



**National Institute of Population and Social Security Research**

国立社会保険・人口問題研究所

# **The Economic and Social Impacts of Depopulation in Japan and Its Consequences to Global Economy**

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and Social Security Research, Japan**

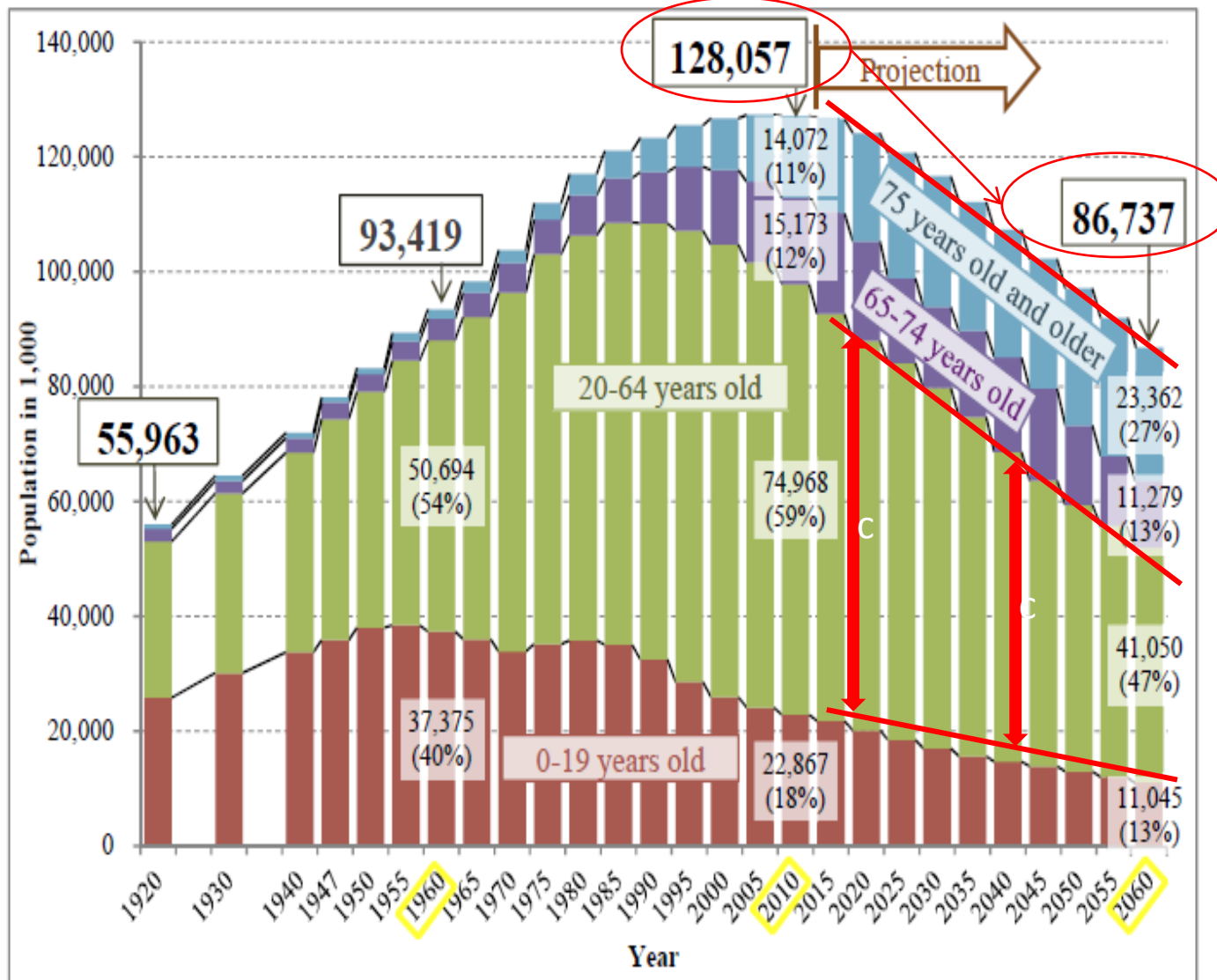
Presented at  
**INTERNATIONAL SOCIAL SECURITY CONFERENCE 2015**  
19th & 20th May, 2015  
At Berjaya Times Square Hotel, Kuala Lumpur, Malaysia

# Outline

1. Depopulation and progress of aging in Japan
2. Increasing social security expenditure
3. Demographic changes in Asian countries
4. How Japan deals with depopulation and aging
5. Conclusion

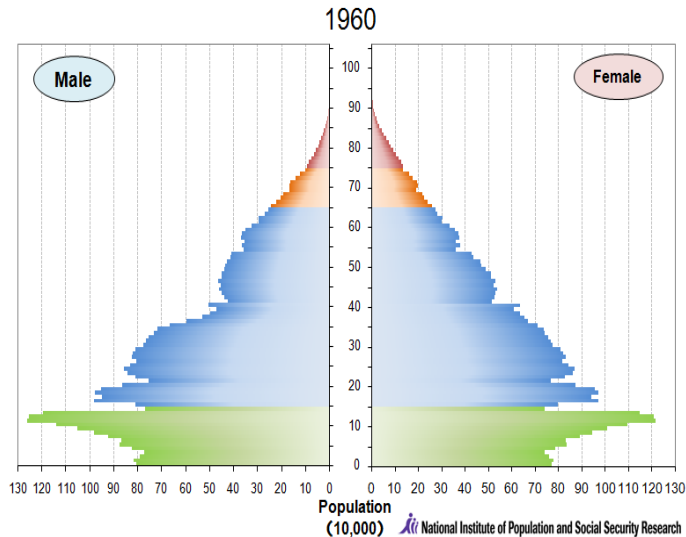
# Total population and change of age structure

## Population trend by age group in Japan (1920-2060)

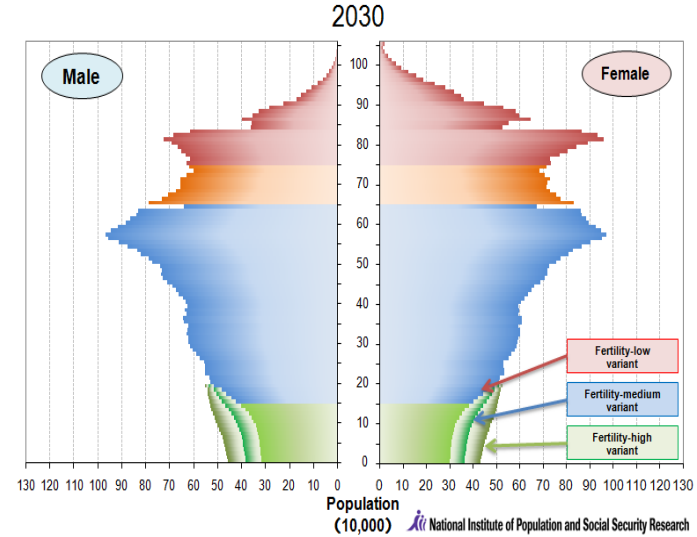


Source : For data up to 2010, Census data by Statistics Bureau of Ministry of Internal Affairs and Communication (<http://www.stat.go.jp>). For data from 2015, "Population Projections for Japan", IPSS (see footnote)

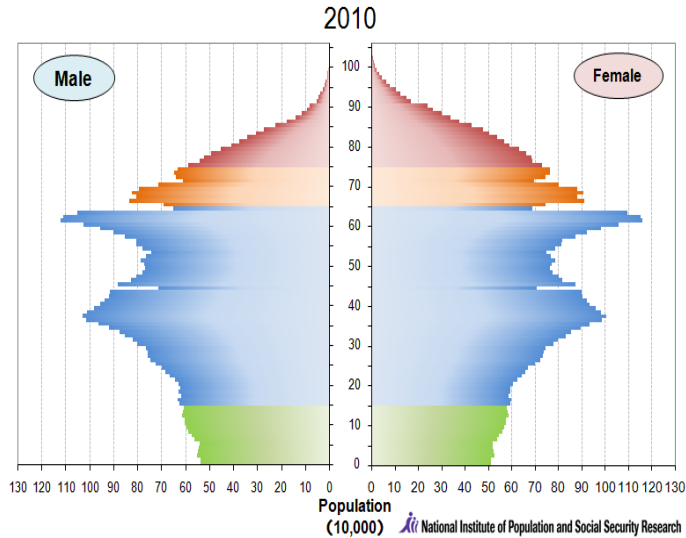
# Population "Pyramids"



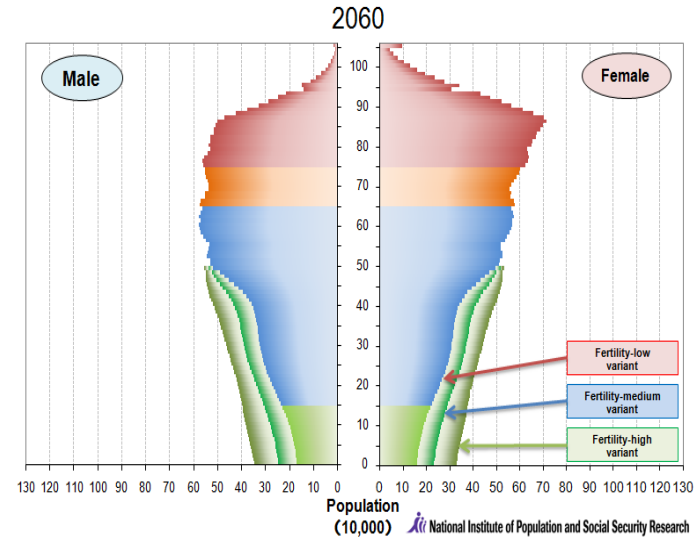
Sources: Census (1920-2010) and "Population Projections for Japan:2011-2060"(2015-2060)



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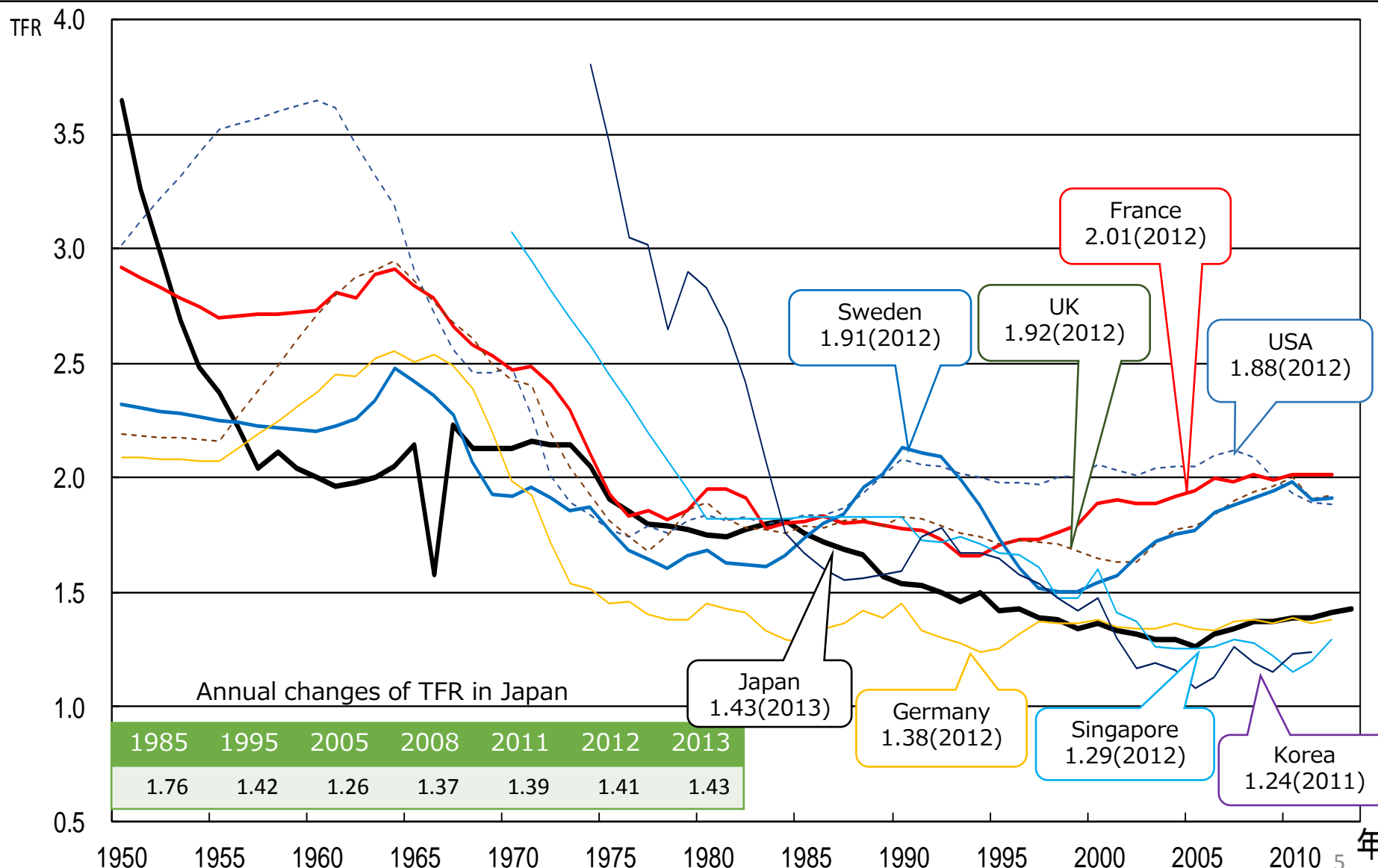


Sources: Census (1920-2010) and "Population Projections for Japan:2011-2060"(2015-2060)

# Changes of Total Fertility Rate in Japan and Other Countries

Depopulation and aging

When comparing fertility rate in Japan with other countries, it is found to be at the lowest level internationally, along with Germany, southern and eastern European countries, and Asian NIES.

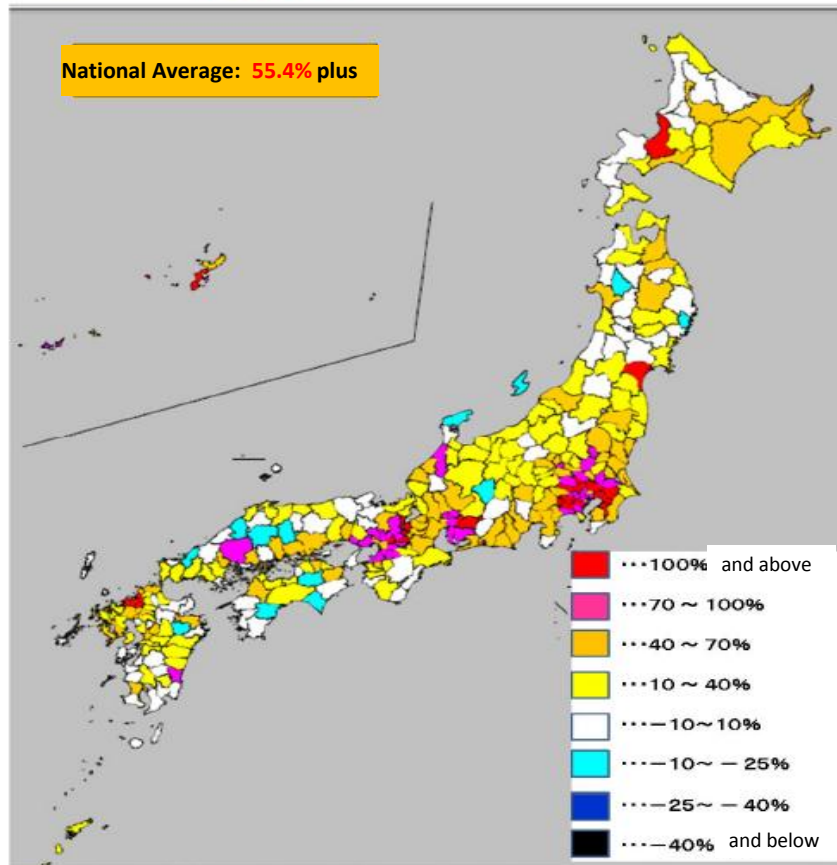


Reference: Vital Statistics (Japan), Eurostat(UK), Bilan démographique (France, tentative for 2012), Statistisches Bundesamt (Germany), Statistics Singapore (Singapore), Summary of Population Statistics (Sweden), National Vital Statistics Reports (US), Final Results of Birth Statistics in 2011(Korea)

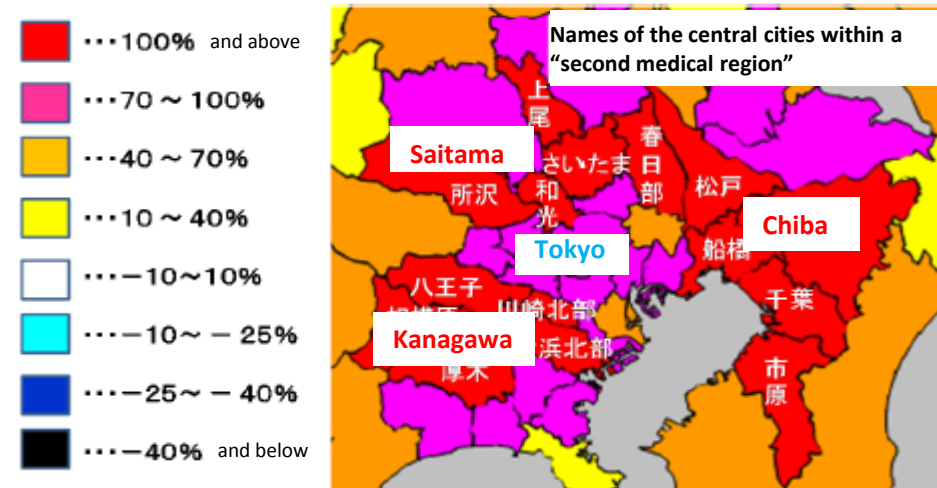
- ✓ Huge population of “baby-boomers” (born in 1946-49) residing in metropolitan areas, especially Tokyo and its surrounding areas
- ✓ “Explosion” of senior population in these areas
  - Not “Tokyo-specific” but **national problem**

(“How should we deal with their care needs?”)

Rate of increase of population 75+ (2010-2040)



Rate of increase /decrease of population 75+ (2010-2040) in Tokyo and its suburbs

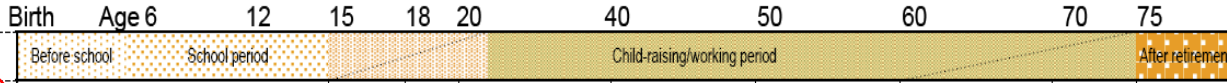


Showing the Tokyo metropolitan areas where the massive increase of population aged 75+ is expected. In areas such as Western Chiba Pref., Eastern and Central Saitama Pref., and Northern Kanagawa Pref. (areas close to central Tokyo), **more than 100% in crease** is expected for population aged 75+.

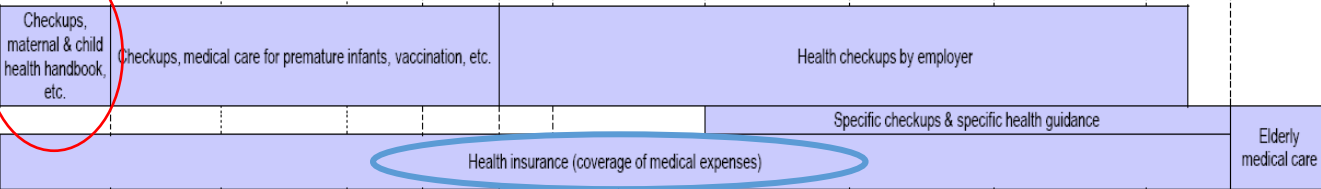
(Source) Presentation by Dr. Tai Takahashi at the 9<sup>th</sup> conference of National Council for Social Security System Reform (April 19<sup>th</sup>, 2013)  
Translation by IPSS

# Current Social Security System in Japan (from “pre-cradle” to “post-grave”)

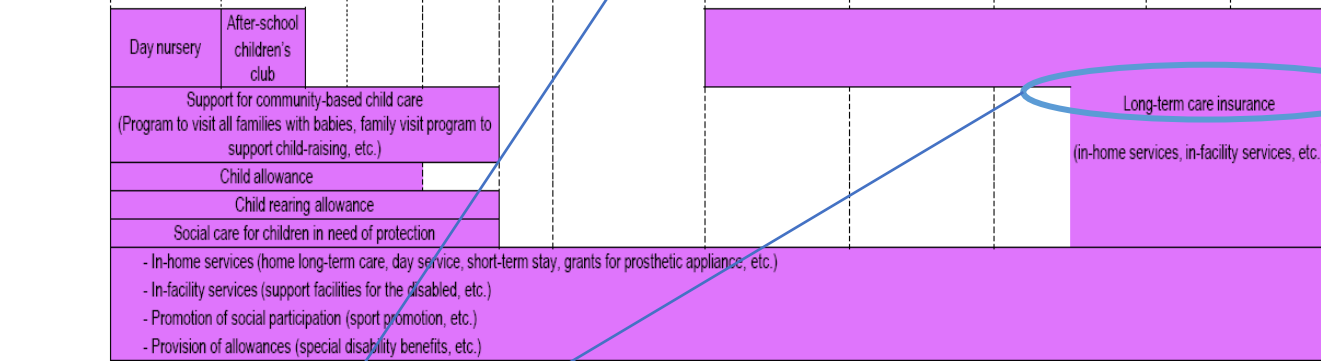
Social Security



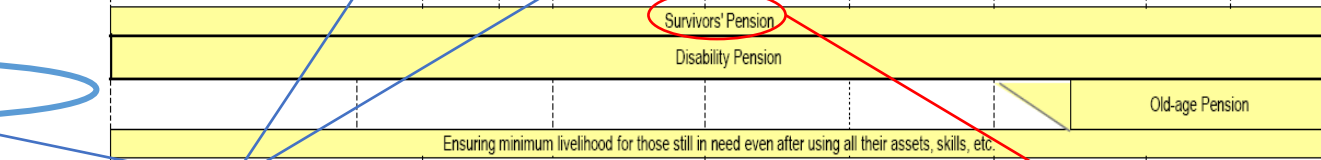
[Health/medical care]  
Health promotion  
Checkups  
Disease treatment  
Medical care



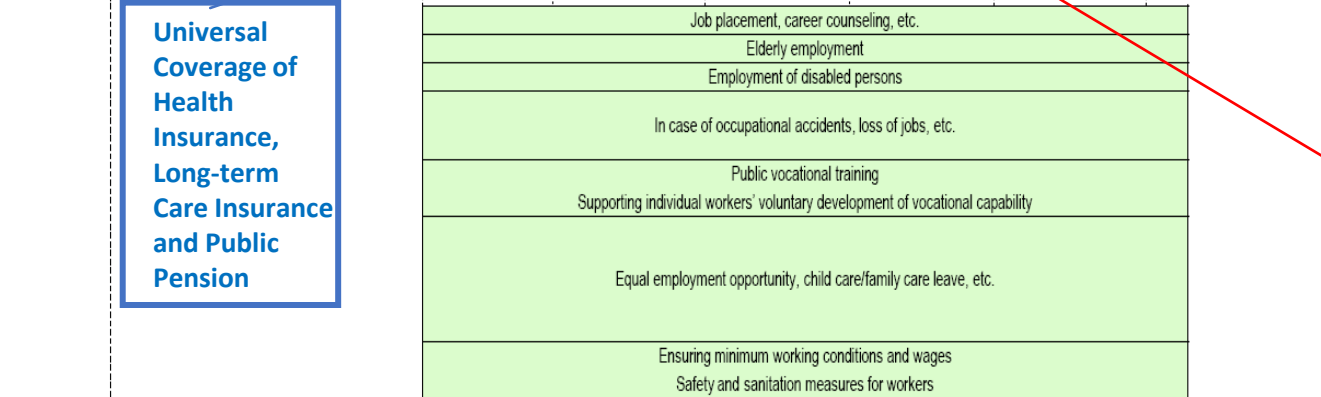
[Social welfare, etc.]  
Child welfare  
Welfare for fatherless families & widows  
Welfare for disabled persons (children)



[Income security]  
Pension system  
Public assistance



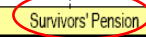
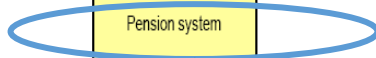
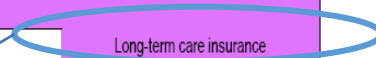
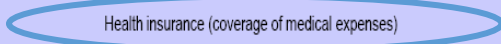
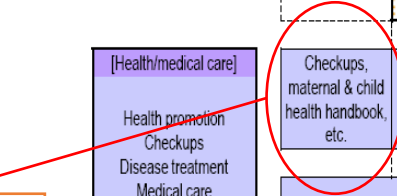
[Employment]  
Labor supply-demand adjustment  
Workers' compensation insurance  
Employment insurance  
Vocational capability development  
Equal employment opportunity between men and women  
Support for work-life balance  
Working conditions



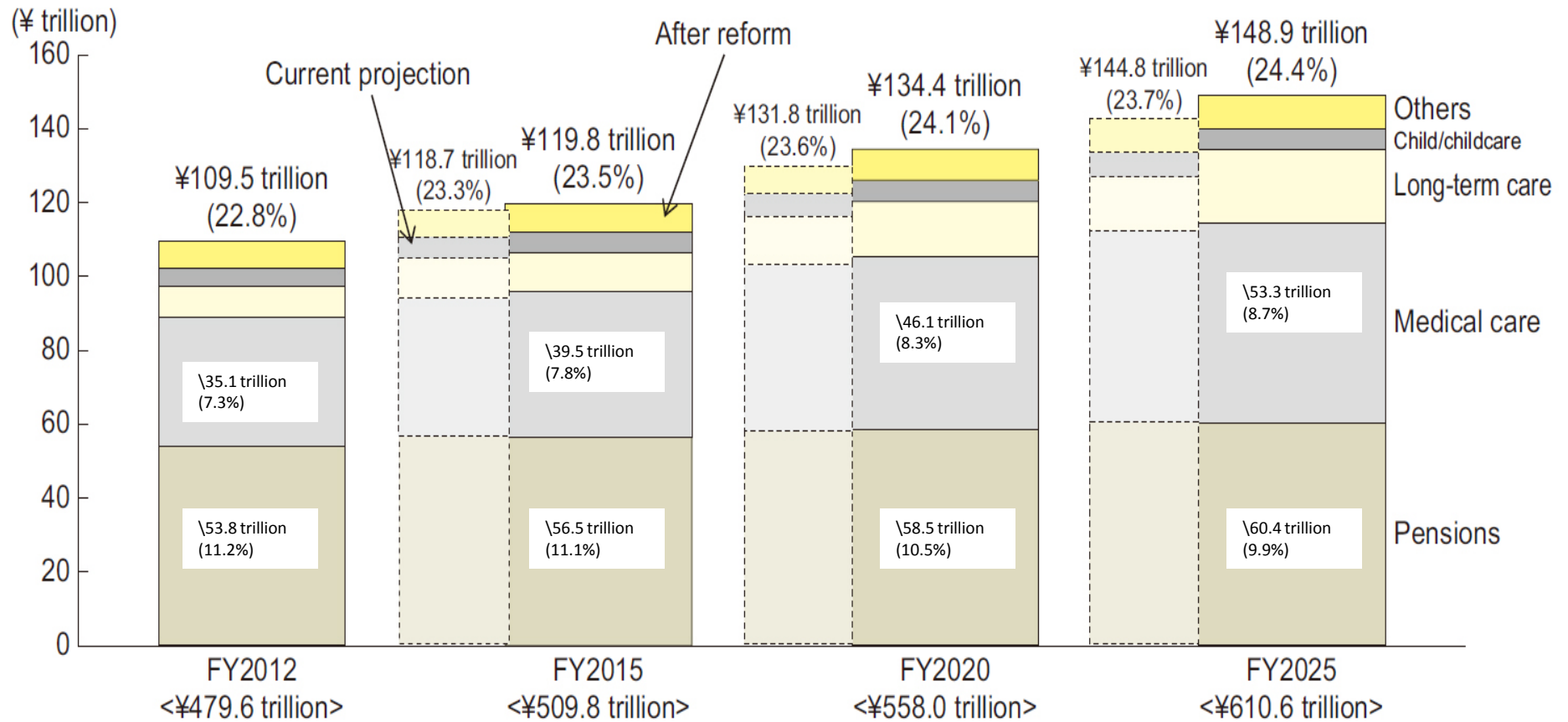
Maternity (“pre-cradle”) Care for expectant mothers

Universal Coverage of Health Insurance, Long-term Care Insurance and Public Pension

Survivors’ (“post-grave”) Pension for the dependent (Important source of income for bereaved old women)



# Projection for Social Security Expenditure (Benefits)



Source: Ministry of Health, Labour and Welfare (2013) Annual Health, Labour and Welfare Report 2013–2014

Fig. 1. Three dimensions to consider when moving towards universal coverage

-100% coverage for any citizen

-10% to 30% copayment  
- Monthly maximum for out-of-pocket payment

-Basically any medical services and medicines are covered  
-Fee-schedule (list of included services and medicines) reviewed once in every two years

Extend to non-covered

Reduce cost sharing and fees

Include other services

Direct costs: proportion of the costs covered

Coverage of Health Care

Population

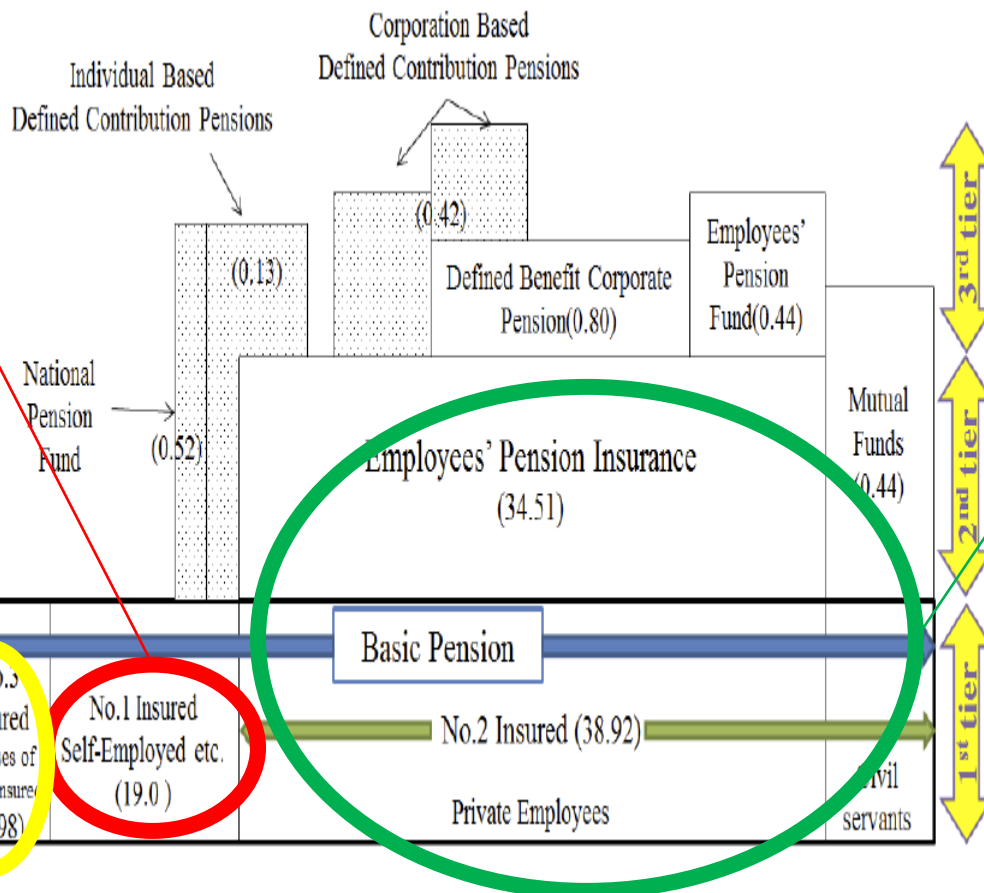
This “Blue Box” is “ever-expandable” .

“How can we sustain the “Box” ” is our greatest challenge.

# How the “Universal Coverage of Public Pension” works under Japanese system

Social Security

- 1st-tier “Basic Pension” covers non-employed (farmers, small shop owners, etc.) as well.  
 - 50% financed by premium.  
 Remaining 50% of the benefit funded by subsidy from national tax considering their unstable financial condition



- “No.3 Insured” could receive both 1st-tier Basic Pension and 2nd-tier Survivor’s Pension (from Employees’ Pension Insurance) if she(he) is survived by her husband (wife)

1st and 2nd tier: PAYG system with reserves to alleviate future rapid increase of premium  
 3rd tier: Funded system

Benefits (both 1st and 2nd tier) paid from age 65 years old.

Full amount of 1st-tier benefit : ¥66,000/mo.(2012)  
 Monthly premium of 1st tier (Basic) pension : ¥15,040/mo. (2012)

“Normal” monthly pension benefit for retired husband (former employee) and wife (non-working housewife): About ¥231,000/mo. (2012)

Monthly premium for private employees (1st tier and 2nd tier combined): 7.5% of salary BOTH by employer and employee

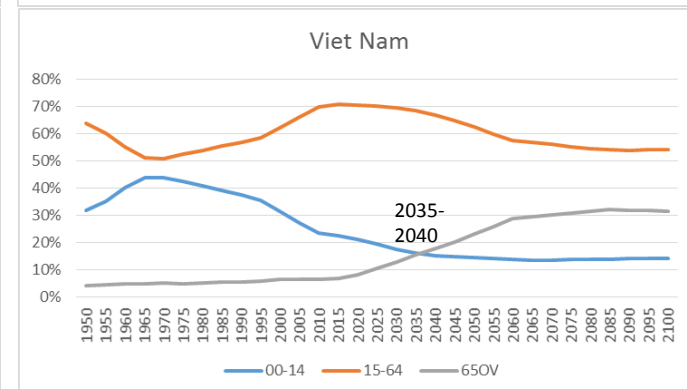
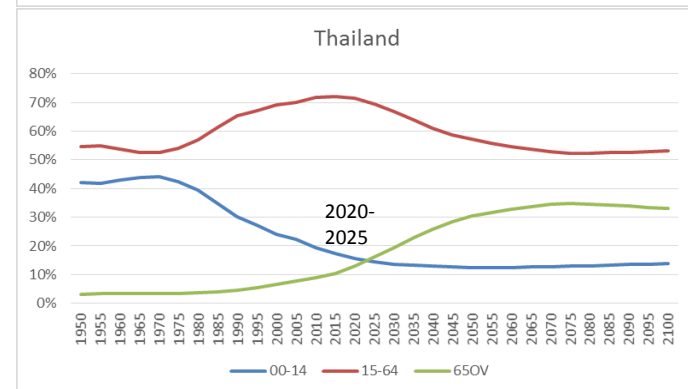
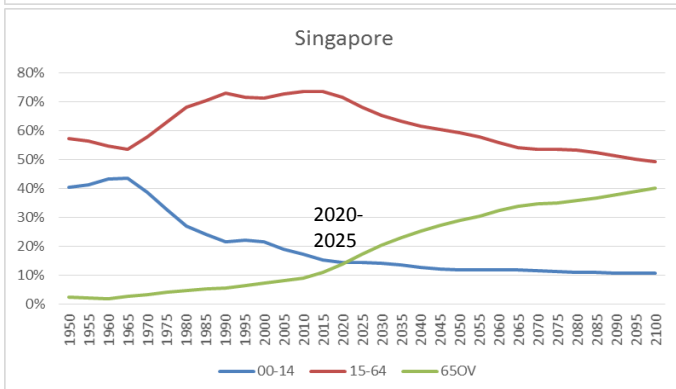
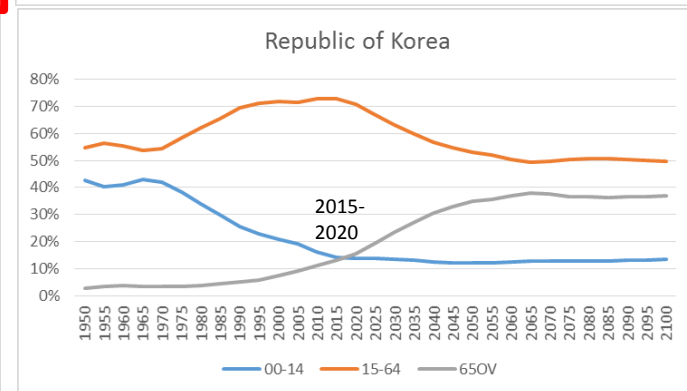
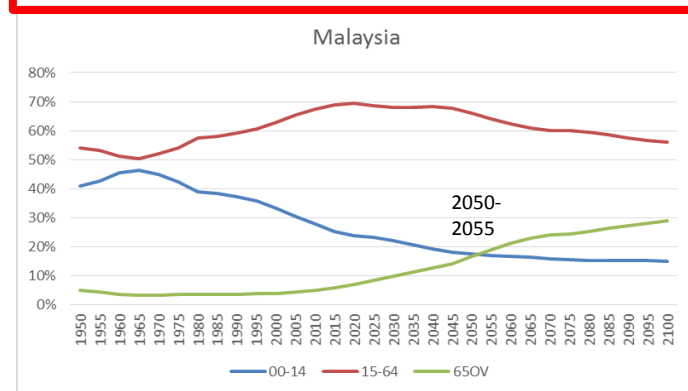
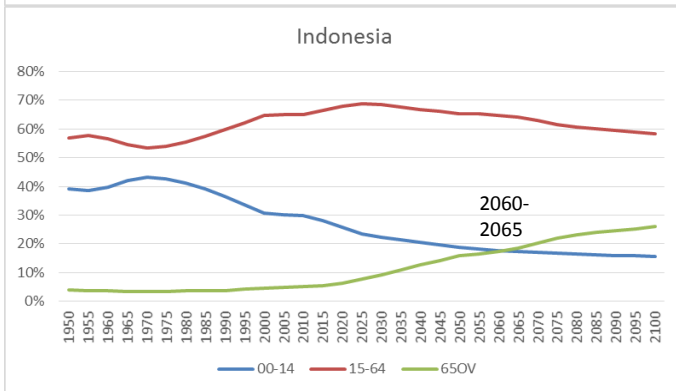
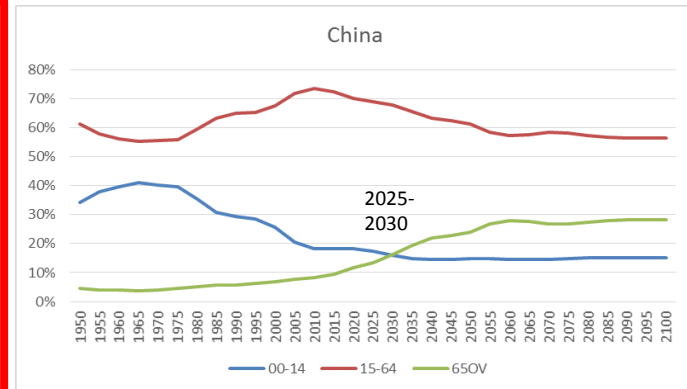
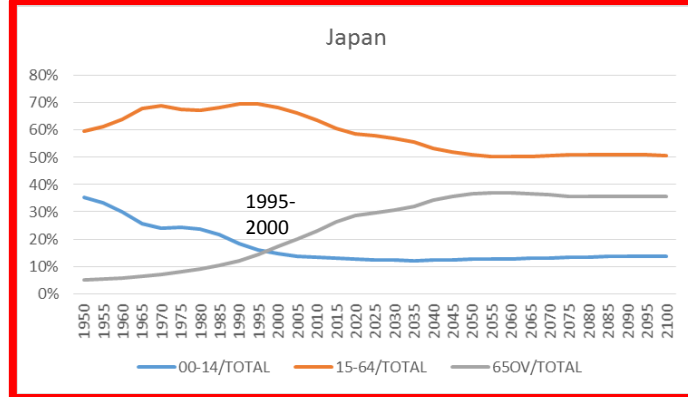
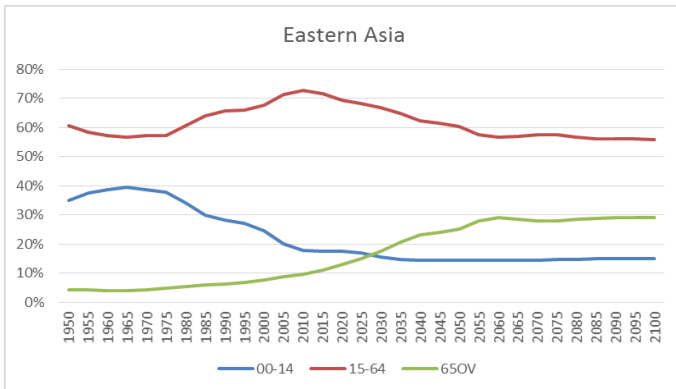
Newly-awarded pension: basically wage-indexed  
 Afterwards: basically price-indexed

Source: National Institute of Population and Social Security Research(2014) “Social Security in Japan 2014”

# Demographic Changes in Asian Countries

In near future, many Asian countries will face similar issues with Japan.

--- Japan's current problem is YOUR problem.



## I. Children and child raising

New system started in April, 2015

- Resolution of the problem of the “waiting-list children” to pre-school/nursery school by increasing public investment to these services
- Enrichment of various childcare services such as “nursery for sick children”, “nursing-moms”, etc. to meet the needs of working moms/dads
- Encouragement of changes at workplace to be more “mom/dad friendly” ones, such as enhanced maternity/paternity leaves, shortening working-hours, gender-neutral working environment, etc.

## II. Medical and long-term care services

In the phase of implementation for supply-side reform

- Differentiation and strengthening of functions of hospitals and hospital beds with enhanced cooperation among hospital providers (\*) for streamlining service-provision structure in each locality

(\*) For historical reason, the majority of hospitals in Japan are privately-owned. Therefore the cooperation among hospitals are essential to achieve efficiency from macro point-of-view.

- Strengthening of preventive measures
- Enhancement, etc., of in-home medical care for less-costly AND better QOL services
- Establishment of an “integrated community care system”
- Comprehensive reform of the National Health Insurance for financial sustainability (still under debate at the Diet)
- Prioritizing the medical care and long-term care benefits (increased self-pay for higher-income seniors, etc.) (still under debate at the Diet for health insurance)
- (Still in initial stage) Introduction of cost-benefit analysis method for evaluating newly-introduced medical technologies and medicines for national insurance coverage

## III. Pension

- Securing stable financial resources for the subsidy of the Basic Pension (1/2 of the benefit)
- Introduction of “macroeconomic slide”(\*) applied to alleviate the increase of benefit for current elderly in order to reduce the burden of pension premium of the current working generation under PAYG system

(\*) Macroeconomic slide (Please read it later. Very sorry for being too complicated!)

A mechanism to adjust the amount of pension benefit automatically to reflect the extension of life expectancy and reduction of working-age population to secure the benefit-burden balance.

Very largely said (neglecting some exceptions), without “Macroeconomic Slide”, the amount of already-awarded pension of a certain fiscal year should be “the amount of already-awarded pension benefit (last fiscal year) X (1+price change)”. (The revision will be made annually.) But, with “Macroeconomic Slide”, the formula is “the amount of already-awarded pension benefit (last fiscal year) X (1+price change- $\alpha$ )”.

(For example, if you receive ¥700,000 annually, the price change is +5% and the “ $\alpha$ ” is 1%, the amount you receive in next fiscal year will be ¥728,000 (¥700,000 X (1+0.05-0.01).)

The  $\alpha$  is 0.9% for the revision of pension benefit in April, 2015. The “0.9%” has been calculated actuarially according the recent estimate of life expectancy and the population of working-generation. There are exceptions in the formula in case of price reduction (say, minus x%) or other difficult economic condition. As the Japanese economy has been stagnant for quite a few years, the formula has been applied for the first time this year since the introduction of such mechanism in 2004 Reform Bill.

For the newly-awarded pension, such annual change of the amount of benefit also is applied, so is the formula with the “Macroeconomic Slide”. The index is “wage change” rather than the “price change” in case of newly-awarded pension.

## VI. Fiscal sustainability

- Raise of the consumption tax rate (5% to 8%) (April, 2014).  
Will be raised to 10% from April, 2017 (\*).

(\* ) Originally, the rate was supposed to be raised to 10% from October, 2015. However, with due consideration to the current economic condition where bailing out the national economy from the deflation has been the top priority, the Abe Cabinet decided to suspend the raise. Several provisions included in the “Comprehensive Reform of Social Security” has been postponed without financial resources, such as to provide new benefit to the elderly with very small amount of public pension.

Japan is now struggling to cope with the depopulation and aging. Our challenges are difficult and may be endless, but we need to keep reviewing and modifying our social security system to secure the decent life of the Japanese people now and in future.

Active and close cooperation among Asian researchers of population and social security is essential to overcome our common issues.

We look forward to working with you.



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