

## **China-Japan: Future labour supply issues**

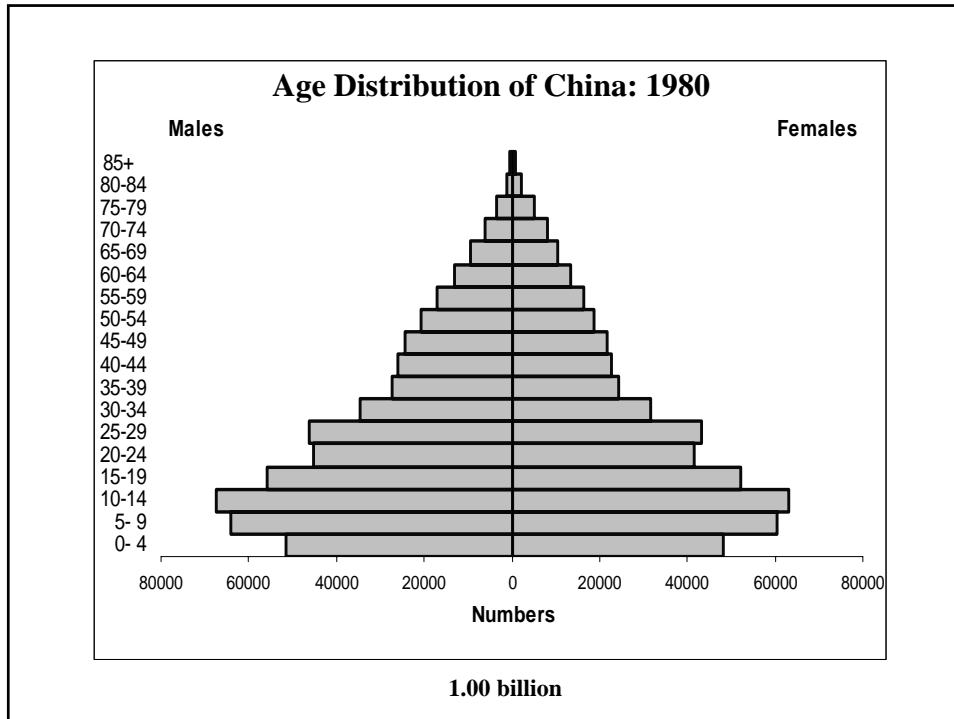
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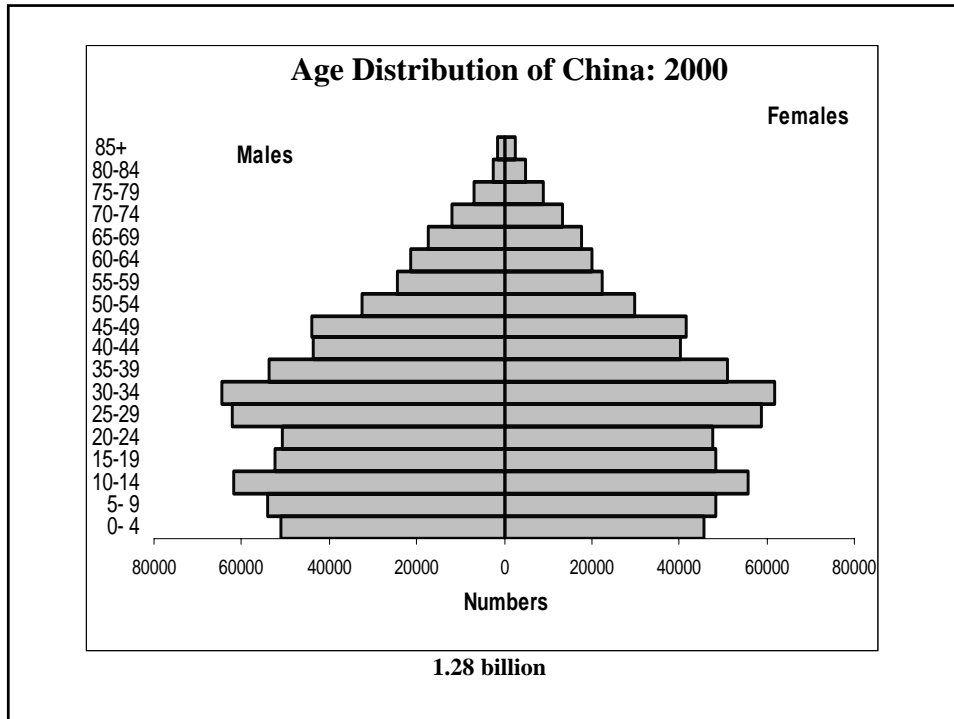
## **China's Population in 1980**

- One billion people
- Large concentration in the ages 5-19 (births in the 1960s and early 1970s).
- Facing population explosion as large birth cohort passed through the reproductive ages.
- One child policy instigated.



## China's Population 1980-2000

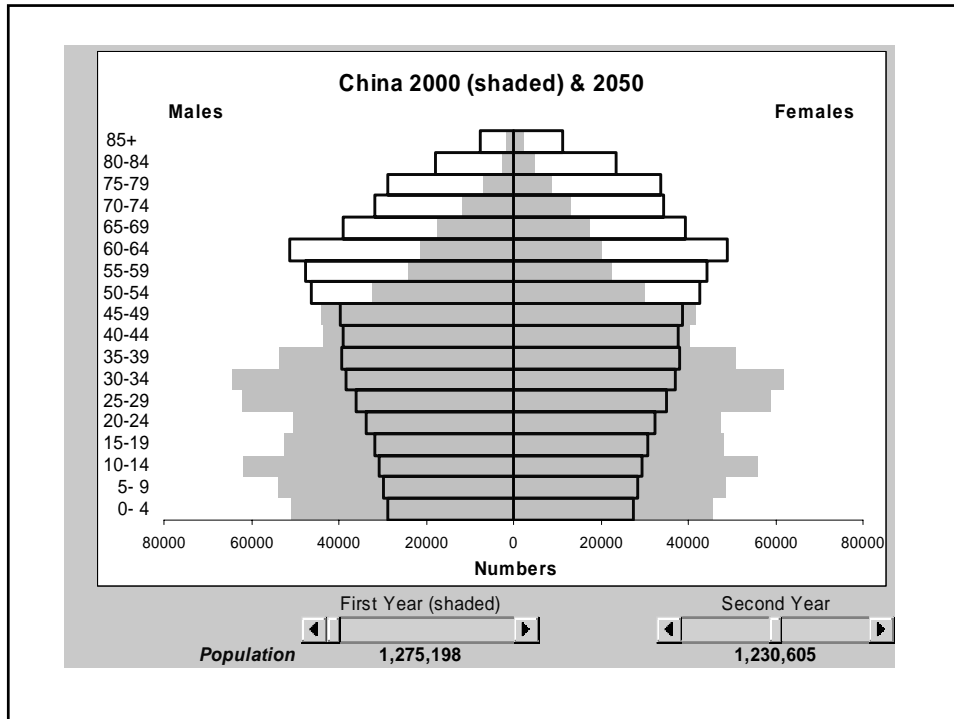
- Large birth cohort enters working ages producing a 'demographic dividend' or **demographic bonus**, a concentration of population in the young working ages.
- Fertility rate falls from 2.6 to 1.6 births per woman.
- Population in 2000 is 80 million fewer than it would have been if fertility had remained at 1980 level.
- **Note:** All rapidly developing Asian nations experienced the demographic bonus over the past 40 years.



## China's Population, 2000-2050

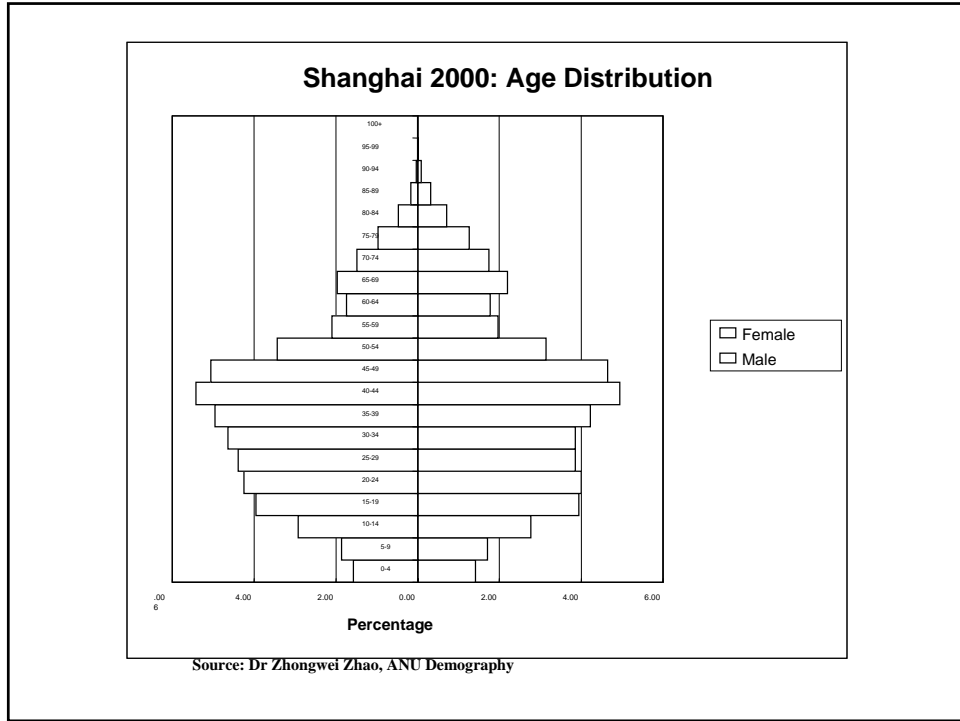
- if fertility remains constant at 1.6 births per woman

- Maximum population of 1.37 billion reached in 2025.
- 2050 population 50 million fewer than in 2000.
- 2050 population will be **one billion** fewer than it would have been if fertility had remained at the 1980 level of 2.6 births per woman.
- Population ages very rapidly: those aged 65+ increase from 87 million to 267 million in 2050.
- Young working ages fall dramatically: those aged 20-39 fall from 450 million to 290 million.



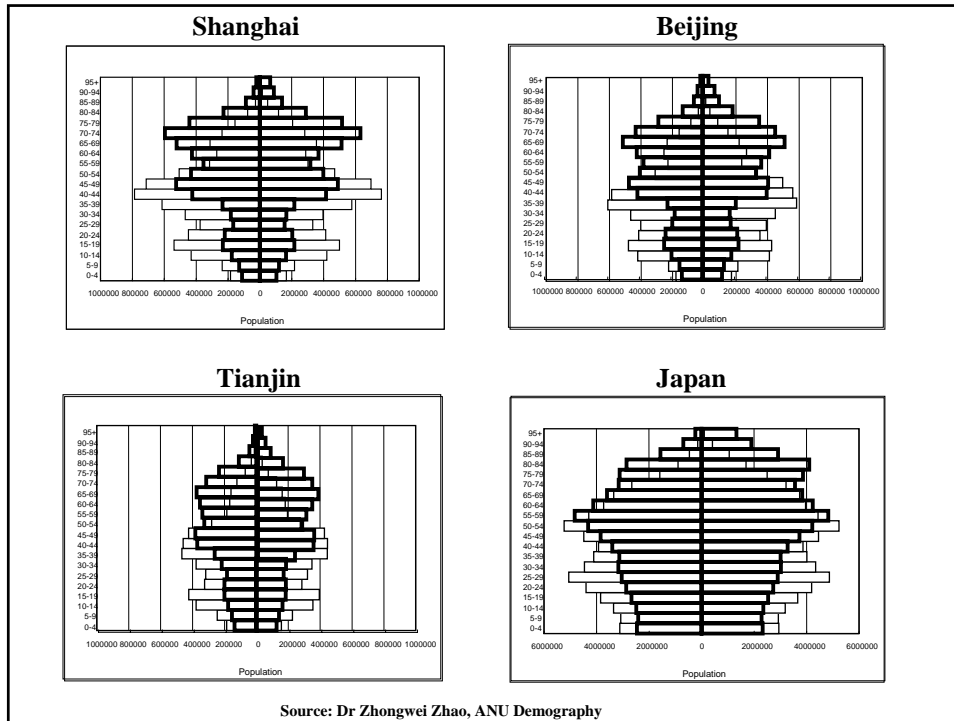
## The Demography of the Cities: Shanghai, Beijing, Tianjin

- China's largest cities have exceptionally low fertility rates: around 0.8 births per woman.
- Large scale in-migration of workers without their children adds to the extraordinary age structures of these cities.
- Workforces are ageing rapidly.
- **Huge** future in-migration will be required simply to keep the labour forces the same size as they are now.



## Chinese cities in 2030

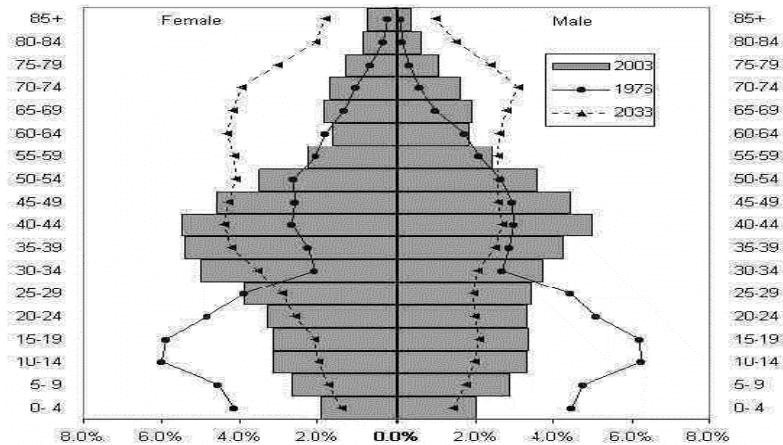
- The following projections assume that the fertility rate in the three largest Chinese cities will rise from 0.8 births per woman in 2000 to 1.5 in 2030, with zero migration.
- This is the registered population (excludes the floating population).



## Would abolition of the one-child policy make a difference?

- Hong Kong, without a one-child policy, has the same age structure.
- Relaxation of the one-child policy is underway in these cities, but this may have little effect.

### Age Distribution of Hong Kong: 1976, 2003 and 2033 (projected)

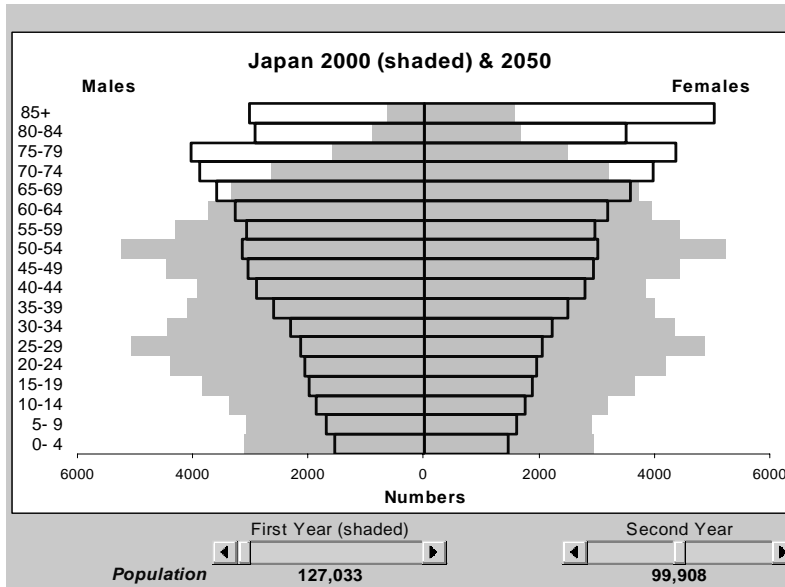


Source: Dr Paul Yip, The University of Hong Kong

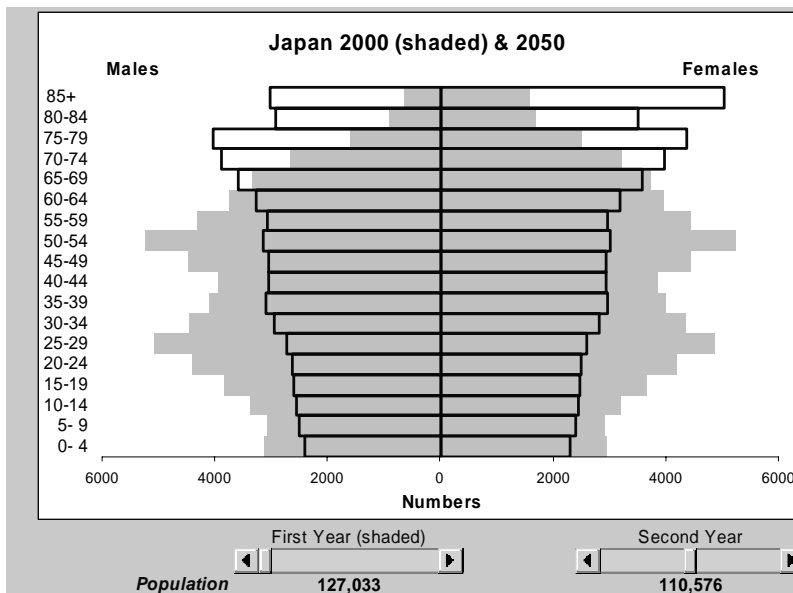
## Hong Kong

- Considerable concern about the ageing and falling labour supply.
- In 2004, there was an annual quota of 54,000 One Way Permit Holders entering Hong Kong, but only 38,000 arrived in the last year.
- Skilled young Hong Kong workers are being lost to the mainland and to Western countries.
- Pronatalist policies under very active discussion in Hong Kong.

### Japan Projection1: Current Demography

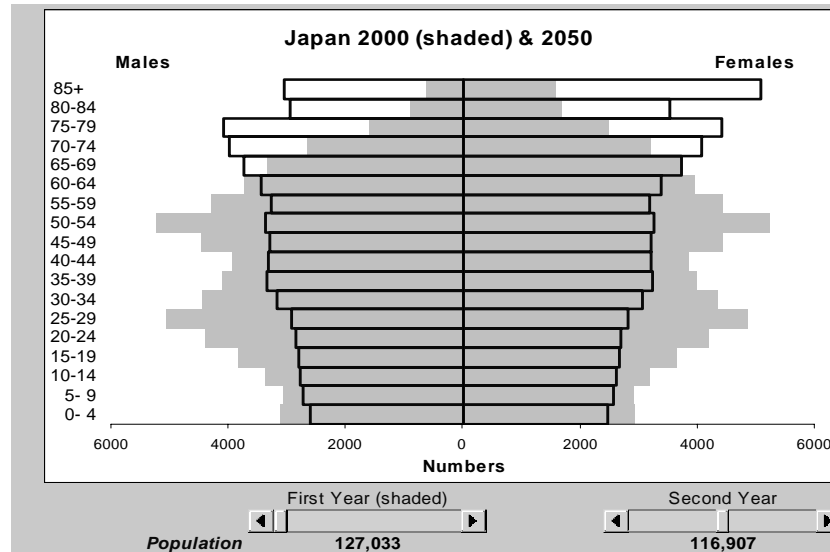


### Japan Projection2 (fertility rises to 1.7 over 10 years and remains constant)



### Japan Projection3

Higher fertility (as in Projection2) + Annual Net Migration rises by 50,000 every five years to 200,000 then remains constant



### Japan: Projection Outcomes (Millions)

Outcome		Proj1 Constant	Proj2 Higher fertility	Proj3 + Higher migration
	2000	2050	2050	2050
Total Population	127.0	99.9	110.6	116.9
Aged 25-54	54.1	31.9	35.3	38.2
Aged 70+	14.8	30.7	30.7	31.1
Aged 15-24	16.1	7.9	10.2	11.0
Aged 55-64	16.4	12.5	12.5	13.3

## Foreign-born population in Japan (thousands)

Year	China-born	Total Foreign-born
1995	223	1362
2000	336	1686
2005	520	2012

Data provided by Masataka Nakagawa

## The future problem for Japan and China

- With sustained low fertility, the demographic bonus rapidly transforms to a **demographic onus** (Naohiro Ogawa).