

Chapter 2 Prospect for Regional Economic Revival

Section 1 Regional Disparities in Economic Recovery

(State of regional economy)

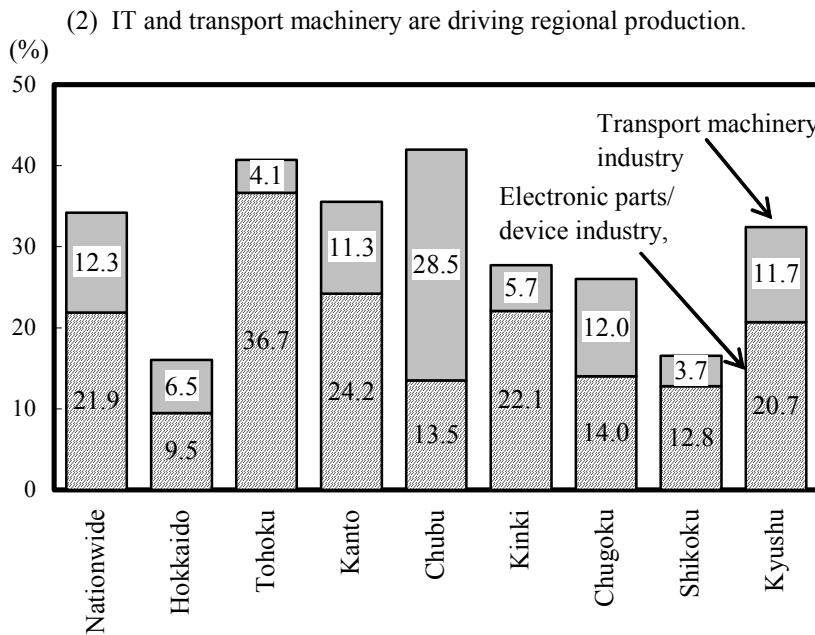
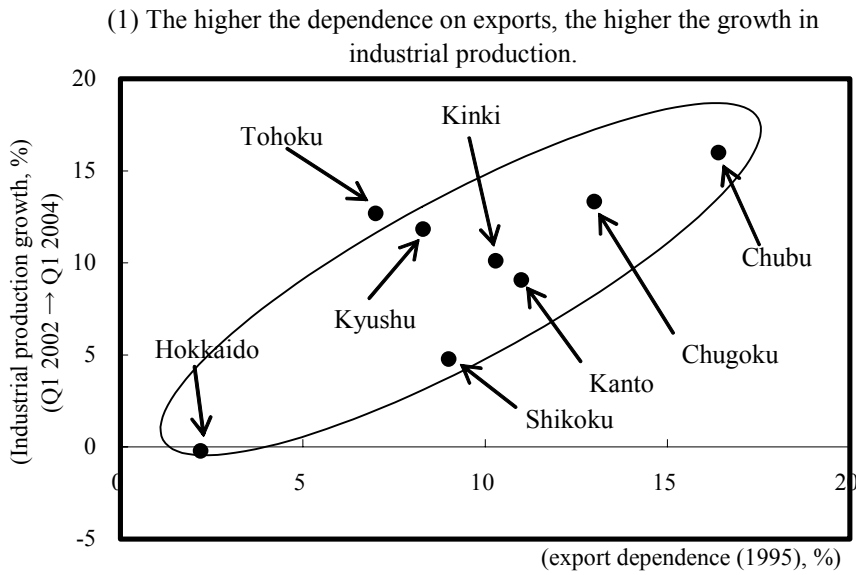
- “Economy Watcher Survey” found that business confidence was improving in most regions as of May 2004.
- Production grew strongly in regions with export-oriented and digital electronics-oriented production bases.

(Background of production disparities)

The regional disparities in production were slightly larger than in the past. Here are the reasons:

- 1) This recovery phase has seen export-oriented businesses recovering. As different regions depend on exports to different degrees, regional disparities have emerged in the growth of production. There is a large gap between regions like Chubu and Chugoku with export dependence (production stimulation by demand item) of 16% and 13%, and Hokkaido with 2%.
- 2) Sensitivity to demand growth in other regions also differs by region. High production growth regions such as Tohoku, Chubu and Chugoku have “trading-style” economies with a high proportion of products traded with other regions. That is why those regions are in a virtuous circle where demand growth in other regions leads to production growth in that region, with those economic benefits then spilling over to other regions. Meanwhile, Hokkaido, where the recovery in production has been delayed, has an “inward transfer-style” economy with a lot of products coming in and little going out. It is not sensitive to demand increases in other regions, and the benefits of recovery in the region leak out easily. The Kanto region is an “autonomous” economy with few products coming in or going out, making it self-contained.

Fig. 2-1-3 Dependence of production on exports and IT

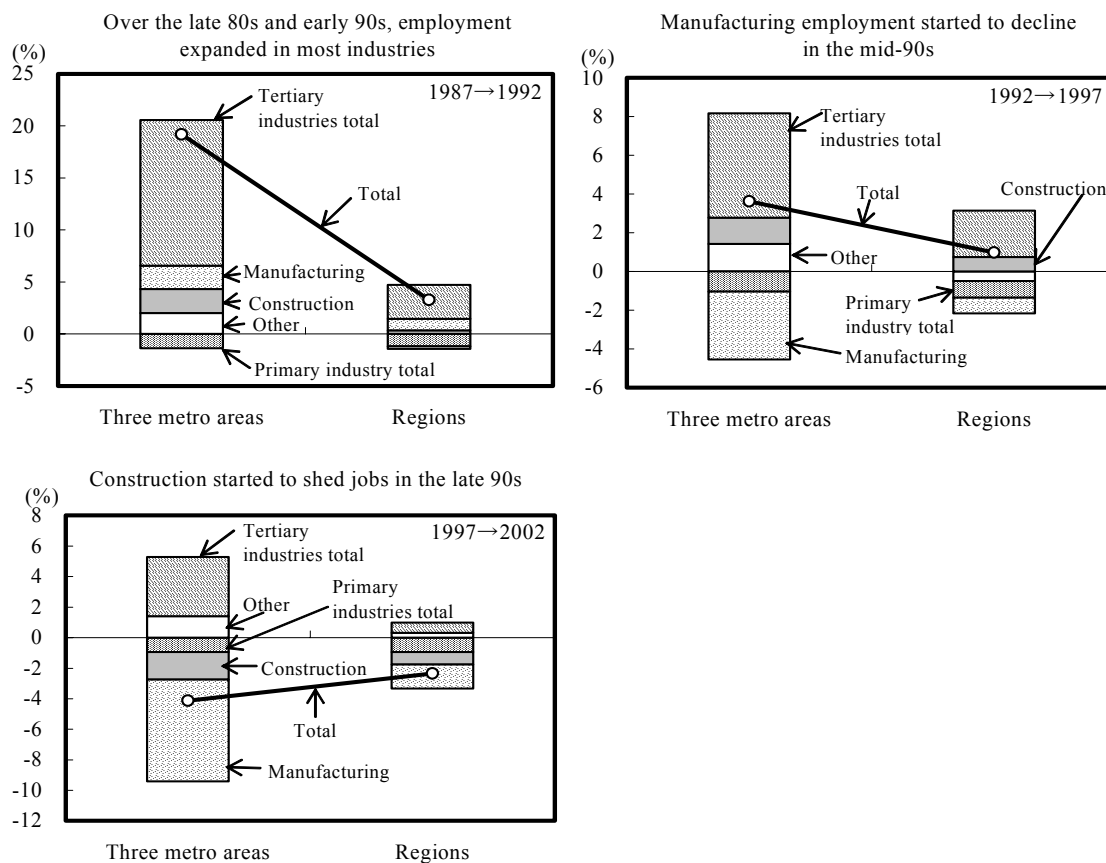


- Notes:
1. From *Interregional Input-Output Table*, METI and *Industrial Product Index*, METI and Bureau of Economy, Trade and Industry.
 2. The regression formula for (1) is as follows. The t value coefficient is in brackets.
Including Tohoku: $Y = 0.32 + 0.97X$ (3.11)
Excluding Tohoku: $Y = -1.94 + 1.12X$ (4.56)
 3. Electronic parts/device industry, etc. includes electronic parts and device industry, electric machinery industry and information and telecommunications machinery industry.
 4. Note 2-1B is used for regional categories. However, Okinawa is excluded.

(Employment situation still severe)

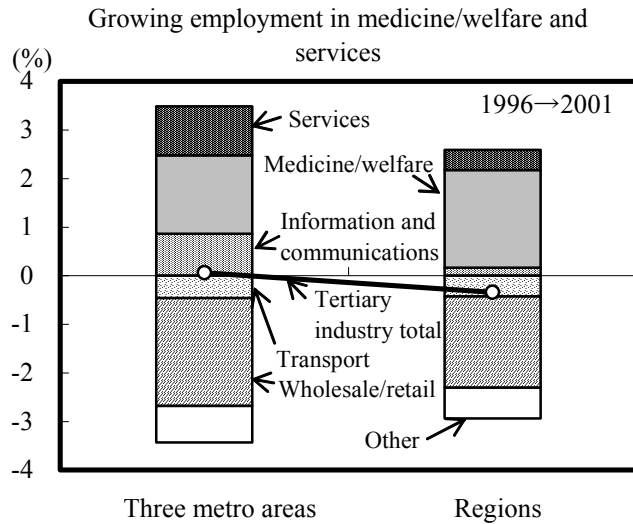
- The disparity in the unemployment rate between regions is decreasing. However, the level of unemployment rate remains high.
- From a long-term viewpoint, manufacturing and construction are declining in most regions and employment in tertiary industries is growing. In the regions, high growth is seen in the medical and welfare sector, while the ICT industry is growing strongly in the large metropolitan areas.
- A lot of jobs are being lost in manufacturing and construction, yet job leavers from those sectors tend to be re-employed in the same sector. Therefore, a policy that promotes the smooth transition of labor between industries is necessary.

Fig. 2-1-9 Change in number of workers by industry



Notes: 1. From *Employment Status Survey*, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
 2. As in Note 1-2A, the three metropolitan areas are Kanto, Tokai and Kinki, while the rest are regions.

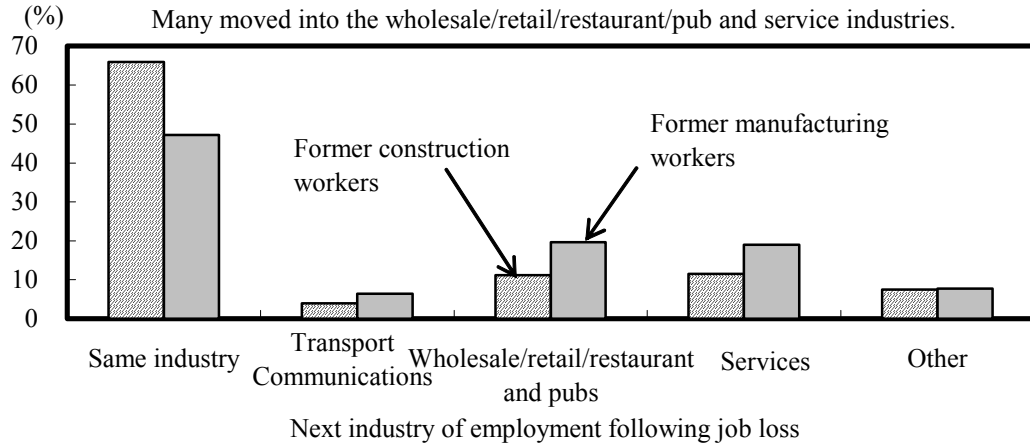
Fig. 2-1-10 Change in tertiary industry workers



Notes: 1. From *Office and Business Statistical Survey*, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
 2. As in Note 1-2A, the three metropolitan areas are Kanto, Tokai and Kinki, while the rest are regions.

Fig. 2-1-12 Labor transition rate by industry among former construction and manufacturing workers

(Ratios showing the industries that former construction and manufacturing workers moved to)



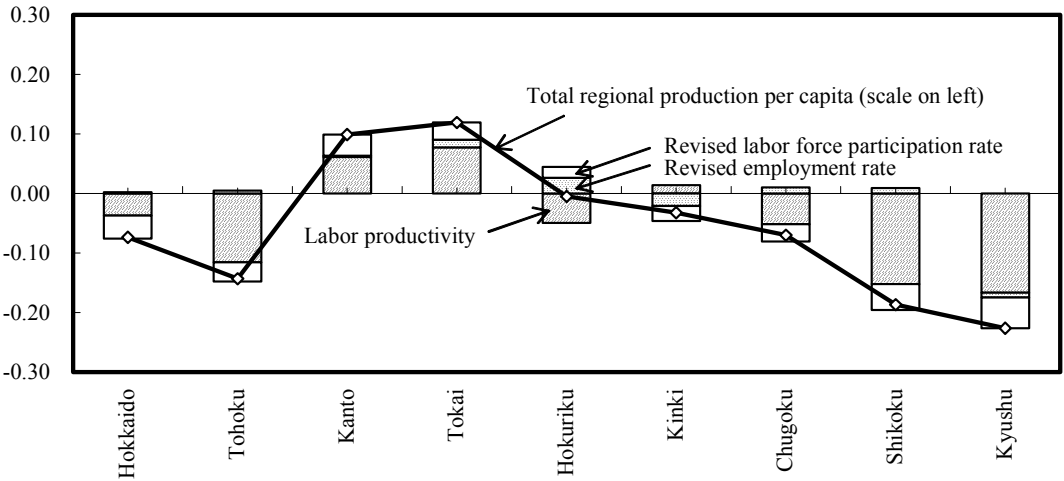
Notes: 1. From *Labour Trends Survey*, Ministry of Labour, Health and Welfare.
 2. "Others" include mining, utilities, waterworks, finance/insurance and real estate industries as well as cases where former construction workers became manufacturing workers and where former manufacturing workers became construction workers.

Section 2 Economic Divergence Between Regions and Causes

(Breakdown of factors in regional income disparities)

- The economic disparity between regions as seen from the perspective of per capita income is narrowing. Nevertheless, the size of the gap between the highest income (Tokyo) and the lowest income (Okinawa, where the inhabitants average nearly half the income of those in Tokyo in 2001) is substantial.
- In order to investigate the causes of this gap, per capita gross spending for each region was broken down into i) labor productivity (total regional production ÷ no. of workers), ii) employment rate (no. of workers ÷ labor force population), iii) labor participation rate (labor force population ÷ population of region).
- The study found that i) the biggest contributor was labor productivity disparities, ii) low labor participation rates were a significant cause of low per capita incomes in Kyushu, Shikoku and Hokkaido, iii) the employment rates (1 minus the unemployment rate) contributed to disparities positively in Hokuriku and negatively in Kinki.

Fig. 2-2-2 Divergence of total regional production per capita by regional blocs (numeric value) from national average and breakdown of causes (FY2001)



- Notes:
1. From *Prefectural Citizens' Economic Accounts (FY2001)*, Cabinet Office and *Employment Status Survey (FY2002)*, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
 2. $\ln(\text{real GDP}/\text{popn.}) = \ln(\text{real GDP}/\text{no. of workers}) + \ln(\text{no. of workers}/\text{total of workers and unemployed jobseekers}) + \ln(\text{workers}/\text{total of workers and unemployed jobseekers}/\text{popn.})$
 3. The employment rate used in this analysis, or the number of workers divided by the total number of workers and unemployed jobseekers, is different from the usual definition of the employment rate (number of workers divided by the population aged 15 years or over or the population of productive age).
 4. The labor force participation rate used in this analysis, or the total number of workers and unemployed jobseekers divided by the total population, is different from the usual definition of the labor force participation rate (working population divided by the population of 15 years or over).
 5. Note 2-1F is used for regional categories.

(Disparity in labor productivity between regions depends on industry specialization and human capital)

- The more people in a region worked in manufacturing or services, the higher its productivity was. Conversely, productivity was lower when the proportion of workers in agriculture and forestry and construction was higher. And the higher the rate of graduates from tertiary education was in a region, the higher its productivity was.

(Regional labor migration and unemployment rates)

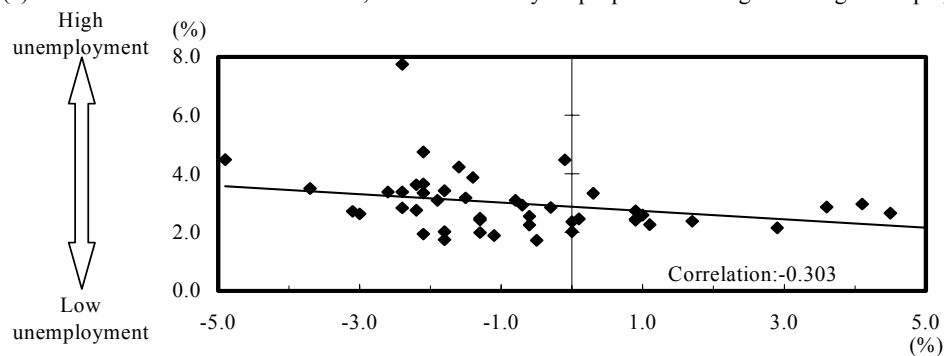
- In the past, the shift of labor from regions of high unemployment to regions of low unemployment contributed to narrowing the gap between unemployment rates but recently, inter-regional labor migration has declined significantly.

(Our view of inter-regional economic disparities)

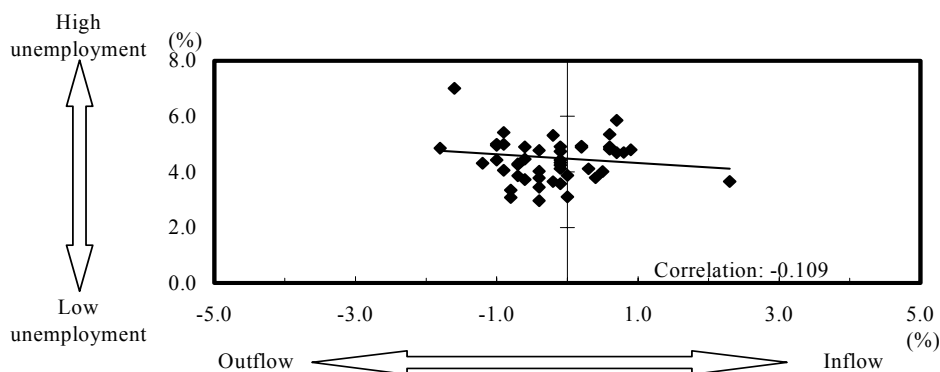
- Causes of inter-regional economic disparities vary from region to region. The solution to problems unique to a region should be based on local initiatives, and different prescriptions will be required for each region.

Fig. 2-2-7 Correlation between labor mobility and unemployment rates based on prefectural data

(1) 1990: While the correlation is weak, there is a tendency for people to leave regions of high unemployment



(2) 2000: Almost no correlation between labor mobility and unemployment



X axis: rate of increase in no. of people who move in (incomers - leavers/Population of 5 years old or over X 100)

Y axis: unemployment rate

- Notes:
1. From *National Census (1990, 2000)*, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
 2. Those who “lived in another prefecture five years ago” are counted as incomers and those who “lived in that prefecture five years ago and currently live in another prefecture” are counted as leavers.

Section 3 Structural Reform in the Regions

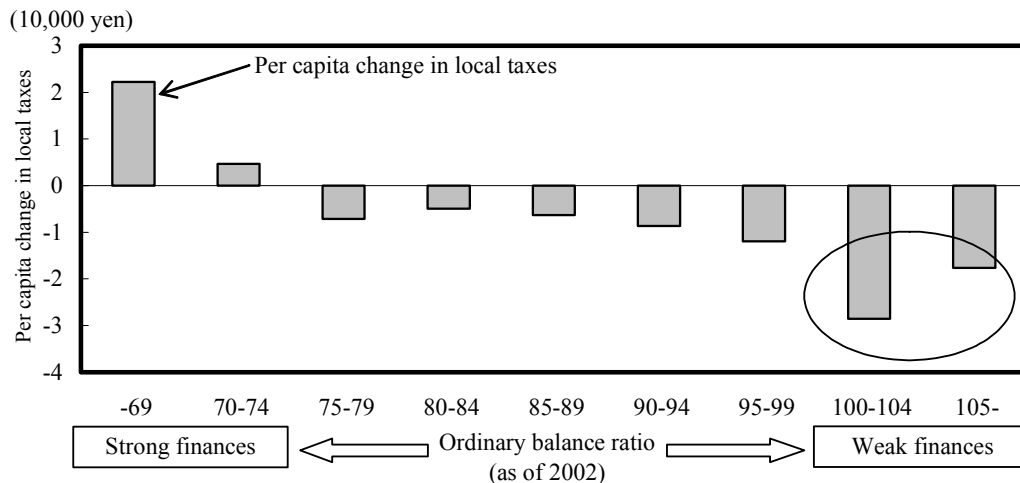
1. Structural Reform of Public Finances at the Local Government Level

(Status of fiscal consolidation initiatives in areas of spending and revenue)

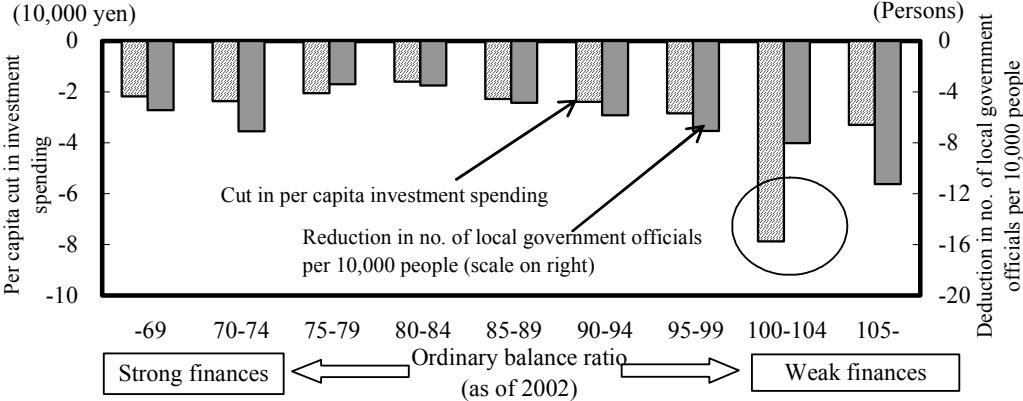
- The budget deficits in the local government have slightly come off its peak. At the same time, the ordinary balance ratio (the proportion of general revenues applied to the current expenditure such as personnel costs) reached a record 90% in 2002, showing the increasingly rigid state of public finances.
- The analysis on individual financial data of local bodies nationwide shows that:
 - 1) On the revenue side, the worse a local government's fiscal condition, the greater the decline in its tax revenue had been.
 - 2) On the expenditure side, Per capita investment spending and local body staffs have been reduced across the board.
 - 3) Nevertheless, the cuts to investment spending were extreme in local bodies in particularly severe fiscal condition.

Fig. 2-3-3 Financial condition of local government, tax revenues and investment spending

(1) Tax revenues declined significantly for local governments in financial difficulty (difference between 1998 and 2002)



(2) Fiscally challenged local governments cut investment spending substantially (between 1998 and 2002)



- Notes:
1. From *Survey of Settlement by Local Authority* and *Overview of Population Based on Basic Resident Registers*, Local Public Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
 2. Survey covers 641 cities nationwide as well as the 23 wards of Tokyo.

(Regression analysis showing factors affecting financial condition)

A regression analysis, which looks at the correlation between some factors and changes in the financial conditions (ordinary balance ratio) of local bodies nationwide from 1998 to 2002 shows:

- 1) Increased employment of government officials, decreased local tax revenues, higher interest payment on public debt and increased social security costs due to aging population, all contributed to increased rigidity of finances.
- 2) Cutting investment spending was not enough to prevent growing rigidity of public finances.

Fig. 2-3-4 Financial condition of local governments and causes

Explanatory variable	Explained variable: Change in fiscal rigidity (ordinary balance ratio) FY2002-FY1998		
	Case 1	Case 2	Case 3
Change in staff nos.: Finances worsen with increasing headcounts	18.133** (6.901)	18.783** (7.220)	17.590** (6.675)
Change in local tax revenue: Finances worsen as tax revenues fall	-0.537** (-4.100)	-0.536** (-4.144)	-0.551** (-4.271)
Change in public debt ratio: Finances worsen as public debt ratio increases	0.481** (7.503)	0.381** (5.600)	0.381** (5.621)
Change in investment spending: Finances worsen in spite of cutting investment		-0.183** (-4.087)	-0.197** (-4.378)
Change in social security costs (aging-related): Finances worsen as social security costs rise			0.441** (2.491)

- Notes: 1. From *Survey of Settlement by Local Authority* and *Overview of Population Based on Basic Resident Registers*, Local Public Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications.
2. Survey covers 641 cities nationwide as well as the 23 wards of Tokyo.
3. Estimate based on OLS. () contains t value, ** is 95% significance.
4. As an aging-related indicator, elderly welfare costs are used for social security costs.

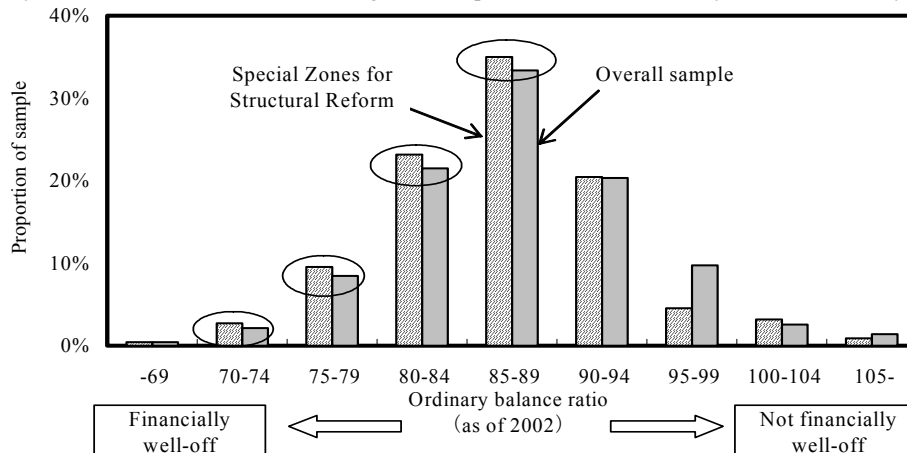
2. Special Zones for Structural Reform and Regional Revitalization

(Special zones and revitalization of local governments)

- Of the local bodies that received designation as special zones i) many were relatively well-off financially, ii) many had aggressively adopted measures which serve to increase transparency, efficiency, participation of residents, and convenience.
- However, while many local bodies from the first to the third round of designation had the zeal for reform as seen above, the increasing number of local bodies, which were initially hesitant about reform, received designation as special zones in the fourth round.

Fig. 2-3-8 Ordinary balance ratio and special zones

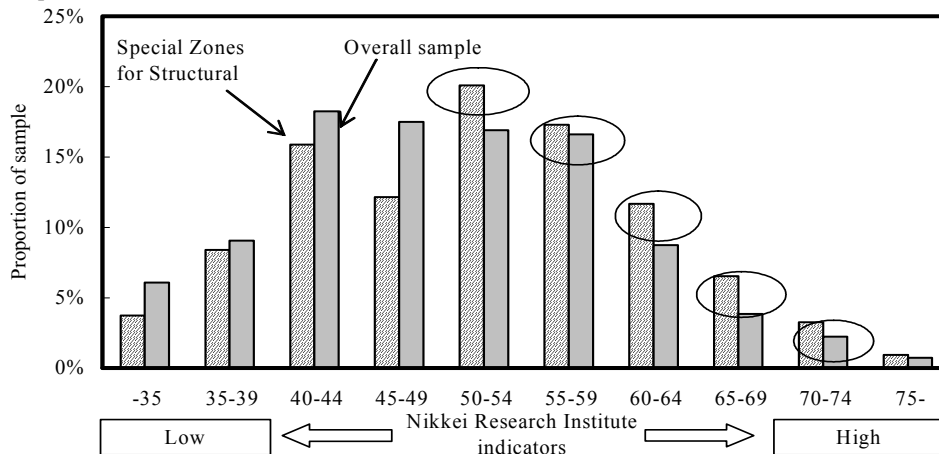
Many of the local bodies that received designation as special zones were relatively well-off financially.



- Notes:
1. From *Survey of Settlement by Local Authority and Overview of Population Based on Basic Resident Registers*, Local Public Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications and Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications and *Administrative Comparison of Local Governments in Japan*, Nikkei Research Institute of Industry and Markets' 2002 survey.
 2. Survey covers 641 cities nationwide as well as the 23 wards of Tokyo.
 3. Total number of Special Zones for Structural Reform designated until March 2004. Designated special zone local bodies refers to municipal governments only (220 bodies).

Fig. 2-3-9 Designation as special zone and Nikkei Research Institute indicators

Local bodies designated as special zones were high on the Nikkei Research Institute indicators of transparency, efficiency, citizen participation and convenience, etc.



- Notes:
1. From *Survey of Settlement by Local Authority and Overview of Population Based on Basic Resident Registers*, Local Public Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications and Finance Bureau, Ministry of Public Management, Home Affairs, Posts and Telecommunications and *Administrative Comparison of Local Governments in Japan*, Nikkei Research Institute of Industry and Markets' 2002 survey.
 2. Survey covers 641 cities nationwide as well as the 23 wards of Tokyo.
 3. Nikkei Research Institute indicators are from *Administrative Comparison of Local Governments in Japan*, Nikkei Research Institute of Industry and Markets.
 4. The Nikkei Research Institute indicators are a comprehensive evaluation of administrative transparency, efficiency, citizen participation and convenience, etc.
 5. Total number of Special Zones for Structural Reform designated until March 2004. Designated special zone local bodies refers to municipal governments only (220 bodies).

3. Tourism and Other Means of Regional Revitalization Harnessing Special Regional Features

(Estimated inbound tourism in Japan)

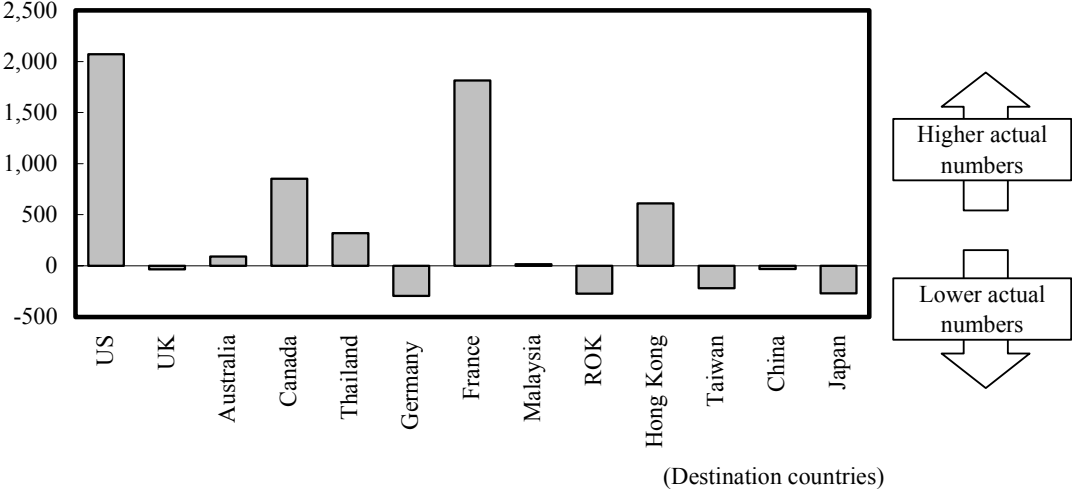
- Over five million tourists visit Japan every year, placing it 33rd in the world. It is a low number given the size of the country.
- Estimating the tourism models, which are based on population, economic size and travel distance, the number of tourists actually visiting Japan from other countries is below the projected figures.
- Using the same models to assess the number of tourists visiting Japan from each country, the numbers of tourists arriving from the Republic of Korea and China are below those projected, while Taiwan’s is above the projection. However, tourists from Korea and China has been increasing recently.

Fig. 2-3-13 Projected number of tourists according to the Gravity Model

The actual number of tourists visiting Japan is lower than the figure projected by the model.

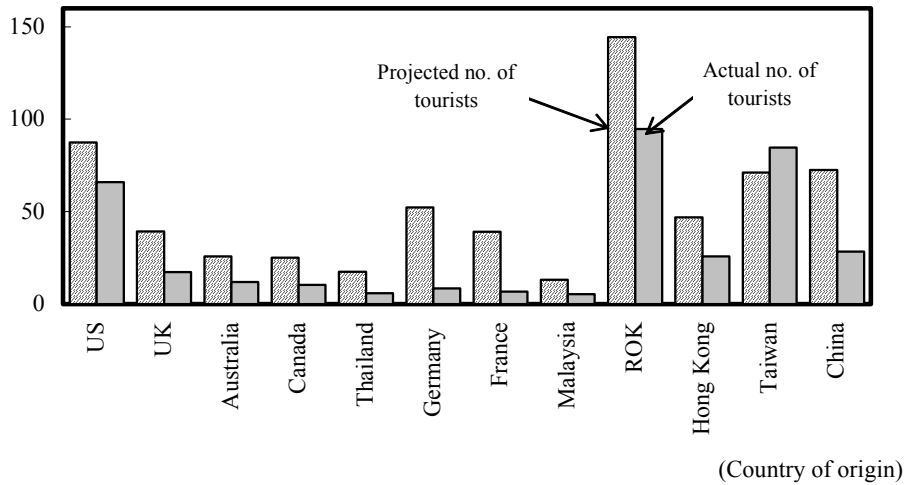
(1) Disparity in other countries between projected number of foreign tourists and actual number

(10,000 people)



(2) Projected number of tourists visiting Japan by country of origin

(10,000 people)



Notes: 1. Model formulae

$\ln(\text{Projected no. of tourists}) = \text{Section}$

+a $\ln(\text{distance between capitals of countries of departure and arrival})$

+b $\ln(\text{population of country of departure})$

+c $\ln(\text{population of country of arrival})$

+d $\ln(\text{per capita GDP of departure country})$

+e $\ln(\text{per capita GDP of arrival country})$

	Coefficient	t value
Section	-1.95	-1.81
Distance	-0.95	-23.89
Population of departure country	0.47	15.03
Population of arrival country	0.29	9.62
GDP of departure country	0.66	18.70
GDP of arrival country	0.29	8.53

2. Projection model data

Tourist numbers (1996-2000): From *World Tourism Statistics 2002*, Asia-Pacific Tourism Exchange Center.

Nominal GDP: From *National Accounts 2003*, OECD.

Population: From *Summary Demographic Data*, U.S. Bureau of the Census.