly of construction of expressways and other social infrastructure. The majority of the public investment went to local regions instead of metropolitan areas. Until the 1980's, when social infrastructure was still insufficient, regional public investment played an important role in creating employment opportunities particularly in construction and manufacturing industries. As already elucidated above, it is clear that creation of jobs in rural areas through public spending played a major role in maintaining regional divergences in employment and unemployment within a narrow range during about 20 years until the end of the 1990's.

In the period after 1990 as the bubble economy collapsed, however, there was a rapid change in the industrial structure, and public investment from the central to regional governments made a small increase in job opportunities. Although excessive investment was often made into physical social infrastructure, typically expressways, the actual usage of the infrastructure did not increase, giving financial pressures to the state and regions in both construction and maintenance costs.

In the period from the 1970's to 1980's, standardized regional development measures, drawn up by the central government and implemented at the regional level, were introduced. Based on the Factory Reallocation Promotion Act and Resort Development Act, these measures aimed to establish a number of third sectors, or joint public-private ventures between local governments and private firms, for development of factory sites and construction of large-scale resort facilities. The collapse of the bubble economy, however, caused a drastic change in the demand for such projects, and financial difficulties were revealed in the course of the recession in the 1990's, forcing a number of ventures to close down or go bankrupt.

The promotion of high-tech industries in regional areas under the Technopolis policy did not make much contribution as it was enlarged to cover 26 areas after the local governments' invitation activities escalated and policy stance was standardized. Although manufacturing industries moved to regional areas as a progress was made in the creation of the social infrastructure such as expressways in the 1980's, they made a quick change and began to move their factories to China and other countries in the 1990's, making a reversal from "creation" of employment to "loss" of employment. Due to the situation, the number of workers in the manufacturing industries substantially decreased by as many as 3.47 million, from the 15.69 million peak in 1992 to 12.22 million in 2002 (Labour Force Survey, Ministry of Internal Affairs and Communications).

With regard to the regional industry and employment development policy of up to the 1990's, local governments needed to make plans based on the standardized measures of the central government in order to obtain grants and tax benefits from the central government. Consequently, local governments made similar development plans throughout the country that did not reflect the unique features in each region.

Standardized measures had a relatively large policy effect up until the 1970's when social infrastructure was still insufficient in local regions. As a progress was made in the construction of physical social infrastructures and as the industrial structure rapidly changed, however, standardized measures substantially lost its effectiveness by the 1990's. After the prolonged recession of the 1990's, a strategic change in the regional industry and employment development policy is finally being realized after 2000.

The former Prime Minister Kakuei Tanaka's Nippon Retto Kaizo-Ron (Remodeling of the Japanese Archipelago) set in motion the central government's regional development policy of providing fiscal investments in large-scale, nationally uniform public works in regional areas. The effectiveness of such a policy, however, clearly declined after 1990. Moreover, the central and local governments have liabilities worth one quadrillion yen, including "hidden debts" of public corporations. This, for all practical purposes, makes regional industrial development and job creation through largescale public works difficult. In addition to the tripartite reform for readjusting the allocation of financial resources among the state and local governments, there is now also a shift towards decentralization in industrial and employment policies.

Industrial and employment policy decentralization signifies that each regional community will be advancing regional development projects by utilizing its unique resources to realize realistic goals. However, this structural change in industrial and employment policies may — contrary to the intended purpose of reducing regional divergences through decentralization — result in widening regional divergences. This may be caused principally by differences in each regional community's ability to plan and design regional development projects and hence by differences in the human resources.

During the years of centralized, nationally uniform industrial and employment policies, local governments

only had to draw up plans according to the ministries and government agencies' specifications. Therefore, structurally, the differences in the ability to plan and design projects did not become noticeably evident. In fact, regional divergences in employment and unemployment from 1980 to 2000 remained relatively unchanged during that period.

But once each regional community's ability for planning and designing begins to take on a greater significance through decentralization, regional divergences may expand. In fact, a number of recent indicators of employment and unemployment suggest that regional divergences are widening. Seemingly, local governments' leadership has been a key element in the divergences, for instance, between Tokyo and Osaka and in the growth of jobs and number of workers in Mie and Okinawa Prefectures.

There is a clear difference in the leadership of the governors of Tokyo and Osaka, both of whom happened to take over the posts from former entertainers-turnedgovernors. In Tokyo, a heavyweight politician became the governor and is exercising strong leadership in policy matters. The governor is promoting structural reform that goes beyond mere synergy generated by industrial clusters.

In contrast, a former bureaucrat became the governor of Osaka. The governor's leadership appears to be much weaker than that of the Tokyo governor. Osaka is lagging behind in industrial structure adjustments and has a smaller concentration of IT and other specialized service industries than Tokyo. As symbolized by the stagnation of the Kansai International Airport, it is clear that Osaka is behind Tokyo in terms of infrastructure as well.

Mie and Okinawa Prefectures have made a progress in industrial development and job creation. In both prefectures, the governor's leadership played an important role in economic revival. Both prefectures adopted a policy of strategically targeting specific industries and firms to relocate in their prefectures and have succeeded in bringing those industries and firms to their prefectures and create jobs in a relatively short time. Under the leadership of the governors, the staffs of the prefectures and municipalities are making an earnest effort to draw up plans for industrial development and job creation that are suited to regional characteristics and are implementing the plans within their financial means.

Regional divergences may widen in the future between regional communities that have the ability for planning, designing, and implementation and regional communities that do not. The state and its ministries and agencies should, instead of uniformly transferring financial resources to local governments, introduce and further broaden a system for training local governments' staffs so that they may increase the ability for planning and designing. They should establish an institute for regional human resources development with a network of local governments, take advantage of initiatives taken by NPOs and private firms as is done in the U.S., and introduce new instruments modeled after the local government employee system in Europe (including permanent, not temporary, transfers of national government employees).

# **References:**

- Employment Security Bureau of Ministry of Labour (1990), *Introduction to Regional Employment Measures*, Institute of Labour Administration, Tokyo (in Japanese).
- Fujimoto, T. (2003), "Capability Building Competition — Why Japanese Automobile Industry is Competitive —" (in Japanese).
- Fukao, K. and T. Amano (2004), "Foreign Direct Investment in Japan and Japanese Economy" (in Japanese).
- Ito, K. (1992), *New Development of Regional Employment Policy*, Japan Rodo Press, Tokyo (in Japanese).
- Ito, M. (1999), 'Influence of the Off-shoring of Production to Local Manufacturing Industry' in The Japan Institute of Labour eds. "*International Division of Production and Employment*" (in Japanese).
- Itoh, M. (2004), 'Japanese Regional Industry and Employment Creation in Japan — focusing on three success stories —' in Hosei Univ. eds. "*Innovation Management*" No.1 (in Japanese).
- Japan Institute for Labour Policy and Training (2004), "Study on Employment Strategy in Advanced Countries" (in Japanese).
- Kato, T. (1984), *Regional Employment Development in a New Era*, Japan Institute of Labour, Tokyo (in Japanese).

- Kiyonari, T. and T. Hashimoto, (1997), "Future of Japanese Industrial Agglomeration" (in Japanese).
- Kruger, A. and L.H. Summers (1988), "Efficiency Wages and Inter-Industry Wage Structure," Econometrica, Vol.56, No.2, pp.259-293.
- Ministry of Health, Labour and Welfare (2003), *White Paper on the Labour Economy* 2003, Japan Institute of Labour, Tokyo (in Japanese).

— (2004) White Paper on the Labour Economy 2004, Gyosei, Tokyo (in Japanese).

- Mizuno, A. (1992), "Regional Disparities of Unemployment Rate and its Determinants," in Unemployment in Japan, Ch8, pp.241-272, Chuo University Press, Tokyo (in Japanese).
- Porter, M.E. (1992), "The Comparative Advantage of Nations" (in Japanese).
- Porter, M.E. (2000), "Competitive Strategy II" (in Japanese).
- Shirai, S. (1988), *The Theory of Employment Measures* for Regional Economy, The Institute of Labour Administration, Tokyo (in Japanese).
- Takanashi, A. (1989), *New Development of Labour Market Policy*, Institute of Labour Administration, Tokyo (in Japanese).
- OECD (1989), "Regional Unemployment in OECD Countries," in *Employment Outlook*, Ch3, pp.95-131, Paris.

—(1990) "Supply and Demand in Regional Labour Markets: Population Growth, Migration, Participation, and Earnings Differentials," in *Employment Outlook*, Ch3, pp.77-103.

— (2000) "Disparities in Regional Labour Markets," in *Employment Outlook*, Ch2, pp.31-78.

- Ohta, S. and Y. Ohkusa (1996), "Inter-regional Migration and Wage Curve in Japan," *JCER Economic Journal*, No.32, pp.111-132. (in Japanese).
- Ohtake, F. (2003), "Unemployment Measures for Structural Unemployment in Japan," *The Japanese Journal of Labour Studies*, Vol.45, No.7, pp.42-54. (in Japanese).
- Yugami, K. (2004), "The Determinants of Regional Disparities in Unemployment Rate," in Japan Institute for Labour Policy and Training eds. "Interprefectural Differences in Employment-Unemployment Situation, JILPT REPORT, No.9, Ch2, pp.19-35. (in Japanese).