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

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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

- Tax
- Premiums

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.
Calculation method for premiums

\[\text{Revenue from Premiums} = \text{Expenditures} - \text{Transfers and Subsidies}\]

\[= \text{Health Care Expenditures} + \text{Transfer to Other Plans}\]

\[+ \text{Reinsurance Program (Contributions} - \text{Benefits)} - \text{Matching Grant}\]

\[= \text{Ordinary Adjustment Subsidy} - \text{Prefectural Adjustment Subsidy}\]

\[= \text{Transfers from Municipal General Account}\]

\[= \text{Other Transfers and Subsidies}\]
Variation in premium rates among CHI programs before and after adjustment

Large disparities in premium rates among insurers (Coefficient of Variation \( <CV> = \text{Standard Variation/Mean} \))

The impact of fiscal adjustment is not large

<table>
<thead>
<tr>
<th></th>
<th>CV</th>
<th>ΔCV</th>
</tr>
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<tbody>
<tr>
<td>Total Expenditure</td>
<td>0.38</td>
<td>-</td>
</tr>
<tr>
<td>Matching Grant</td>
<td>0.39</td>
<td>0.01</td>
</tr>
<tr>
<td>Ordinary Adjustment Subsidy</td>
<td>0.33</td>
<td>Δ 0.06</td>
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<tr>
<td>Prefectural Adjustment Subsidy</td>
<td>0.33</td>
<td>0.00</td>
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<tr>
<td>Reinsurance Program</td>
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<td>Δ 0.05</td>
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<tr>
<td>Transfers form Municipal Government</td>
<td>0.26</td>
<td>Δ 0.02</td>
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<tr>
<td>Total Premiums</td>
<td>0.22</td>
<td>-</td>
</tr>
</tbody>
</table>

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 elderly
- 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 and 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