Capturing the Demographic Dividend: Experience from South East Asian Countries

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A Look Back…

- East Asian "economic miracle" offers recent history's most compelling evidence of the Demographic Dividend
- Compared to Western Europe, the demographic transition in East Asia was very fast
  - Western Europe: ~150 years (started in mid-18th century)
  - East Asia: 50-75 years (second half of 20th century)

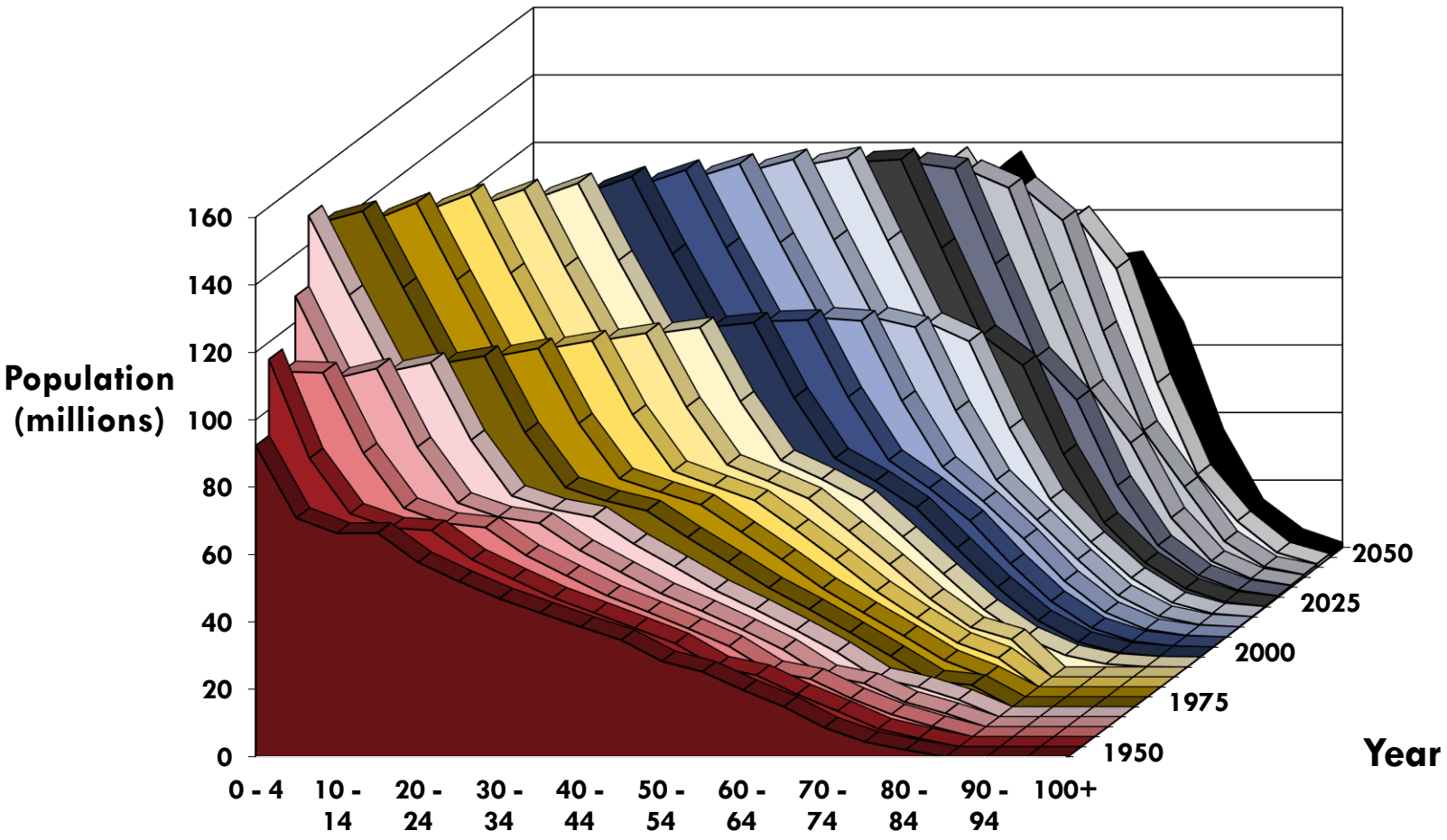
The Epidemiological Transition

- Following WWII, rapid population growth because of declining mortality but continued higher fertility
- Epidemiological transition in 1950s in East Asia
  - Public health improvements (sanitation, disease management)
  - Vaccinations, antibiotics (penicillin)
  - Improved nutrition and health behaviors
- Infant mortality in East Asia dropped from 181 per 1,000 in 1950 to 34 per 1,000 in 2000

Demographic Transition

- Fertility fell relatively rapidly following the decline in mortality
- Determinants of fertility decline
  - Proximate: Increase in age of marriage, FP/RH programs
  - Distal: Women's education, ideal family size, SES, FLFP
- East Asian countries at the forefront of this transition
- In 1950, average TFR in East Asia was around 6, dropped to slightly over replacement rate by 2000.
  - "Boom" Generation
- South and Southeast Asia are following East Asia
  - SE Asia almost as fast as E Asia, S Asia is more slow

Demographic Transition, E. Asia

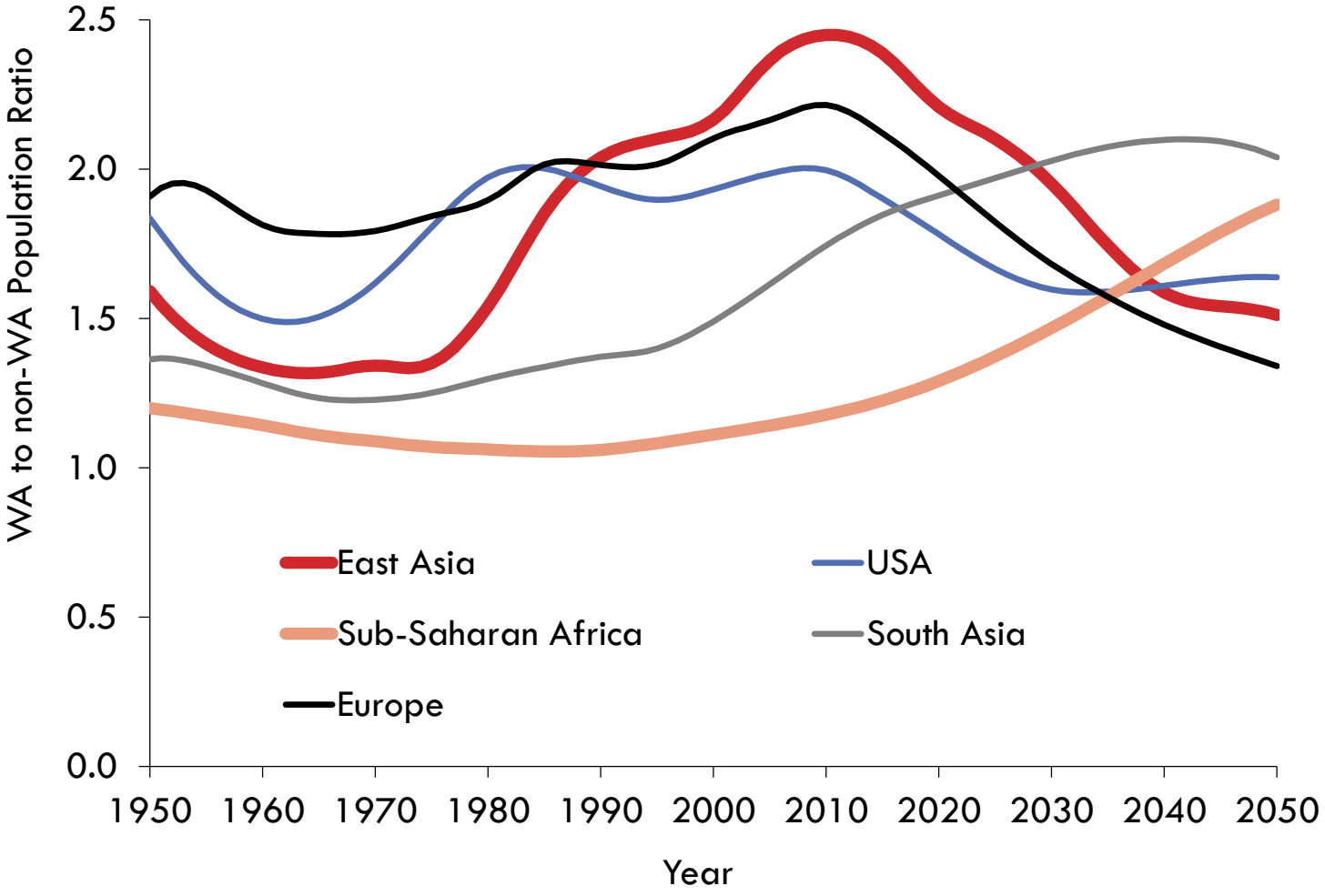


Source: Bloom, Canning, Sevilla (2001)

Importance of Age Structure

- Perhaps most important element of the DD
- Working-age population grew 4 times faster than dependents (youth and elderly) in East Asia between 1965 and 1990
- Two effects of age structure in East and SE Asia
    - First DD: Mechanical effect of the Demographic Transition (change in the support ratio), increase in labor supply (FLFP)
    - Second DD: Behavioral effect with increases in lifecycle savings and capital per worker from labor and asset accumulation
- Large potential for productivity, labor force participation, and economic activity

WA to non-WA Population Ratio



Source: Bloom, Canning, Sevilla (2001)

Harnessing the DD in E. Asia

- Taking advantage of the "window of opportunity" for economic growth from the favorable support ratio
- Policies and factors that allowed East Asia to take advantage:
  - Human capital investment: secondary education, health (especially MCH, FP/RH)
  - Productive employment of working-age population
  - Increase in foreign direct investment
  - Flexibility in labor markets and structural transformation
  - Export-oriented policies that promoted openness to trade
  - Increased savings (private HH savings, which finances growth)

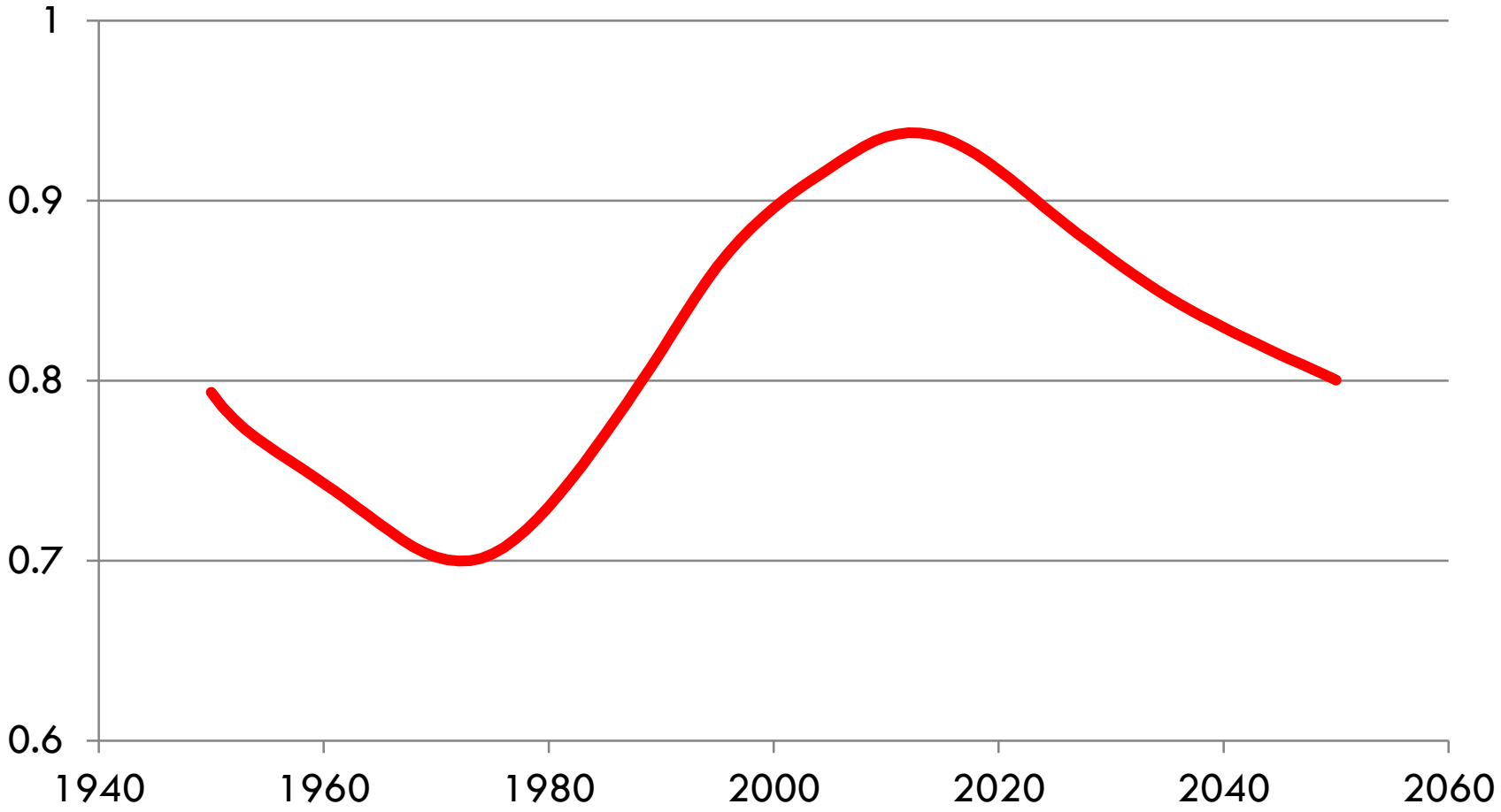
The Results

- Per capita income increased by more than 6 percent per year between 1965 and 1990 in East Asian countries
    - But not all of these increases came from the DD
- Gains in health (mortality reduction, LE), education (schooling), productivity (LFP, employment), and welfare

Future Challenges for East Asia:

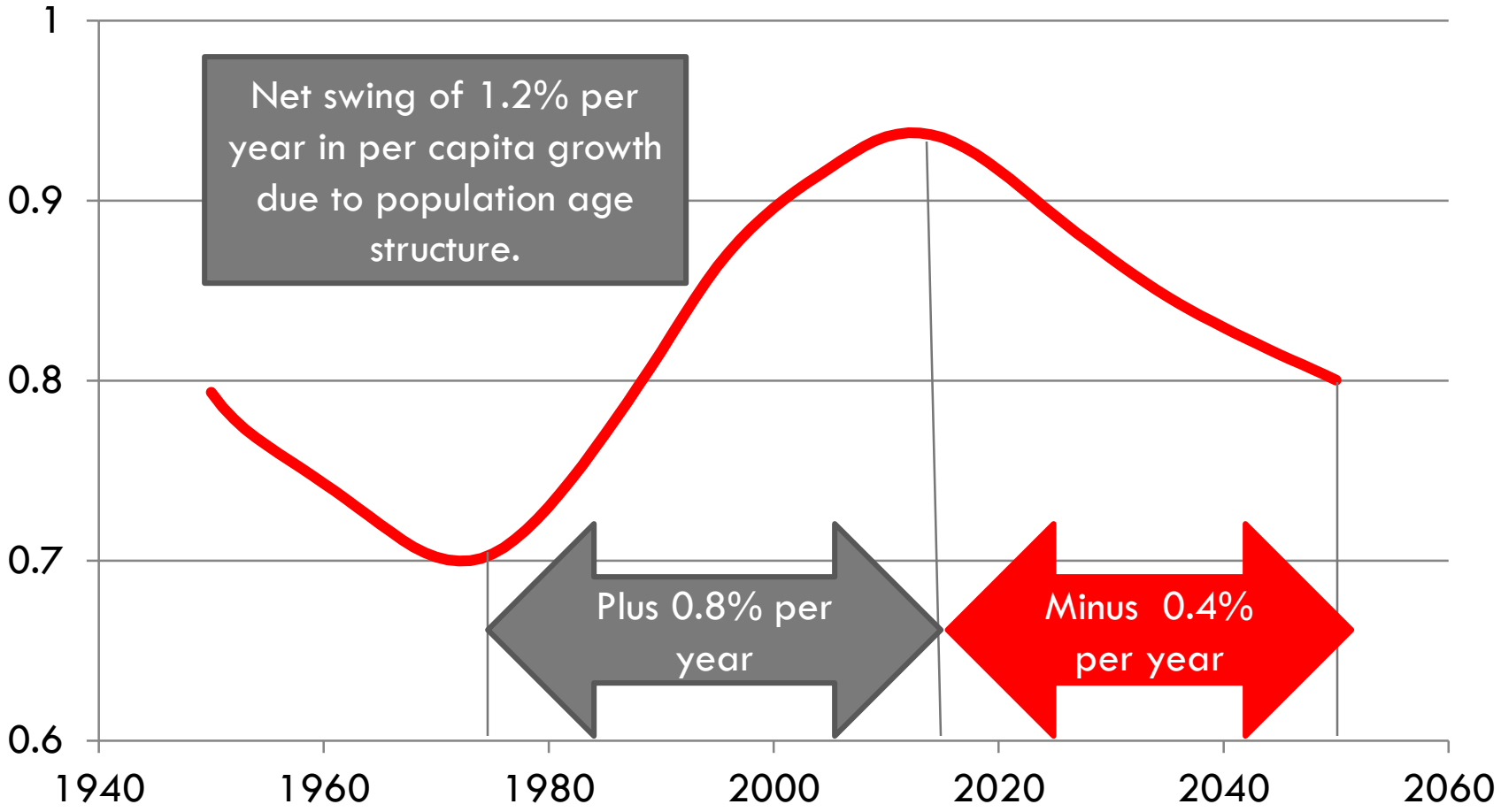
- Ensuring that policies and resources are in place to support population aging as the "window of opportunity" closes (as "boom" generation ages into retirement)
    - Social security and welfare systems
    - Old-age pension and retirement policies

The DD in China: Support Ratio



Source: Mason (2013)

The DD in China: Growth



Source: Mason (2013)

Conclusions

- Estimates of Demographic Dividend effect in East Asia: accounts for as much as one-third of "economic miracle" (estimates between 25 and 40 percent)
- Consequences of the Demographic Transition are powerful and predictable – demography allows the policymaker to make policies for tomorrow
- For South Asia and Sub-Saharan Africa, the DD and lessons from East Asia offer significant opportunities for growth
- Failure to take advantage of the Demographic Transition can lead to severe consequences

Thank You!

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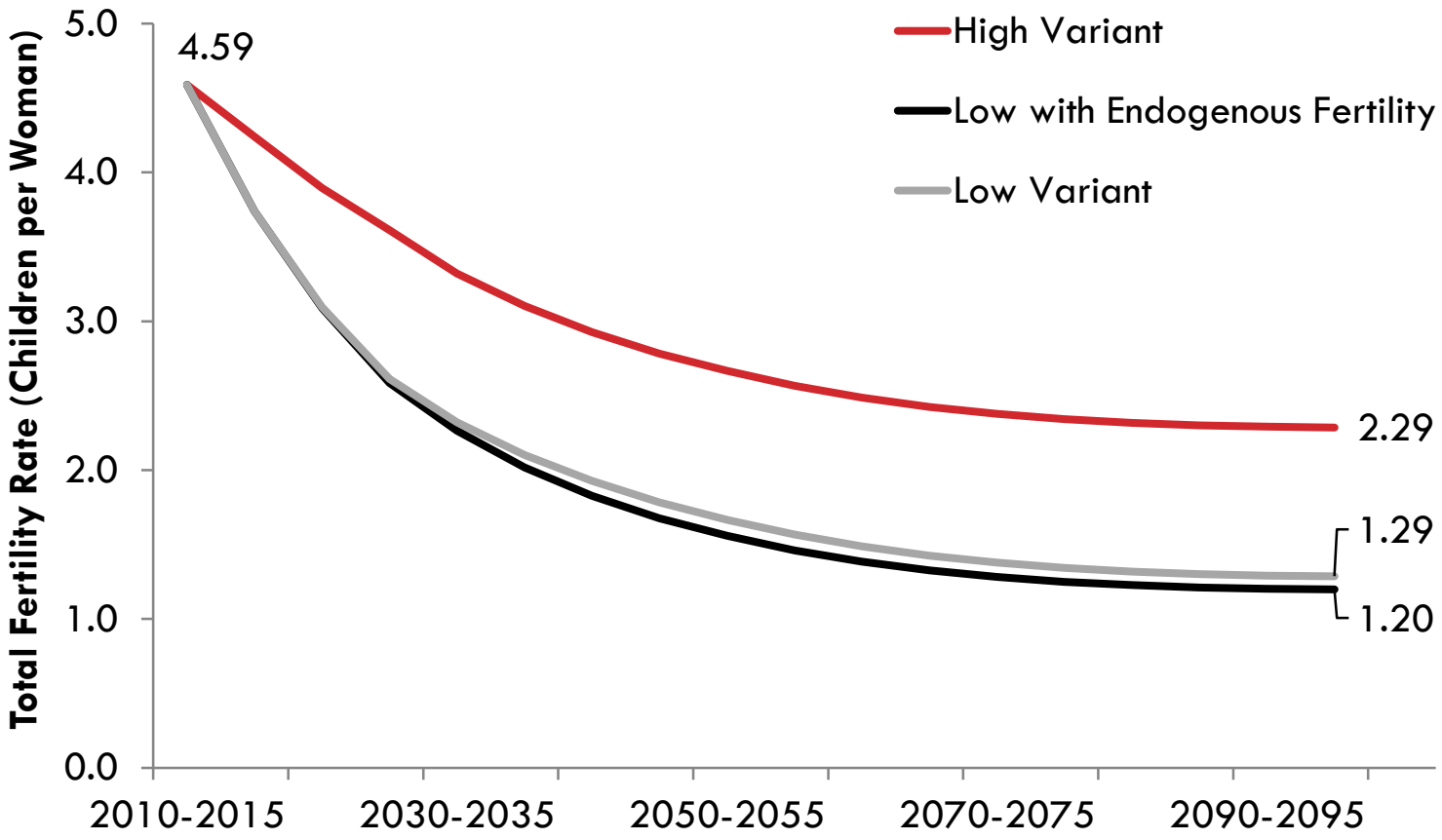
Appendix:
The CKW Model for Ethiopia

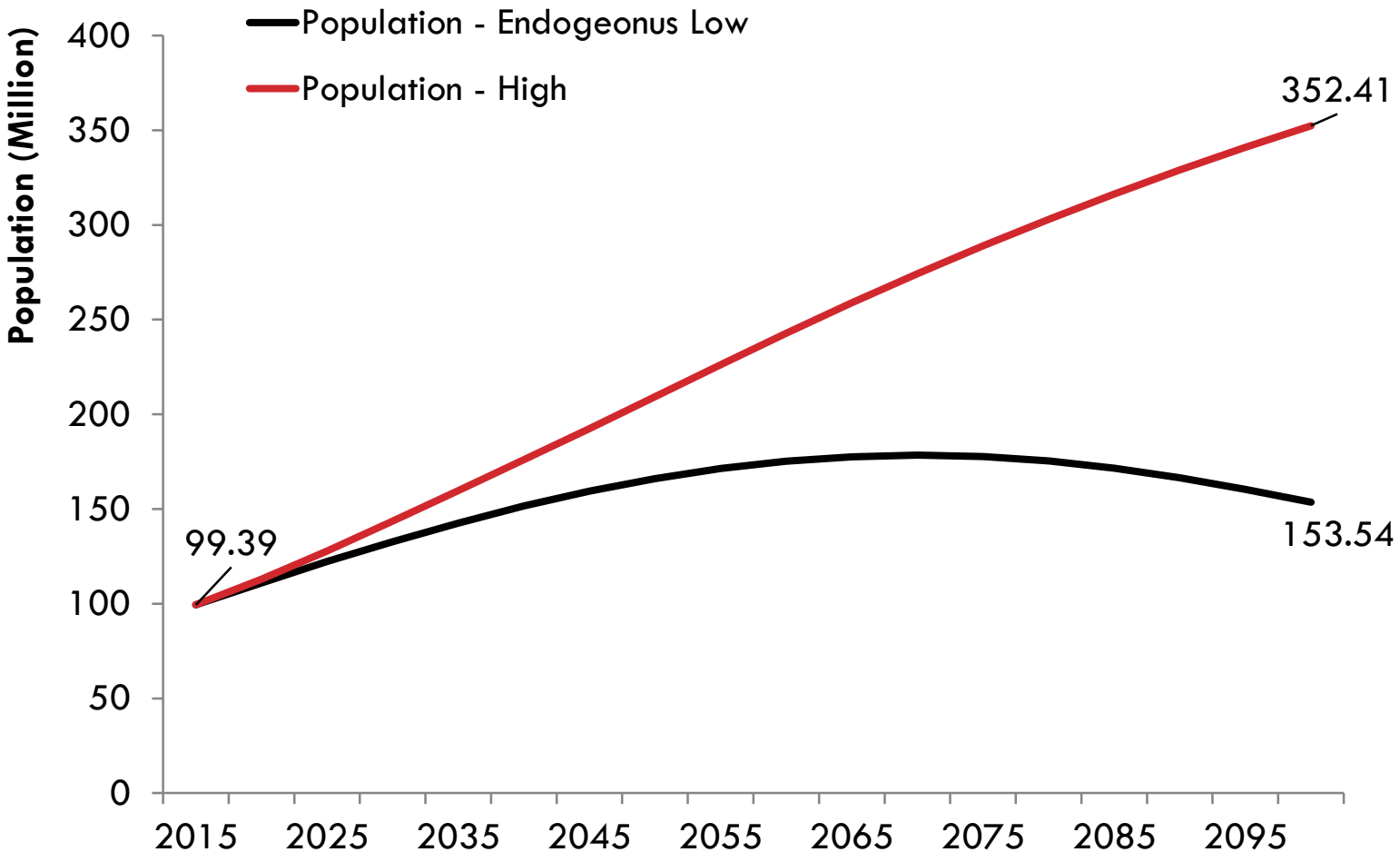
Data: Fertility Paths

- In following AWW 2013, calibrate to Ethiopia
- Two fertility scenarios:
  - "Baseline" high variant fertility: Decrease in TFR from 4.59 in 2005 to 2.29 by 2100
  - "Alternative" low variant: Decrease in TFR to 1.29 children per woman by 2100
  - One birth difference simulates impact of a strong family planning intervention or program (e.g. Matlab, Navrongo)

Results: Fertility Paths



Results: Population



Results: Per-Capita Income