Japanese Social Health Insurance Program Viewed from Macroeconomic Context and Fiscal Disparities

Shuzo Nishimura

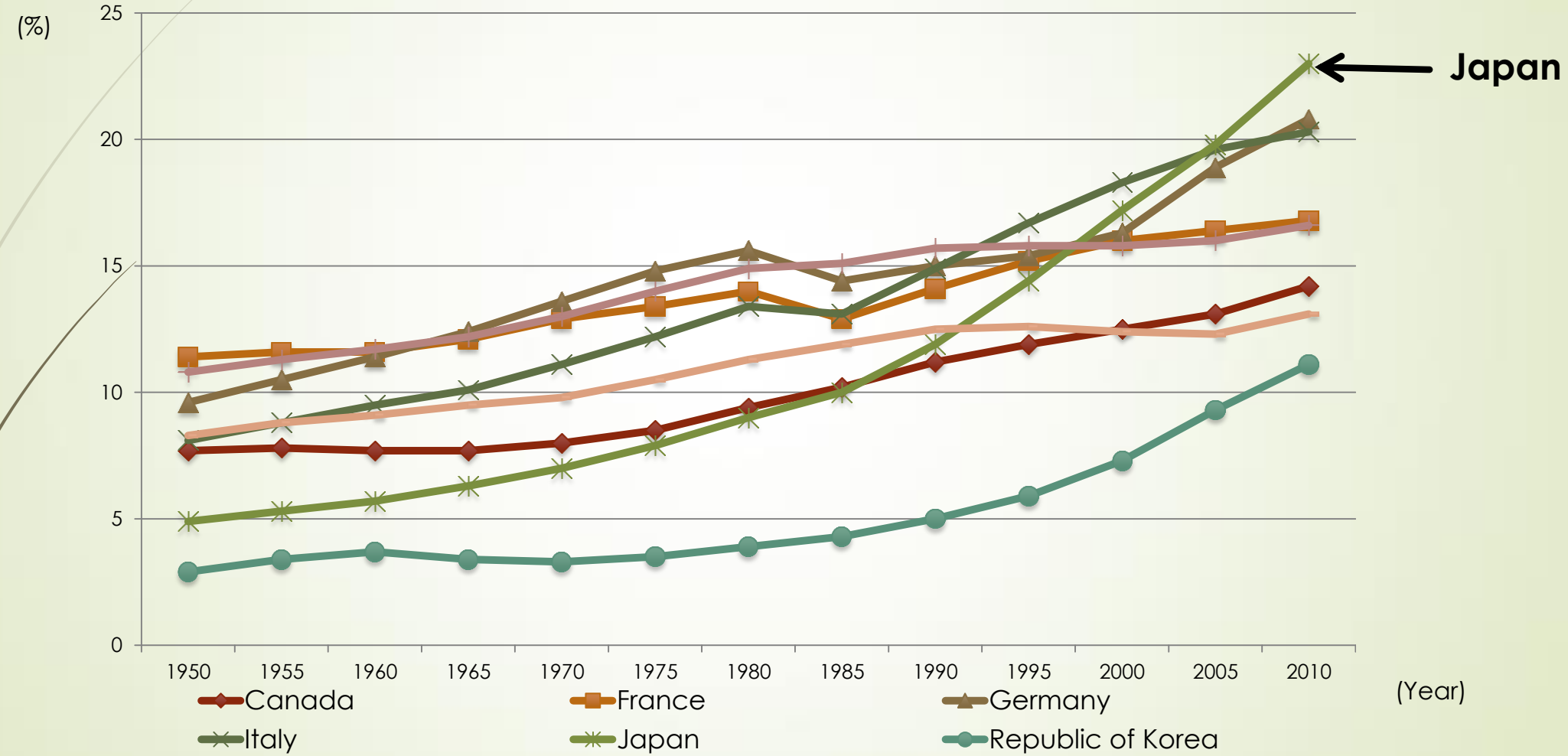
based on the paper with Takaku, Bessho, and Ikegami

The change in Japan's economic status after achieving UHC and its impact on health insurance system

1. Lower economic growth
   （1）(1955-1970) average growth rate: 9.6%
   （2）(1970-1990) : 4.5%
   （3）(1990-2011): 1.0%
2. Ageing (as shown in the next slide)
3. Decrease in per capita average wage after 1990's
4. Sharp decrease in tax income and fiscal deficit as a result
5. Widening economic disparity

Rapid Ageing

Percentage of Population Aged 65 Years Old and Over, 1950-2010

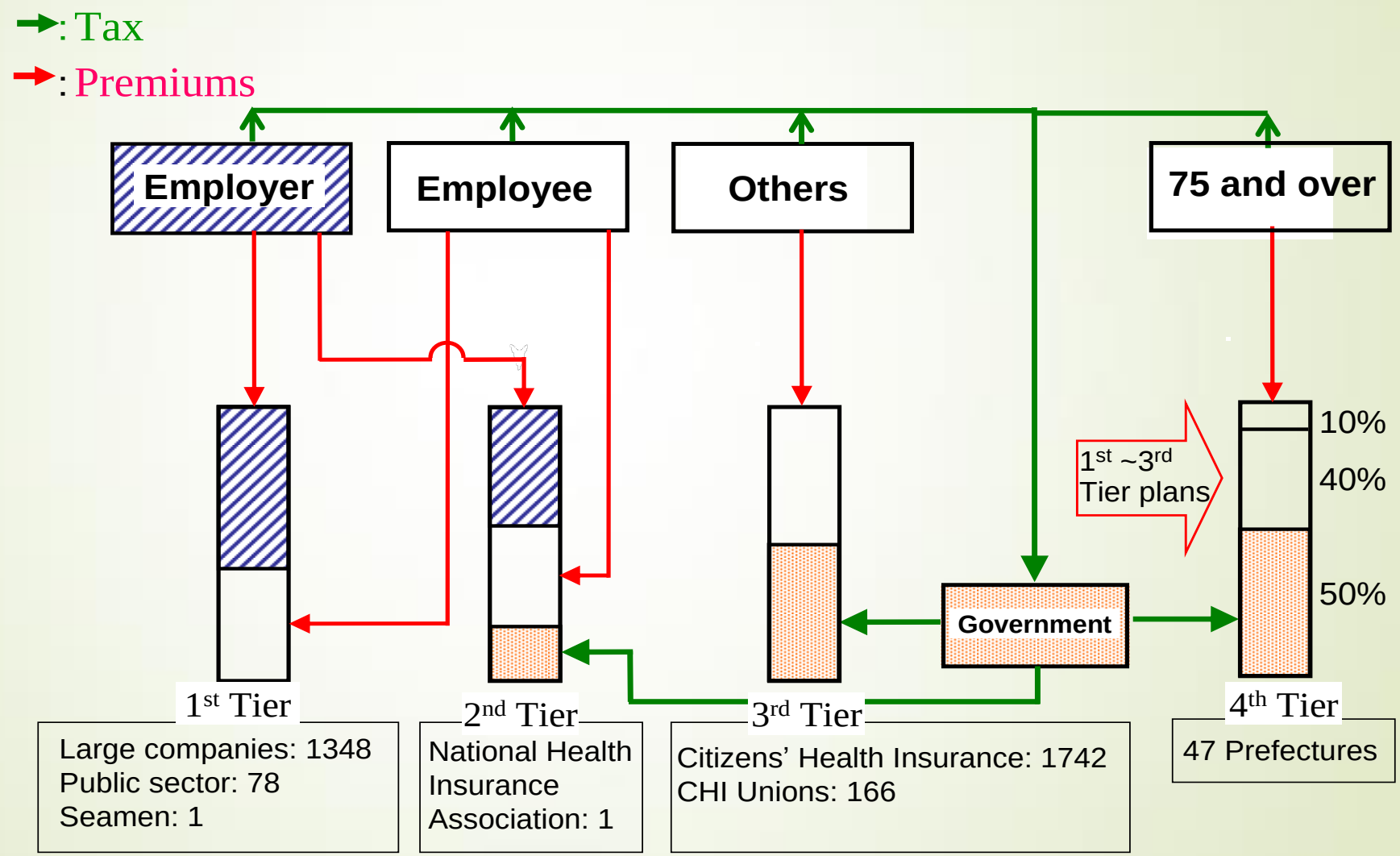


Source: UN, The 2012 Revision of the World Population Prospects

Main features of Japan's Social Health Insurance System

1. Diverse (3,000+) social health insurers:
   - Employees and their family members, or
   - Self-employed and retired
2. Same benefit, but premium widely differs
3. Insured members' age and income composition differs
4. Largest disparities are observed among Citizens' Health Insurance (CHI)
5. CHI largely relies on tax and other subsidies
6. Various types of fiscal adjustment are introduced, however, the disparities of premiums among insurers (CHI and Workers' Health Insurance) are widening

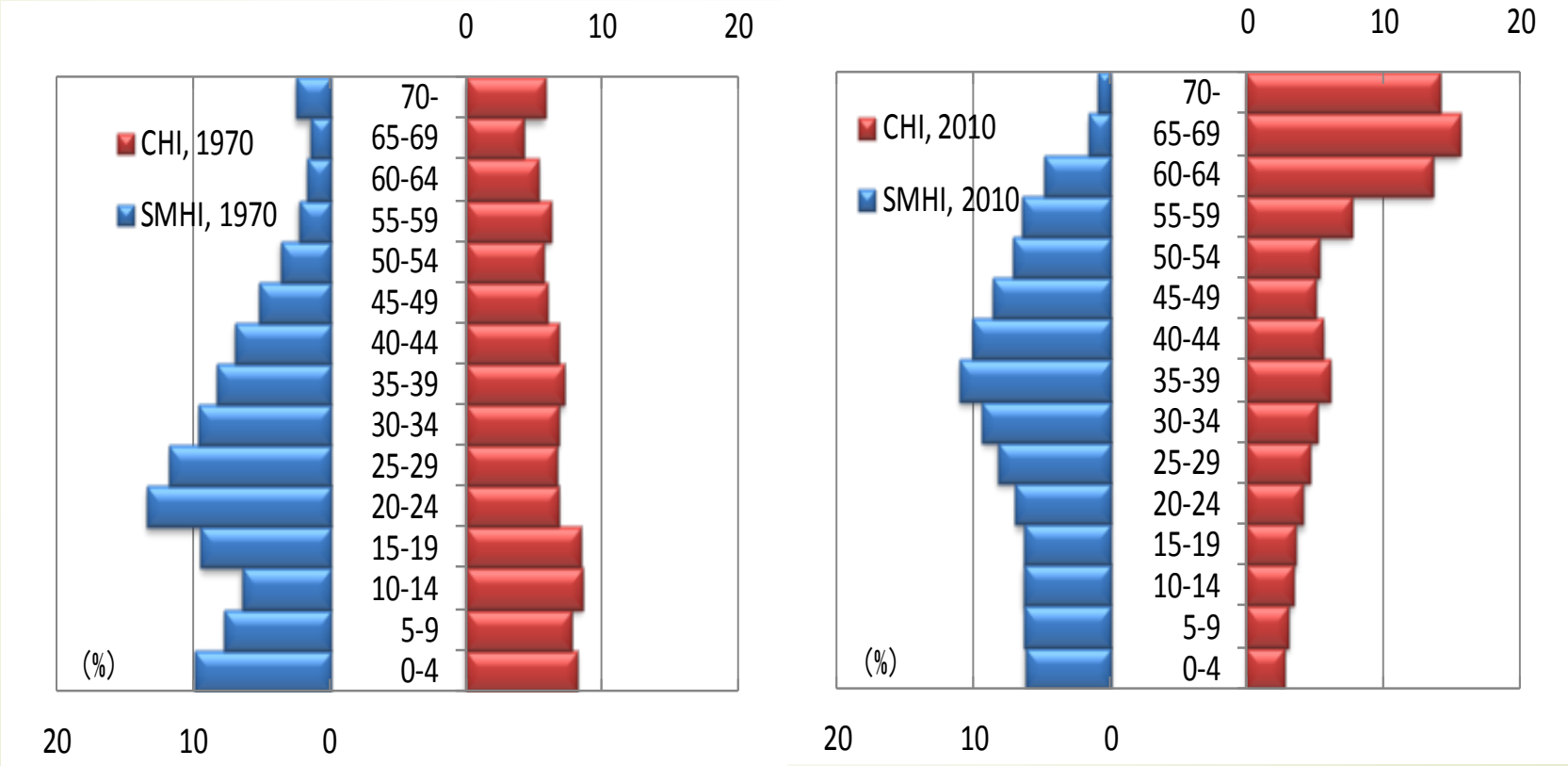
Flow of Money in Social Health Insurance Programs, 2011



Source: Ikegami et al. 2011 (updated).

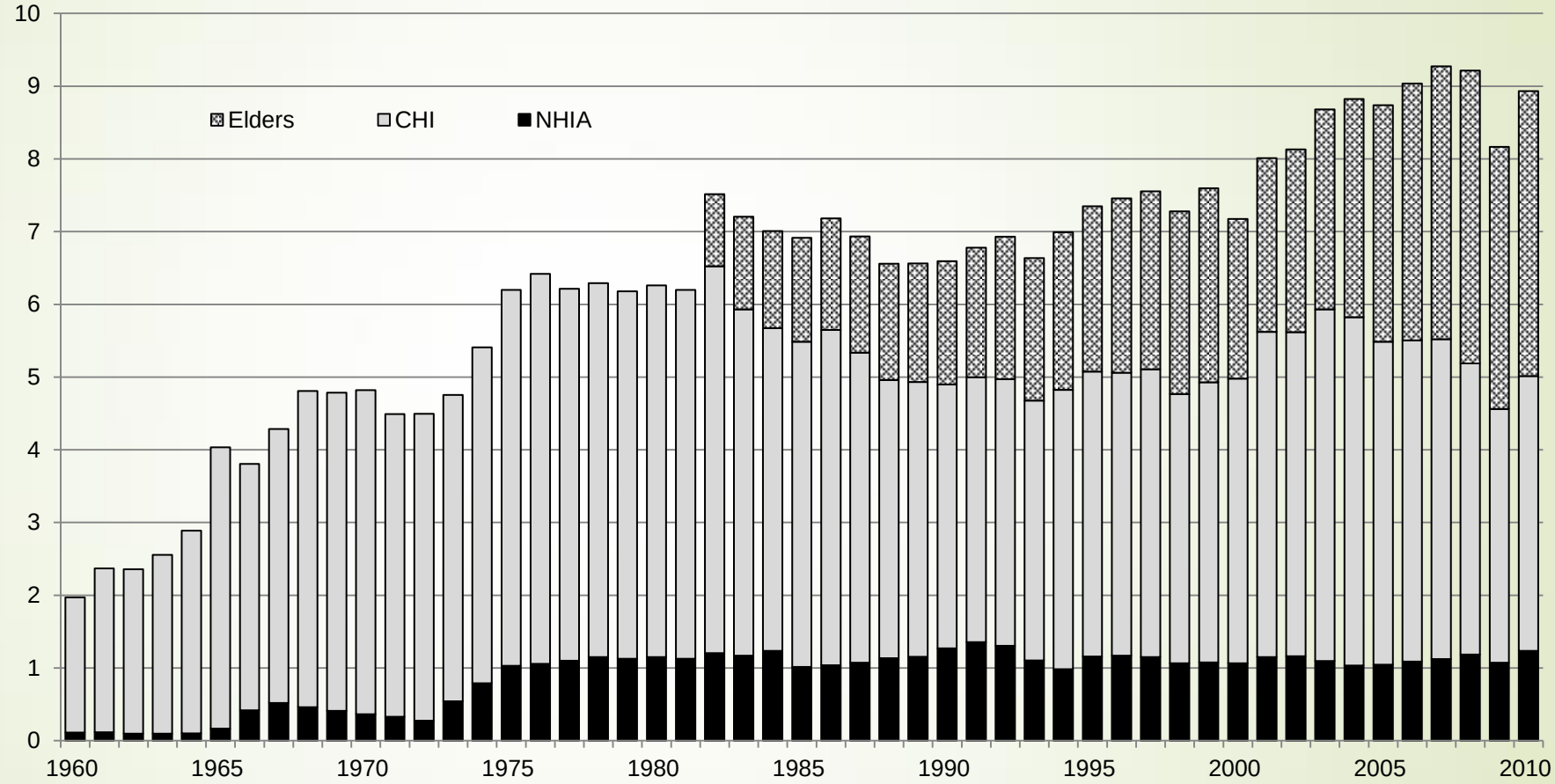
Age Distributions of Enrolees in CHI and SMHI, 1970 and 2010

Difference in age composition: impact of ageing differs by Program



Source: National Institute of Population and Social Security Research

Subsidies from the National Government to SHI, % of General Account Expenditures



Note: The subsidies from the national government to the SMHI paying some of the administrative costs are negligible and are therefore excluded

Source: Data for elders from Ministry of Finance (1983–2010 Surveys); data for CHI and NHIA from National Institute of Population and Social Security Research

Calculation method for premiums

$$
\begin{aligned}
\textit{Revenue from Premiums} &= \textit{Expenditures} - \textit{Transfers and Subsidies} \\
&= \textit{Health Care Expenditures} + \textit{Transfer to Other Plans} \\
&+ \textit{Reinsurance Program}\,(\textit{Contributions} - \textit{Benefits}) - \textit{Matching Grant} \\
&- \textit{Ordinary Adjustment Subsidy} - \textit{Prefectural Adjustment Subsidy} \\
&- \textit{Transfers from Municipal General Account} \\
&- \textit{Other Transfers and Subsidies}
\end{aligned}
$$

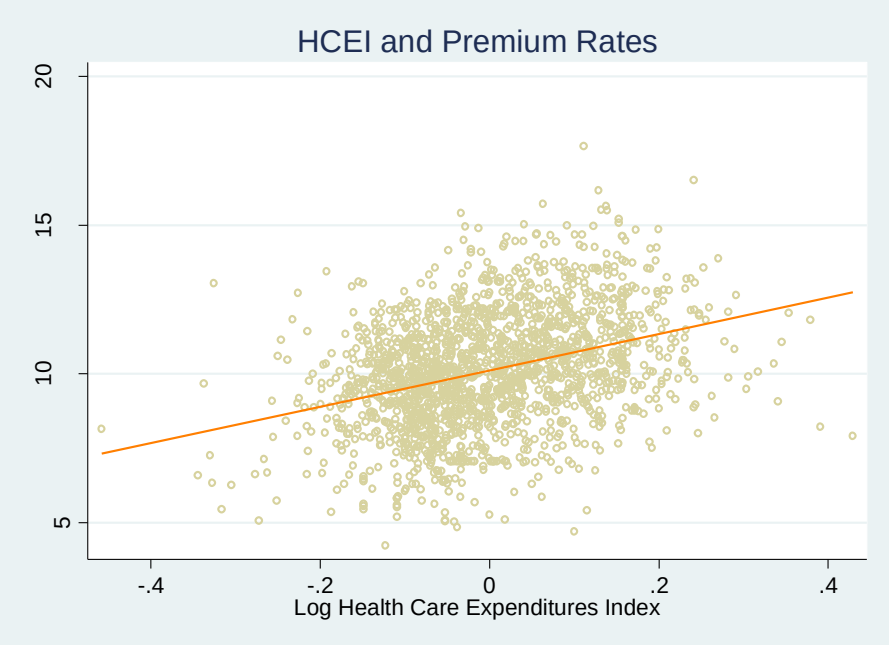
Variation in premium rates among CHI programs before and after adjustment

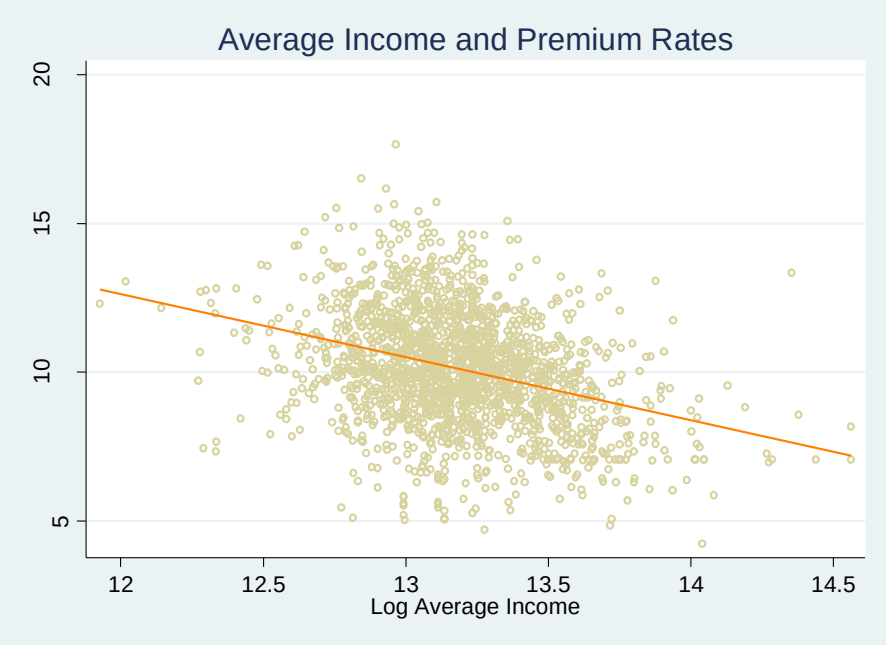
Large disparities in premium rates among insurers
(Coefficient of Variation<CV>=Standard Variation/Mean)
The impact of fiscal adjustment is not large

	CV	⊿ CV
Total Expenditure	0.38	-
Matching Grant	0.39	0.01
Ordinary Adjustment Subsidy	0.33	**Δ 0.06**
Prefectural Adjustment Subsidy	0.33	0.00
Reinsurance Program	0.28	**Δ 0.05**
Transfers form Municipal Government	0.26	Δ 0.02
Total Premiums	0.22	-

Source: Authors' calculations based on data from All-Japan Federation of National Health Insurance Organizations 2011

Health Care Expenditures Index and Premium Rates, and Average Income and Premium Rates, among CHI Programs, 2010





Note: Amounts and rates are for non-elders' households with annual income of ¥3 million
Source: Health care expenditures index and average income from MHLW (2010); premium data from All-Japan Federation of National Health Insurance Organizations 2011

Satutory fiscal disparities among employment-based programs are observed

- Overall, premium is increasing in all insurers, reflecting the increase of the elderlies
- Negative correlation between premium rate and income level
- Additional benefits (extra benefits that insurers can provide in addition to the legal benefits)

Conclusion: Disparities of premiums increased among both CHI an Employment-based Programs

- Major causes:
  - (1) Lower economic growth after 1990's
  - (2) Widening income disparities
  - (3) Ageing
- Tax has been used to adjust the disparities, resulting in larger fiscal deficits