

Economic and Social Implications of Population Ageing

Francis T Lui

Department of Economics
HKUST

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Abstract: "Hong Kong has one of the world's lowest total fertility rates and highest life expectancies. As such, Hong Kong's demographic structure seems to be following the path of Japan to move into the phase of inverted pyramid. This phenomenon will necessarily create enormous financial challenges for the Government and society in general. I will discuss how the limited budgetary resources of the Government should be optimally allocated so that the most difficult issues due to population ageing can be addressed in a balanced way."

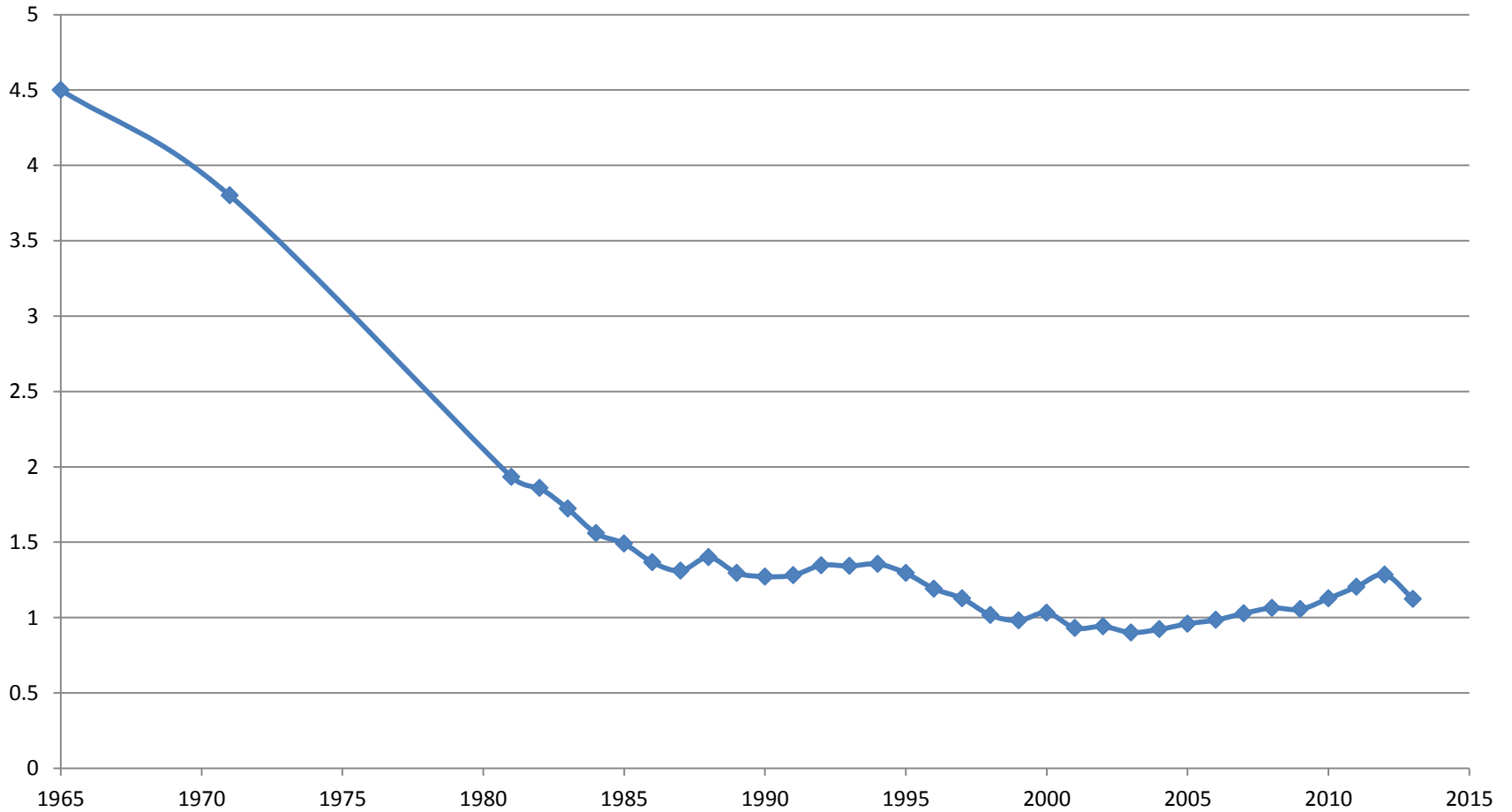
Life Expectancies at Birth of Males & Females for some Developed Economies (1981-2013)

	Male Life Expectancy at Birth		Female Life Expectancy at birth	
	1981	2013	1981	2013
Hong Kong	72.3	81.1	78.5	86.7
Australia	71.4	79.6*	78.4	84.6*
France	70.4	78.7	78.5	85.0
Japan	73.8	80.9	79.1	87.71
Singapore	70.1	80.2	75.2	84.6
Sweden	73.1	80.1	79.1	83.7
UK	70.8	78.3*	76.8	82.7*
USA	70.4	77.1*	77.8	81.9*

Total Fertility Rates in a Sample of Economies

	1965	2014
Asia-Pacific Rim		
Australia	3.0	1.77
China	6.4	1.55
Hong Kong	4.5	1.12 (2013)
Japan	2.0	1.40
South Korea	4.9	1.25
Taiwan		1.11
Thailand	6.3	1.50
Singapore	4.7	0.8
Developed Economies		
European Union	2.7*	1.6
United States	2.9	2.01
World	5.1	2.43

Total Fertility Rate in Hong Kong



Proportion of women at different age groups who do not have any children

Year	Age Group	20-39	40-44
1996		58.22%	20.90%
2001		63.83%	25.31%
2006		69.75%	31.81%
2011		71.83%	39.3%

Hong Kong versus Japan

	Japan 2013	Hong Kong 2013	Hong Kong 2041
Median Age	45.8	43.8 (2014)	51.8
Male Life Expectancy at Birth	80.85	81.1	84.4
Female Life Expectancy at Birth	87.71	86.7	90.8
Total Fertility Rate	1.31	1.124	1.15
Proportion of 15-64 years olds	0.618	0.73 (2014)	0.58
Proportion of those at 64 and above	0.248	0.16 (2014)	0.32
Old age Support Ratio	0.40	0.22 (2014)	0.55

- Full-time workers work for about 42 years
- Labor force participation is about 2/3
- Average working life is therefore around 28 years
- Work for 28 years, and retire (out of the labor force) for more than 30 years
- Enormous pressure on personal finance and government finance

Effective Support Ratio (Labor Force / People older than 64)

2014	2019	2024	2029	2034	2039	2044	2049	2054	2059	2064
3.294	2.636	2.016	1.596	1.417	1.320	1.265	1.212	1.162	1.121	1.113

Maximizing life-time utility

- People want:
 - 1) more consumption in each year
 - 2) more years of consumption
- Consumption encounters significant diminishing returns
- Lengthening life is not a free lunch: advanced economies invest disproportionately large resources in life and medical sciences

- If we choose to lengthen life, society must:
 - 1) invest more in health care
 - 2) prepare for longer retirement (or work longer) by saving more for the future, i.e., by reducing today's consumption.
- Longer life gives us more options, but longer life without reducing today's consumption could result in serious financial problems