

Annual Report on the Japanese
Economy and Public Finance
2011

Enhance the Essential Power of
the Japanese Economy

Summary

July 2011

Cabinet Office
Government of Japan

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To analyze the trends in the real economy, prices, and the financial and capital markets, with a focus on the impact of the Great East Japan Earthquake, and to point out challenges for public finance and social security.

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This material has been tentatively prepared to explain the “Annual Report on the Japanese Economy and Public Finance.” For quotation and other purposes, please refer to the text of the “Annual Report on the Japanese Economy and Public Finance.”

Chapter 1 Post-Earthquake Japanese Economy

Section 1 Earthquake Impact on Real Economy

- Japan was struck by the Great East Japan Earthquake (hereinafter referred to as the “Earthquake”) just as the economy was in a transition from the state of “stagnation” to “recovery.”
- The negative economic impact of the Earthquake has been greater than the impact of past major disasters in Japan and abroad.

Figure 1-1-1 Real GDP Growth Rate

The Earthquake occurred while the economy was still weak.

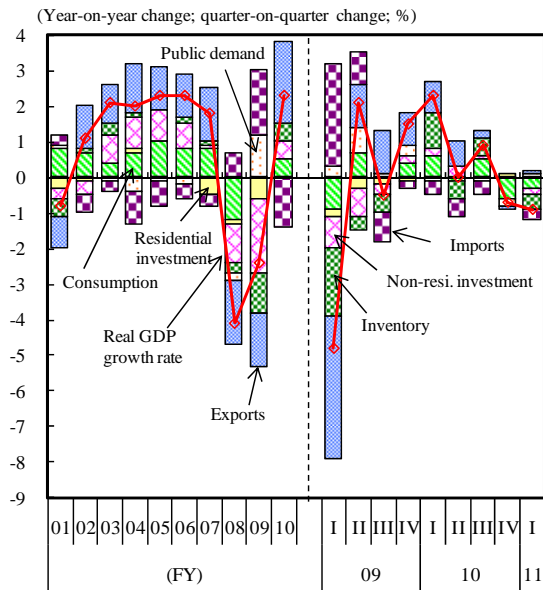
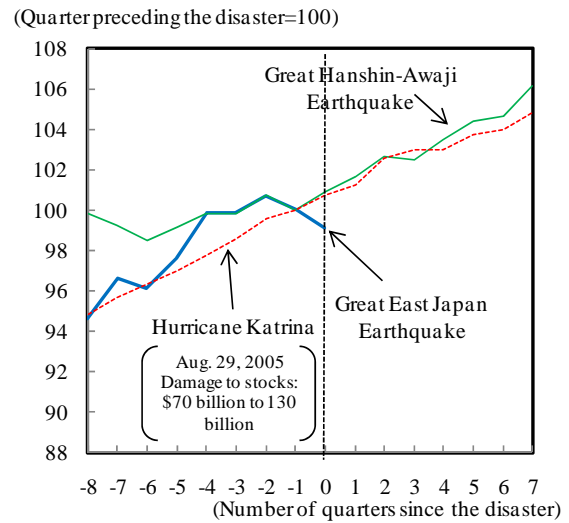


Figure 1-1-5 (3) GDP before and after disasters

After the Great East Japan Earthquake, the economic conditions changed more than after other recent major disasters.



- Unlike after past major disasters, personal consumption has declined on a nationwide basis.
- Consumer sentiment deteriorated sharply after the Earthquake.

Figure 1-1-5 (2) Personal consumption before and after disasters

After the Great East Japan Earthquake, personal consumption also declined.

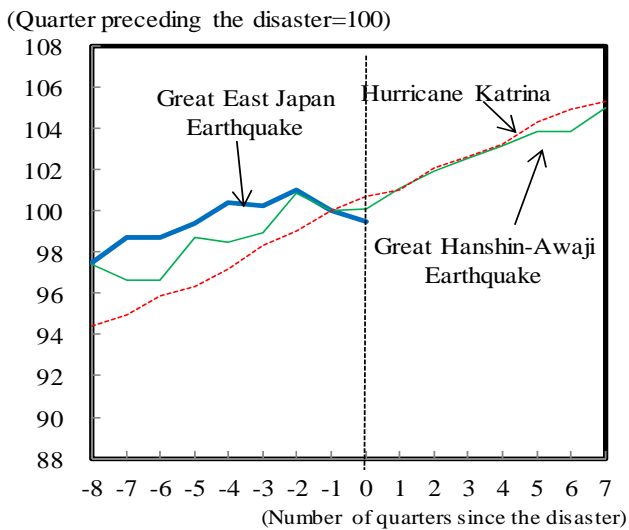
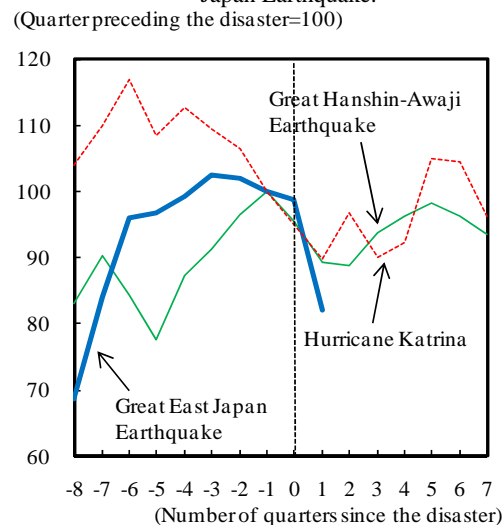


Figure 1-1-6 (1) Consumer sentiment before and after disasters

Consumer sentiment deteriorated sharply after the Great East Japan Earthquake.



(Note) The figure for the first quarter after the Great East Japan Earthquake is the average for April and May

- After the Earthquake, production in Japan suffered a strong negative impact not only from the shutdown of damaged factories but also from the disruptions of supply chains and power supply constraints.
- The auto industry depends on the Tohoku region for the supply of key parts including semiconductors and other electronic components.

Figure 1-1-5 (1) Industrial production before and after disasters

Industrial production plunged after the Earthquake.

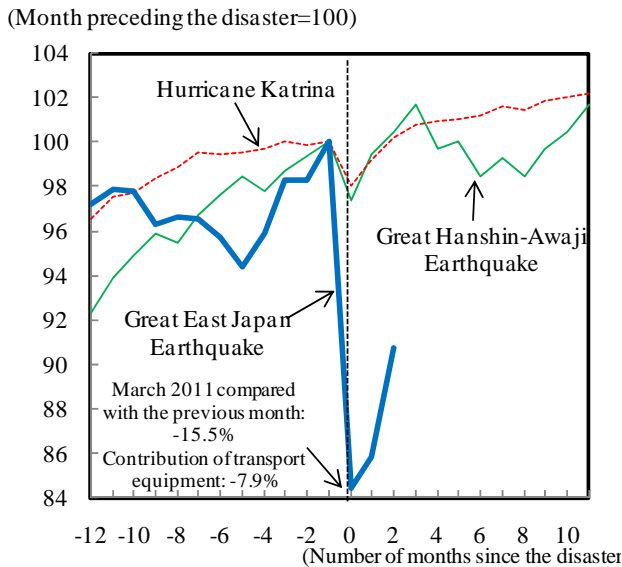
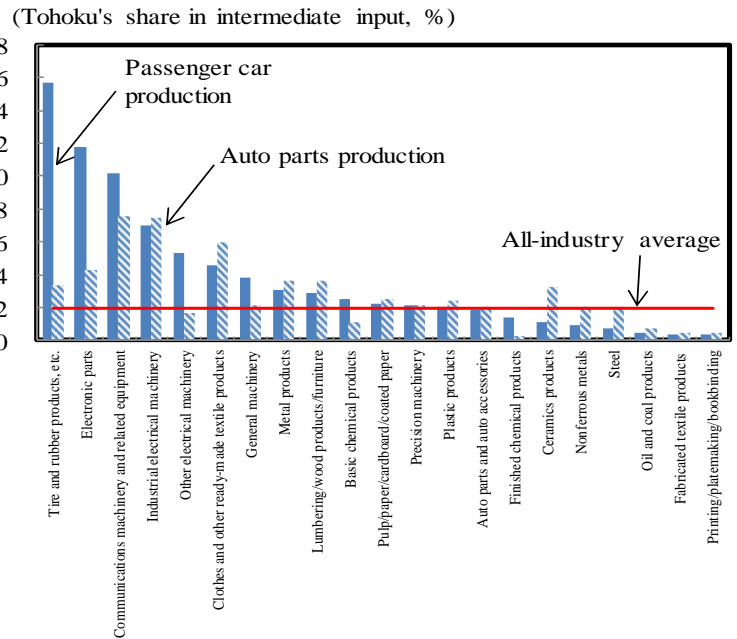


Figure 1-1-8 (3) Automobile-related industries' dependence on the Tohoku region

The auto industry depends heavily on Tohoku for the supply of key components.



- There is strong correlation between power demand and production activity.
- Power supply constraints have a negative impact on economic activity, mainly production.

Figure 1-1-9 (1) Power demand and industrial production

Power supply constraints have a negative impact on production activity.

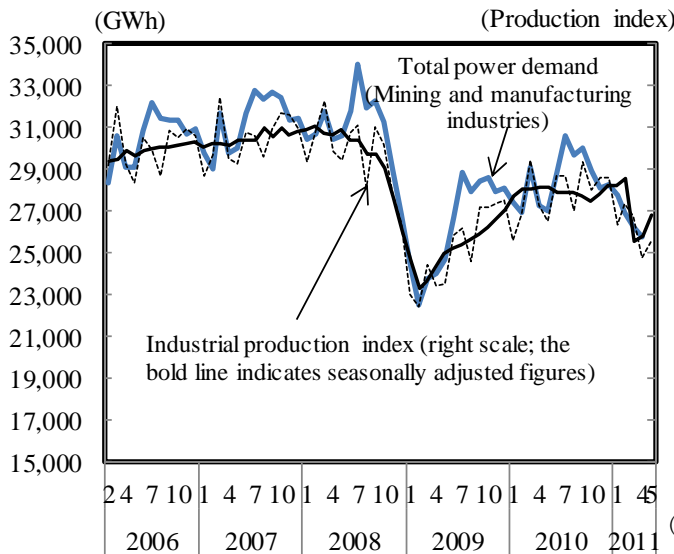
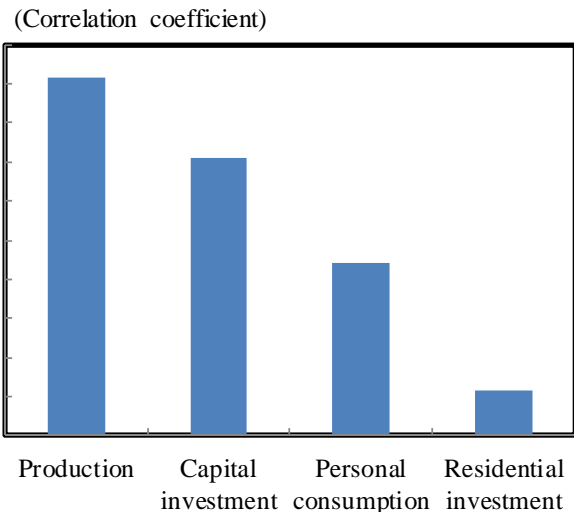


Figure 1-1-9 (2) Correlation between power demand and various indexes

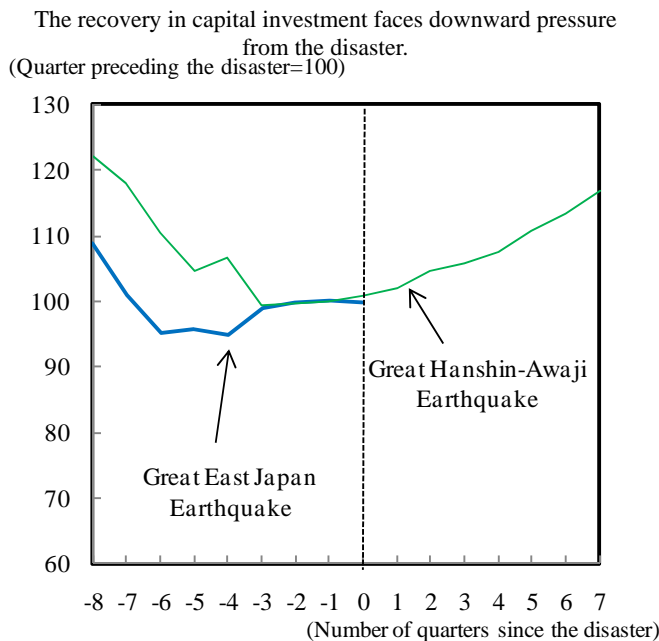
There is strong correlation between production activity and power demand.



(Note) Regarding production and capital investment, correlation with power demand from large-lot users (mining and manufacturing industries) is indicated above. Regarding personal consumption and residential investment, correlation with overall power demand is indicated above.

- Supply constraints also reduced capital investment temporarily.
- Although corporate earnings have not constrained capital investment until now, attention must be paid to the negative impact of the Earthquake on earnings.

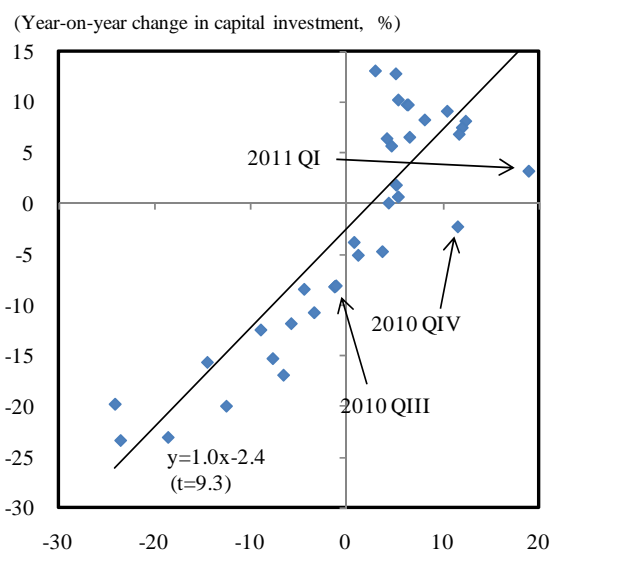
Figure 1-1-12 (2) Capital investment after earthquakes



(Note) The numbers for January-March 2011 are preliminary ones that exclude the numbers for companies in some regions including Iwate, Miyagi and Fukushima Prefectures. The same applies to the right-hand figure.

Figure 1-1-11 (1) Correlation between capital investment and cash flow

The increase in capital investment in recent years has been small compared with the strong growth in cash flow.

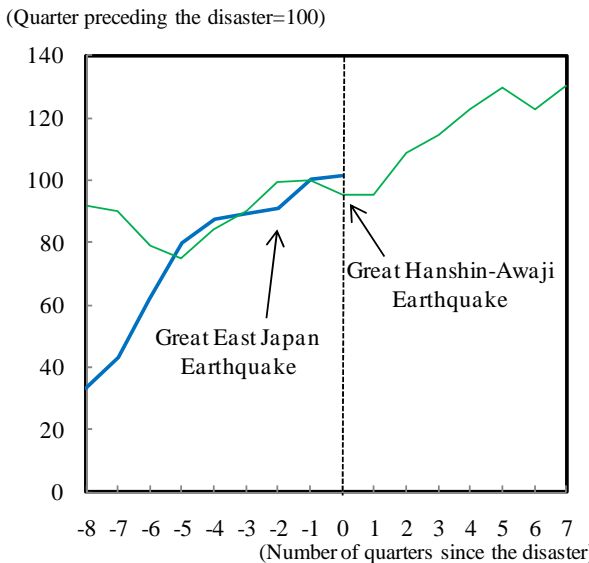


(Note) The above figure indicates year-on-year changes in cash flow and capital investment (quarterly average).

- After the Earthquake, growth in corporate earnings slowed.
- Although the ratio of overseas investment is increasing as a trend, attention must be paid to the post-Earthquake trend.

Figure 1-1-12 (1) Corporate earnings after earthquakes

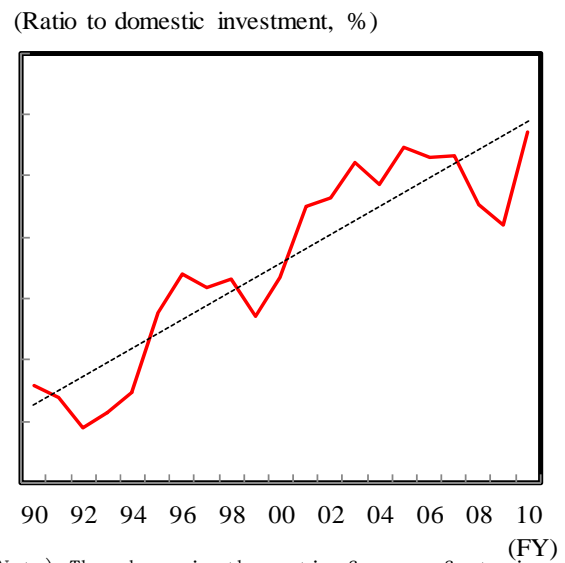
Attention must be paid to the risk that a slump in corporate earnings will negatively impact capital investment.



(Note) The numbers for January-March 2011 are preliminary ones that exclude the numbers for companies in some regions including Iwate, Miyagi and Fukushima Prefectures.

Figure 1-1-12 (3) Ratio of overseas investment after earthquakes

After the Great Hanshin-Awaji Earthquake, overseas investment increased partly due to a strong yen.

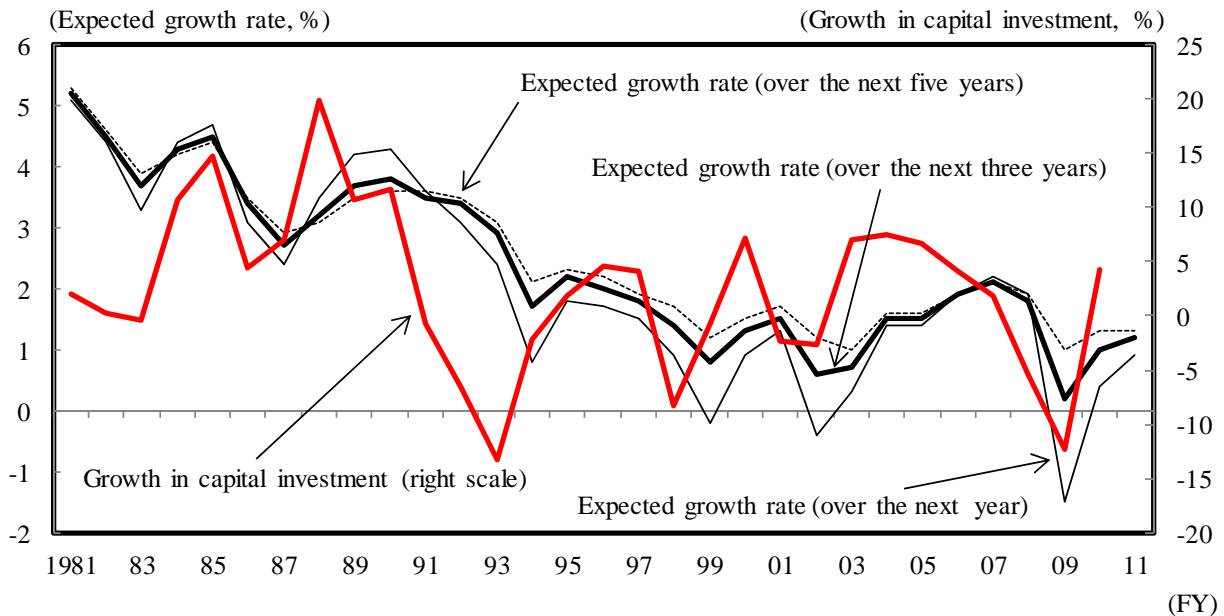


(Note) The above is the ratio for manufacturing companies (capitalized at ¥1 billion or higher). However, the ratio for FY1994 is for the materials industry. The ratio for FY2010 is based on planned investment.

- Behind the low growth of capital investment in recent years is a decline in the expected growth rate.

Figure 1-1-11 (3) Expected growth rate and capital investment

In years when the expected growth rate is high, capital investment tends to grow.



- In light of studies on the relationship between disasters and productivity, investment in human capital (e.g., workers' skills) and intangible assets such as intellectual properties are important for medium-and long-term growth.

Table 1-1-14 Major studies on the impact of natural disasters on productivity

Although the findings vary, the studies suggest the importance of human capital and other intangible assets.

<Empirical studies>

<Keys to sustainable growth after the Earthquake>

	Findings	
Study A (Developed/developing countries)	Countries where meteorological disasters frequently occur are inclined toward investment in <u>human capital</u> and enjoy high growth. Adoption of <u>new technology at the time of capital stock renewal</u> enhances productivity.	Suggested by precedent studies → (Particular to the latest disaster)
Study B (Europe (companies))	Although flood damage lowers corporate productivity, the negative impact is smaller at companies with more <u>intangible assets</u> .	
Study C (Developing countries)	Countries prone to natural disasters enjoy the fruits of <u>R&D activity</u> by developed countries via imports.	
Study D (Developed/developing countries)	Disasters do not have any impact on economic growth.	

- 1 Introducing new technologies and new schemes (including regulatory reforms) at the time of the renewal of capital stocks.
- 2 Investing in human capital (workers' skills) and other intangible assets (know-how, patents, software, etc.).
- 3 Establishing safe, secure highly efficient and environment-friendly energy supply systems.

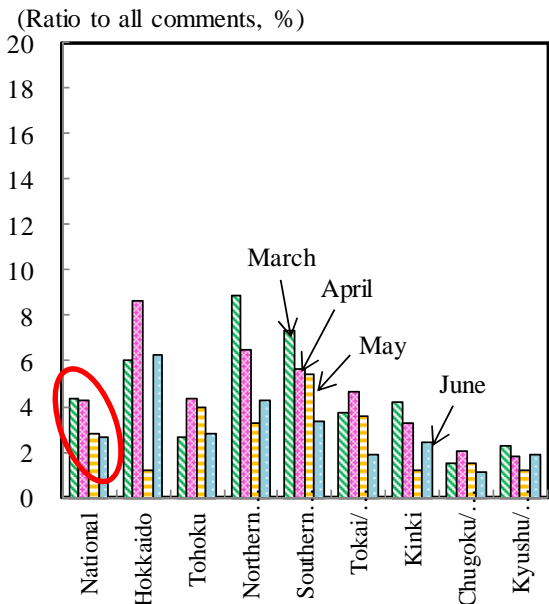
- What is particularly notable about the Earthquake is that it has been accompanied by a nuclear disaster.
- The nuclear power station accident has not only caused power supply constraints but also has had a negative impact on economic conditions, mainly in the tourism and leisure sectors.

Figure 1-1-18 Impact of the nuclear disaster

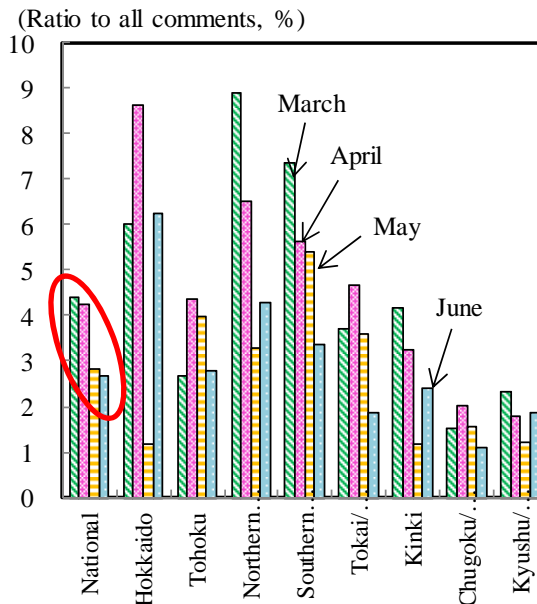
The impact of the nuclear disaster has become apparent mainly in the tourism and leisure sectors.

(1) Comments related to the nuclear disaster

Assessment of current conditions

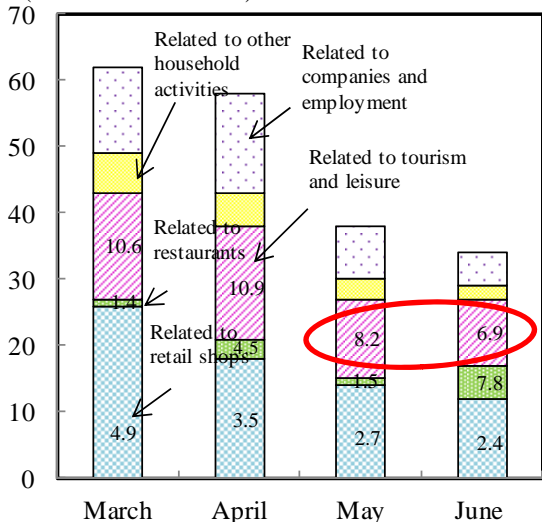


Assessment of future conditions

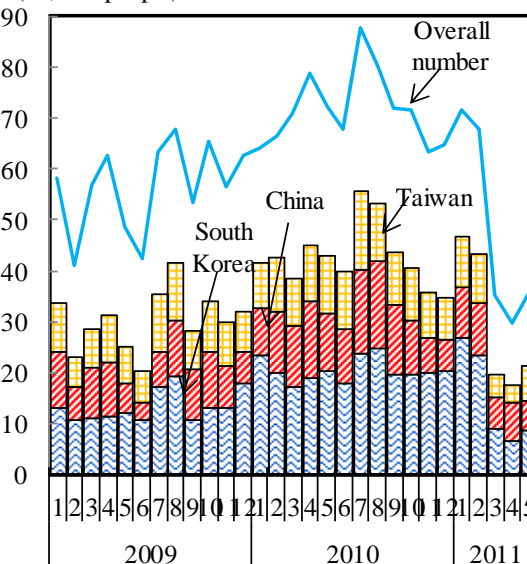


(2) Breakdown of comments related to the nuclear disaster (assessment of current conditions)

(Number of comments)



(3) Changes in the number of visitors to Japan by nationality (10,000 people)

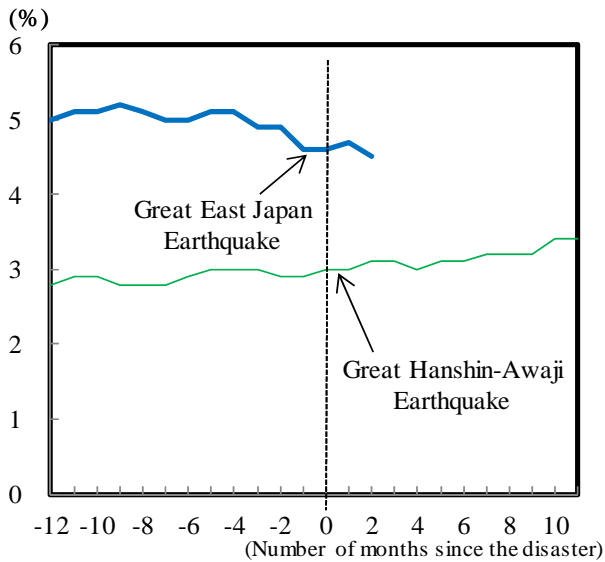


- (Notes) 1. The survey period of the "Economy Watchers Survey" is from the 25th day to the last day of each month.
 2. "Comments related to the nuclear disaster" in Figures (1) and (2) refer to those that contain the terms "nuclear power (nuclear power station accident)" and "radioactivity and radiation."
 3. "Related to tourism and leisure" in Figure (2) represents the total number of comments related tourism, transportation and leisure facilities among comments concerning services related to household activities. "Related to other household activities" include comments related to services excluding tourism and leisure and those related to housing. Numbers in the figures represent the ratios of comments related to the nuclear disaster to all comments related to the relevant industries (assessment of current conditions) (%).

- After the Great Hanshin-Awaji Earthquake, the nationwide employment situation did not deteriorate.
- While the unemployment rate in regions other than the three disaster-stricken prefectures has been stable, there are concerns regarding a recovery in employment in the services industry.

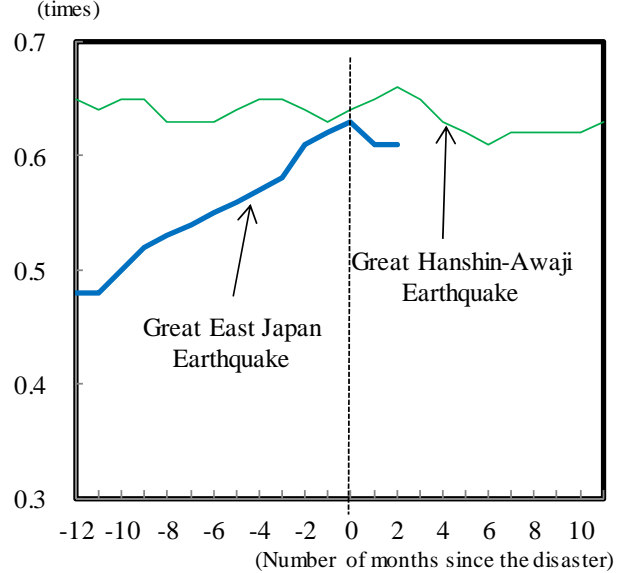
Figure 1-1-21 Comparison with the employment situation after the Great Hanshin-Awaji Earthquake
Attention must be paid to whether or not the post-earthquake employment situation will deteriorate on a nationwide basis.

(1) Unemployment rate



(Note) The unemployment rates in the months after the Great East Japan Earthquake do not reflect the results in Iwate, Miyagi and Fukushima

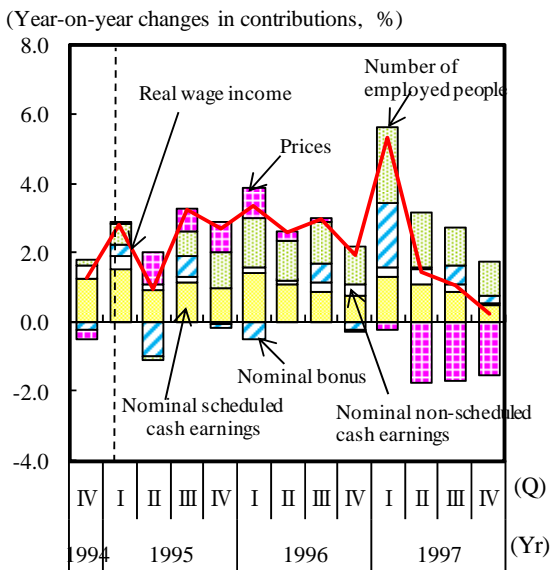
(2) Effective job offer ratio



- Growth in income is necessary for sustainable expansion of consumption.
- Attention should be paid to the trend in bonuses (including those at small and medium-size enterprises) as well as the number of employed people.

Figure 1-1-22 (3) Real wage income after the Great Hanshin-Awaji Earthquake

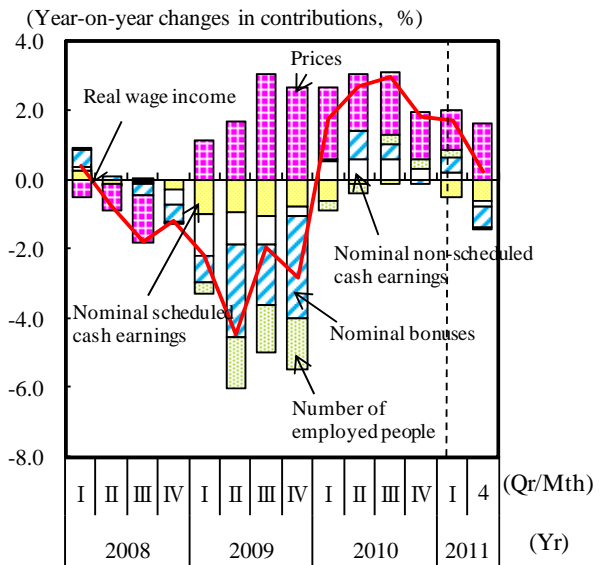
After the Great Hanshin-Awaji Earthquake, the number of employed people continued stable growth.



(Note) The 1995 summer bonuses, the first bonuses after the earthquake, grew by 1.6% from the previous year at companies with a workforce of 30 employees or more and by 0.5% at companies with a workforce of five or more.

Figure 1-1-22 (2) Contribution by real wage income

Increases in the number of employed people and salary income make relatively small contributions to growth in real wage income.



Section 2 Price Trends and Financial and Capital Markets

- Prices have remained stable since the Earthquake.
- Due to time lag effects, the past improvement in the supply-demand gap is now moderating downward pressure on prices.

Figure 1-1-5 (4) Consumer prices before and after disasters (overall prices)

Consumer prices have remained stable since the Great East Japan Earthquake.

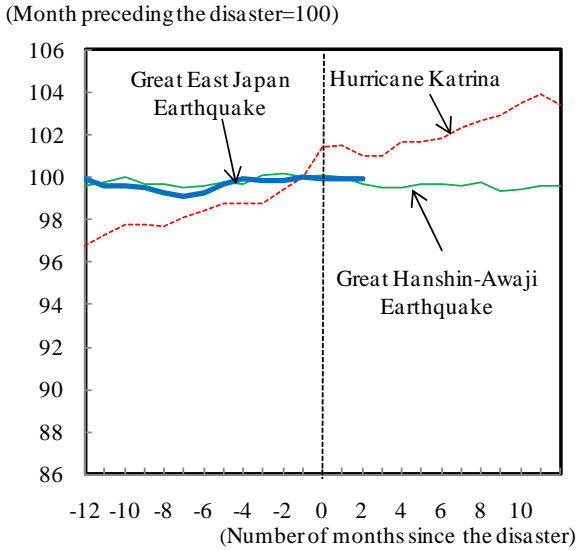
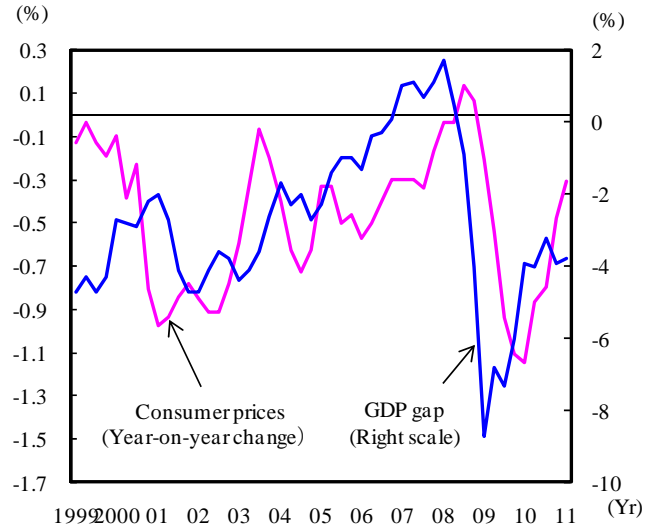


Figure 1-2-2 (1) GDP gap and consumer prices

A change in GDP gap tends to lead to an increase in the inflation rate with a time lag of around one year.

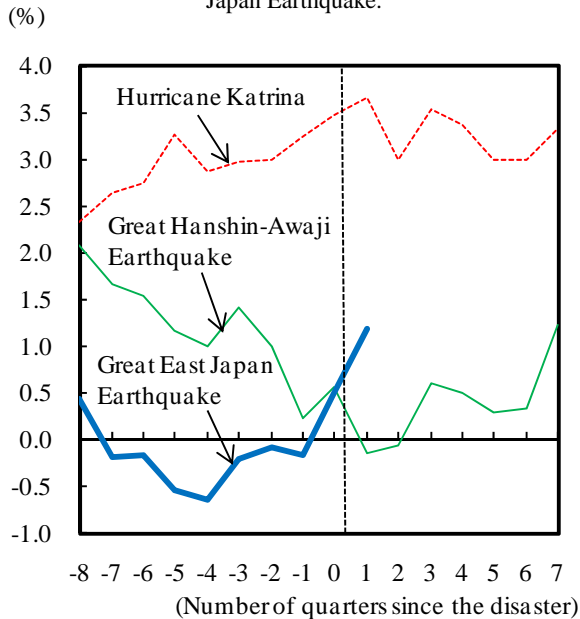


(Note) Consumer prices in the above figure are general consumer prices excluding food and energy prices.

- Households' expected inflation rate has risen due to a rise in crude oil prices and the post-Earthquake supply constraints.
- The market's expected inflation rate has remained relatively stable since the Earthquake.

Figure 1-1-6 (2) Expected inflation rates before and after disasters

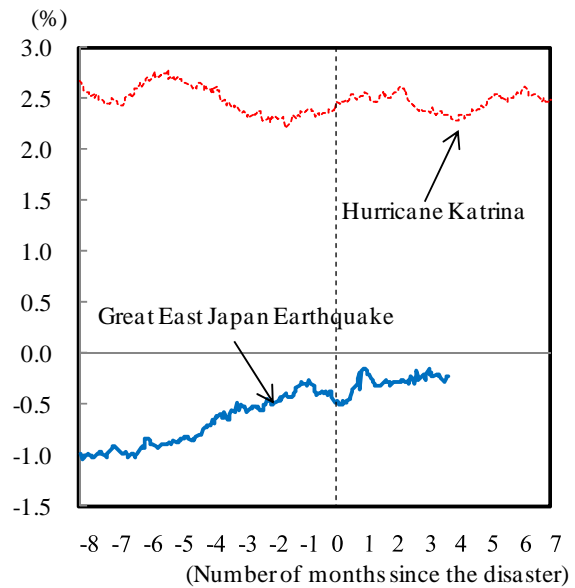
Households' expected inflation rate rose after the Great East Japan Earthquake.



(Note) The figure for the first quarter after the Great East Japan Earthquake is the average for April and May

Figure 1-2-14 (3) Breakeven inflation rates before and after disasters

The market's expected inflation rate has remained stable since the Earthquake.



(Note) After the Great East Japan Earthquake, the monthly average rate was -0.4% in March, -0.3% in April, -0.3% in May and -0.2% in June.

- Prices of oil products have been rising in line with a rise in crude oil prices since before the Earthquake.
- One factor behind the structurally low expected inflation rate is a change in the population mix.

Column 1-5 Figure Oil product prices before and after the Great East Japan Earthquake

Prices of heating oil and gasoline had already risen before the Earthquake in line with a rise in crude oil prices.

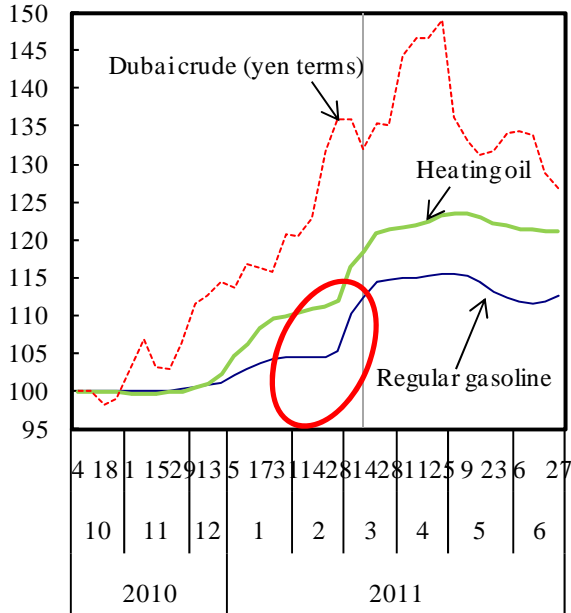
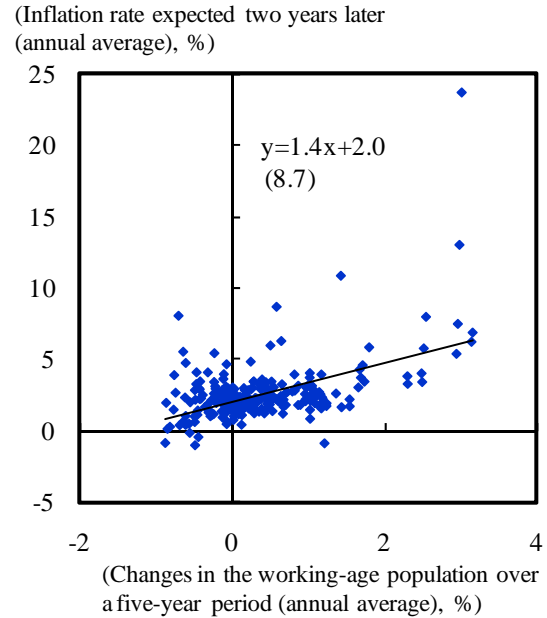


Figure 1-2-11 (2) Relationship between the forecast of changes in the working-age population and the expected inflation rate

The higher a country's forecasted rate of growth of the working-age population is, the higher its expected inflation rate.

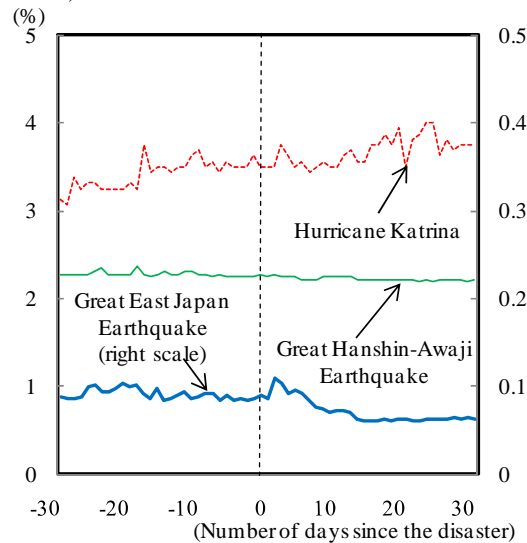


- Interest rates have remained stable since the Earthquake due to the easy monetary policy or monetary easing.

Figure 1-2-14(1) (2) Interest rates before and after disasters

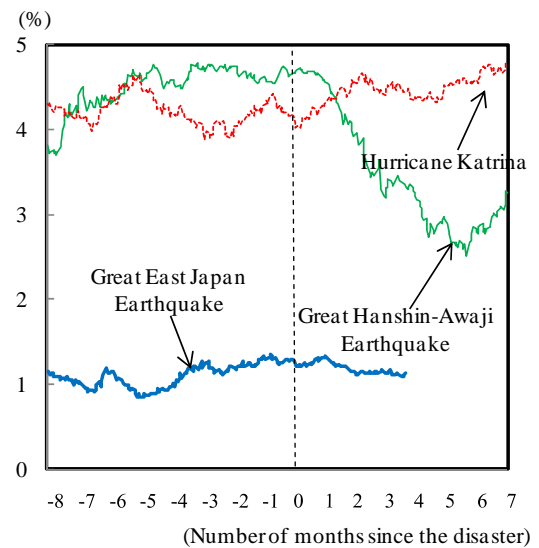
Further monetary easing lowered short-term interests rates and stabilized long-term interest rates.

(1) Short-term interest rates (unsecured overnight call rate, FF rate)



(Note) After the Great East Japan Earthquake, the Bank of Japan provided the largest-ever amount of funds through its market operation. The FRB reduced the FF rate by 0.25 point some 20 days after Hurricane Katrina (September 20, 2005.)

(2) Long-term interest rate (10-year JGB yield)



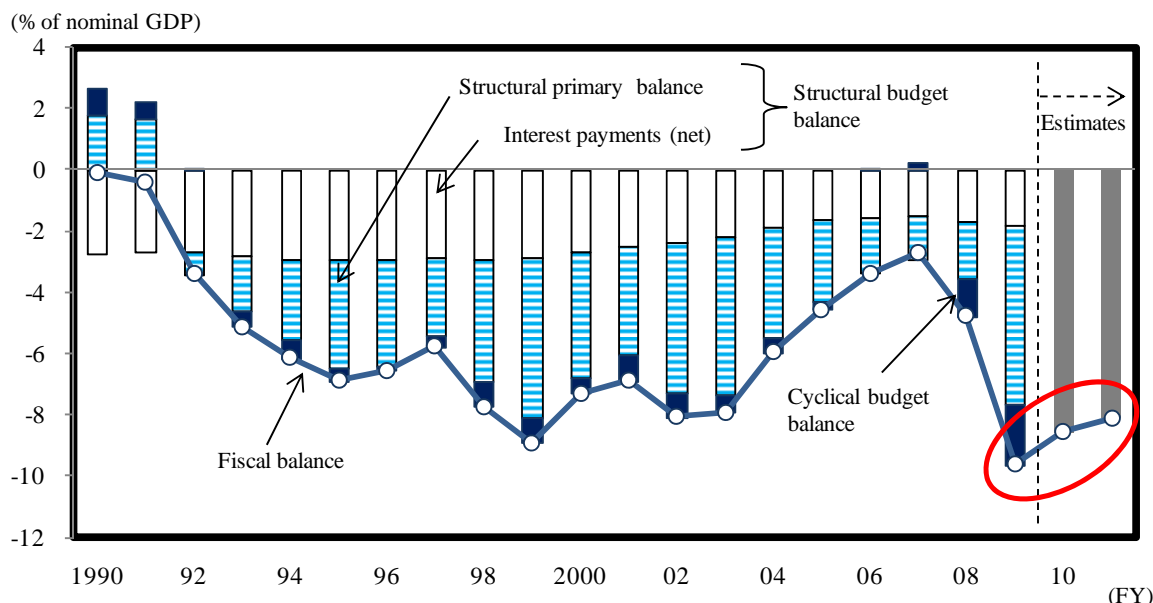
(Note) Some three months after the Great Hanshin-Awaji Earthquake (April 14), the Bank of Japan reduced the official discount rate by 0.75 point. After Hurricane Katrina, the FRB reduced the FF rate by 0.25 point each seven times over a 12-month period.

Section 3 Current Conditions of and Future Challenges for Public Finance and Social Security

- The Lehman shock triggered a sharp deterioration in the fiscal balance.

Figure 1-3-1 National and Local Governments' Cyclical and Structural Budget Balance

Since the implementation of fiscal measures after the Lehman shock, the balance has improved at a moderate pace.



(Note) The actual numbers for the years through FY 2009 are based on the System of National Account, the Cabinet Office. The estimates for FY 2010 and 2011 are estimates made as of May 2011 (they do not reflect the second supplementary budget for FY 2011).

- The size of outstanding debts of the Japanese government is more than double the size of GDP.
- Even if debts are netted against assets, the Japanese government still has vast excess debts.

Table 1-3-6 Government balance sheet (FY2009)

The government is in a state of net debt.

(trillion yen)

	General government	National government	Local governments	Social security funds
Assets	985.8	342.9	438.7	204.2
Non-financial assets	470.1	101.6	365.3	3.2
Financial assets	515.7	241.3	73.3	201.1
Liabilities... (A)	1,231.2	830.4	203.7	197.0
National and local government bonds	795.8	731.4	64.4	0.0
Retirement benefits liabilities	25.4	4.9	20.4	0.1
Pension reserves	181.6	0.0	0.0	181.6
Asset-liability difference	-245.3	-487.4	234.9	7.2

(Attached table)

Public contribution to pensions... (B) (Contributions for past periods, current value)	273.2	257.6	15.6	0.0
(A) + (B)	1,504.4	1,088.0	219.4	197.0

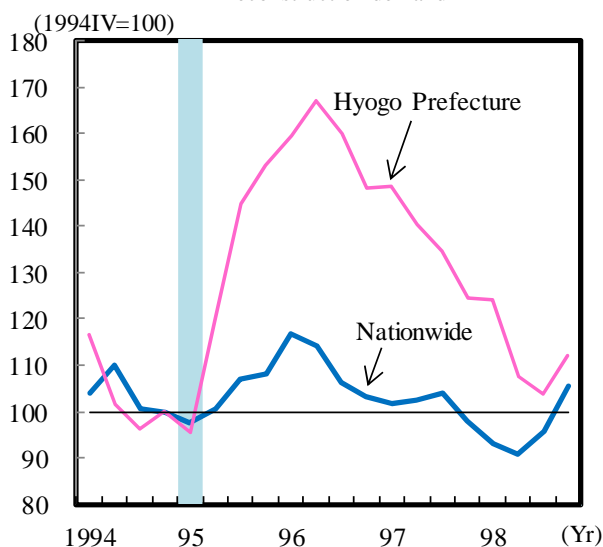
(Note) Regarding public pensions, the main table includes only reserves. The attached table also includes public contributions. Regarding public contributions to pensions (contributions for past periods, current value), it is assumed that the national government's contributions account for a third of the total contributions to basic pensions at the end of FY1999 and half of them at the end of FY2009.

- After the Great Hanshin-Awaji Earthquake, fiscal expenditures for restoration and reconstruction grew sharply in the disaster areas.
- To achieve fiscal consolidation in the medium to long term, it is important to restrain constant pressure for growth in other expenditures.

Figure 1-3-4 Change in fiscal conditions after Great Hanshin-Awaji Earthquake

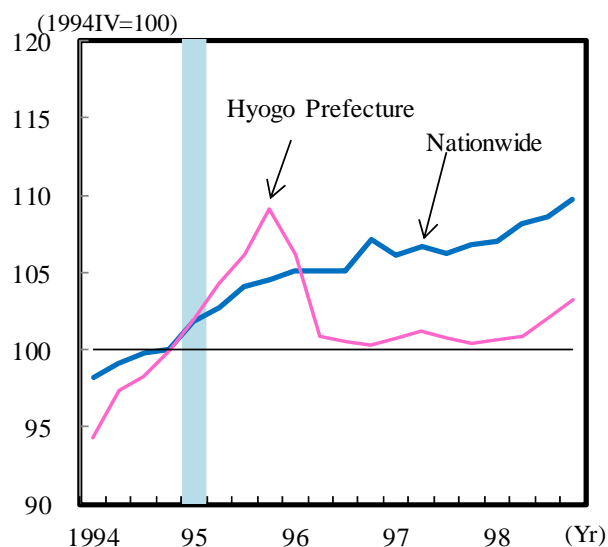
(1) Public fixed capital formation

After the Great Hanshin-Awaji Earthquake, public investment grew sharply due to restoration and reconstruction demand



(2) Government final consumption expenditures

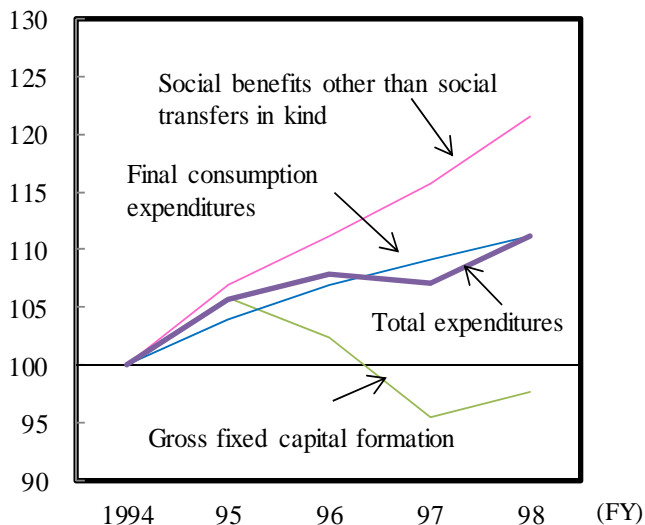
Government final consumption expenditures increased in the disaster areas but showed no notable change on a nation-wide basis.



(3) Total expenditures (general government)

How to curb increases in expenditures other than those related to restoration and reconstruction is an important issue.

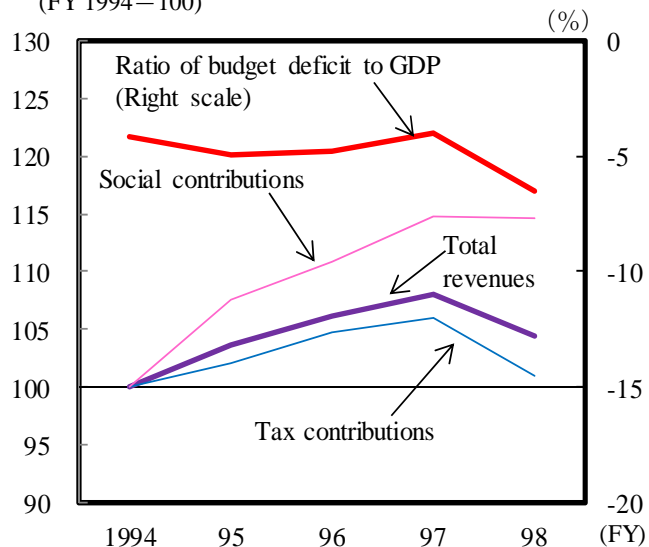
(FY 1994=100)



(4) Budget deficit and total revenues (general government)

After the Great Hanshin-Awaji Earthquake, the budget deficit did not expand.

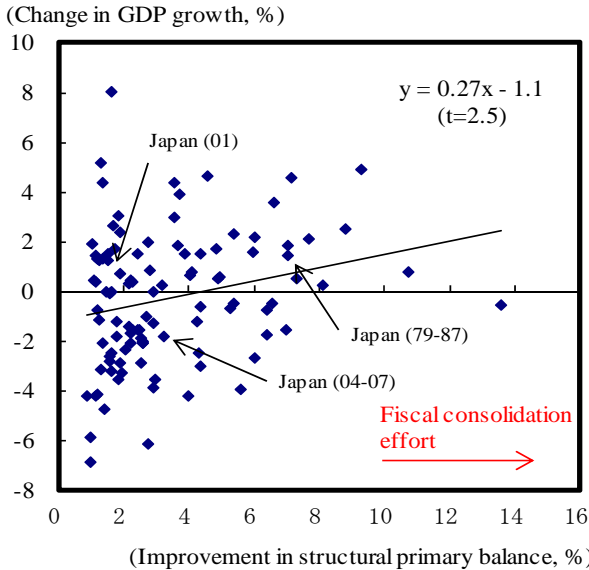
(FY 1994=100)



- According to the experiences of OECD countries, many countries posted higher economic growth rates after achieving fiscal consolidation.
- Countries that post higher growth rates after fiscal consolidation generally succeeded in restraining public investment and social security expenditures.

Figure 1-3-8 (2) Fiscal consolidation effort and economic growth

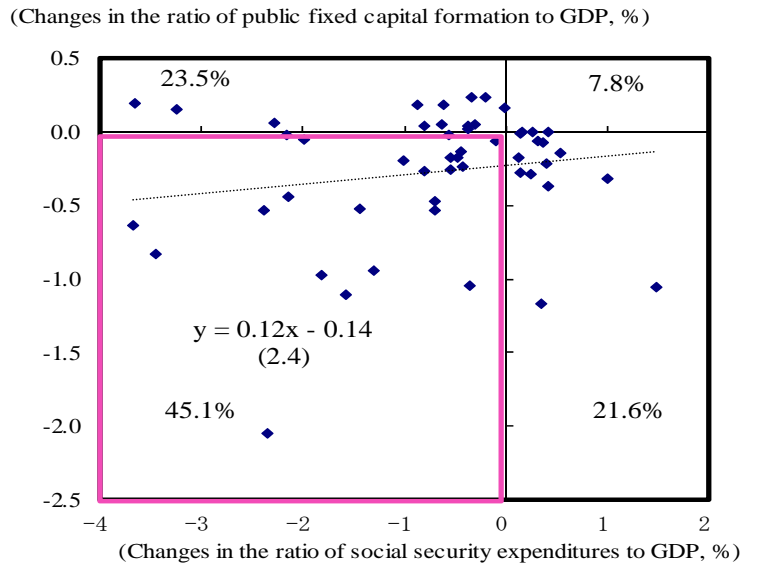
The greater the fiscal consolidation effort is, the higher the economic growth rate after the consolidation period tends to be.



- (Notes) 1. The fiscal consolidation period is determined as follows: it commences in the year when the structural primary balance to potential GDP ratio improved one percentage point or more from the year before, or the second year of two years during which the ratio improved one percentage point or more (however, a year-on-year improvement of 0.5 percentage points or more is required in the first year); and it ends in the year when the ratio dropped from the year before or increased 0.2 percentage points or less.
2. The change in the growth rate represents the difference between the average GDP growth rate for the three years before the fiscal consolidation period and the average for the three years after the period. "Countries with accelerated growth" are countries whose growth rate increased after the fiscal consolidation period.

Figure 1-3-10 (3) Social security and public fixed capital formation in countries with accelerated growth

Both public fixed capital formation and social security expenditures are curbed.



- If Japan is to limit growth in social security expenditures to a sustainable level despite the rising ratio of elderly people, it is important to promote economic growth and improve the efficiency of per-capita expenditures for the elderly person.

Figure 1-3-14 (1) Expenditure structure of countries

Although the amount of Japan's expenditures is relatively small, the ratio of social security expenditures to overall expenditures is high.

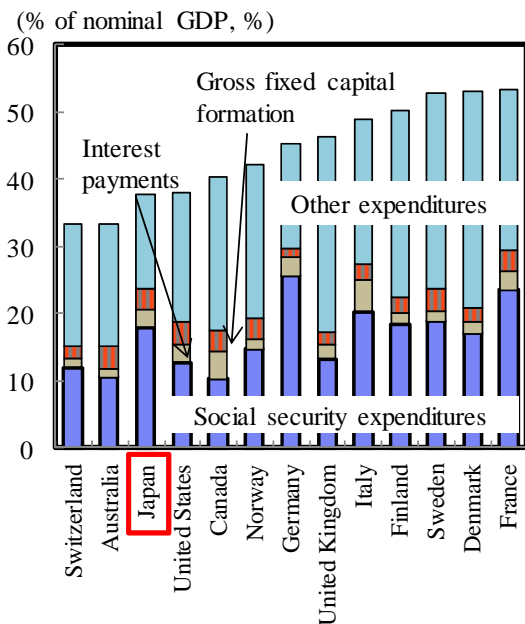


Figure 1-3-15 (2) Growth factors of social security expenditures (expenditures related to the elderly)

Expenditures grow due to an increase in per-capita expenditures for the elderly in addition to a sharp rise in the population of elderly people.

