

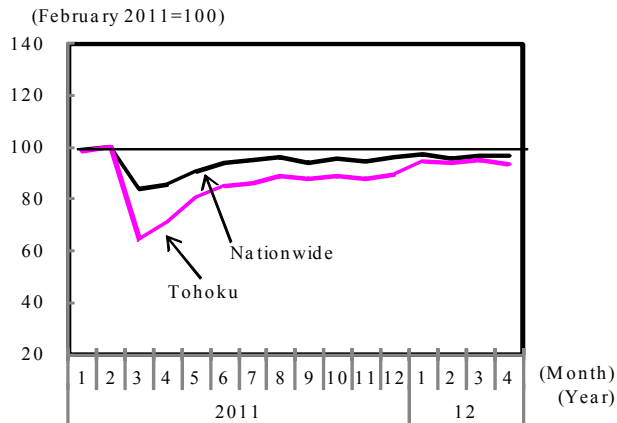
# Chapter 2 Post-Earthquake Reconstruction

## Section 1 Recovery of production and reorganization of supply chains

- Production in the disaster region has mostly recovered, although the situation in tsunami-flooded areas remains severe.

**Figure 2-1-1 Changes in production in Tohoku**

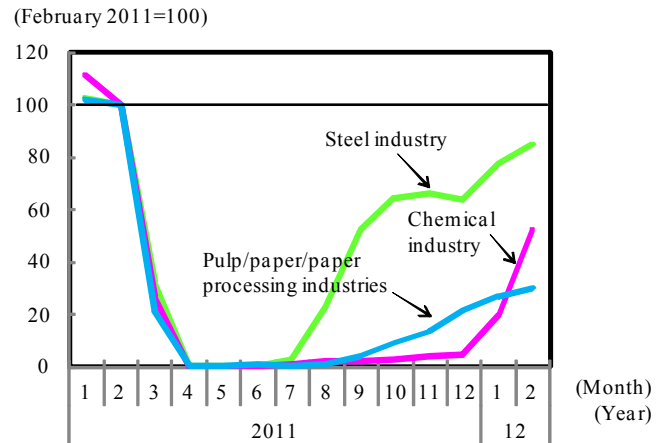
Production in Tohoku has mostly recovered.



(Note) The three disaster-stricken prefectures account for about 70% of overall production in Tohoku.

**Figure 2-1-2 Trend in production in flooded areas of the three disaster-stricken prefectures**

Although the situation in flooded areas is severe, some recovery has been observed.



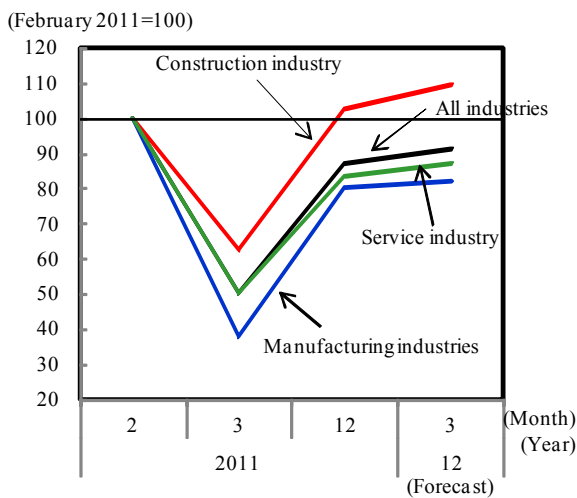
(Note) Seasonally adjusted series of production quantity (weight)

- Production capacity in flooded areas was significantly damaged but has recovered since then.
- Although sales in flooded areas are weak, the construction industry is performing well there due to reconstruction demand.

**Figure 2-1-5 Recovery in production capacity**

(1) Production and sales capacity (damaged by the tsunami and earthquake damage)

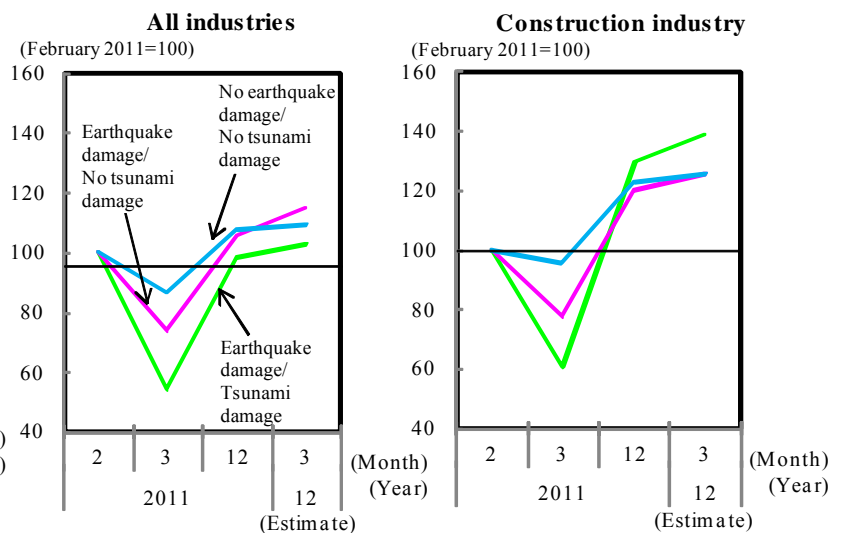
Production capacity in flooded areas was significantly damaged.



**Figure 2-1-6 Production and sales trends**

(1) Sales trend

Although sales in flooded areas are weak, the construction industry is performing strongly.

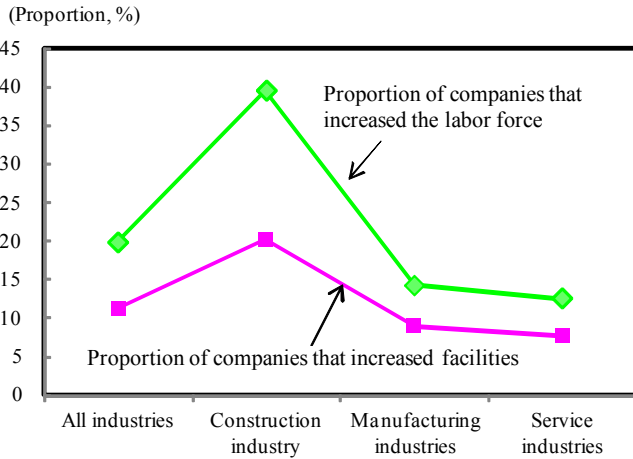


(Note) Compiled based on the attitude survey on corporate activities, the Cabinet Office.

- Reconstruction demand was met by increasing employment, rather than business investment.
- Large companies are more eager to diversify domestic supply sources than smaller ones.

**Figure 2-1-13 Response to reconstruction demand**

Although employment increased due to reconstruction demand, the spillover effect on capacity was small.

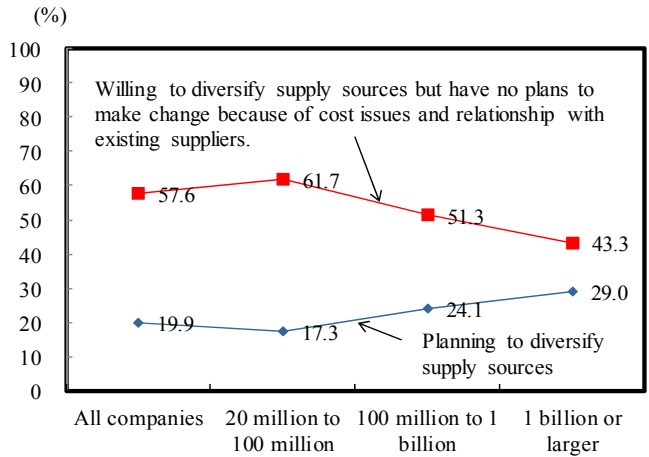


(Note) Compiled based on the attitude survey on corporate activities, the Cabinet Office.

**Figure 2-1-9 Policy toward product suppliers**

(1) Policy toward domestic supply regions by capital amount

The larger companies are, the more willing they are to diversify supply sources

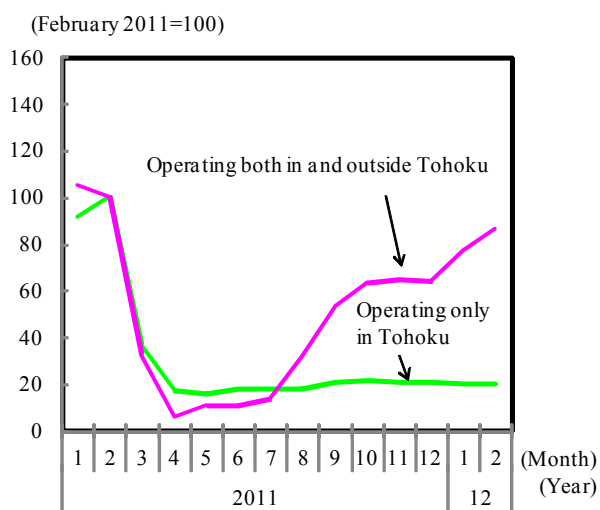


- Companies operating in two or more regions are recovering more quickly than others.
- Business facilities in areas where the facility density is high are recovering more quickly than others.

**Figure 2-1-15 Production by the geographical breadth of business operation**

**Steelmakers (production weight)**

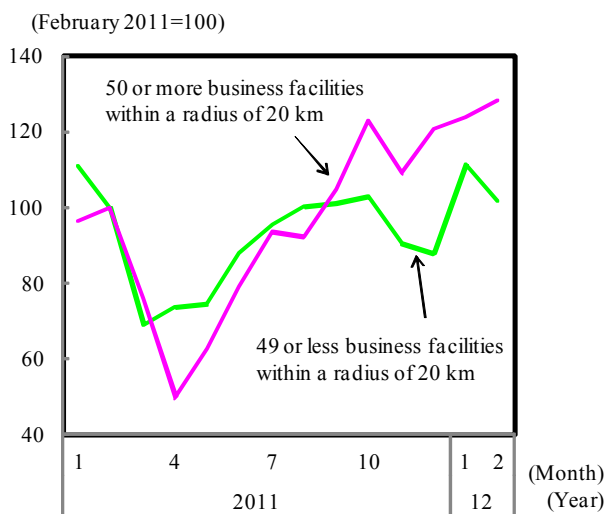
Companies operating in two or more regions are recovering more quickly than others.



(Note) Compiled based on the seasonal indexes for Tohoku.

**Figure 2-1-16 Production by business facility density**  
**Electrical machinery makers (production value)**

Facilities located in areas where the facility density is high are recovering more quickly than others.



(Note) Compiled based on the seasonal indexes for Tohoku.

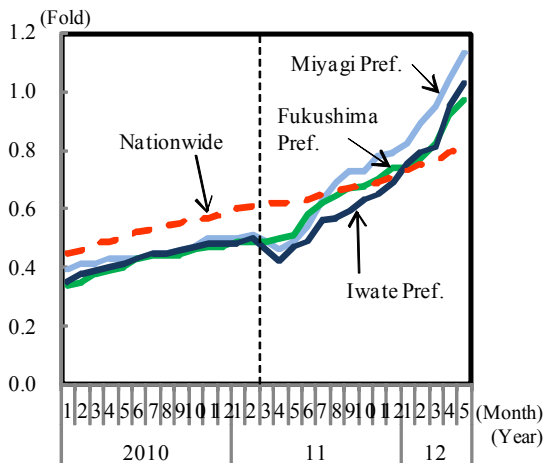
## Section 2 Earthquake Impact on Life and Employment

- Although the ratio of job offers to applicants dropped after the earthquake, it later rebounded and has remained high since then.
- Although the unemployment rate rose steeply after the earthquake, it has declined since then.

**Figure 2-2-1 The ratio of job offers to applicants on a nationwide basis and for the three disaster-stricken prefectures**

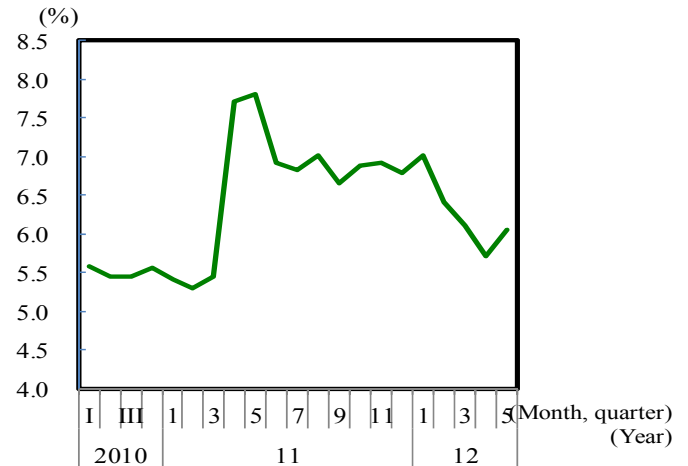
(1) The ratio of the job offers to applicants on a nationwide basis and for the three disaster-stricken prefectures

The ratio of job offers to applicants has stayed high in all of the three disaster-stricken prefectures.



**Figure 2-2-2 Unemployment rate in the three disaster-stricken prefectures as estimated from the number of employment benefits recipients.**

The unemployment rate has been declining.



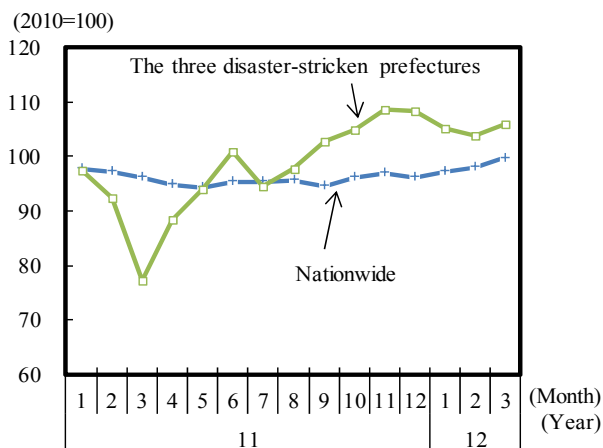
(Note) Estimated by the Cabinet Office based on changes in the number of employment benefits recipients.

- Although consumption fell steeply in the three disaster-stricken prefectures after the earthquake, it later recovered quickly.
- In flooded areas, retail sales have remained weak as the number of stores has not recovered.

**Figure 2-2-6 Consumption trend in the disaster-stricken areas**

(1) Total expenditures per household

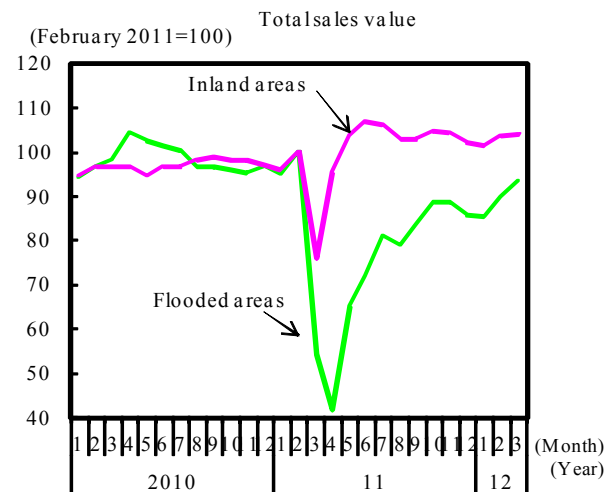
Although consumption fell steeply after the earthquake, it later recovered quickly.



(Note) Seasonally adjusted figures in nominal terms. Regarding the three disaster-stricken prefectures, the seasonal indexes for Tohoku were used.

**Figure 2-2-9 Sales trends at supermarkets in flooded and inland areas**

In flooded areas, sales have remained weak due in part to a decline in the number of stores.



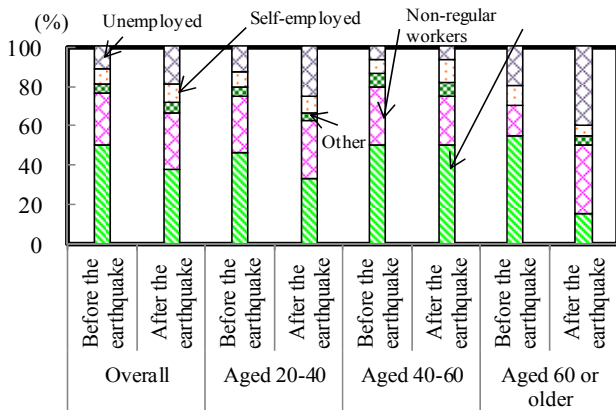
(Note) Seasonally adjusted figures for March 2011 in nominal terms, on a sales-store basis.

- Because of the earthquake, the ratio of regular workers may have dropped steeply among young and elderly people.
- Consumption by non-regular workers and self-employed people may have dropped.

**Figure 2-2-12 Post-earthquake employment and income environments**

(1) Employment types by age before and after the earthquake

The ratio of regular workers dropped steeply among young and elderly people.

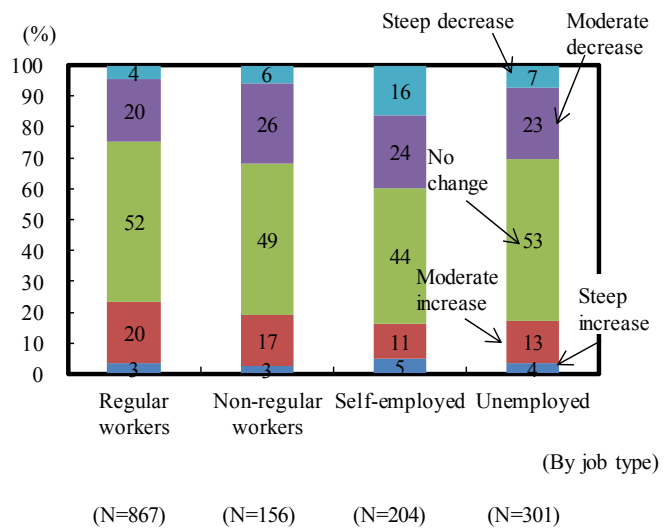


(Note) Compiled based on the Internet-based attitude survey on household activities, the Cabinet Office. It should be noted that as this is a monitor survey, its results may be different from the results of a field survey.

**Figure 2-2-14 Post-earthquake consumption trend**

(2) Consumption trend by job type

The ratio of people who have reduced consumption is high among non-regular workers and self-employed people.

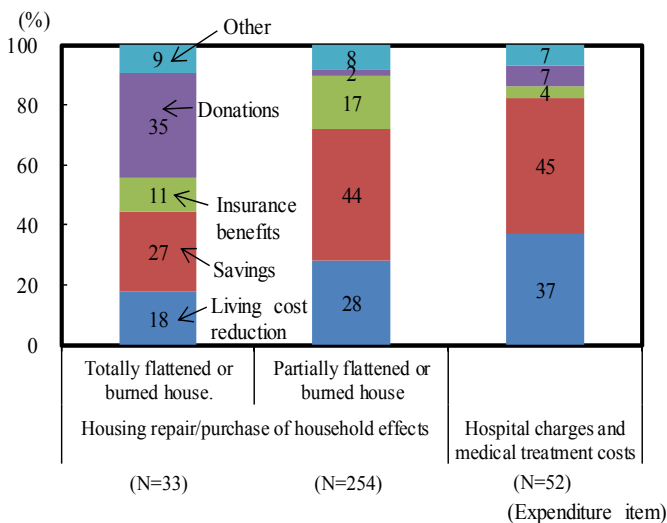


(By job type)

- Donations played a major role in covering the cost of repairing major damage to houses.
- An increase in the number of employed within a household did not necessarily lead to growth in consumption.

**Figure 2-2-18 Way of financing the cost of repairing houses and hospital stays**

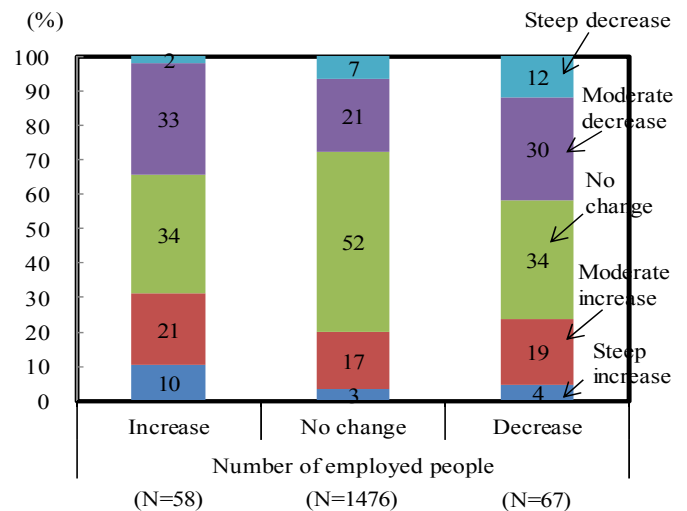
Donations played a major role in covering the cost of repairing major damage to houses.



**Figure 2-2-19 Consumption trend in relation to changes in the number of employed people**

(2) Changes in the number of employed people and consumption

An increase in the number of employed people did not necessarily lead to growth in consumption.



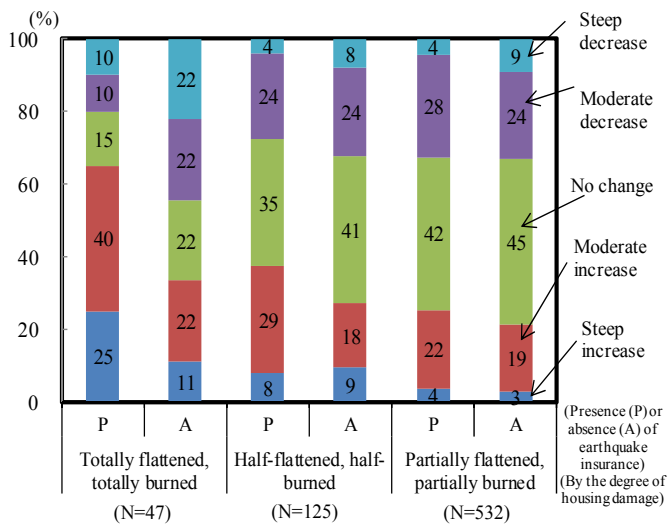
(Note) Compiled based on the Internet-based attitude survey on household activities, the Cabinet Office. It should be noted that as this is a monitor survey, its results may be different from the results of a field survey.

- Earthquake insurance benefits and donations have underpinned consumption in the disaster-stricken areas.

**Figure 2-2-15 Consumption and savings trends by the degree of housing damage**

(2) Trends by presence or absence of earthquake insurance

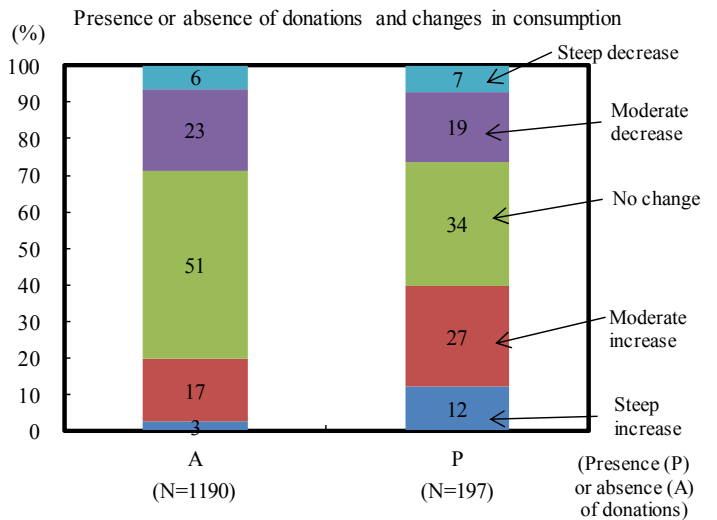
Earthquake insurance benefits have underpinned consumption.



(Note) Compiled based on the Internet-based attitude survey on household activities, the Cabinet Office. It should be noted that as this is a monitor survey, its results may be different from the results of a field survey.

**Figure 2-2-16 Donations and consumption**  
(1) Presence or absence of donations and changes in consumption

Donations have underpinned consumption.

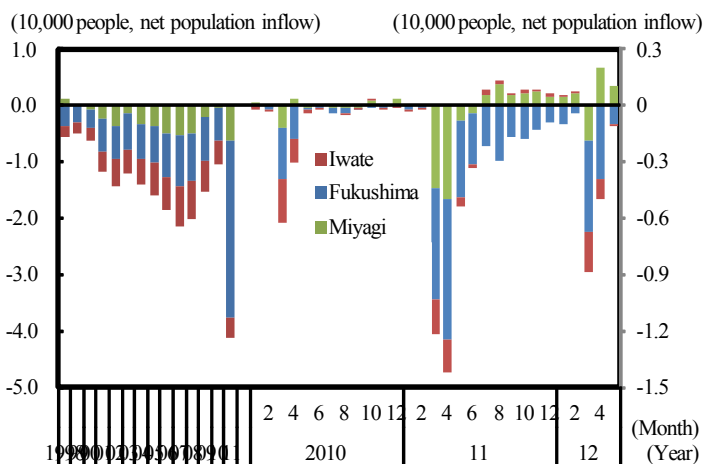


- In the disaster-stricken prefectures, a population outflow has occurred and the number of university graduates who wish to obtain jobs in other prefectures has increased.

**Figure 2-2-22 Population movement in the three disaster-stricken prefectures**

(2) Changes in net population inflow

In the three disaster-stricken prefectures, there has been a population outflow since before the earthquake.

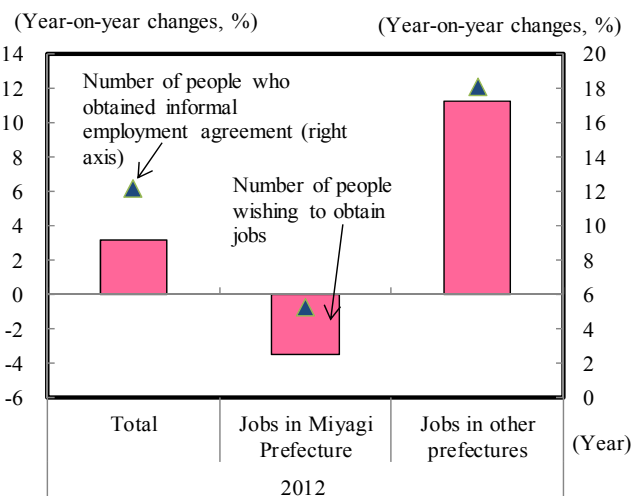


(Note) Net population inflow = Population inflow - population outflow. The right axis indicates monthly figures.

**Figure 2-2-23 Hiring of university graduates in Miyagi Prefecture**

(1) Hiring of people who graduated in March 2012

The number of graduates who wish to obtain jobs in other prefectures increased steeply.



(Note) Compiled based on the status of informal employment agreements for new university graduates, the Miyagi Prefectural Labor Bureau.

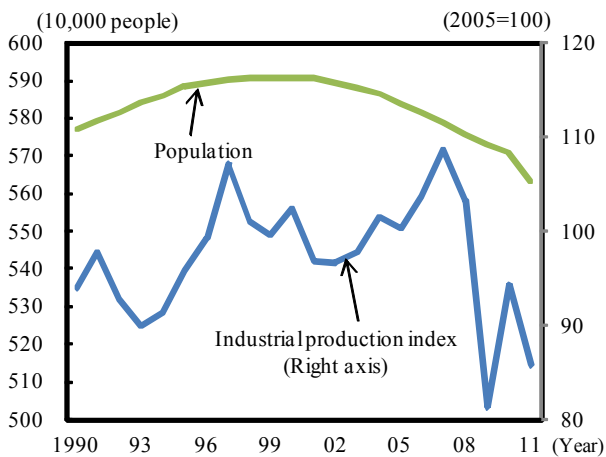
## Section 3 Future Reconstruction and Economic System

- In the three disaster-stricken prefectures, both the population and industrial production have been declining since before the earthquake.

**Figure 2-3-3 Economic and social situations in the three disaster-stricken prefectures**

(1) Population and industrial production in the three disaster-stricken prefectures

In the three disaster-stricken prefectures, the population and industrial production have been declining.

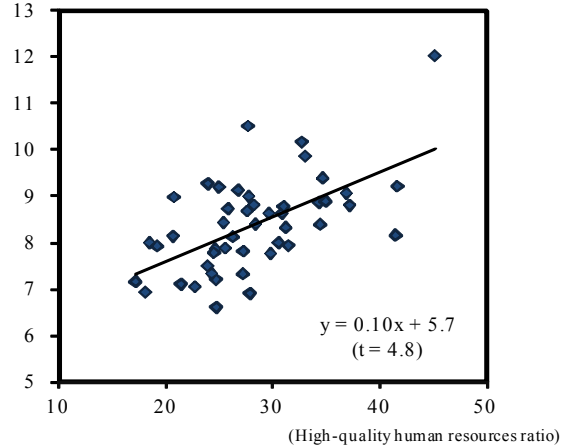


**Figure 2-3-5 Business accumulation and productivity**

(2) Human capital and labor productivity by prefecture

Productivity is higher in prefectures with more high-quality human resources.

(Added value per employee, ¥1 million/person)

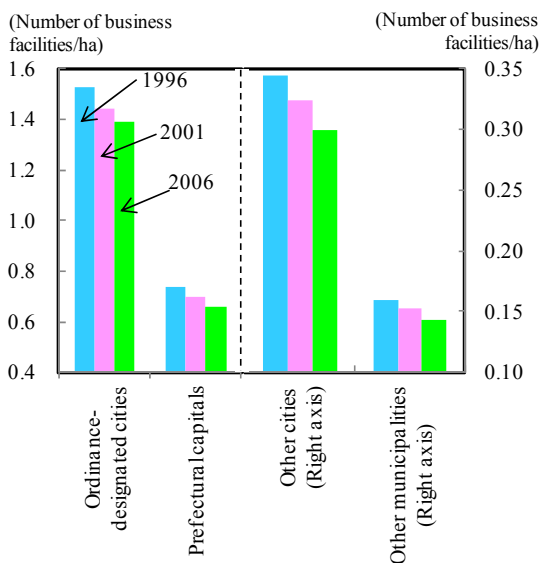


(Note) High-quality human resources ratio = Employed people with degrees from junior colleges, technical colleges, or universities, and graduate schools/employment people aged 15 or older  $\times$  100.

- While it is necessary to build up the regional agglomerations of business facilities, levels of agglomerations have been declining not only in Tohoku but in the whole of Japan, including major cities.

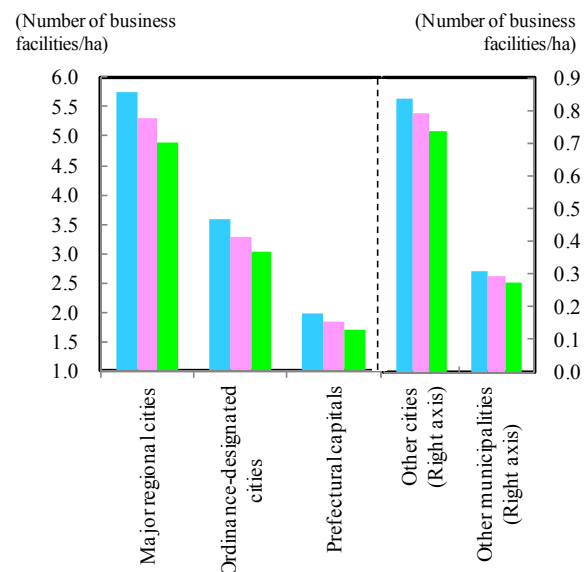
**Figure 2-3-4 Changes in accumulation in Tohoku**

The accumulation of business facilities has been declining even in an ordinance-designated city (Sendai).



**Figure 2-3-6 Changes in accumulation in Japan**

Accumulation has been declining even in major cities.



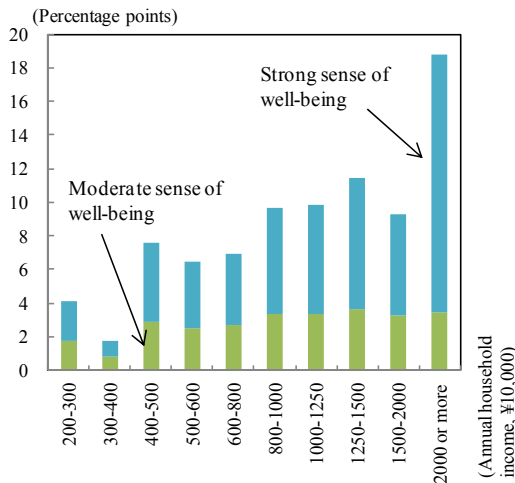
(Note) The density of business facilities by municipality. Major cities refer to Sapporo, Sendai, Tokyo's 23 wards, Nagoya, Osaka, Hiroshima, and Fukuoka.



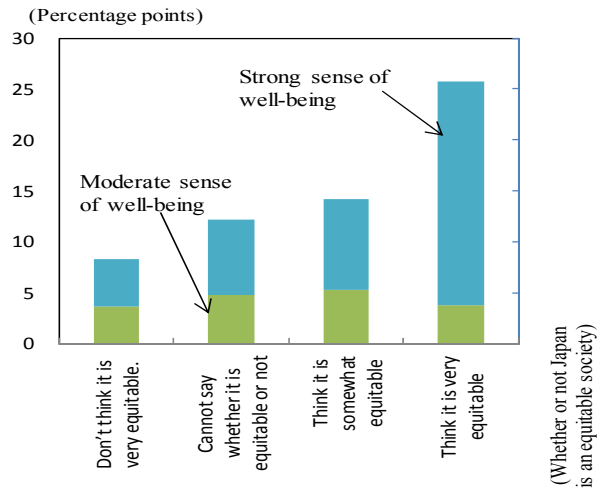
- An annual income difference does not significantly affect the sense of well-being among people in higher income brackets.
- People who perceive social equitability tend to have a stronger sense of well-being.

**Figure 2-3-8 Factors that affect the sense of well-being**

(1) Sense of well-being by annual household income bracket



(4) Sense of well-being by perception of social equitability

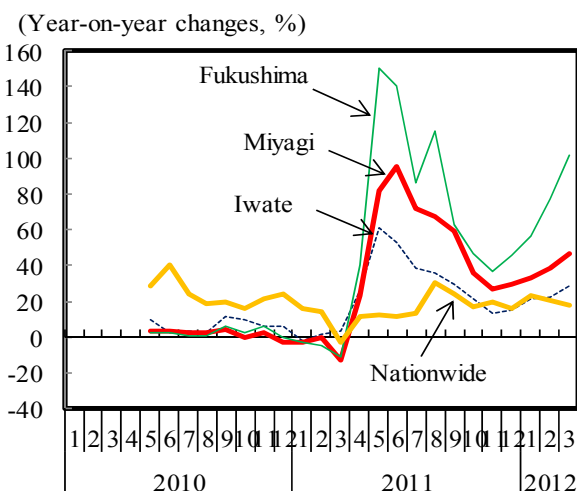


(Note) The above figures indicate changes in the probability of each of the items (explained variables) being selected in cases where a dummy variable takes the average value, and where the reference of the said dummy variable changes from 1 to 0 and the said dummy variable itself changes from 0 to 1.

- The conclusion of new contracts for earthquake insurance increased rapidly after the earthquake but later slowed down.
- Earthquake insurance plays a certain role in covering damage to houses.

**Figure 2-3-12 Status of earthquake insurance contracts in the disaster-stricken region**

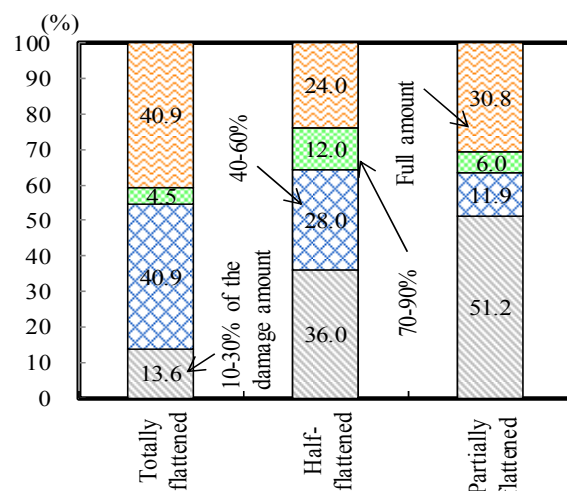
(2) Year-on-year changes in the number of new earthquake insurance contracts concluded



(Note) Compiled based on the numbers of earthquake insurance contracts in force and new contracts concluded, the Non-life Insurance Rating Organization of Japan.

(4) Status of earthquake insurance coverage by the degree of damage

Although earthquake insurance plays a certain role, the ratio of full coverage is small.



(Note) Compiled based on the Internet-based attitude survey on household activities, the Cabinet Office. It should be noted that as this is a monitor survey, its results may be different from the results of a field survey.