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Session 3



# Demographic Challenges and Japan's Fiscal Policy

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# Presentation Outline

- . **Demographic trends in Japan**
- . **Social security benefits spending and central-government finance**
- . **Unexpected demographic change and its impact**
- . **Lessons**

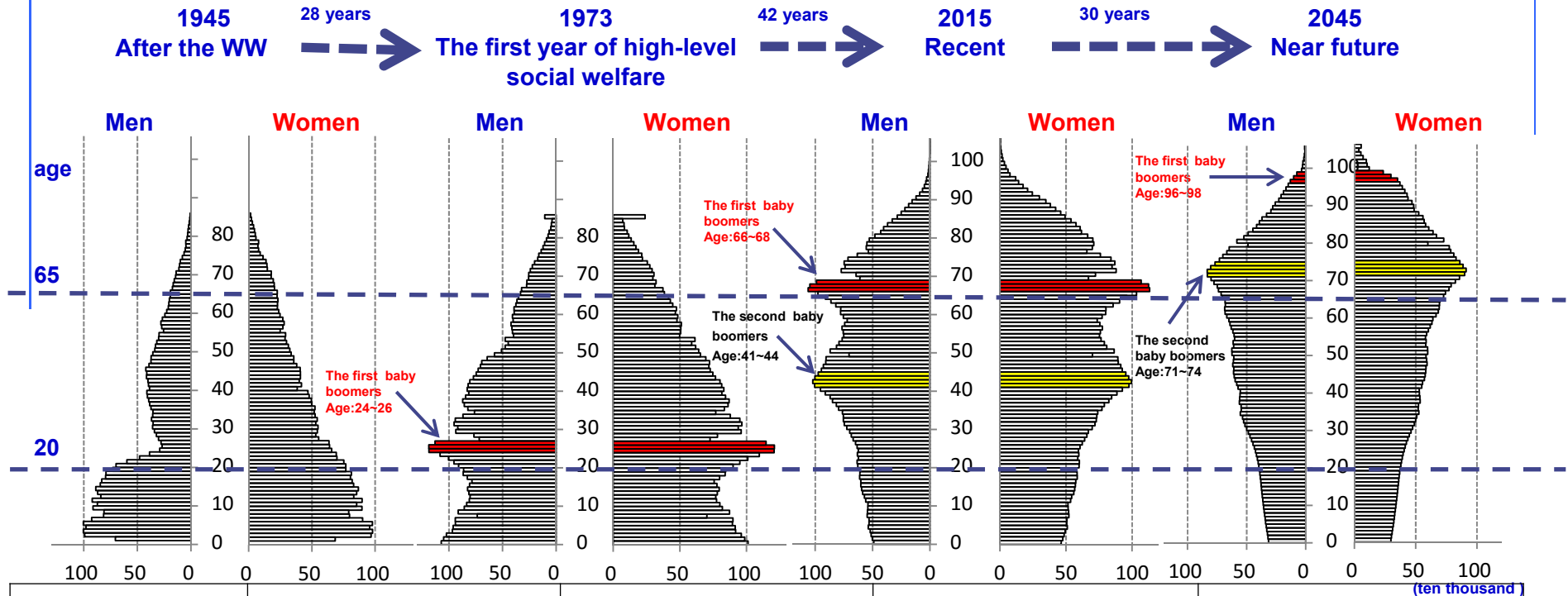
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## **. Demographic trends in Japan**



# Demographic Change in Japan

- ✓ The population composition of 1945 in Japan was similar to the current Myanmar.
- ✓ The level of aging now is, and projected to be, unprecedented.



| Year                                    | 1945    | 1975   | 2015  | 2045  |
|---|---------|--------|-------|-------|
| Average age                             | 27.3    | 32.5   | 46.5  | 52.8  |
| Aging rate                              | 5.1%    | 7.5%   | 26.8% | 37.7% |
| A similar country to Japan at that time | Myanmar | Brazil | -     | -     |

(Note) 1945's population pyramid based on East Asian age reckoning. Average age of 1945 is an estimated value. "Aging rate" is referring to age 65 and older ratio to the total population.

(Sources) Ministry of Internal Affairs and Communications "Population Projection", National Institute of Population and Social Security Research, "Japan's Demographic Composition in the Future" (estimation as of January 2014), UN "World Population Prospects 2015 revision"

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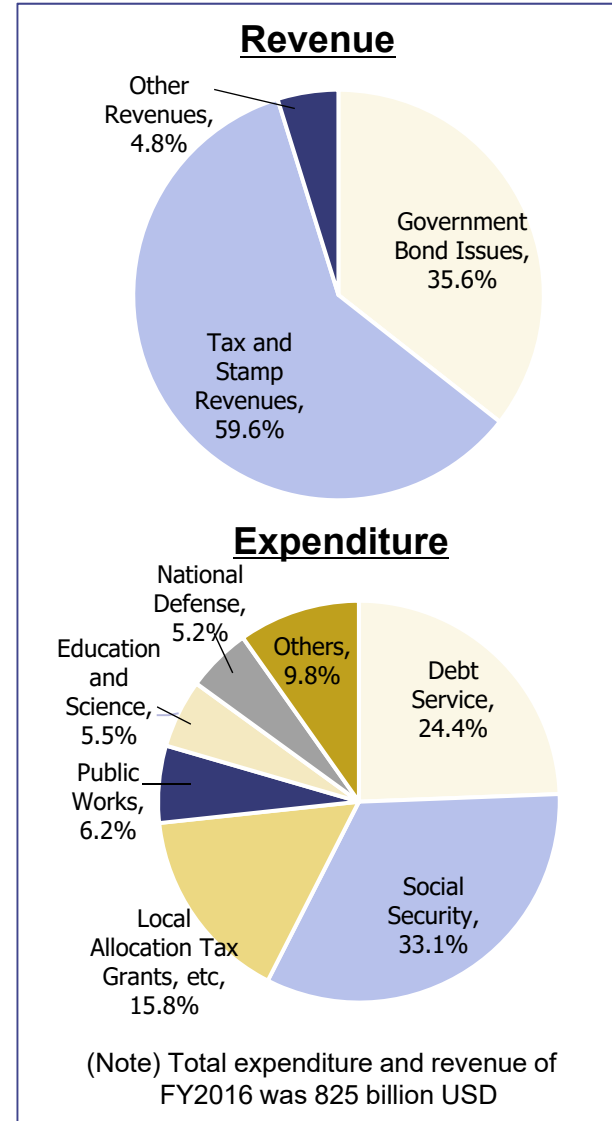
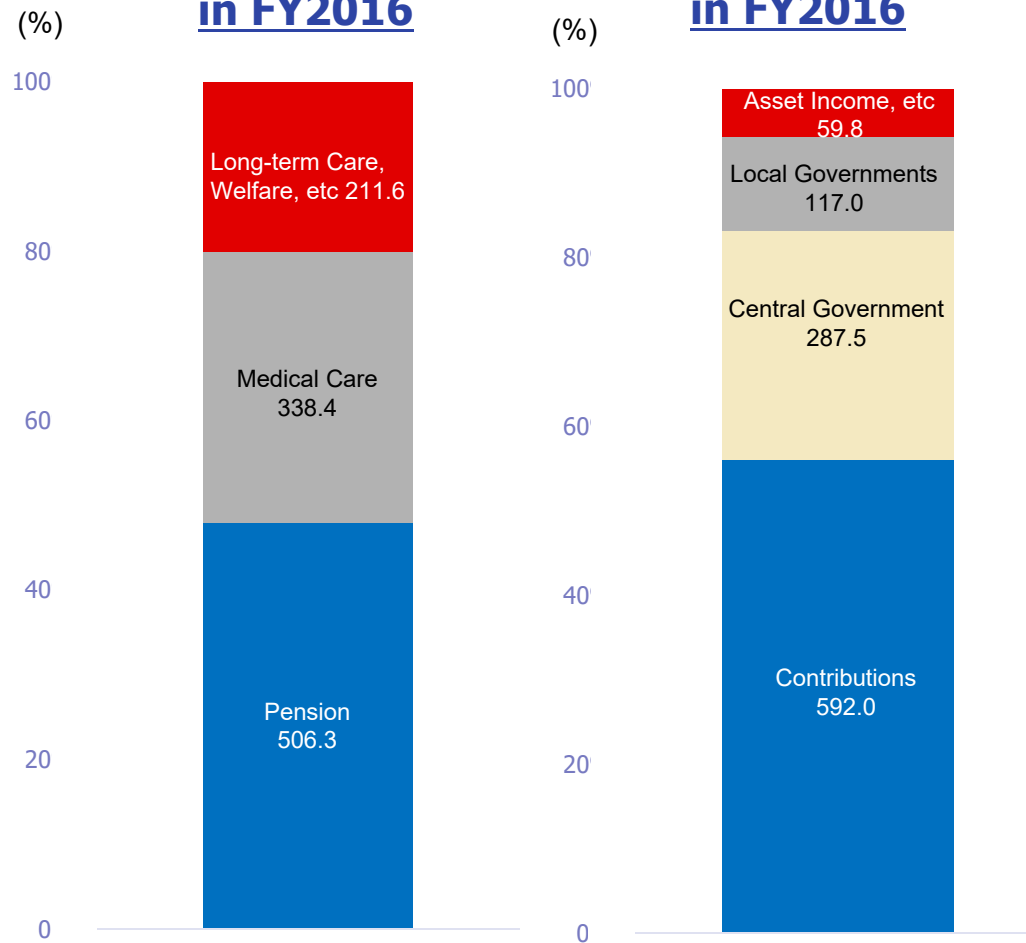
**. Social security benefits spending  
and central-government finance**

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# Social Security Benefits and the Sources of Funding in Japan

**Social Security Benefits in FY2016**      **Sources of Funding in FY2016**

< Ref: General Account Budget for FY 2016 >



(Note) USD billion. 1USD=112JPY(2017/3).  
 Total amounts of social security benefits are 1056.3 USD billion.  
 (Sources) National Institute of Population and Social Security Research  
 "The cost of Social Security Benefits",  
 FY2015: Ministry of Health, Labor and Welfare (initial budget)

(Note) Total expenditure and revenue of FY2016 was 825 billion USD

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**. Unexpected demographic change  
and its impact**

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# Introduction of universal health care and national pension system in Japan (1961)

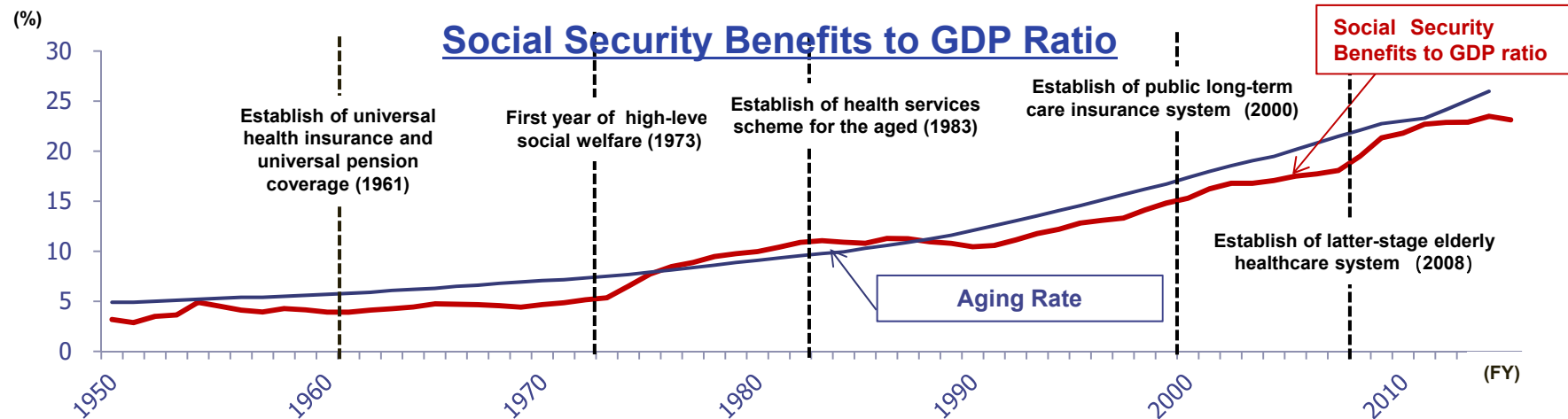
- ◆ In 1956, 32% of the population had no health insurance. Only employees of large companies enjoyed the health insurance system. In 1960, more than half of the reasons of welfare payment were the family sickness.
- ◆ There was no pension fund for farmers, SME employees, and independent proprietors, while there were for large company employees and public servants.
- ◆ Amendment of National Health Law (1958): enacted from 1961
  - The Municipalities operate the insurance. The participation was compulsory but for insuree of employee insurance.
- ◆ Establishment of National Pension Act (1959): enacted from 1961.
  - The contributors are Japanese nationals from age 20 to 59. 25 years of contribution were required to be eligible.
  - Benefits were received from age 65 and above.

(Source) Annual Health, Labour and Welfare Report



# [Ref] Demographic Change and Increase in Social Security Benefits in Japan

◆ With the rapid progress of aging population, social security benefits have been increasing.

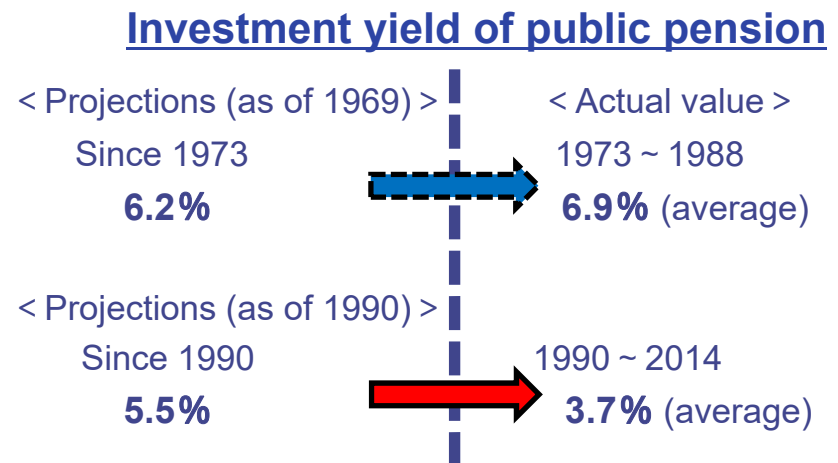
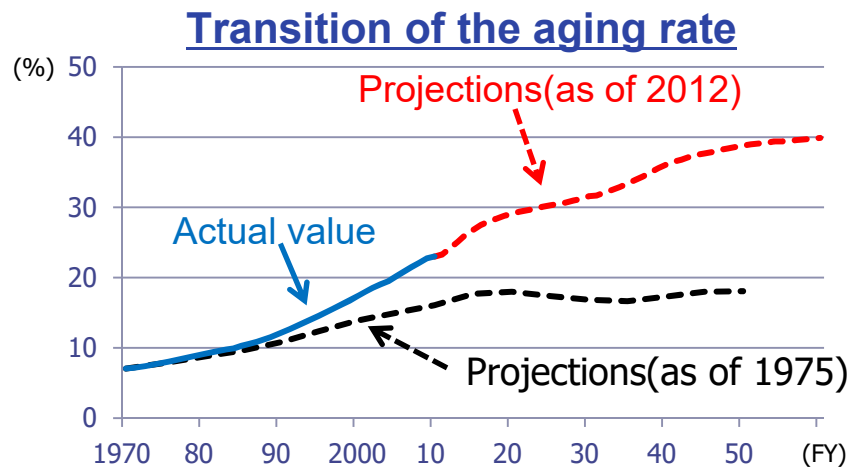
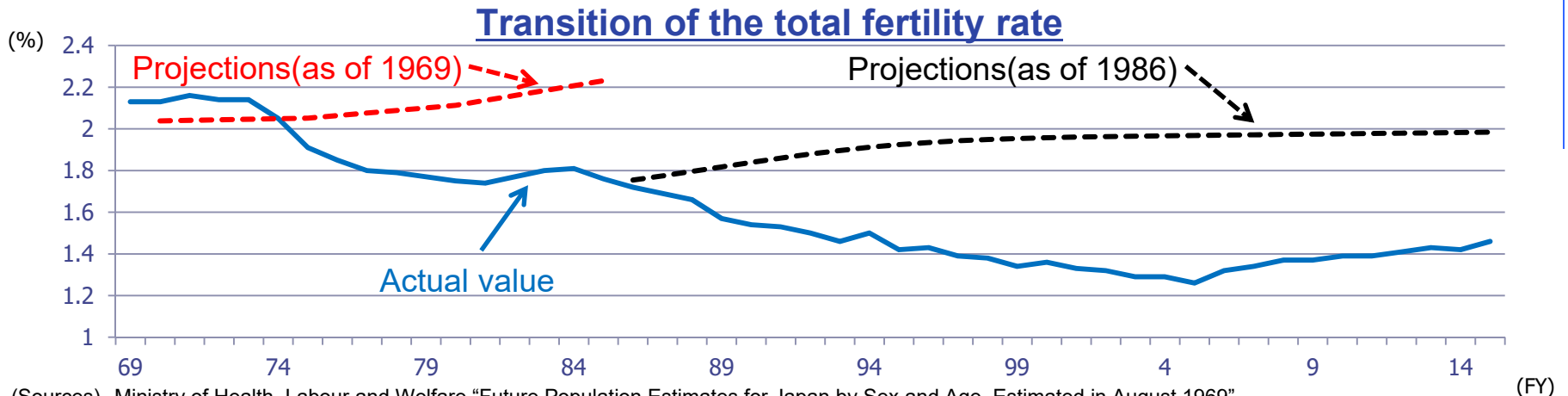


| Year                    | 1960   | 1970                                    | 1983   | 1990                      | 2000  | 2010  | 2015   |
|-------------------------|--|---|--|---------------------------|---|---|--------|
| Topics, etc.            | Establish of universal health insurance and universal pension coverage | First year of high-level social welfare | Establish of health services scheme for the aged | The bubble economy period | Establish of public long-term care insurance system | Establish of latter-stage elderly healthcare system | Recent |
| Life expectancy (Men)   | 65.3   | 69.3                                    | 73.4   | 75.9                      | 77.7  | 79.6  | 80.8   |
| Life expectancy (Women) | 70.2   | 74.7                                    | 78.8   | 81.9                      | 84.6  | 86.3  | 87.1   |
| Aging rate              | 5.7  | 7.1                                     | 9.1  | 12.1                      | 17.4  | 23.0  | 26.7   |
| Total fertility rate    | 2.0  | 2.13                                    | 1.75   | 1.54                      | 1.36  | 1.39  | 1.46   |

(Notes) These charts are made by PRI (Policy Research Institute). Original data sources are "Population Projection", "National Census" (Ministry of Internal Affairs and Communications), and "Labour Force Survey", "Abridged Life Table", "Vital Statistics" (Ministry of Health, Labour and Welfare)

# Socio-Economic Projections and Actual Results in Japan

- ◆ “A social security system should be designed based on the long-term projections.”  
(Fiscal System Council (Nov. 28, 1968))
- ◆ However, there were great differences between actual results and projections.

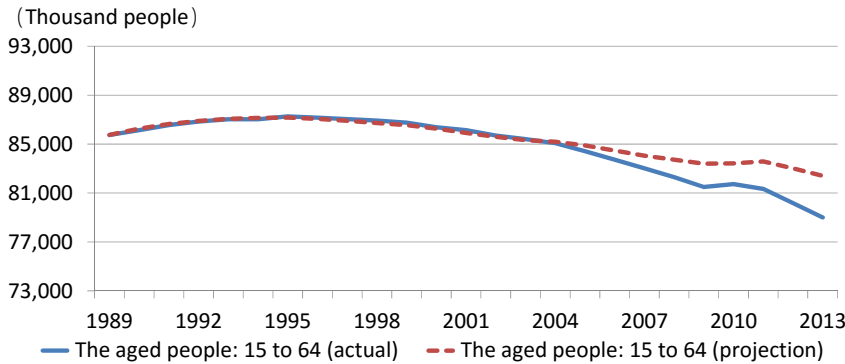


(Sources) Ministry of Health, Labour and Welfare “actuarial review”

# Effect of projection Error on Pension Reserve Funds in Japan

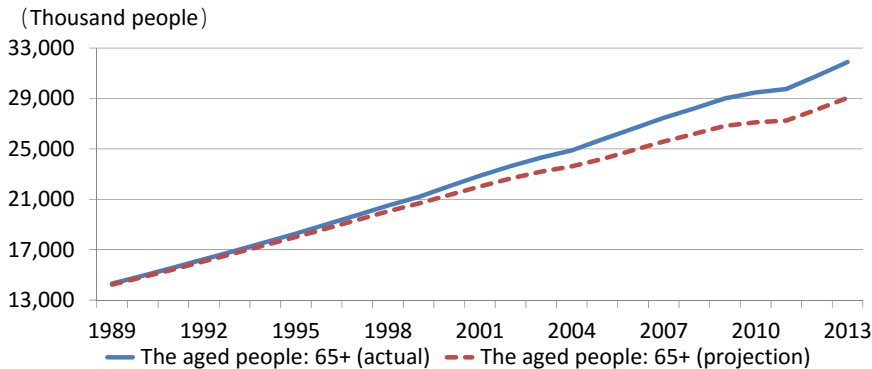
- ◆ The Japanese pension system have Public Pension Reserve Funds, which is expected to play a key role as buffer when long- or short-term fiscal risks hit the economy.
- ◆ The gap between the PRI's estimation based on 1986 population projections and actual value could be as much as 9.8% to GDP in 2013.

**Figure 1 Trends in the population from 15 to 64 years old in Japan**



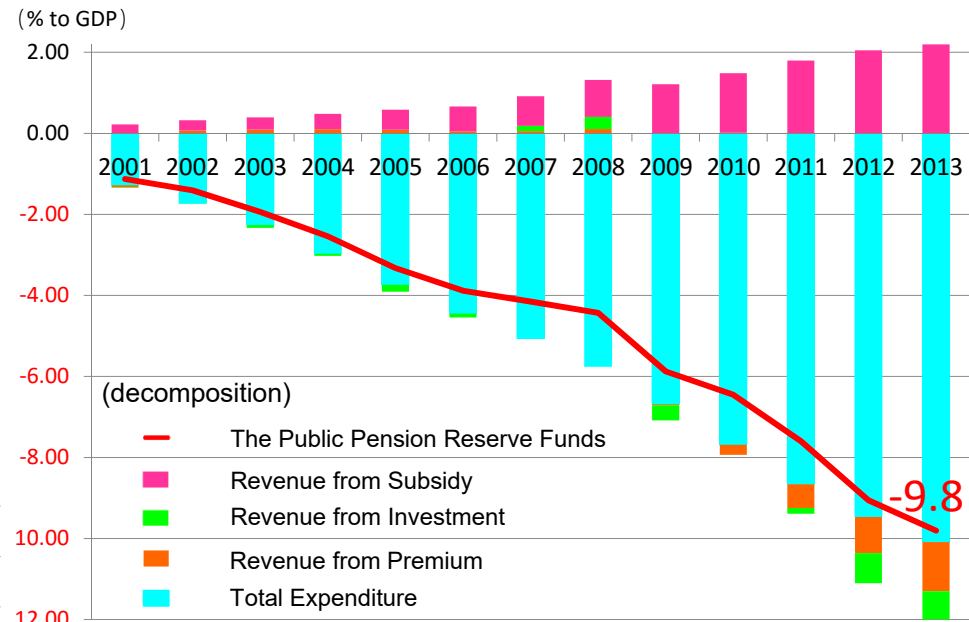
(Source) Ministry of Health, Labour and Welfare "Vital Statistics", Institute of Population Problems "Population Projections for Japan: 1985-2085".

**Figure 2 Trends in the population over 65 years old in Japan**



(Source) Ministry of Health, Labour and Welfare "Vital Statistics", Institute of Population Problems "Population Projections for Japan: 1985-2085".

**Figure 3 Gap between estimation and actual value in Public Pension Reserve Funds**

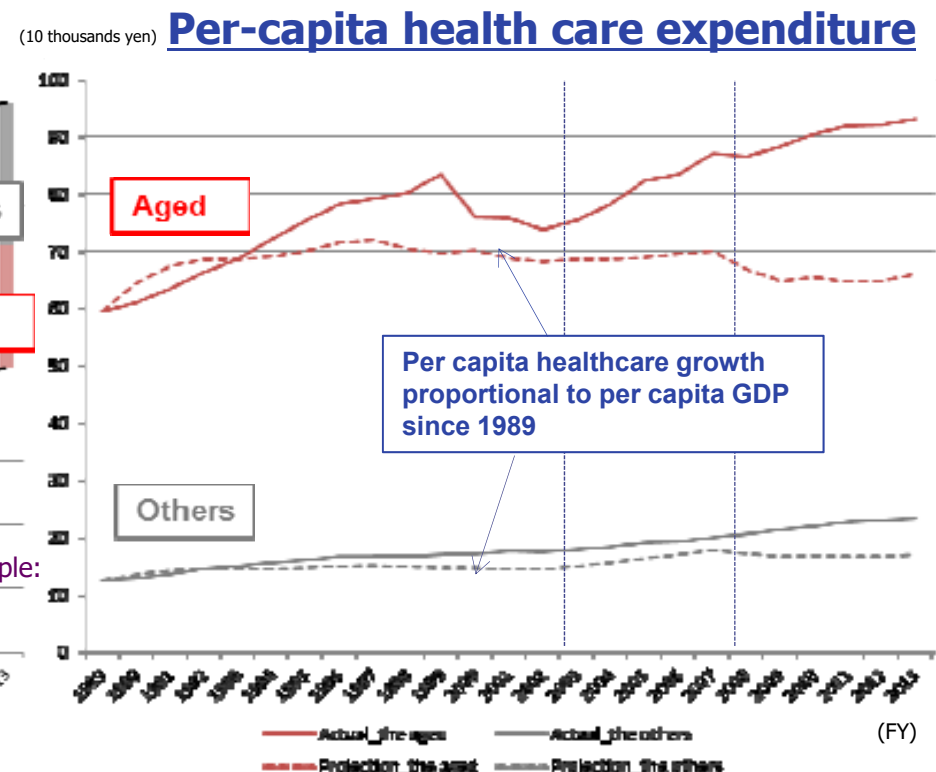
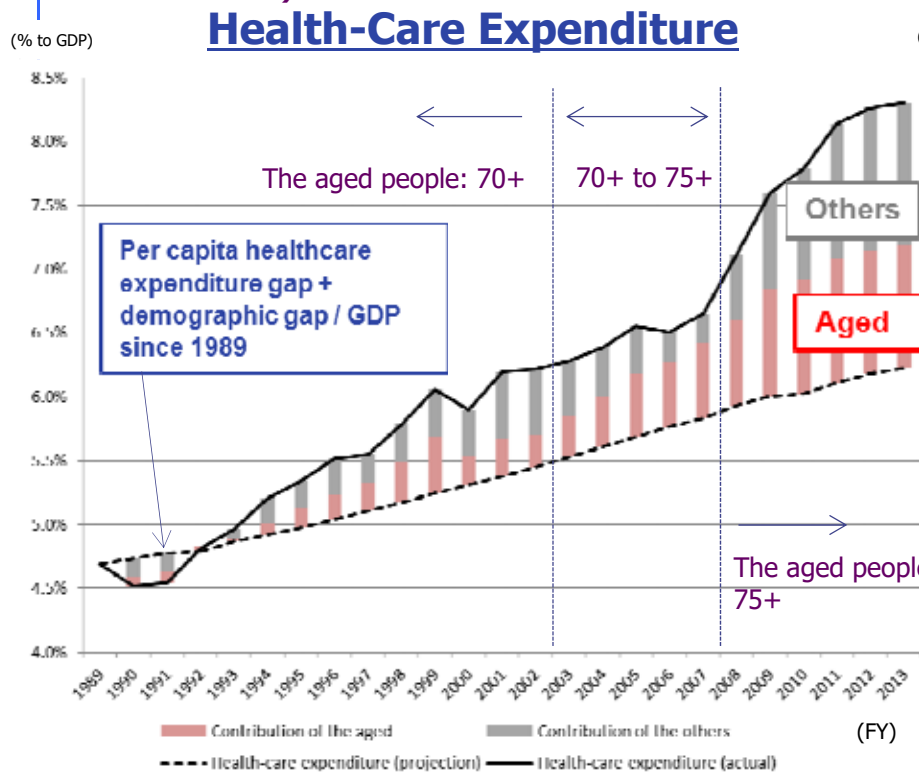


(Note) The estimation means the difference between the actual Public Pension Reserve Funds and the calculated value under the assumption that 1986 population projections have been realized.

(Source) PRI's calculations. Data from Institute of Population Problems "Population Projections for Japan: 1985-2085" and from the Ministry of Health, Labour and Welfare "Japanese Social Security Statistics DB" and "Annual report of Government Pension Investment Fund".

# Hypothetical Projection Error of Health-Care Expenditures in Japan

- ✓ The long-term projection of health-care expenditure could have been underestimated considerably.
- ✓ Per-capita health care expenditure of both the aged and others has grown much faster than the economic growth.
- ✓ PRI's hypothetical projection of the health-care expenditure from 1989 shows that the actual health-care expenditure could be higher than its projection by as much as 2% (to GDP ratio) in 2013.



(Notes)

1. The per-capita health care expenditure is forecast according to actual per-capita GDP growth. The projection gap in the health care expenditure reflects the projection error not only in the per-capita expenditure but also in demographic changes.
2. The definition of the aged people is based on "health care system for the aged (Roujin-hoken seido)" until 2007 and "long-life medical care system (kouki-koureisha-iryō seido)" thereafter. The former system basically covers people at 70 or above, which is gradually narrowed to 75 or above from 2002 to 2007, while the latter system basically covers people at 75 or above. The projection for the aged people also reflects the change in the age classification. The health-care expenditure for the others covers all the expenditures excluding the expenditure for the aged.

# . LESSONS

It is important to minimize uncertainties. What should we keep in mind in designing or revising social welfare system?

- ✓ When making projection: **Consider if it is too optimistic.**
- ✓ What it comes to politics: **Remember “uncertainties” especially under good economic condition.**
- ✓ When designing Public Pension System: **Choose an option of lesser fiscal impact.**
- ✓ When tackling Medical Care Cost : **Envisage the advance in medical technology would push it up.**



Thank you very much!