Fertility Prospects in China

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Issue of Fertility Estimation

- WPP 2009: 1.77 (China)
- From “official estimate”
- NPFPC versus NBS
- Review the trend since 1990s
- Explain reasons behind
- Discuss the implications
Fertility Trend in China

- 1950s: Women’s emancipation
- 1970s: “Later, Sparser, Fewer”
- TFR from 5.81 (1970) to 2.72 (1978)
- 1980: Open Letter for one child
- Early 1990s: below replacement
- Now: about 1.5, among the lowest
Total Fertility Rate in China: 1950 - 2008


Total Fertility Rate
Evolution of Fertility Policy in China

- Resistance to one-child policy
- Compromise by exceptions in mid-1980s
- Localization of policy in the 1990s
- Three groups for two children:
  - First child is a girl in most rural areas
  - Member of ethnic minorities
  - Two-child policy experiment areas
China’s Current Fertility Policy

- Diversity in policy
- National policy fertility: 1.47
- Pop under “1.5” policy: 53%
- Family finally with 1 child: 63%
Issue of Underreporting

- Economic and social liberalization
- Continue draconian birth control
- Concern of births underreporting
Births Underreporting

- 1992 survey: TFR at 1.52
- Raise serious questions
  - Low development level
  - Fertility stagnated in the 1980s
  - Tighten-up in implementation
Retrospect Examinations of TFR in 1992

- 1997 fertility survey: 1.57
- 2001 fertility survey: 1.59
- 2000 census (NBS & EWC): 1.67
- 2000 census (Guo): 1.68
- Real decline to below replacement
- Even taking account of underreporting
Fertility Decline in China

- 1970s: sustained rapid decline from 6
- 1980s: fluctuated around 2.5
- 1990s: further decline to well below 2.1
Fertility Estimates by Different Sources

- NBS censuses and annual surveys
- Retherford et al: 1990 and 2000 censuses
- Guo: 2000 census, 2005 mini-census
- Cai, Scharping, Zhai-Chen: school enrollment
Fertility Trends in China, 1980-2008 based on Various Sources

- NBS Surveys
- 1992 Survey
- 2001 Survey
- 2006 Survey
- Guo 2008
- 1988 Survey
- 1997 Survey
- 2001 Survey
- Cai 2009 (Upper limit)
- NBS & EWC 2007
- Scharping 2005 (Upper Limit)
- Guo 2004
- Zhai & Chen 2005 (Upper Limit)
Higher estimate by school enrollment data: due to over estimate induced from economic incentives, increasing migration, change in education system and age structure

Upward result in 2006 survey: due to under-sampling of young-unmarried
Fertility Estimate by Different Methods

- Around 1.6 in 2000 (Zhang-Zhao)
- 1.47 in 1997-2000 (Retherford et al.)
- 1.5-1.6 in the 1990s (Cai)
- Similar conclusion: Guo, Guo-Chen, Morgan-Guo-Hayford
Current Fertility in China

- Studies: around 1.5
- NBS: 1.6
- NPFPC: 1.7-1.8
- Why is fertility so low?
Reasons to Be So Low

- Fertility policy - not always work
- Social change - to encourage fewer
- Tempo effect – period lower than cohort
- Changes in attitude and behavior
- Modern contraceptive services
Fertility Intention and Behavior

- Jiangsu Study: 6 counties, 525 million
  - Choose one: 57%
  - Choose two: 42%
  - Average ideal: 1.44
- 2006 National survey: 1.73
Fertility Intention and Behavior

Among allowed for two in Jiangsu Study

- Have two: 10%
- Consider for two: 1/3
- One as ideal: 55%
- Average ideal: 1.46
Since mid-1980s, a pop of 8.4 million
Reasons for Limiting to One Child

- Uncertain future
- Cost of having children
- Unfriendly environment to reproduction
- Rising demand for “human capital”
- Retrenchment of public support
- Concentrate for few but successful
Low Fertility Proximate Determinants

- Relatively low “unwanted fertility”
- Son preference via sex-selective abortion
- Infecundity and sub-fecundity
- Delayed marriage and childbearing
Mean Age at First Marriage by Sex, China 1970-2000
Implication of Low Fertility

Population aging:

- By 2005, age 60+: 11%, 144 million
- “Get old before get rich”

By mid-century

- 1/3 population aged 60+
- > 100 million aged 80+
- Less than 2 labors support 1 elder
Population Structure of China, 2000 (Shaded) and 2050

Population in 00,000
Implication of Population Aging

- Children for elderly support: unfeasible
- Youths migrate to cities
- Rural aging is higher than urban
- More than an issue of elderly care
- Overall transformation of society
- Reconstruction of social structure
Implication of Low Fertility

Fragile families:

- Single children: 160 million
- Over 1/3 households with one child
- 50% women 60+ with one child
- Tragedies seen in 2008 earthquake
- Fragility of the family system
Implication of Low Fertility

Population Decline:

- Intrinsic growth rate: 20 ‰ (mid-1970s) to -20 ‰ (2005)
- From doubling in 30 years to halving in 30 years
- Births reached historically low in 2006
- Sharp drop in births in next decades
Reported and Projected Number of Births, China 1980-2050

- 1987, 25.3 million
- 2000, 17.7 million
- 2006, 15.9 million
- 2011, 17.3 million

Births in Million

Year

Population Decline:

• Continue to decline for 50+ years
• Reduce by 220 to 300 million
• Median age to 50 by mid-century
• Reduce size by half at end-century
Implication of Low Fertility

Labor shortage:

- Economic boom due to large labor force
- Demographic dividend: 15-25% growth
- Sharp decline in labor supply
  - From 966 million in late 2020s to 761 million in mid-century
  - Reduce 100 million per decade, 10 million per year
Implication of Low Fertility

Labor shortage:

- From “abundant supply” to “limited surplus”
- Young labor aged 20 to 24
  - Recently educated, more innovative, and active consumers
- Reduce from 125 million in 2010 to only 68 million in 2020
Projected Trends in Young Labor Force, China 2000-2050

- **2009**: 14.9%
- **2020**: 8.3%
- **2046**: 8.7%
- **2050**: 54 million

- **2010**: 125 million

- Labor force in 100 million
- Proportion
- Year
Concluding Remarks

To assess fertility in China:

- Effect of government policy
- Possible underreporting of births
- Empirical studies by various scholars
- Using various methods and data sets
- Reach similar conclusion of around 1.5
Concluding Remarks

Reasons to be low:

• Market oriented economy
• Massive rural-urban migration
• Changing attitude and behavior
• Delayed marriage and childbearing
• High prevalence of contraceptive use
Concluding Remarks

Implication of low fertility:

• Too new to be fully addressed
• Certainly tremendous or revolutionary
• Future will tell what discussed is only the tip of the iceberg
• “Below replacement”: a new global demographic norm
End