
Ageing in Asia

-Reasons and impacts-

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Introduction

Asian Century

Real GDP Growth Rate

(%)

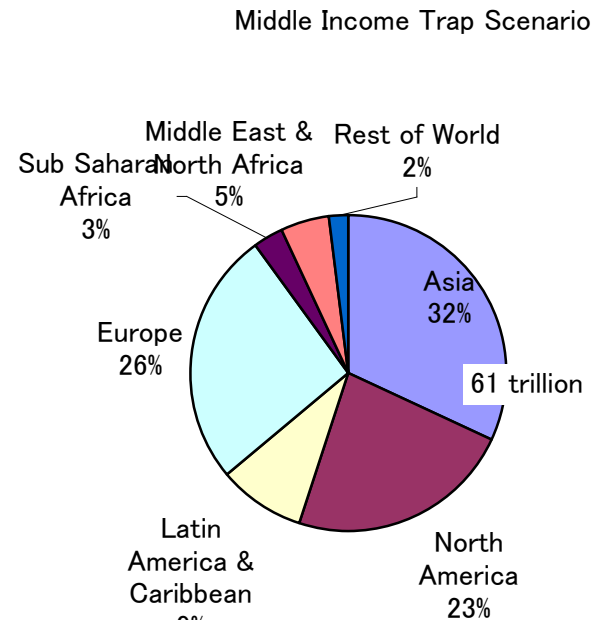
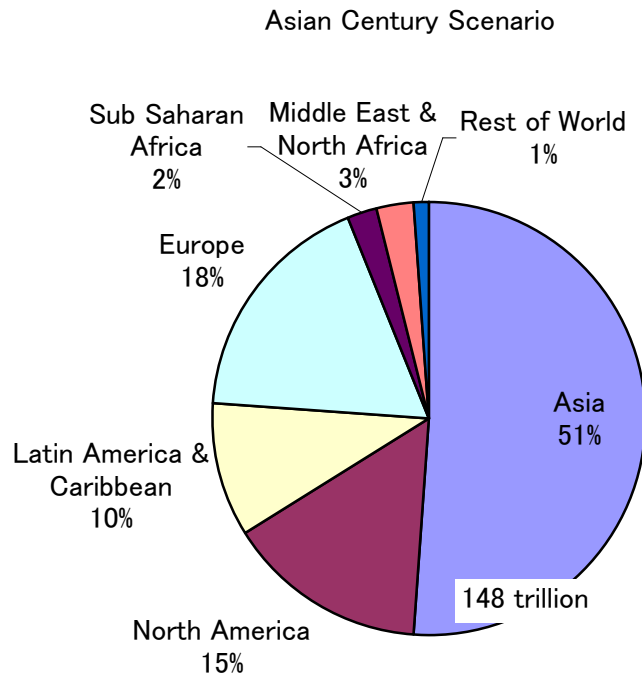
	1980-90	1990-2000	2000-2010	2010-17
Japan	4.6	1.1	0.8	1.0
NIES				
Korea	9.7	6.5	4.2	3.7
Taiwan	7.6	6.2	3.9	4.0
Hongkong	6.7	3.9	4.0	3.9
Singapore	7.7	7.2	5.6	3.6
China	9.3	10.4	10.5	8.5
ASEAN4				
Thailand	7.9	4.4	4.3	4.3
Malaysia	6.0	7.1	4.5	4.9
Indonesia	5.5	4.0	5.2	6.5
Philippines	1.7	2.9	4.8	4.8
Vietnam	5.9	7.6	7.3	6.4
India	5.6	5.6	7.4	6.4
World	3.3	3.2	3.6	4.1
Advanced economies	3.3	2.8	1.6	2.1

Source: IMF, *World Economic Outlook, October 2012*

Asia 2050 Realizing the Asian Century



ADB's scenario of Asian Economy in 2050



Source: ADB. *Asia 2050*

Rapid Changes of Asian Demographic Situation

Table 0-2 Total Fertility Rate and Population Aging Rate

	Total Fertility Rate		Aging Rate	
	1990-95	2005-10	2010	2030
Japan	1.48	1.34	23.0	30.7
NIEs				
Korea	1.70	1.23	11.1	23.4
Taiwan	1.79	1.26	10.7	23.3
Hong Kong	1.24	1.03	12.9	26.5
Singapore	1.73	1.26	9.0	20.5
China	2.05	1.63	8.4	16.2
ASEAN4				
Thailand	1.99	1.49	8.9	19.5
Malaysia	3.42	2.07	4.8	9.7
Indonesia	2.90	2.50	5.0	9.2
Philippines	4.14	3.27	3.7	6.3
World	3.04	2.53	7.7	11.6

Source: UN. *World Population Prospects: The 2012 Revision*

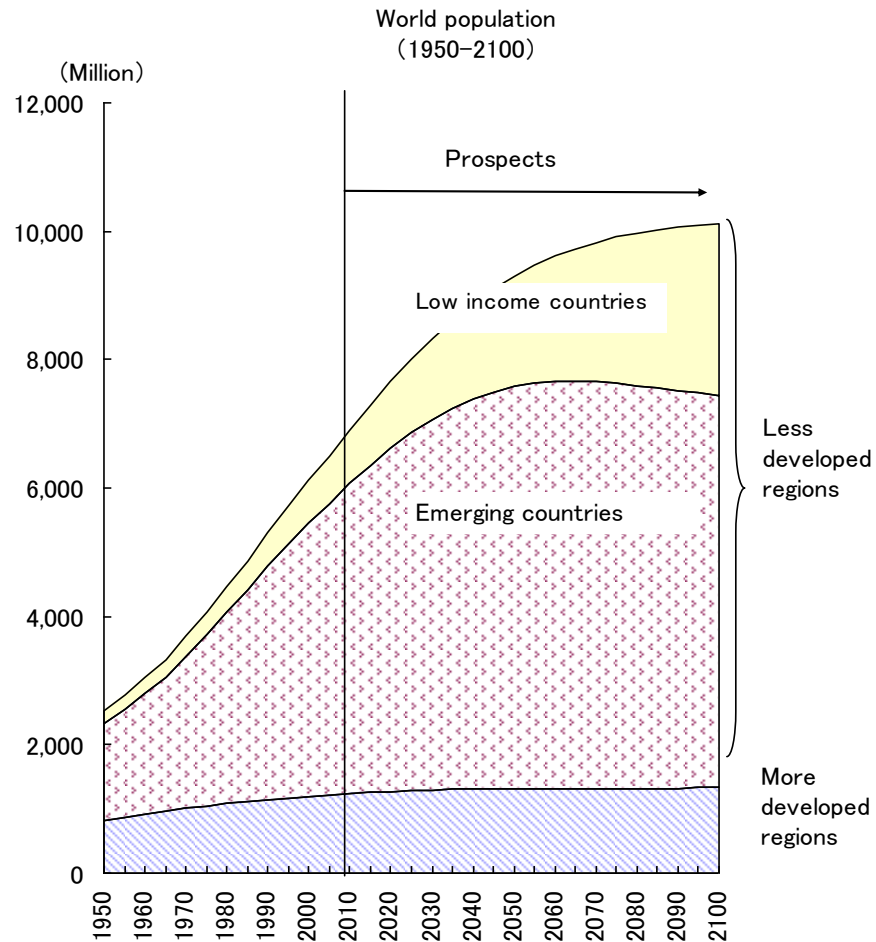
What will happen in Asia?

Today's Lecture Contents

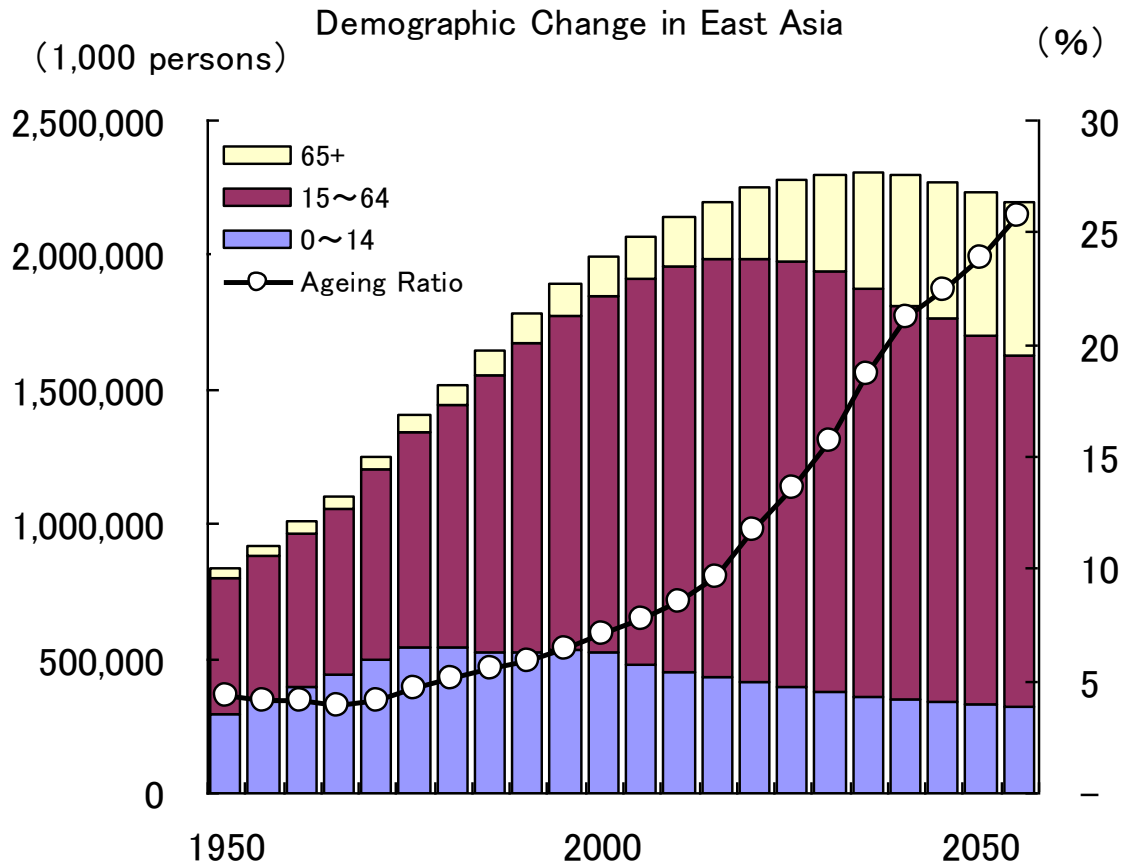
- 1. Demographic changes in East Asia**
⇒ **Low fertility ratio and population ageing**
- 2. Challenges to Ageing Society**
⇒ **Social security system, community-based welfare**

1. Demographic Changes in East Asia

Decline of World Population Growth Rate

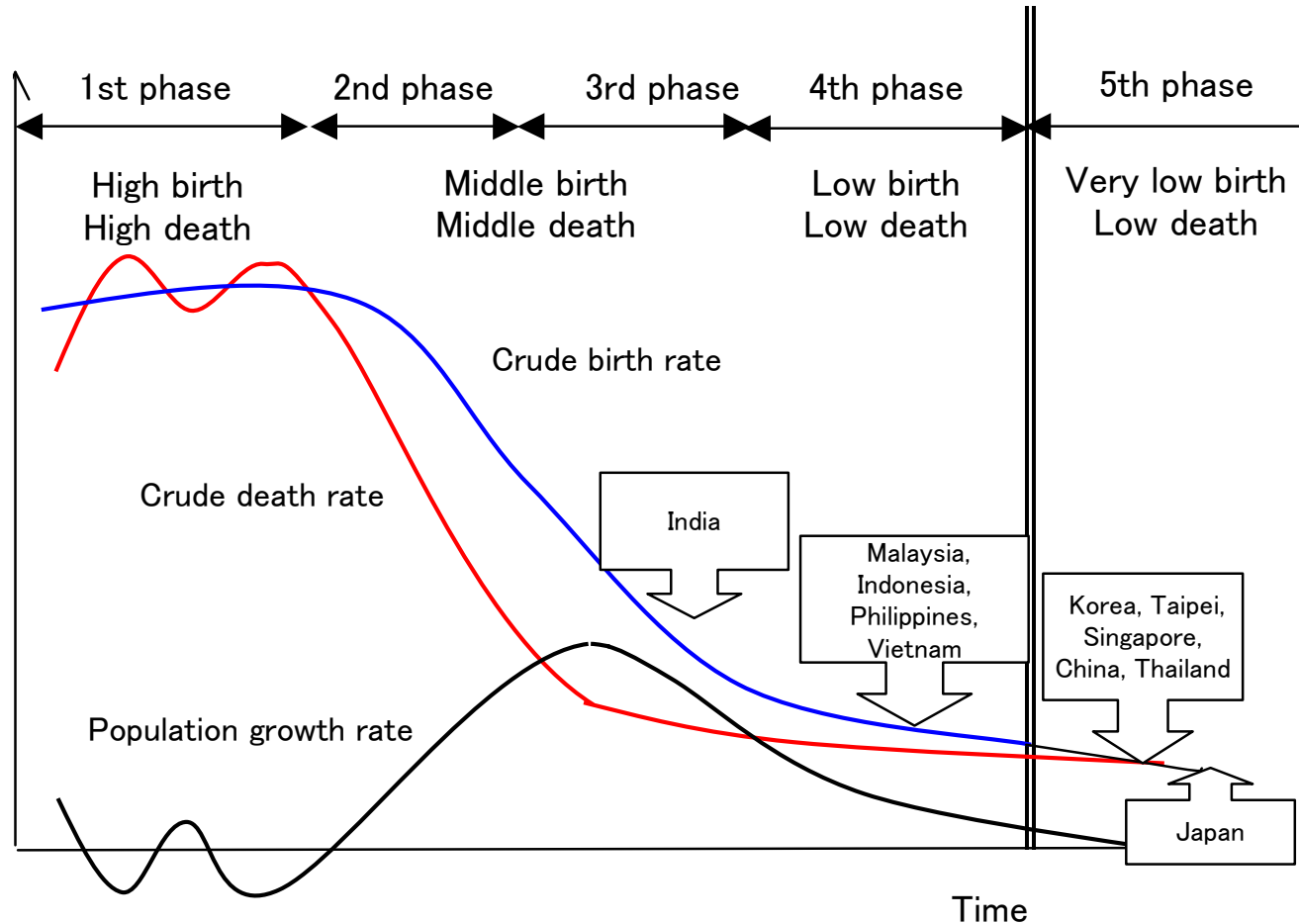


Demographic Change in East Asia



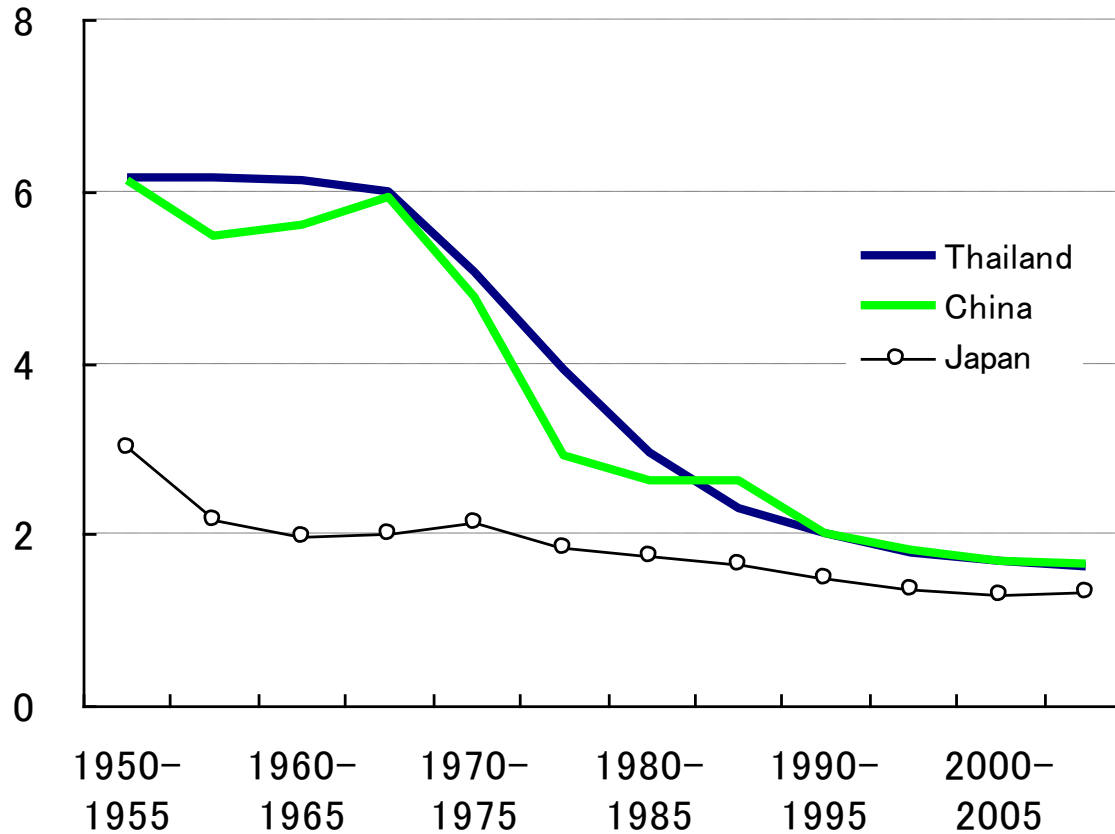
Source: UN, *World Population Prospects: The 2010 Revision*

The stage of Asian countries in the demographic transition model



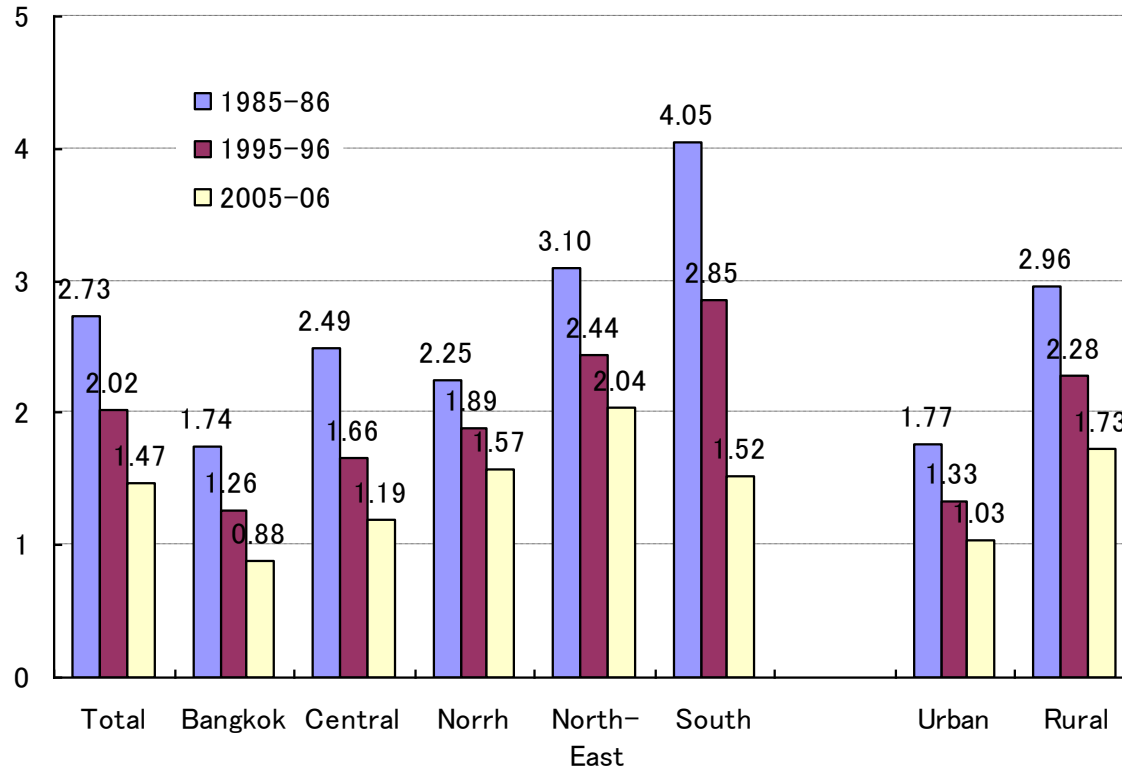
What made East Asia's fertility ratios be so low?

Total Fertility Rate in Japan, China and Thailand



Rapid decline of total fertility rate

Total Fertility Ratio in Thailand



Source: NSO

Reasons for fertility decline

- Libenstein's model

The utilities of having children

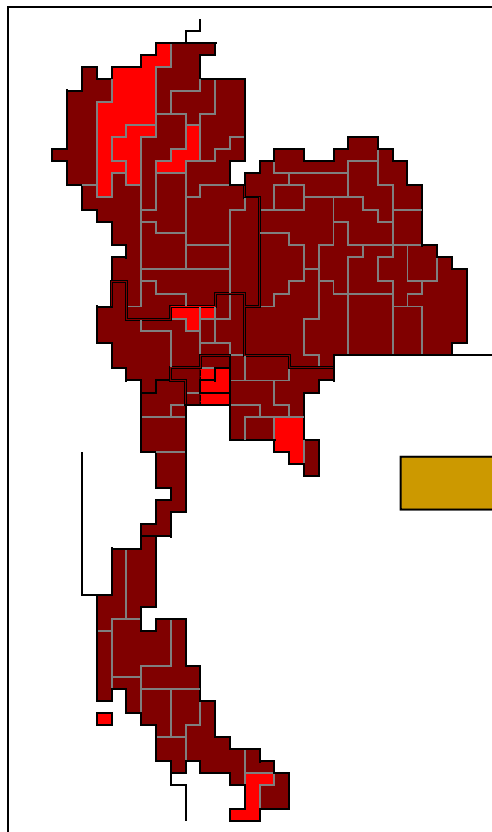
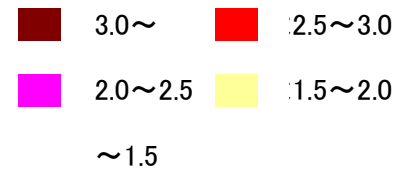
- (1) the joy of having children
- (2) the benefit from child labor or income
- (3) the care for their parents in their old age

The disutilities of having children

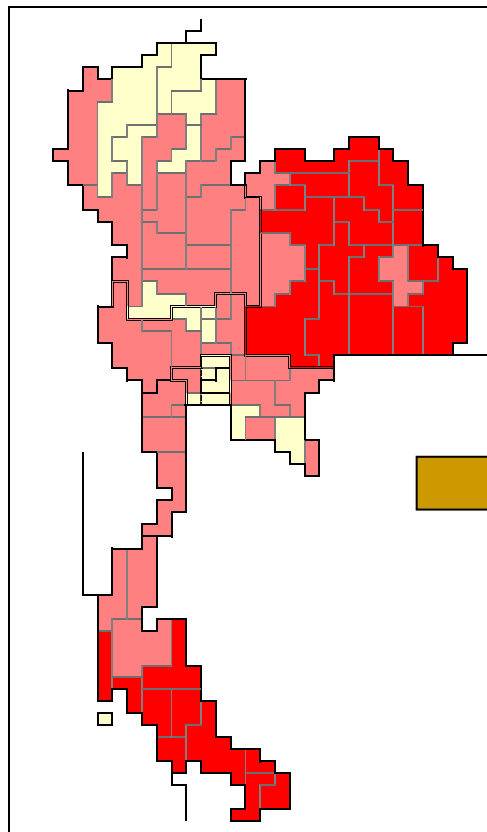
- (1) the direct increase in the financial burden
- (2) the increase in opportunity costs

Expansion of academic career-based society and differences in views of marriage

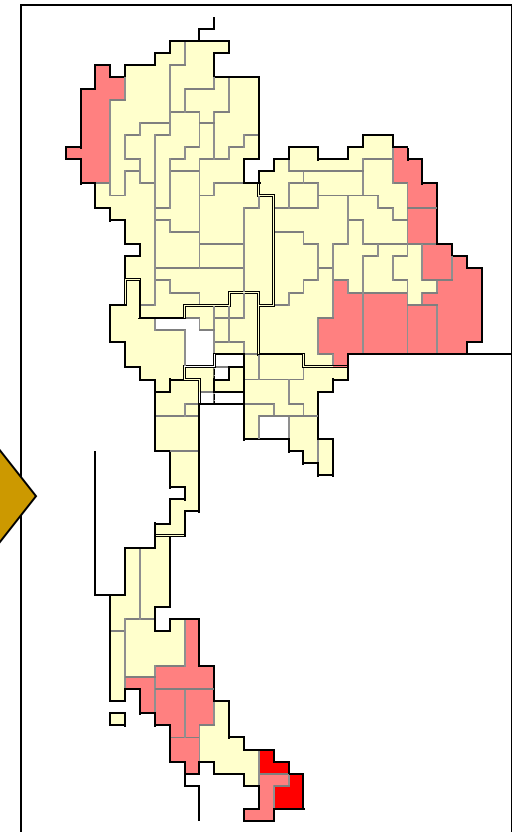
Low fertility in whole land of Thailand



1980



1990

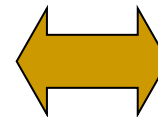


2000

Accelerating Population Ageing in East Asia

Doubling Period of Population Ageing

	The Ageing Ratio (aged 65+)		Doubling period (year)
	7%	14%	
Japan	1970	1994	24
Korea	1999	2017	18
Taiwan	1994	2018	24
Hong Kong	1984	2014	30
China	2000	2025	25
Singapore	1999	2019	20
Thailand	2001	2024	23
Malaysia	2020	2046	26
Indonesia	2020	2038	18
Philippines	2032	2062	30
Vietnam	2018	2033	15

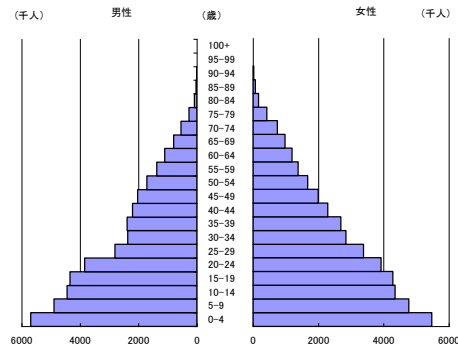


France 115 Years
 Sweden 85Years
 United Kingdom 47Years
 Germany 40 Years

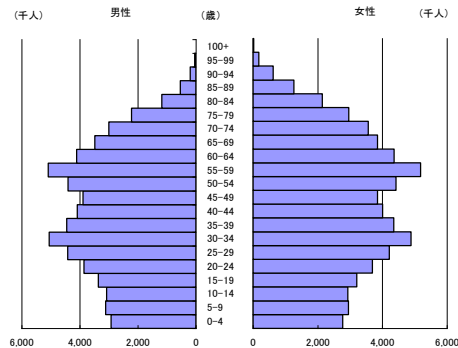
Source: UN, *World Population Prospects: The 2010 Revision*

Population pyramid of Japan

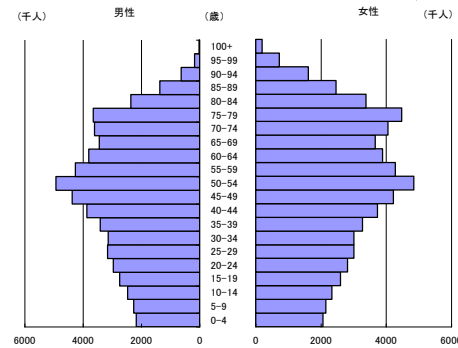
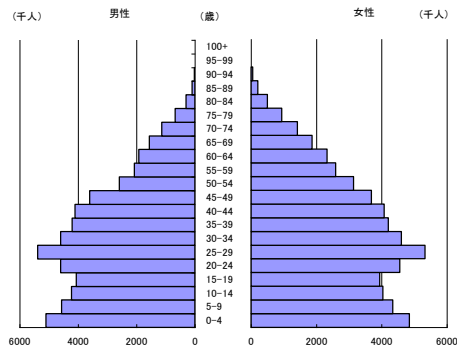
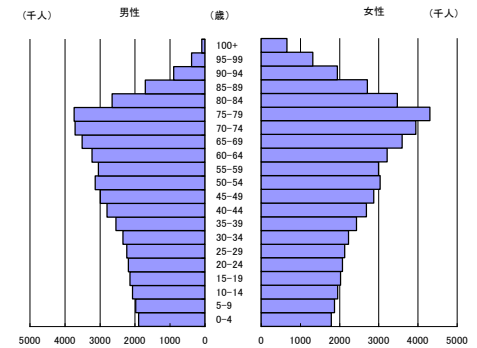
1950



2005



2050

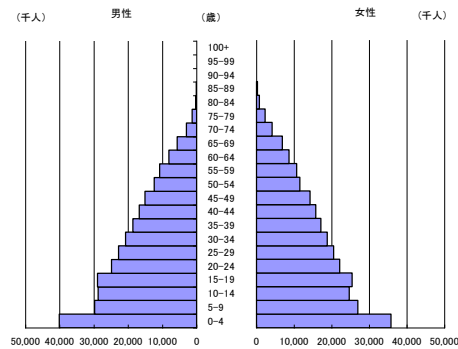


1975

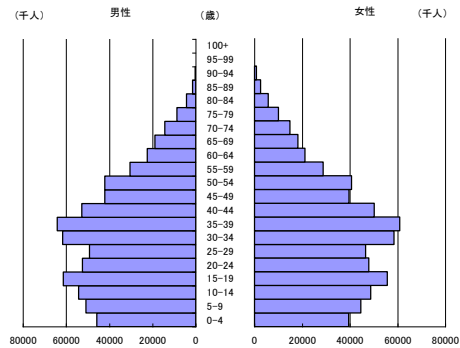
2025

Population pyramid of China

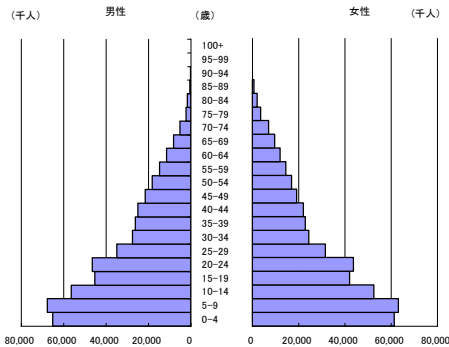
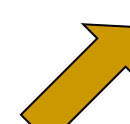
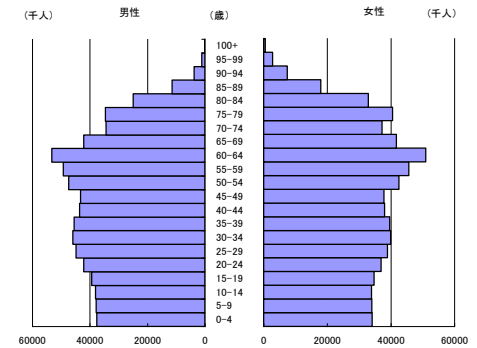
1950



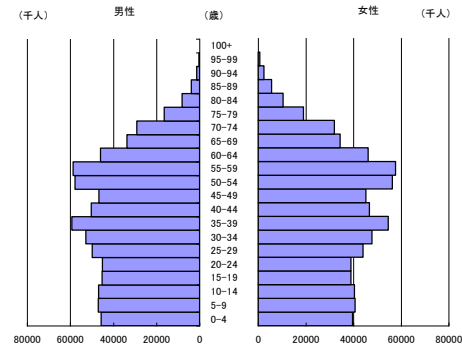
2005



2050



1975



2025

2. Ageing Society in Emerging Countries

Agendas for building social security
system

Where in Thailand will population ageing happen?

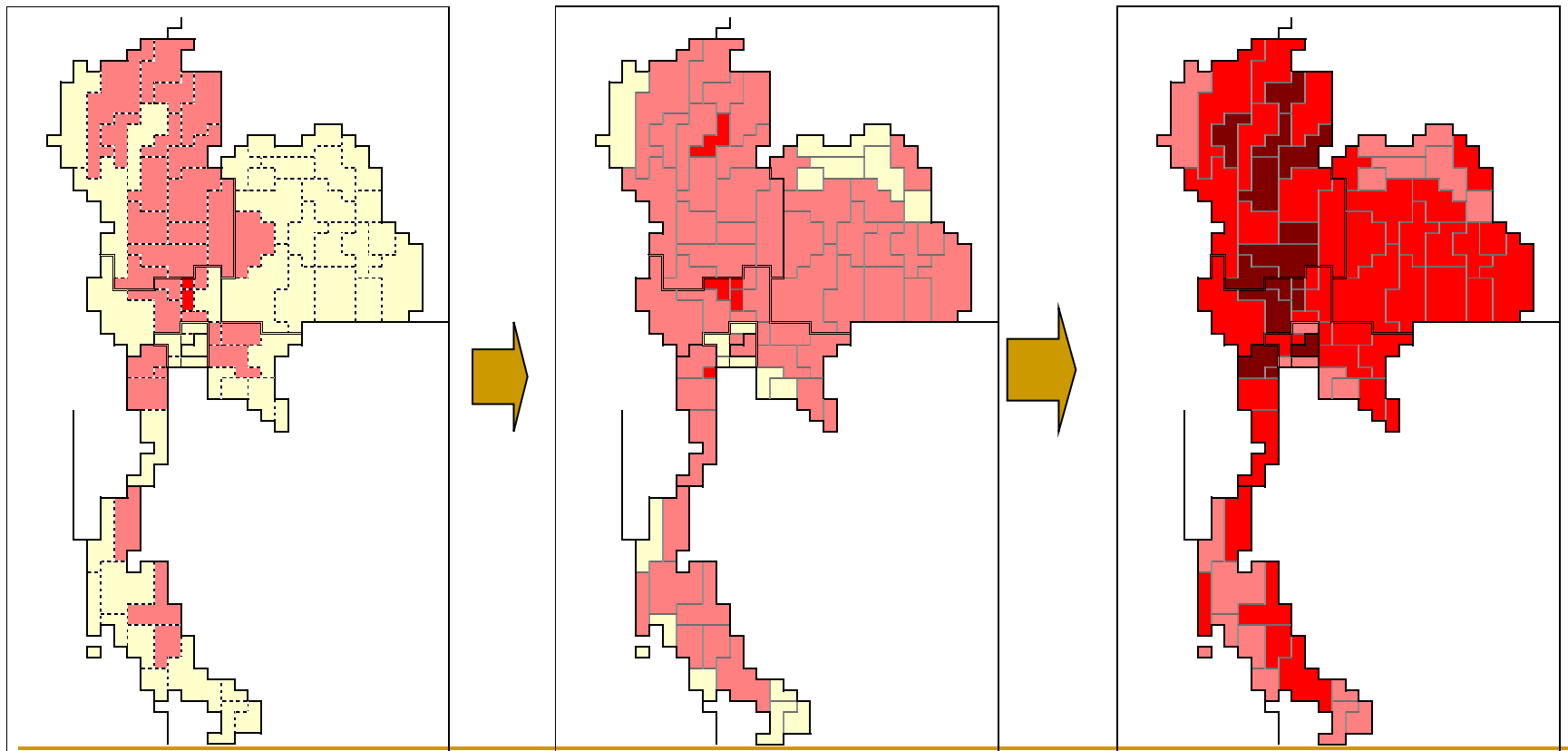
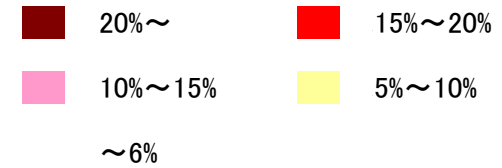
Elderly People Ratio

	2005	2010	2015	2020	2025	Par Capita GDP
United Nation	7.1	8.0	9.3	11.2	13.3	
NESDB	7.0	7.8	9.0	11.0	13.7	
Mahidol	7.0	8.1	9.2	11.3	13.5	114,233
Bangkok	5.7	6.4	7.1	9.2	12.0	316,040
Central	7.3	8.0	8.7	9.9	11.8	207,192
North	8.3	9.5	10.8	14.5	15.9	54,447
Northeast	6.4	7.6	9.4	12.0	14.8	34,983
South	7.1	9.1	9.0	10.0	12.2	84,136

Source: United Nation、NESDB (2003) 、Mahidol University (2006)

Population Ageing will be occurred in whole land of Thailand

Ageing Rate (+60 years old)



2000

2010

2020

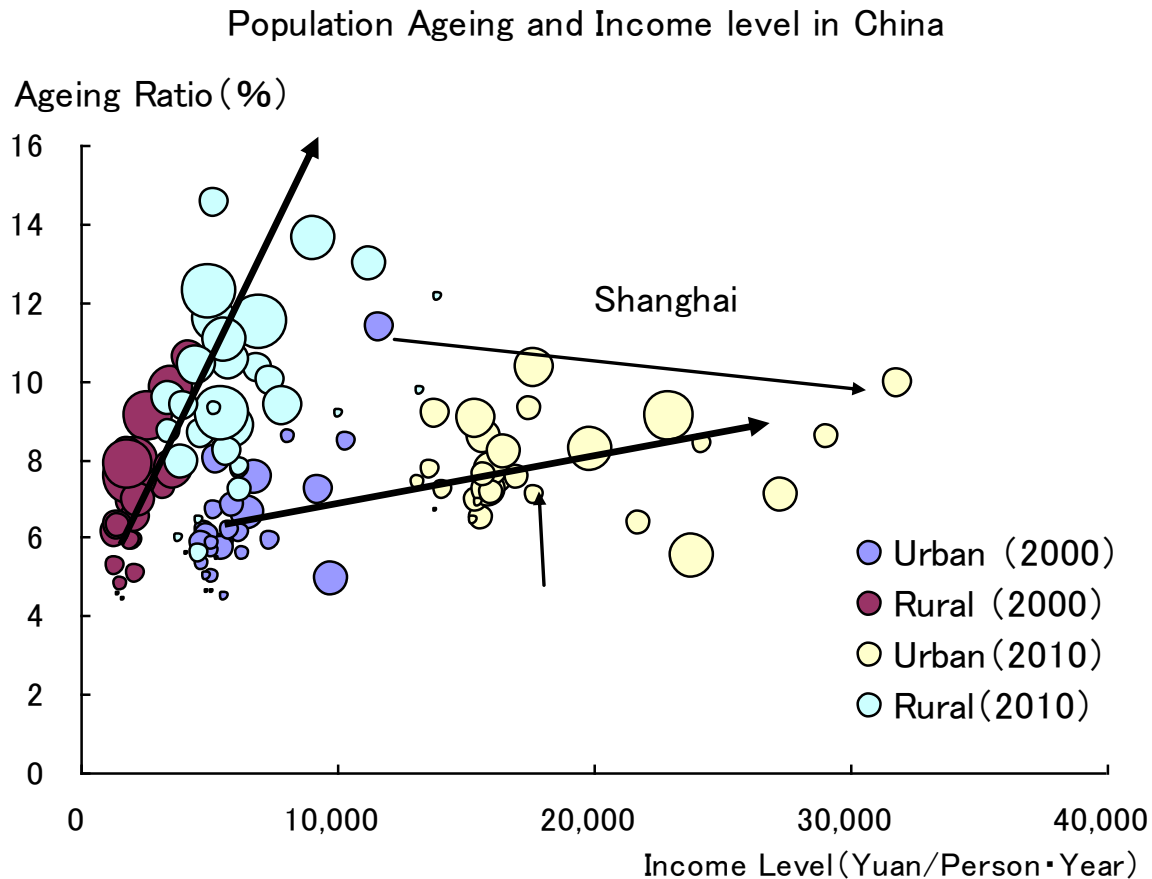
The Ageing Ratio of Shanghai has declined

<Population Aging Ratio in China>

		2000			2010				
		Total	Urban	Rural	Total	Urban	Rural		
1	Shanghai	11.5	11.3	12.6	1	Chongqing	11.7	9.3	14.5
2	Zhejiang	8.9	7.2	10.6	2	Sichuan	11.0	9.0	12.3
3	Jiangsu	8.8	7.5	9.8	3	Jiansu	10.9	9.1	13.6
4	Beijing	8.4	8.4	8.4	4	Liaoning	10.3	10.3	10.3
5	Tianjin	8.4	8.6	8.0	5	Anhui	10.2	8.5	11.5
6	Shangdong	8.1	6.6	9.1	6	Shanghai	10.1	9.9	12.1
7	Chongqing	8.0	7.7	8.2	7	Shangdong	9.8	8.2	11.5
8	Liaoning	7.9	8.0	7.8	8	Hunan	9.8	8.1	11.0
9	Anhui	7.6	6.7	7.9	9	Zhejiang	9.3	7.1	13.0
10	Sichuan	7.6	6.8	7.8	10	Guangxi	9.2	7.5	10.4
Total		7.1	6.4	7.5	Total	8.9	7.8	10.1	

Source: Tabulation on the Population Census of the People's Republic of China (2000, 2010)

Fast Population Ageing in Rural Areas of China

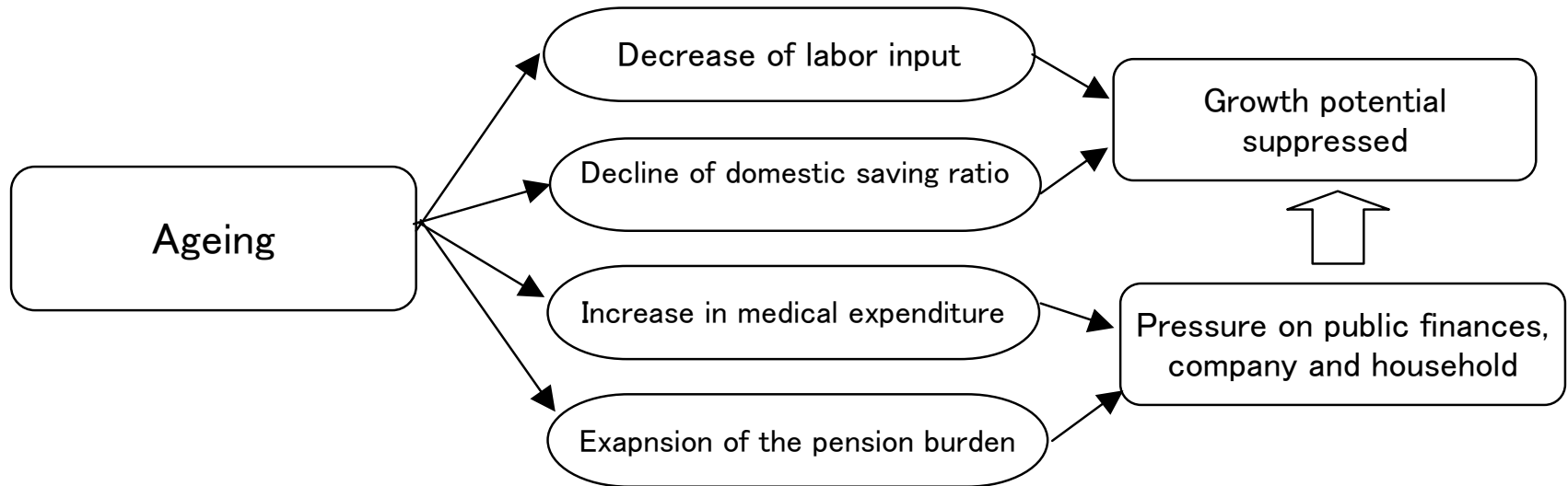


Source: Tabulation on the Population Census of the People's Republic of China (2000, 2010), China Statistical Yearbook

3. How to tackle population ageing in East Asia

Negative impacts from population ageing on growth of economy

Impacts of a population ageing upon economic development



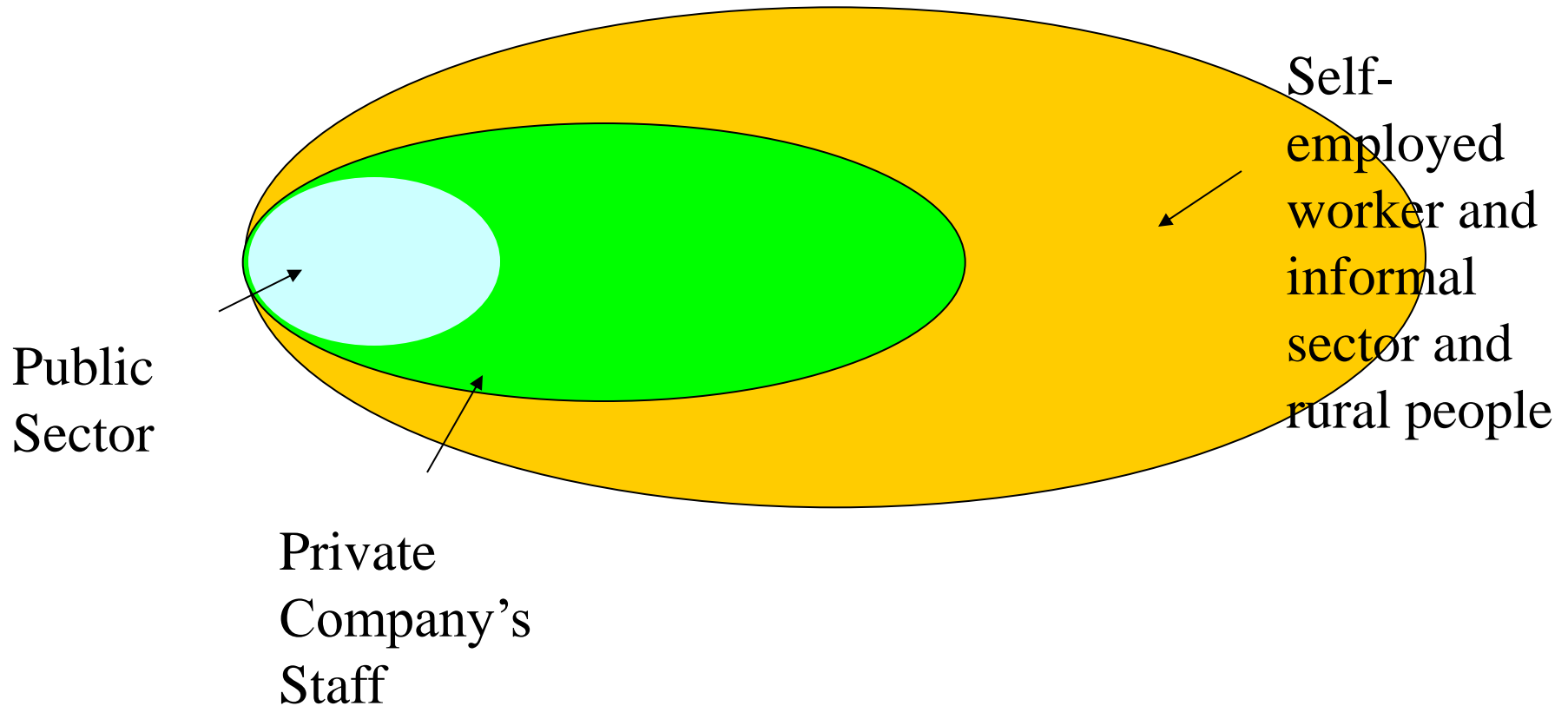
Classification by development phase

Table 1 Social Security System in East Asia

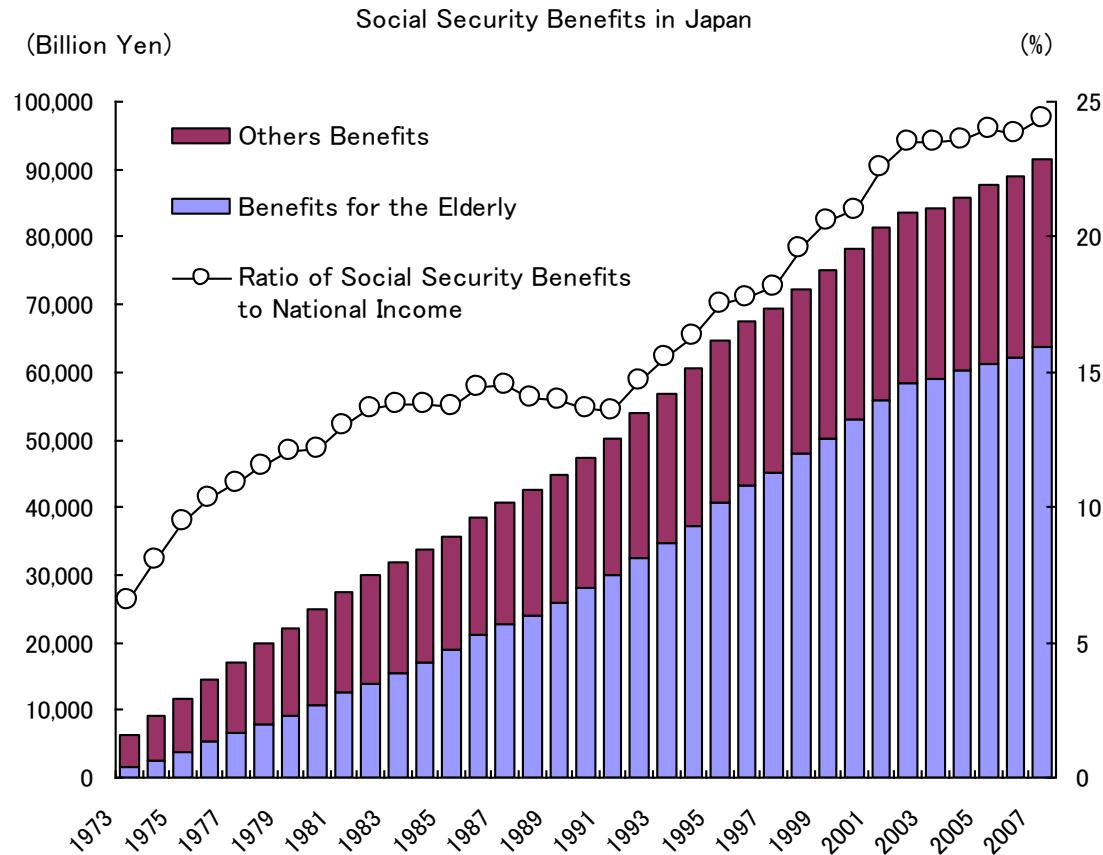
	Social Security System		Economic Development Stage	Industrial Structure	Demographic Transition	
	Current System	Challenges			Population Structure	Urbanization
Third Phase (Japan, Korea, Taiwan, Hong Kong, Singapore)	Universal system	To reform with population ageing	High income	Service-led structure	Accelerating population ageing	Urban society
Second Phase (Malaysia, Thailand, Philippines, Indonesia, China)	System covering public sectors and employee of private company.	To establish universal system covering informal sector and rural people	Middle income	Manufacture-led structure	Rapid Declining of Fertility Rate	Transition from rural society to urban society
First Phase (Vietnam, Laos, Cambodia, Myanmar)	System covering only public sector	To expand system covering employee of private company	Low income	Agriculture-led structure	Starting falling of fertility rate	Rural society

Source: Based on Hiroi and Komamura ed. 2003. *Ajia no Shakai Hosho (Social Security in Asia)*, University of Tokyo Publications p.11-12

Three development phases of social security system



A huge burden of population ageing in Japan



Source: National Institute of Population and Social Security Research, *Social Security Benefits 2007*, <http://www.ipss.go.jp/>

National medical expenditure by age group

National Medical Expenditure by Age Group (2007)

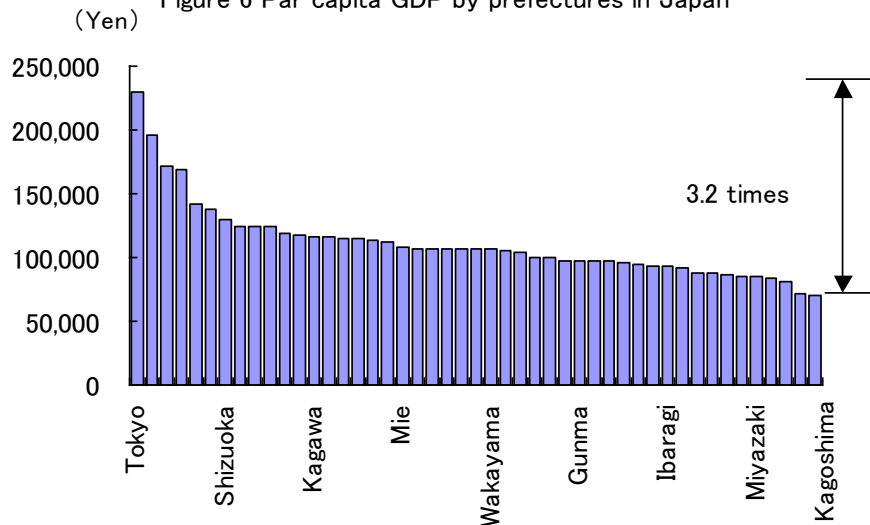
Age Group	Total		Ratio (%)	Expenditure per Capita	
	(10billion Yen)	(10billion USD)		(1000 Yen)	(USD)
Total	34,136	302	100.0	267.2	2,362
~64 and below	16,392	145	48.0	163.4	1,444
0~14	2,327	21	6.8	134.6	1,190
15~44	4,992	44	14.6	103.3	913
45~64	9,073	80	26.6	261.6	2,313
65 and over	17,744	157	52.0	646.1	5,712
70 and over	14,174	125	41.5	722.2	6,384
75 and over	10,089	89	29.6	794.2	7,021

Note: 1UDS=113.12Yen

Source: Ministry of Health, Labor and Welfare

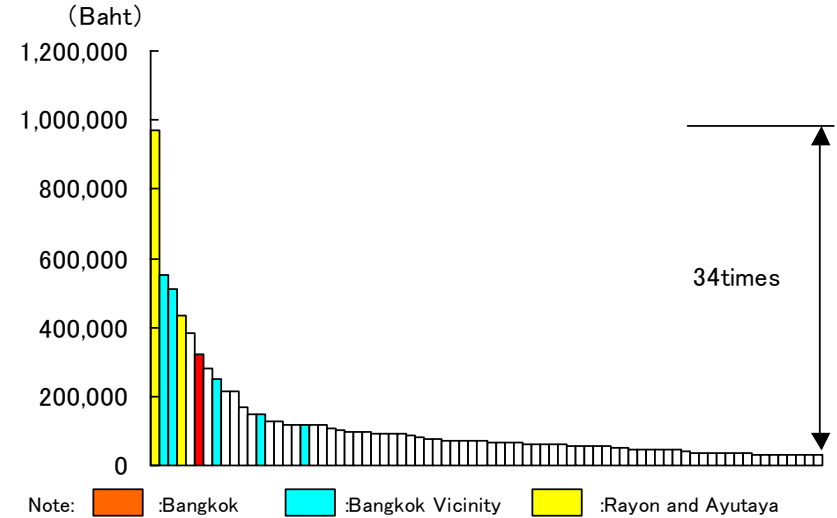
Regional income disparity in Japan (1960) and Thailand (2007)

Figure 6 Par capita GDP by prefectures in Japan



Source: Cabinet office, Government of Japan
<http://www.esri.cao.go.jp/jp/sna/kenmin/h18/main.html>


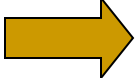

Figure 7 Par capita GDP by prefectures in Thailand (2007)



Note: ■ :Bangkok ■ :Bangkok Vicinity ■ :Rayon and Ayutaya

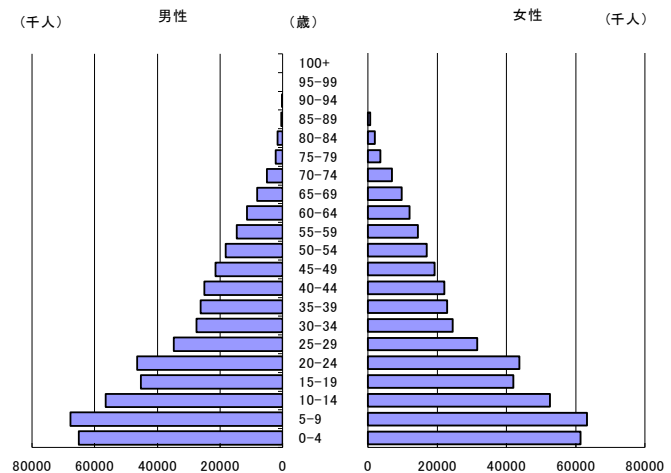
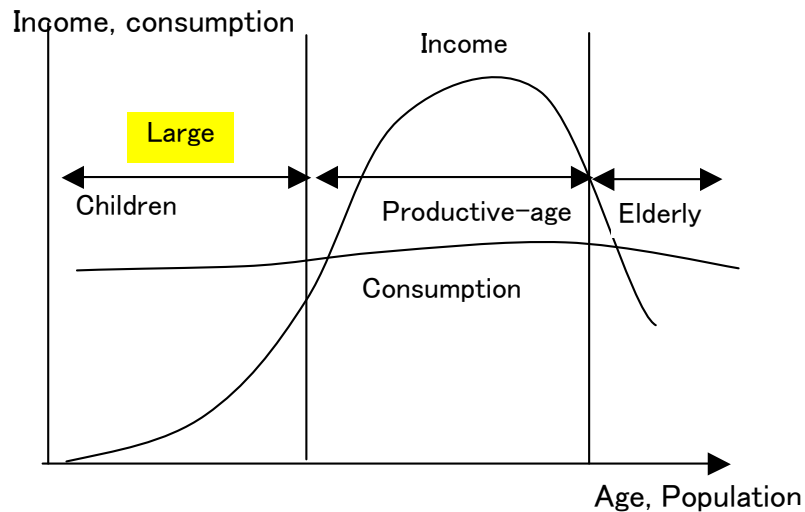
Source: NESDB, *Gross Regional and Provincial Product*

Tax reform and urban development strategies

- Cooperation tax  For attracting foreign companies
- Individual income tax  For promoting human capital activities
- Consumer tax  For expanding domestic market

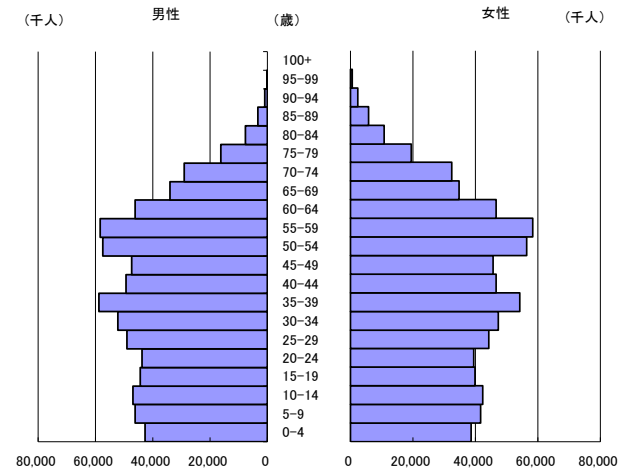
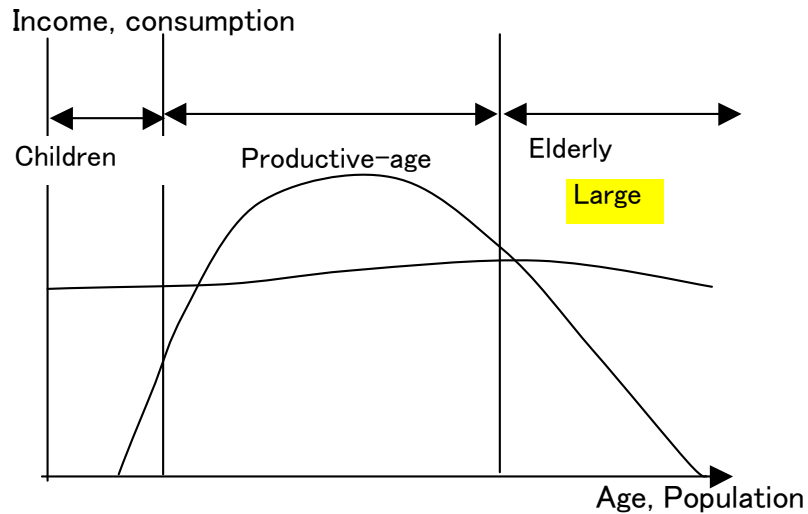
Human security in population explosion

Life cycle model and population pyramid in the period of population explosion



Human security in population ageing

Life cycle model and population pyramid in the period of population ageing



Lessons of World Bank's pension program

Multipillar Pension Taxonomy

Pillar	Target group			Main criteria		
	Lifetime poor	Informal sector	Formal sector	Characteristics	Participation	Finding or collateral
0	X	X	x	"Basic" or "Social pension" at least social assistance	Universal or residual	Budget or general revenues
1			X	Public pension plan, publicly managed (defined benefit or notional defined contribution)	Mandated	Contributions, perhaps with some
2			X	Occupational or personal pension plans (fully funded defined benefit or fully funded)	Mandated	Financial assets
3	x	X	X	Occupational or personal pension plans (partially or fully funded defined benefit or funded defined contribution)	Voluntary	Financial assets
4	X	X	X	Access to informal support (family), other formal social programs (health care), and other individual financial and nonfinancial assets (homeownership)	Voluntary	Financial and nonfinancial assets

Note: The size and appearance of x reflect the importance of each pillar for each target group in the following increasing order of importance: x, X, **X**

(Source) The World Bank "Old Age Income Support in the 21st Century", 2005 p.82

Thank you ! !