Aging and Economic Growth Potentials in the Pacific Region

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Aging Population

Potential risks of:

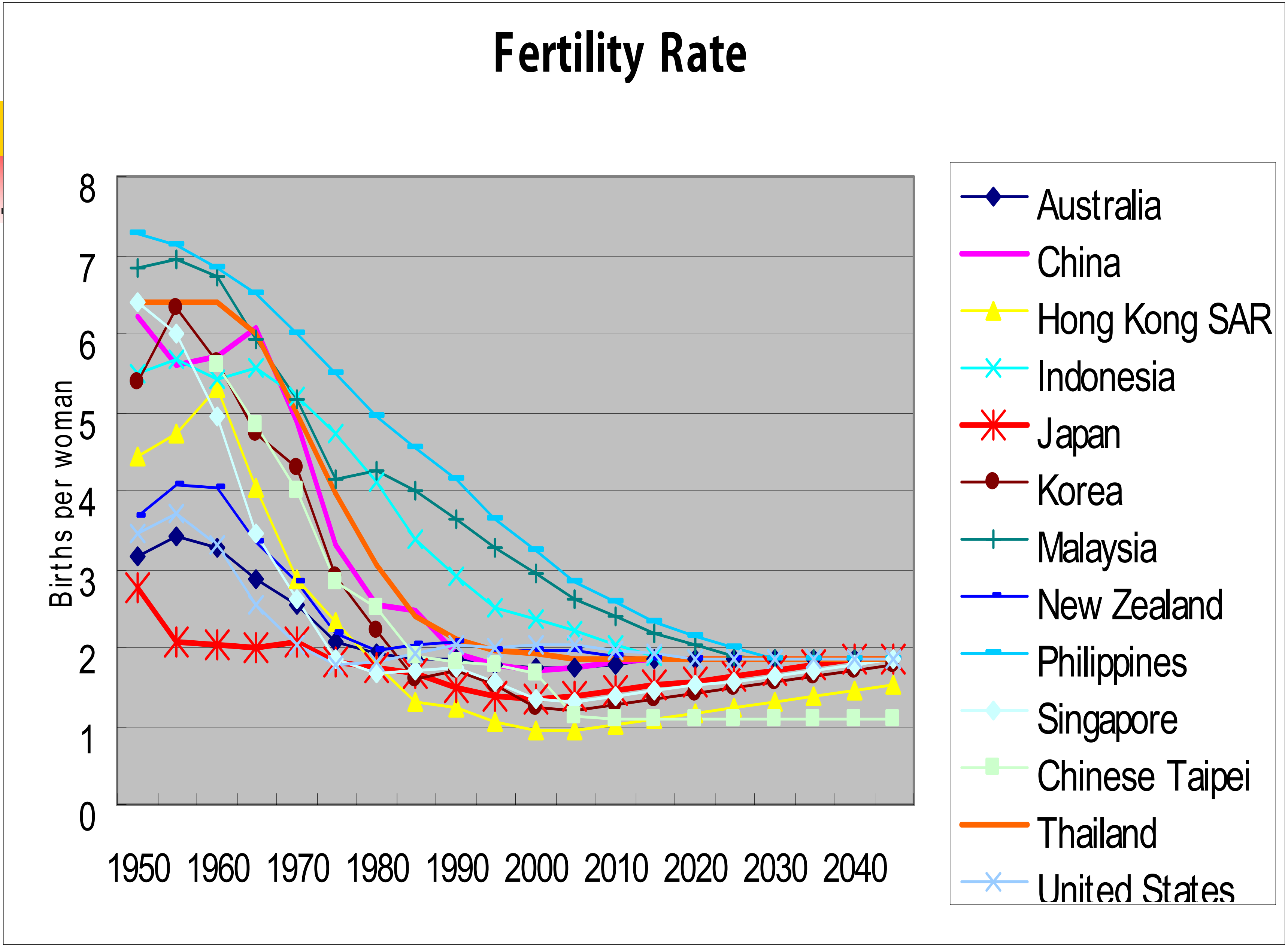
1. Economic growth slowdown
2. Stagnation of technical innovation
3. Fiscal burden through public pension and health insurance plans.

Pacific region: one of the most rapidly aging regions

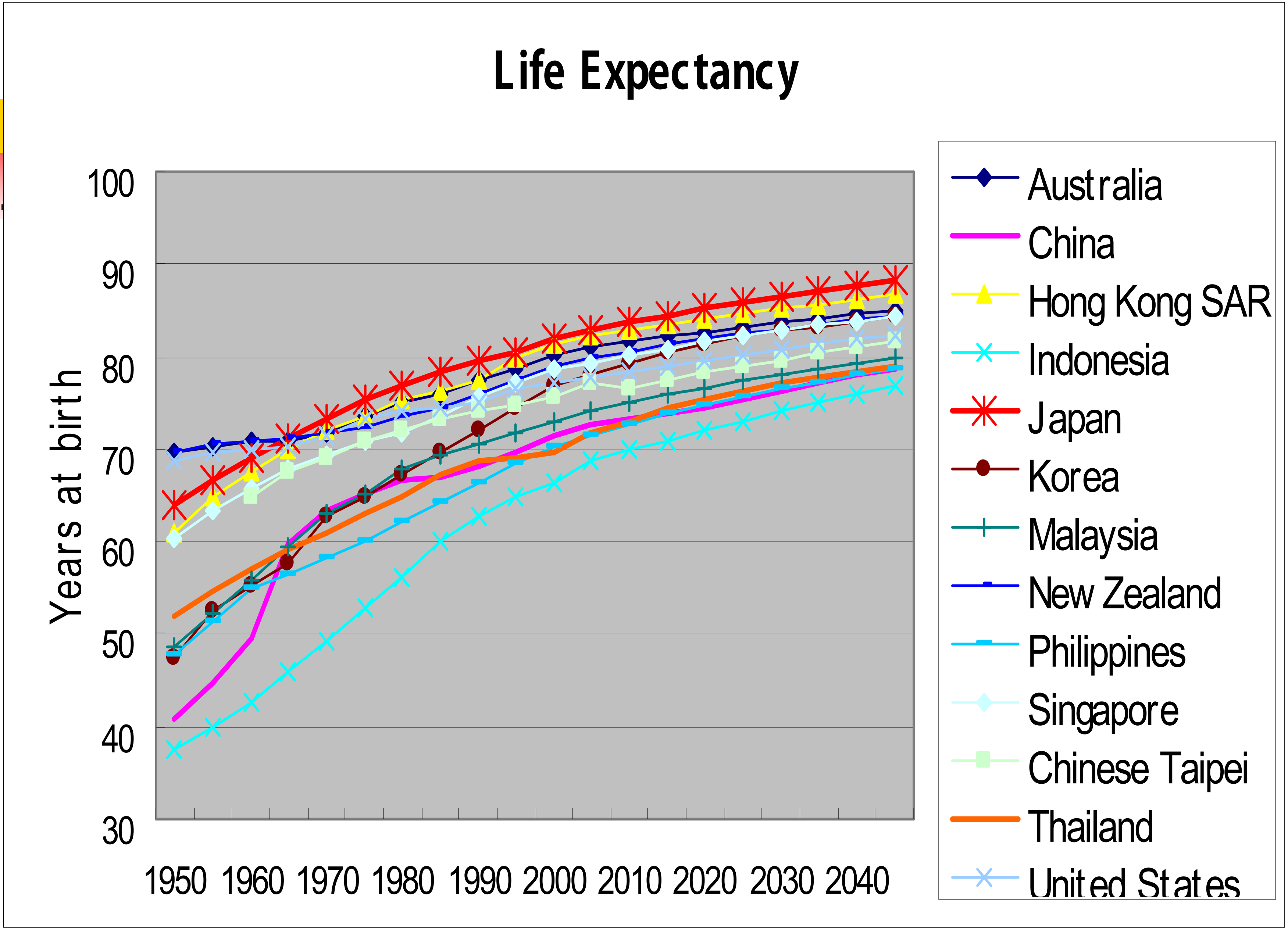
Demographic Trends

Global demographic transition, but with considerable variation across countries and regions due to very different fertility and mortality trends.

PECC region covers the most rapidly aging economies in the world.



Fertility Rate
Births per woman
0
1
2
3
4
5
6
7
8
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
Australia
China
Hong Kong SAR
Indonesia
Japan
Korea
Malaysia
New Zealand
Philippines
Singapore
Chinese Taipei
Thailand
United States


Life Expectancy
Years at birth
100
90
80
70
60
50
40
30
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
Australia
China
Hong Kong SAR
Indonesia
Japan
Korea
Malaysia
New Zealand
Philippines
Singapore
Chinese Taipei
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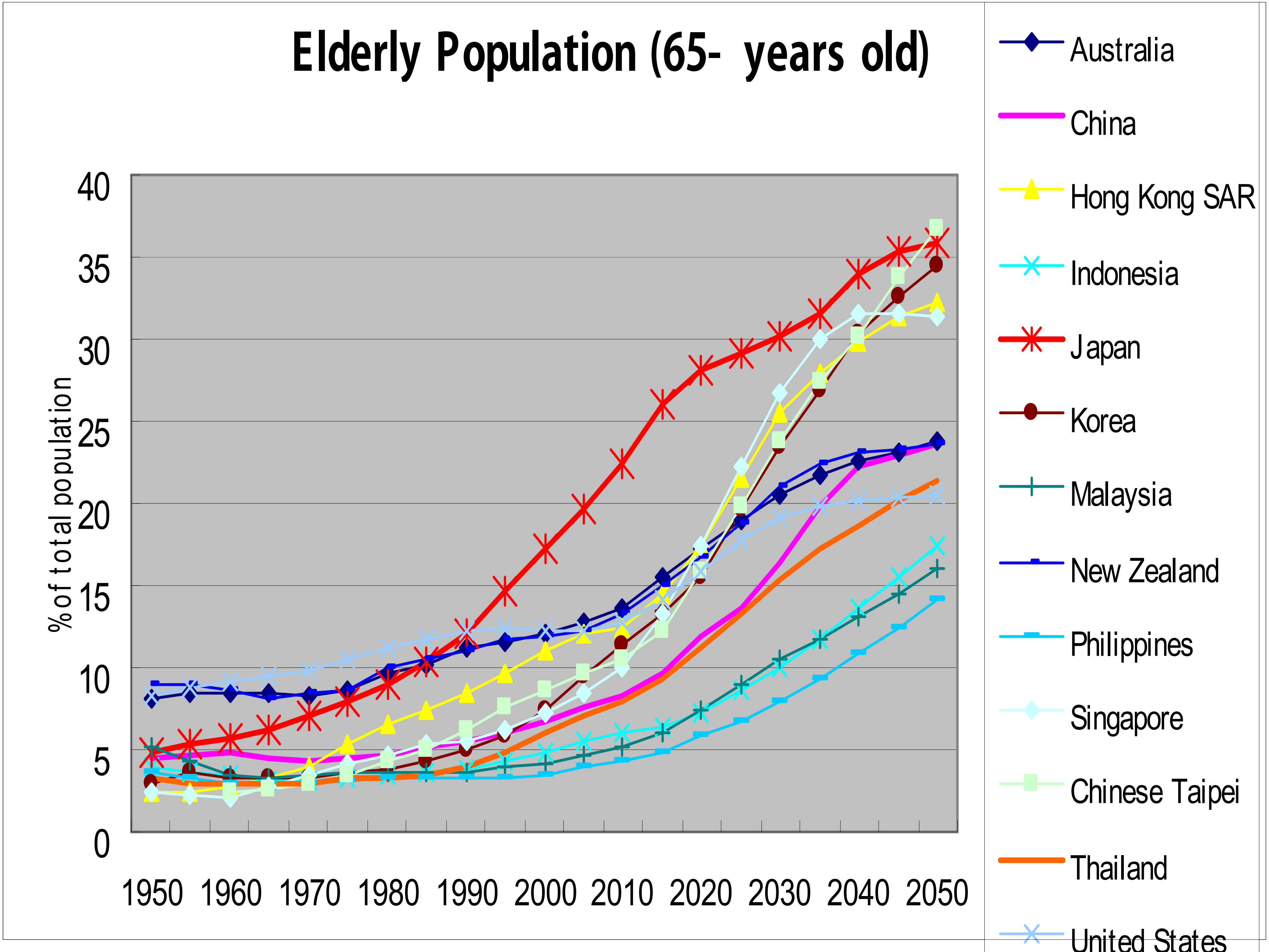
United States

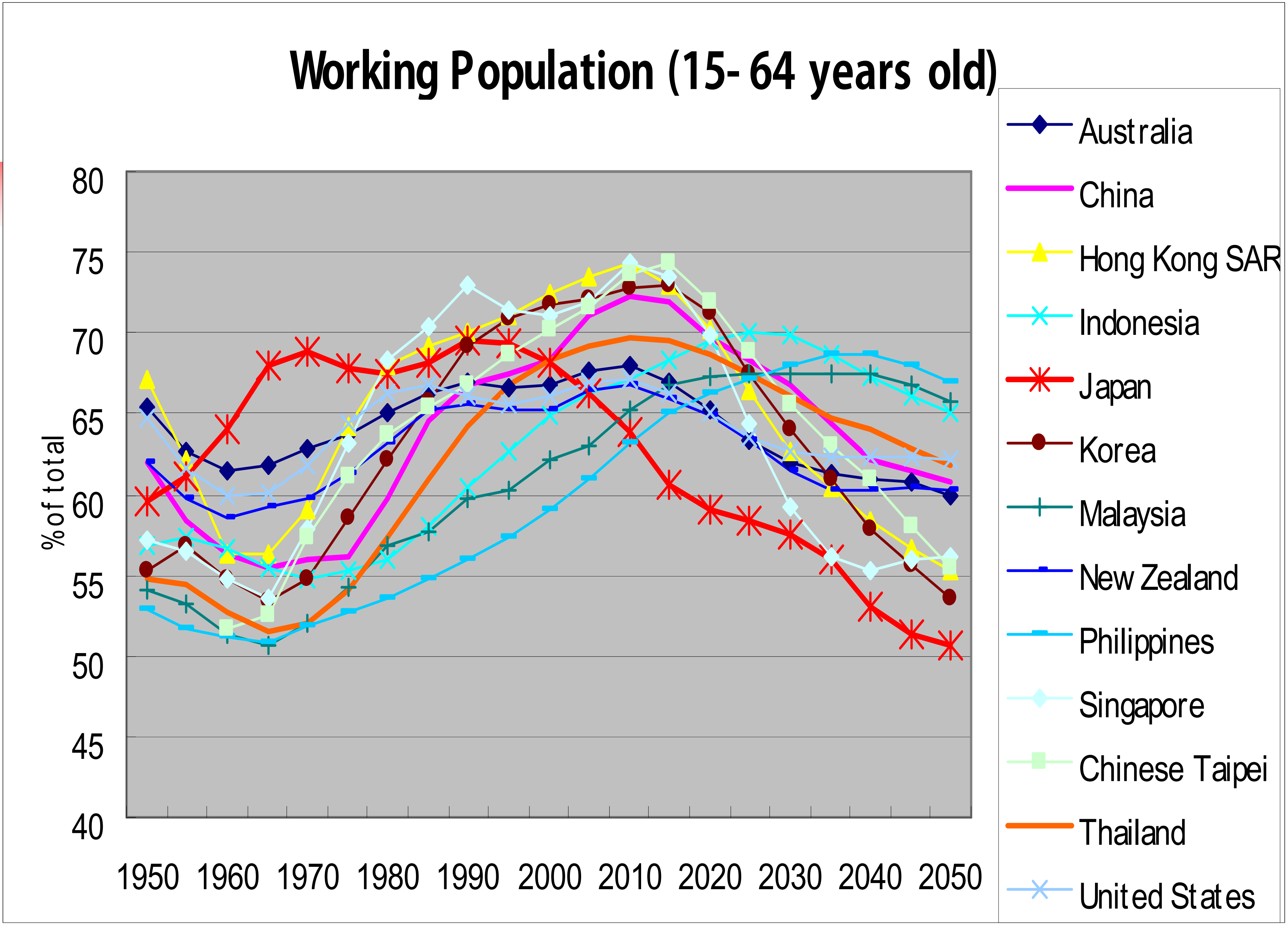
Aging Population

Population will continue to age. The elderly will increase its share.

Hong Kong, Korea, Singapore and Taipei are joining the fastest aging club by 2040. Then Australia, New Zealand and the United States, being caught up with by China and Thailand by 2050.

Working population share will reach its peak by 2015 except for Indonesia, Malaysia and Philippines.


Elderly Population (65- years old)
40
35
30
25
20
15
10
5
0
% of total population
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
Australia
China
Hong Kong SAR
Indonesia
Japan
Korea
Malaysia
New Zealand
Philippines
Singapore
Chinese Taipei
Thailand
United States


Working Population (15-64 years old)
% of total
80
75
70
65
60
55
50
45
40
1950
1960
1970
1980
1990
2000
2010
2020
2030
2040
2050
Australia
China
Hong Kong SAR
Indonesia
Japan
Korea
Malaysia
New Zealand
Philippines
Singapore
Chinese Taipei
Thailand
United States

Impact of Aging on Economic Growth

Timing and speed of demographic changes are significantly different across economies. Hence the age composition of populations differs greatly.

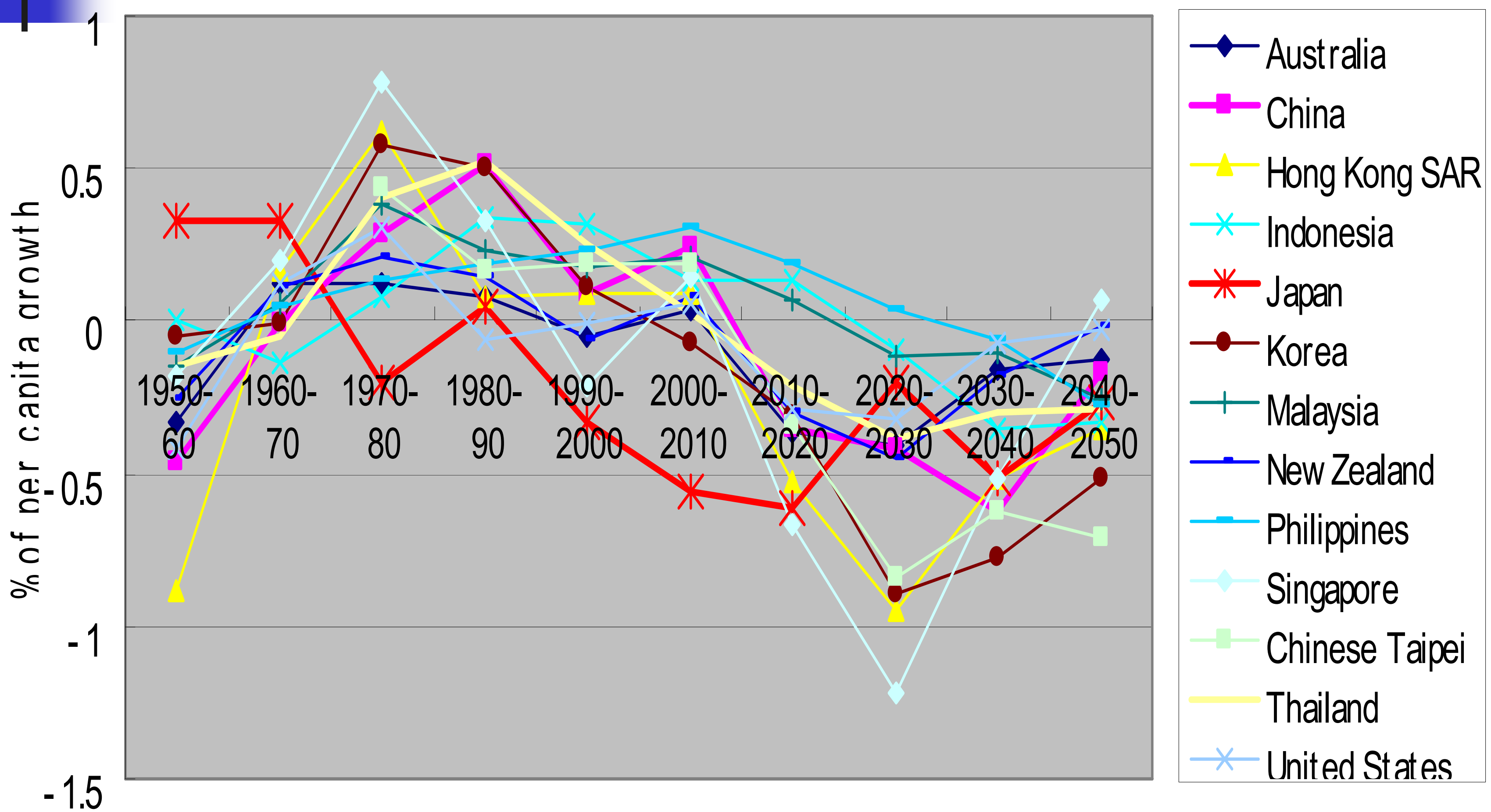
Economic growth comes from labor supply, capital formation and productivity growth. Demographic changes affect the three channels directly and indirectly.

Benchmark Estimates of the Impact

IMF [2004]: Growth regression using a 115-country panel data set for the period 1960–2000.

Per capita GDP growth is correlated positively with changes in the relative size of the working-age population, and negatively with changes in the share of the elderly.

Figure 5. Estimated Dmographic Impacts on Per Capita Economic Growth



Benchmark Implications?

Positive impacts of demographic changes on growth during the latter half of the 20th century.

This positive impacts mostly end by 2010, and negative ones would start toward 2050.

Both positive and negative impacts be larger in Hong Kong, Korea, Singapore and Taipei than the others, and the negative impacts would be sharper and more acute than the positive ones.

How to Cope with Possible Economic Slowdown?

To enhance *labor supply*, *saving/investment*, and *productivity*

Labor supply: *Increase labor market participation rates, permit more immigration, raise the retirement age, increase fertility rates*

Capital formation: *Fiscal consolidation, pension reforms, stable macroeconomic framework*

Productivity: *structural reforms to reduce the impediments to competition, to improve labor market and price flexibility, to upgrade human resources*

Missing Links

Individual effects: regional and country differences

General equilibrium considerations: endogeniety, simultaneity, causality

Time effects: globalization, institutional developments

To Sum Up (I)

- Prior empirical studies tend to understate country differences and time effects as well as possible future adjustments.
- Straightforward application of those parameters to future projection tends to exaggerate negative demographic impacts.
- Even so, the estimated negative impacts on per capita economic growth in the PECC member economies appear modest.

To Sum up (II)

Since the present dramatic population aging is unprecedented, it will inevitably bring serious economic and political challenges.

Note, however, that life in aging, capital-intensive and culturally diverse countries in itself is part of our ultimate goals and that there seems no strong reasons for significantly negative impacts of aging on potential economic growth in the PECC region.