

# The demography and economics of the world's "youth bulge"

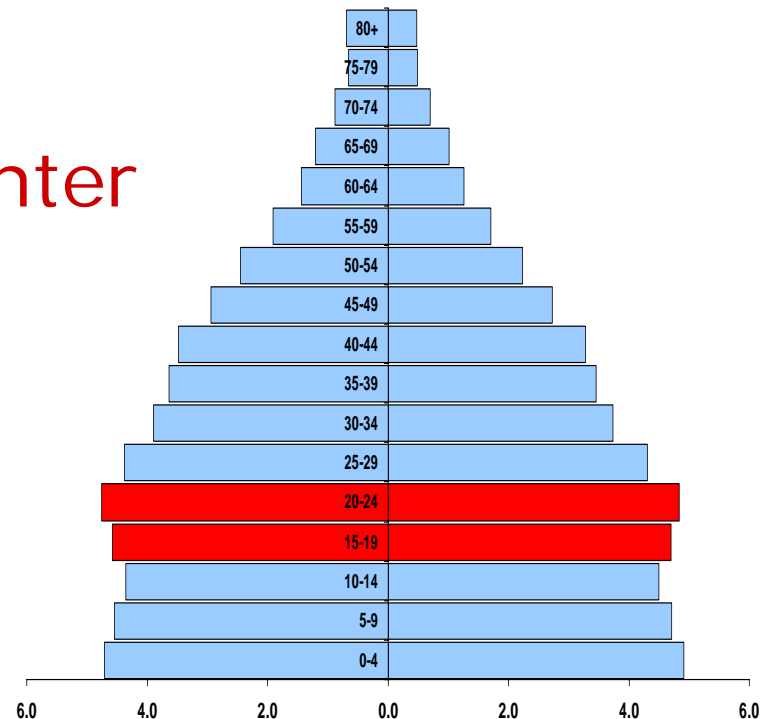
---

David Lam

Department of Economics  
and Population Studies Center  
University of Michigan

Woodrow Wilson Center

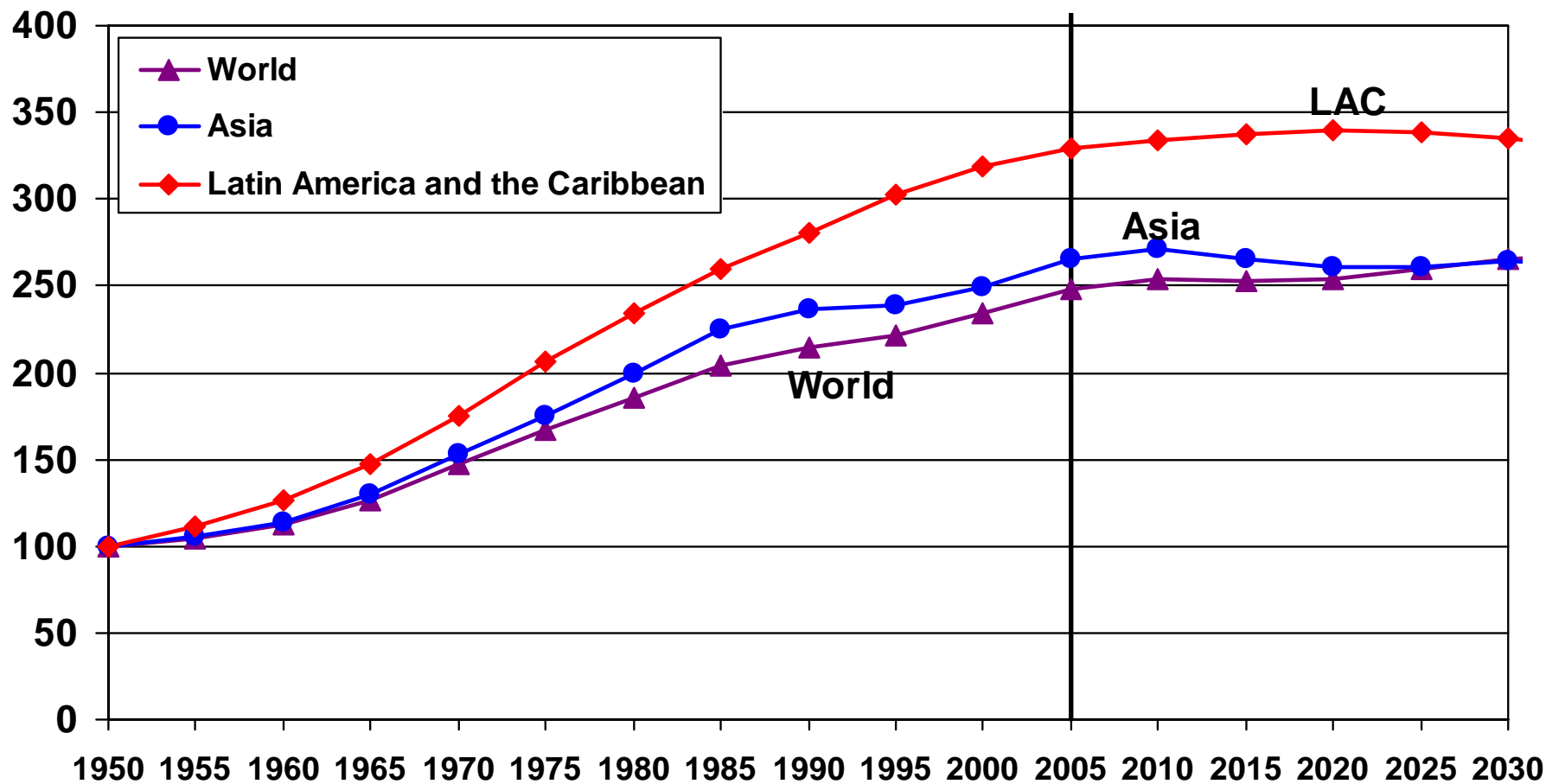
April 17, 2007



# Questions

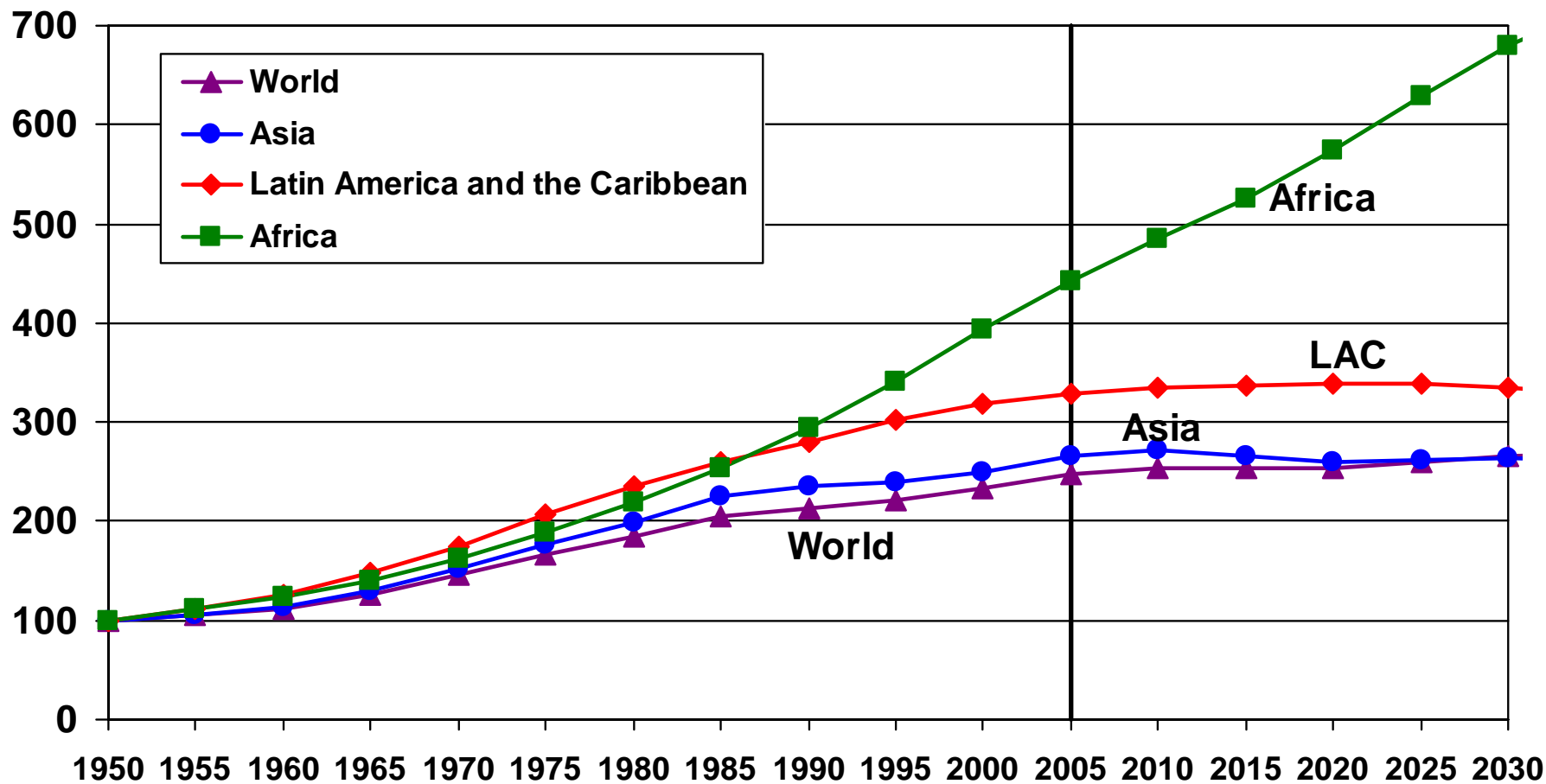
- Why is the world currently experiencing a “youth bulge”?
- What are the important demographic features of the youth population in developing countries?
  - Absolute size
  - Relative size
  - Growth rates
- What features of the demographic transition produced these features?
- What are the economic implications of this youth demography?

# Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

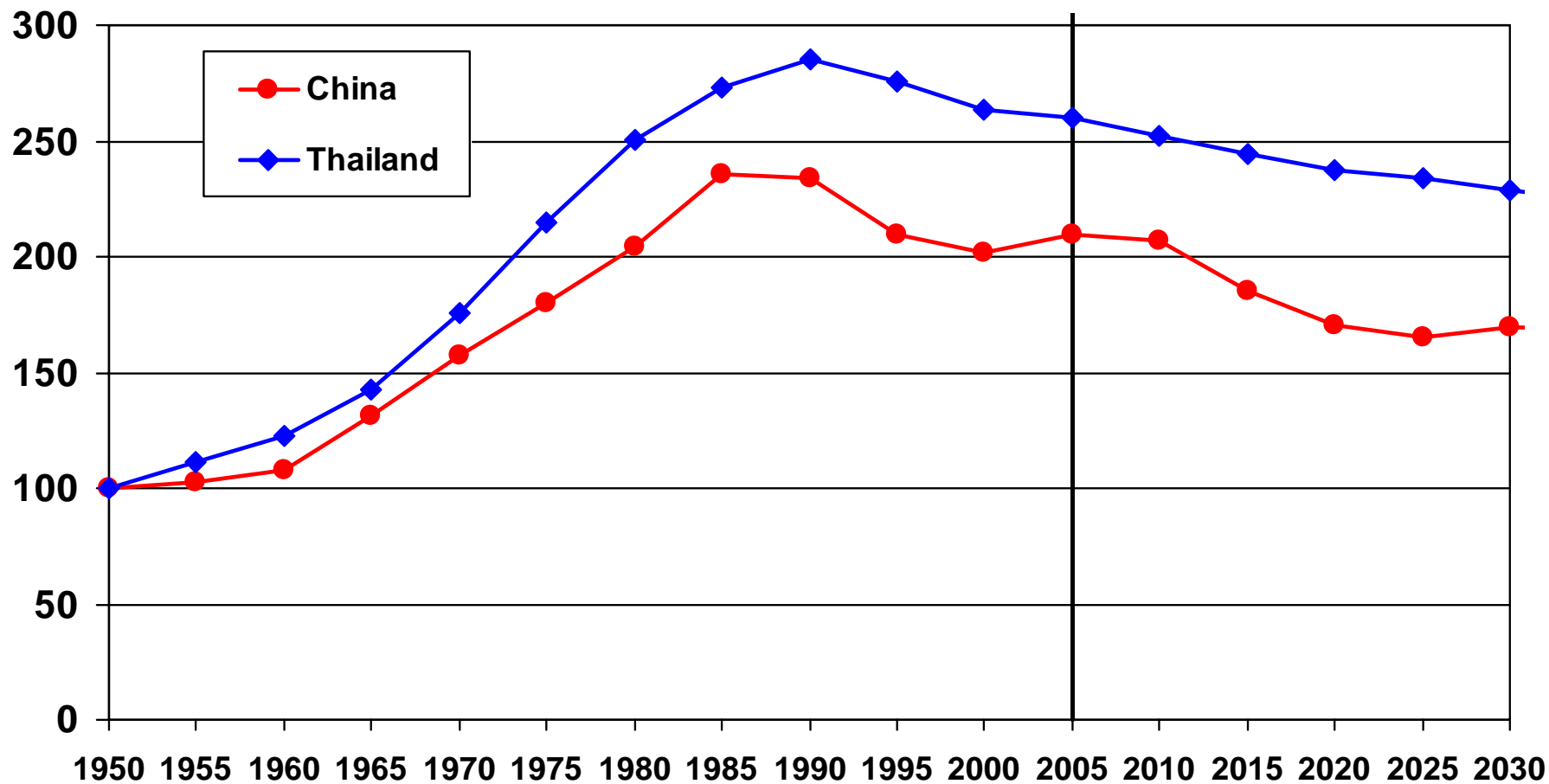
# Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

Some countries have had declining numbers of 12-24 year-olds for a decade or more

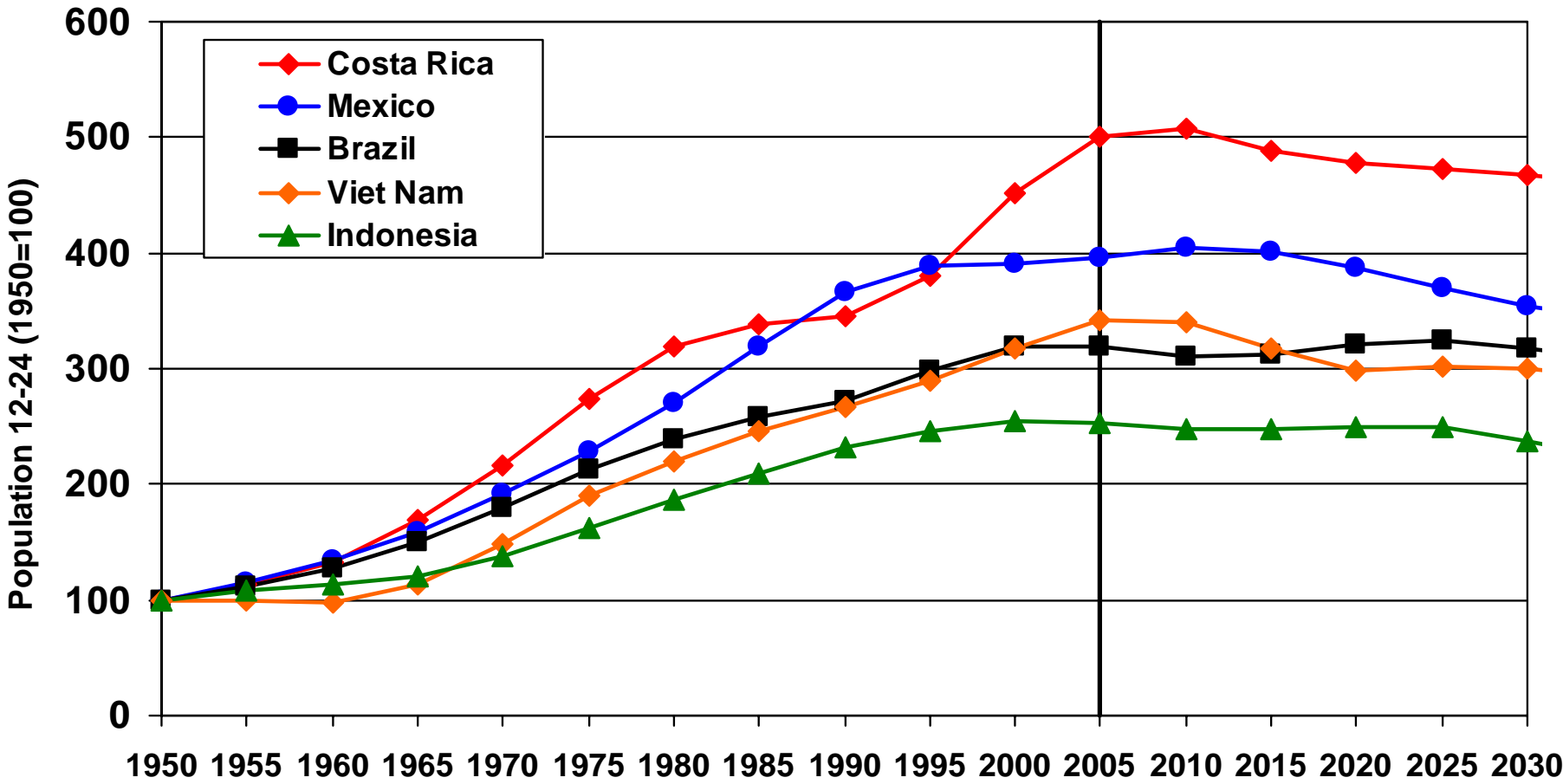
Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

# Countries with a peak in 12-24 population around 2005

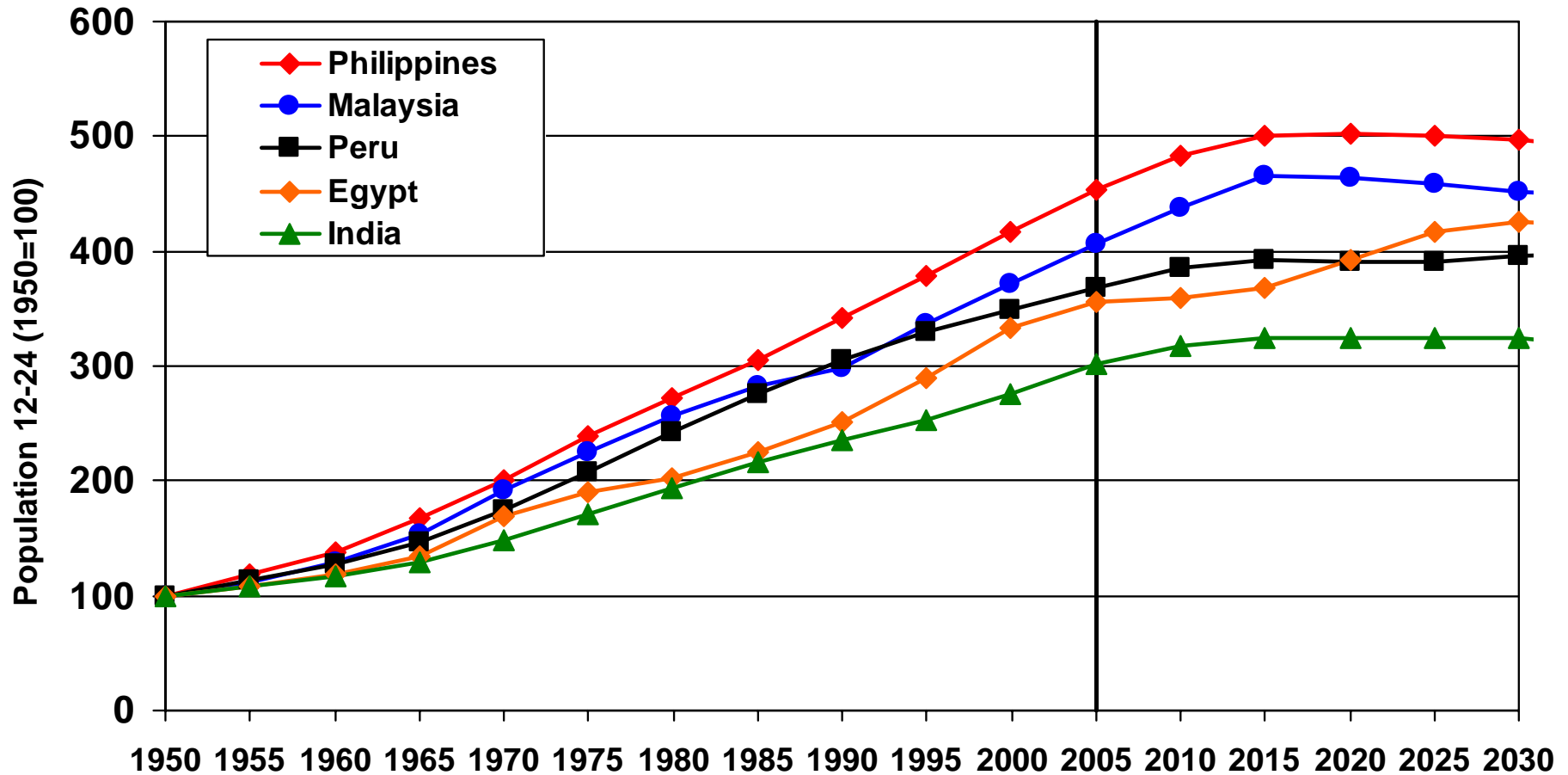
## Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

# Countries with a leveling off of 12-24 population around 2015

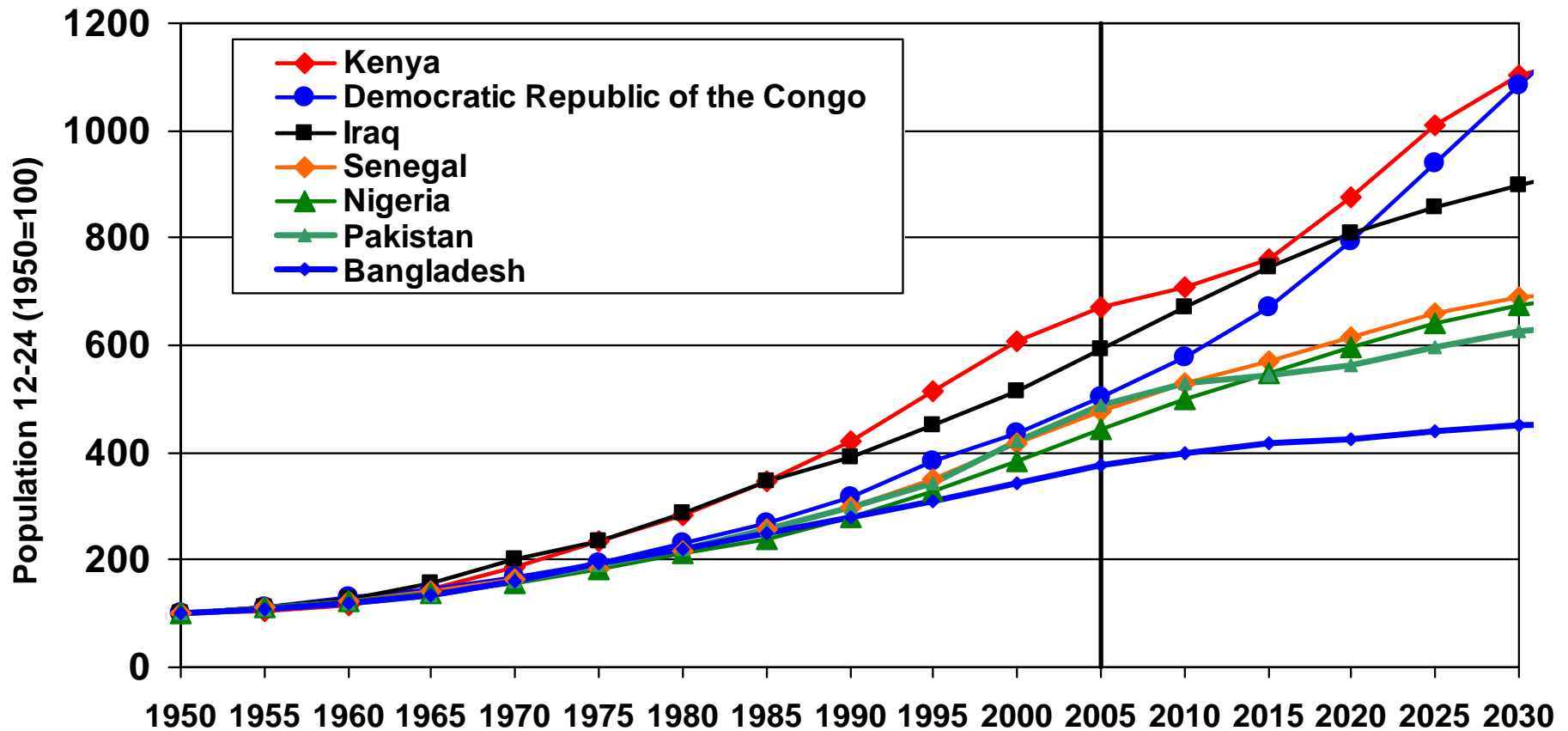
Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

# Countries that will have continued growth in 12-24 population for several decades

Population aged 12-24, 1950 to 2050 (1950=100)



Source: United Nations Estimates and Medium Variant Projections

# Why are current youth cohorts so large?

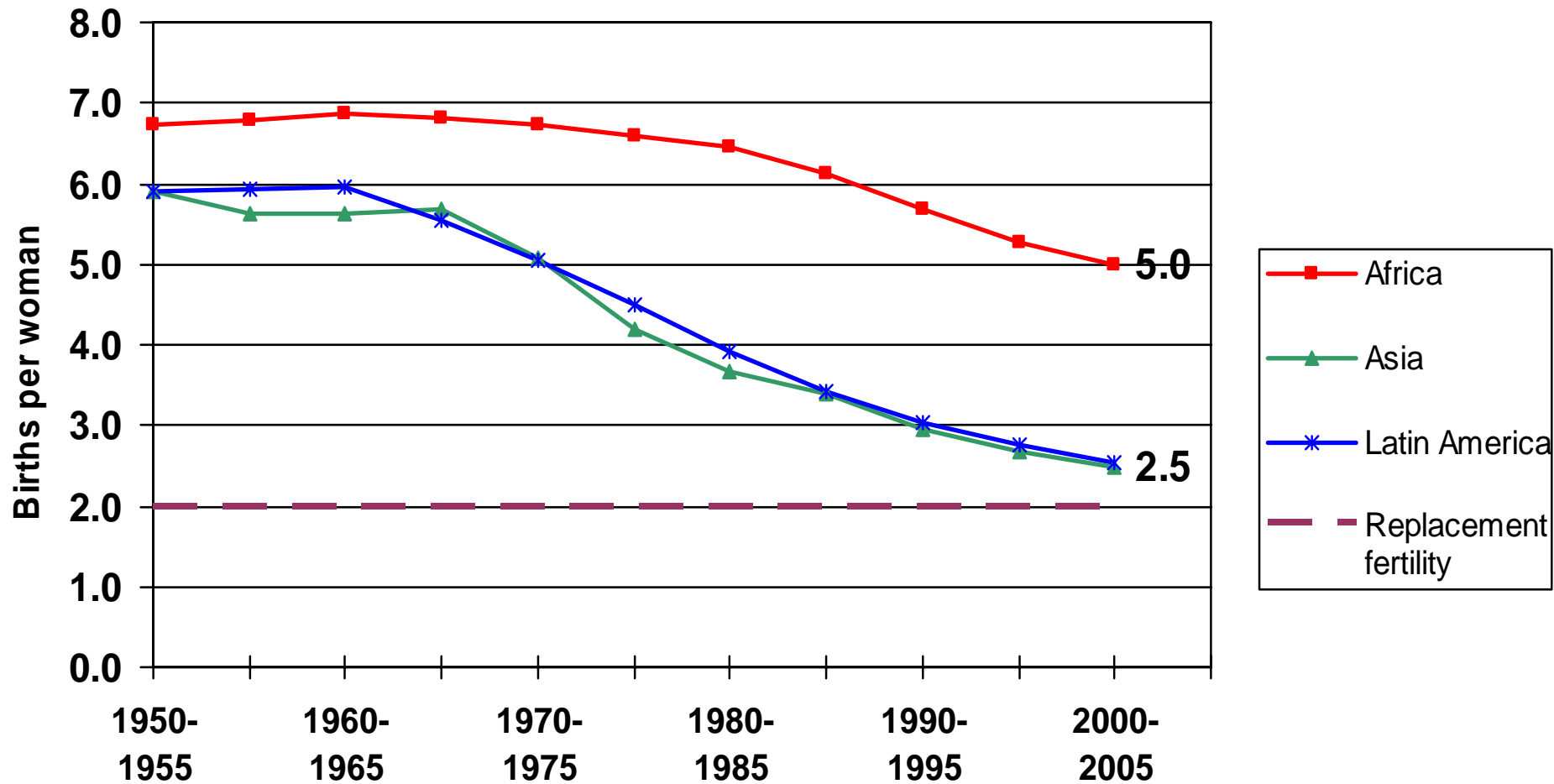
- Today's youth are the children of the "population explosion" generation.
- Improvements in infant and child survival caused rapid growth in size of surviving cohorts in 1950s and 1960s.
- This generated "population momentum" – rapid growth of the childbearing-age population 20-30 years later.

# Why current youth cohorts are so large – population momentum versus falling birthrates

- Rising numbers of childbearing-age women competed with declines in fertility to determine the size of birth cohorts.
- These competing forces produced peaks in the size of birth cohorts in many countries in the 1980s and 1990s. These large cohorts are the youth of today.
- Paradoxically, these large birth cohorts were actually born into small families relative to those of their parents

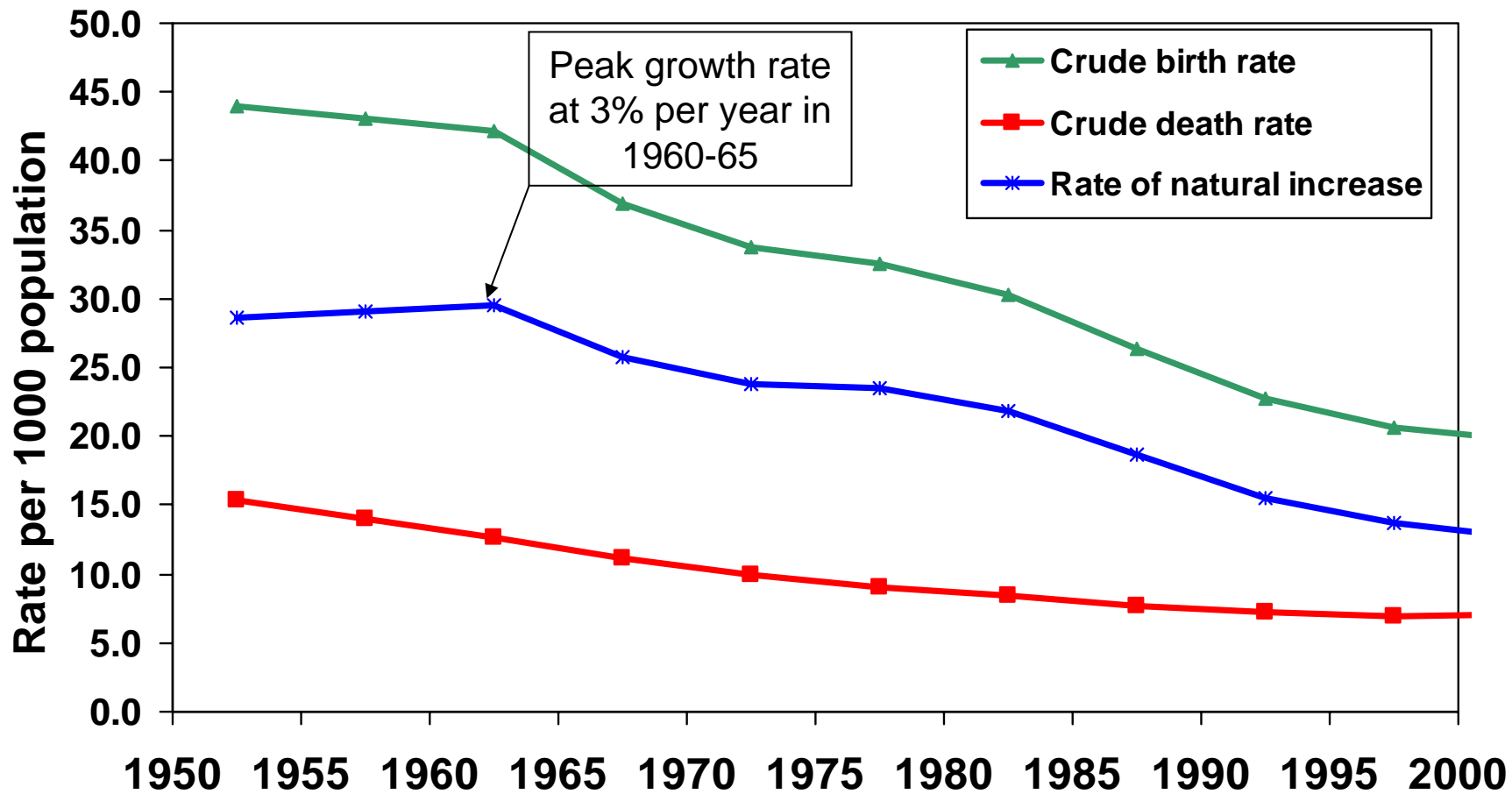
# Birth rates have declined rapidly in all regions

## Total Fertility Rate for World Regions, 1950-2005



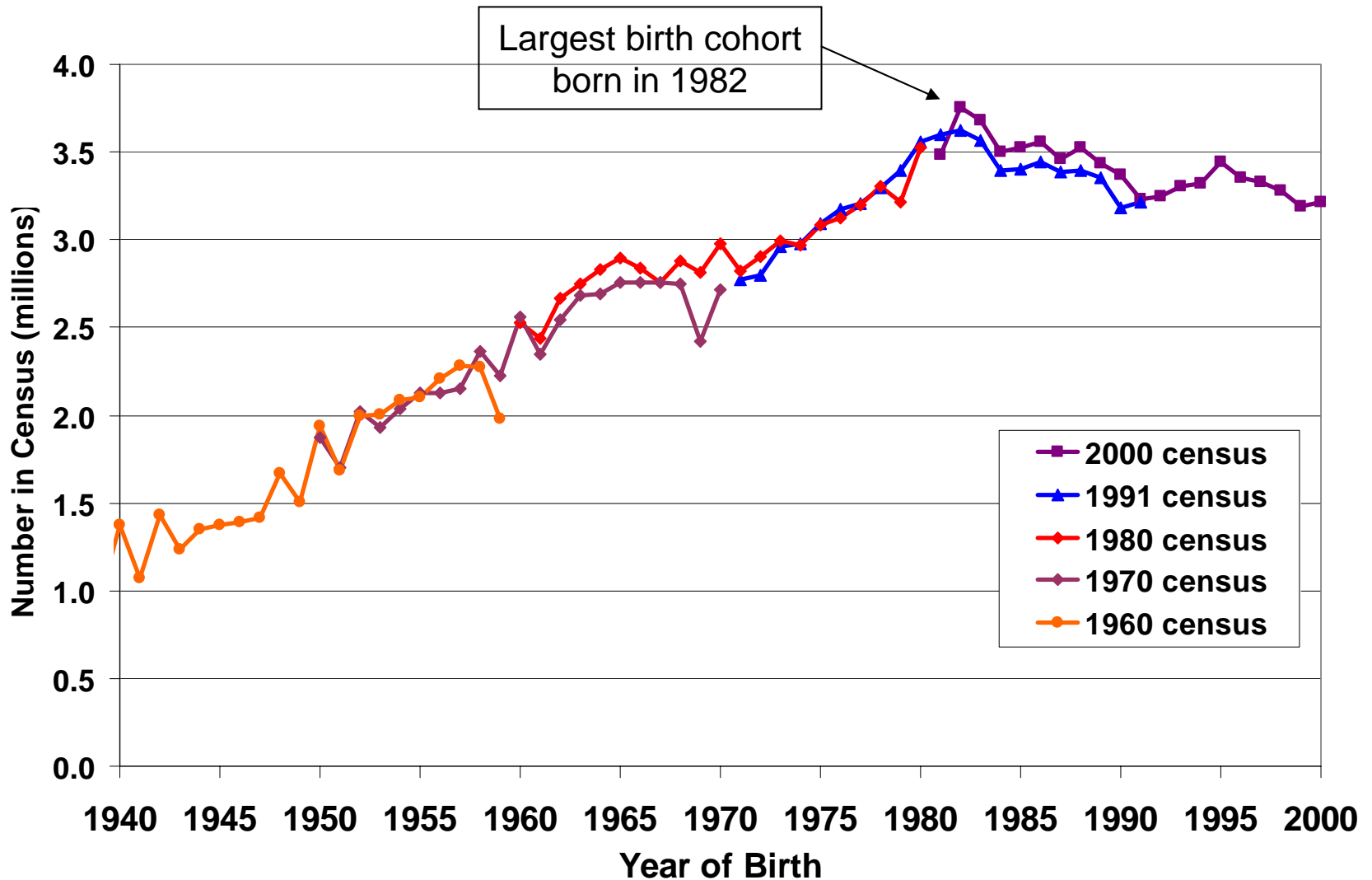
# The Demographic Transition in Brazil

## Crude Birth Rate, Crude Death Rate, and Crude Rate of Natural Increase, 1950-2000

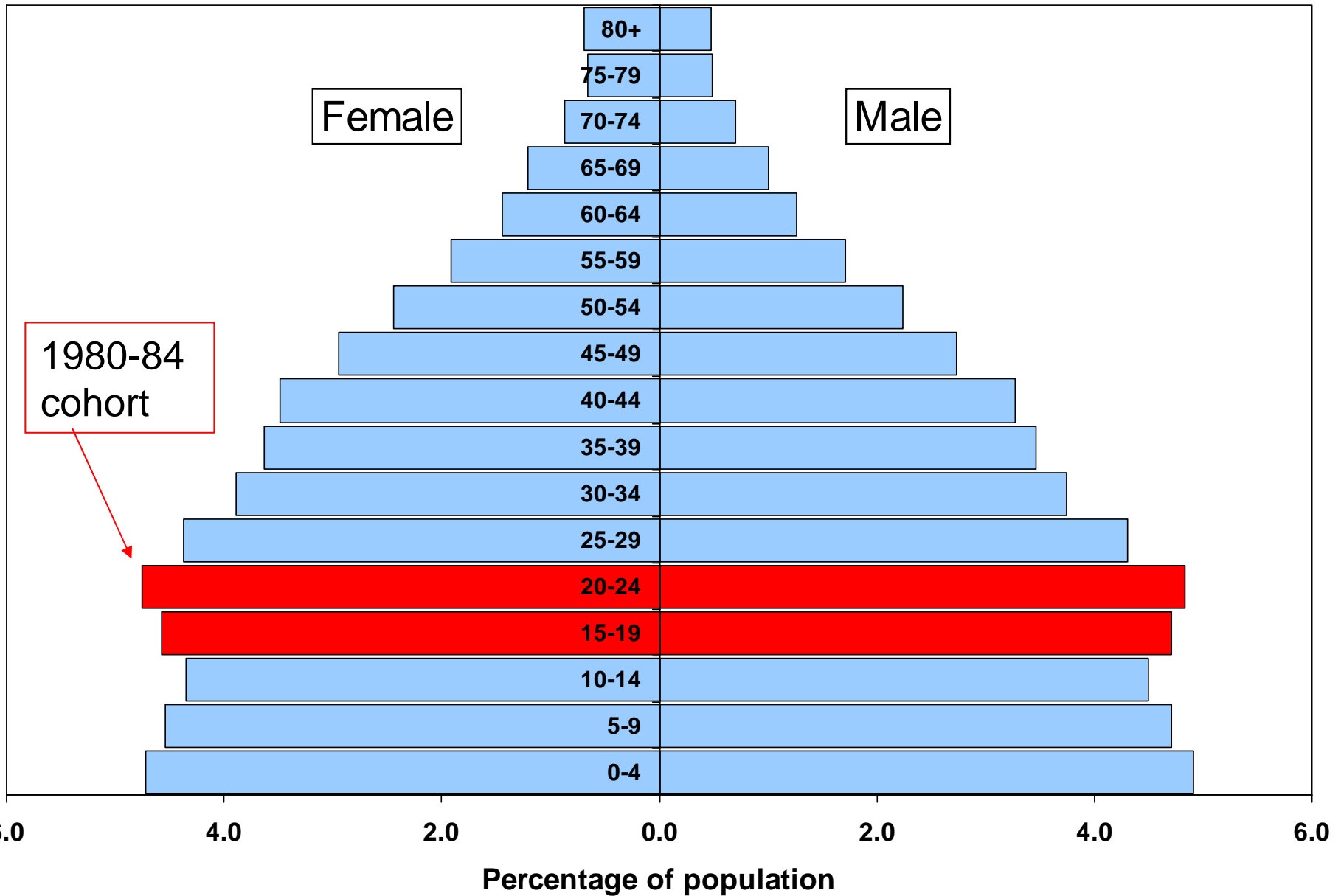


# Size of birth cohorts in Brazil

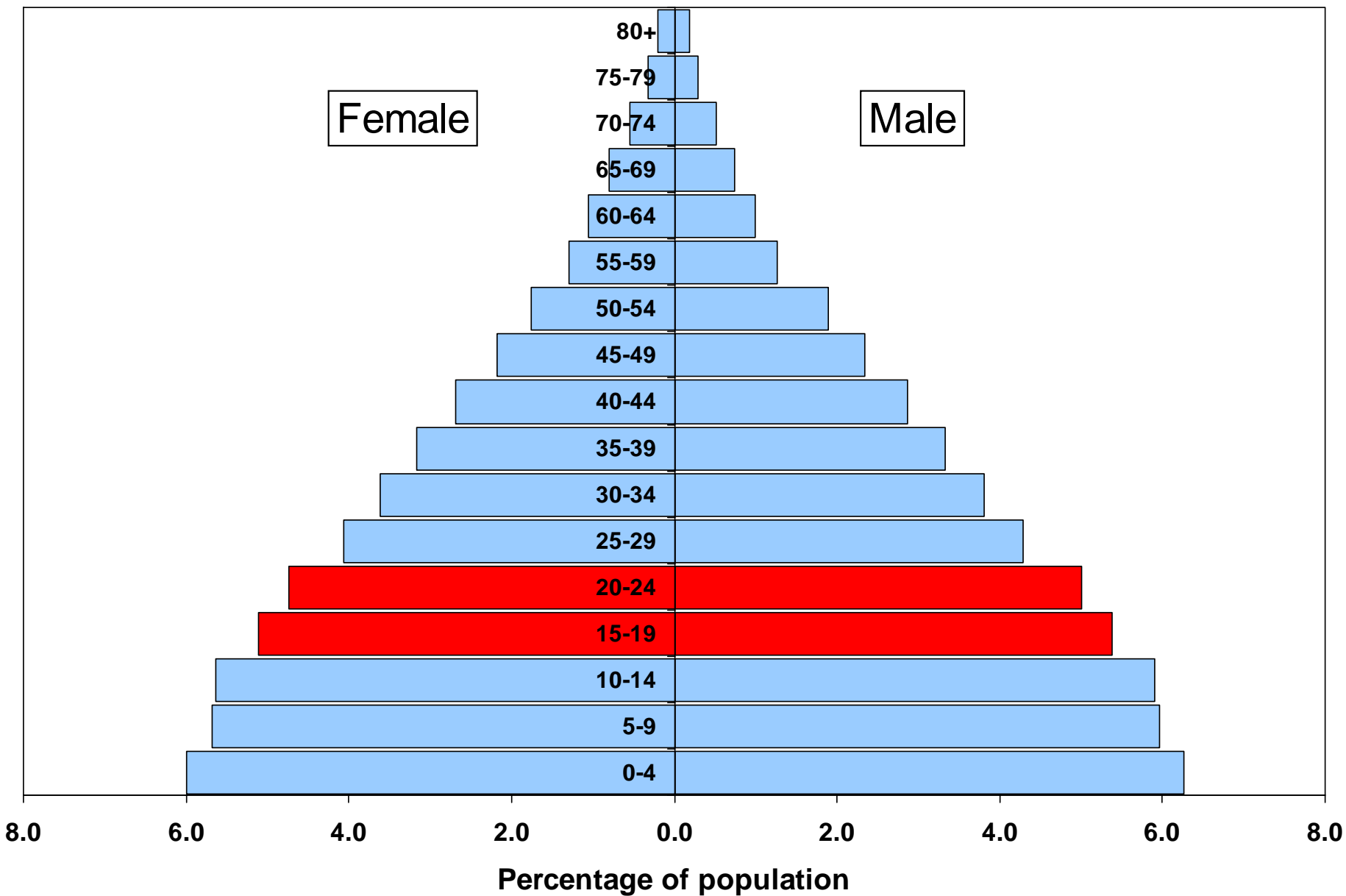
1960, 1970, 1980, 1991, and 2000 censuses



# Percentage Age Distribution, Brazil, 2005



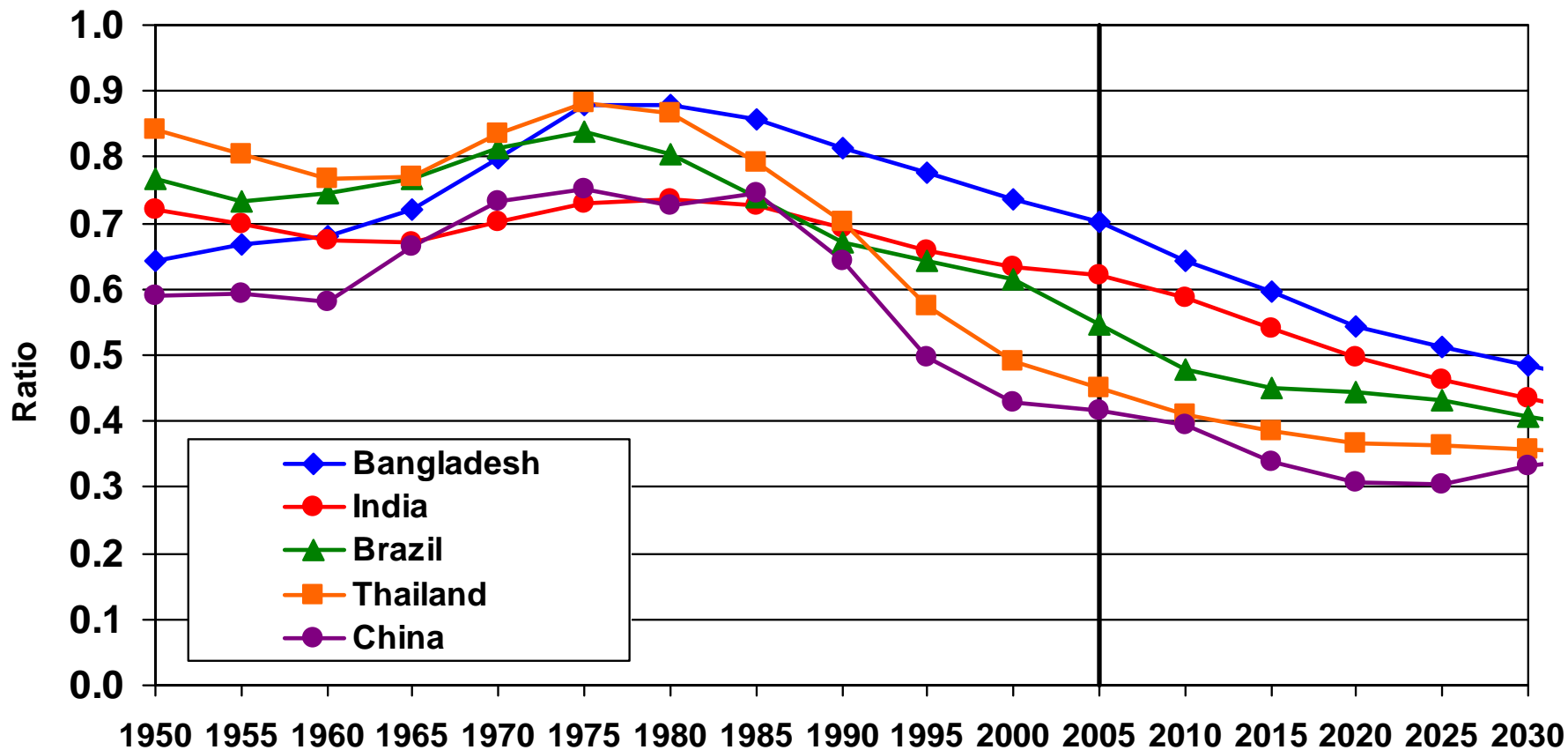
# Age Distribution, Bangladesh, 2005



# Economic implications of youth demography

- Which dimensions of youth demography are most important from an economic perspective?
- Absolute size
  - May be important if there are fixed factors of production, such as land
- Growth rate
  - May be important if there are fixed factors in short run, including physical capital, schools, health facilities
- Relative size
  - Size relative to other age groups may be important if there are resource transfers from other age groups to youth, and if youth compete with other age groups (e.g., children, elderly) for publicly provided services
  - Relative size may also be important if youth are substitutes or complements in production with other age groups (e.g., older adult workers).

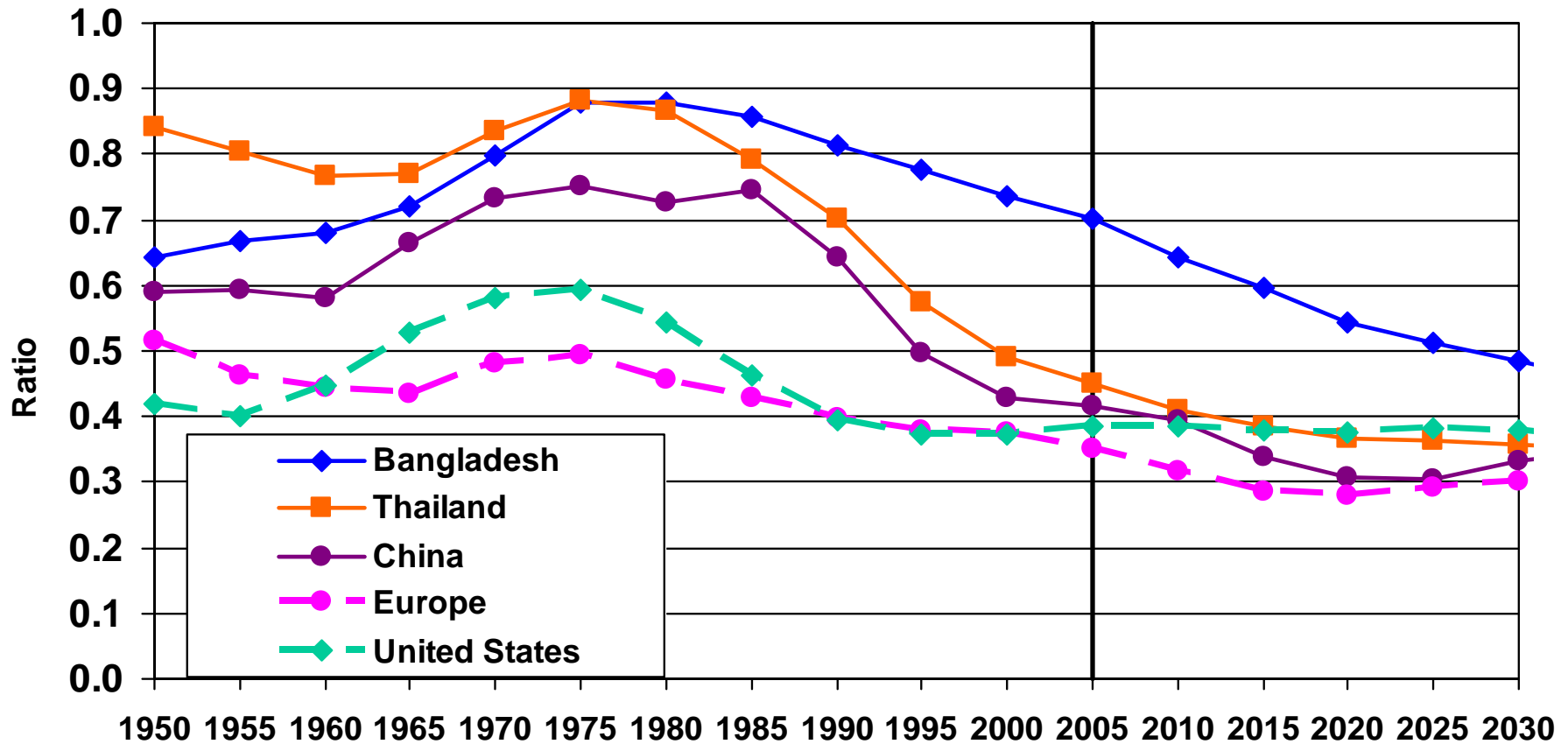
# Ratio of population 12-24 to population 25-59: many countries had peak around 1970-1980



Source: United Nations Estimates and Medium Variant Projections

# Comparisons to impact of the baby boom in United States and Europe

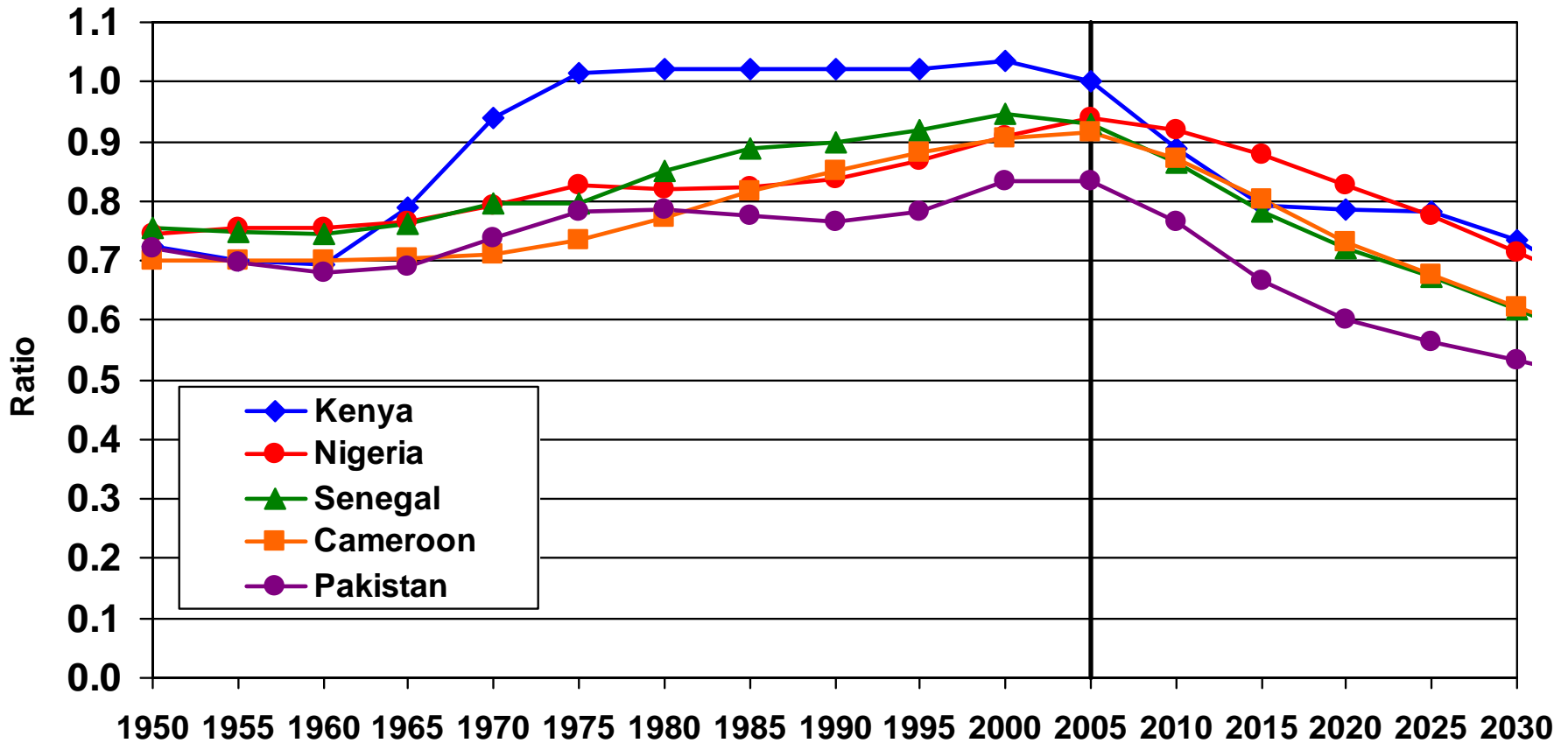
## Ratio of population 12-24 to population 25-59



Source: United Nations Estimates and Medium Variant Projections

Many late fertility decline countries are currently having peak in youth/adult ratio

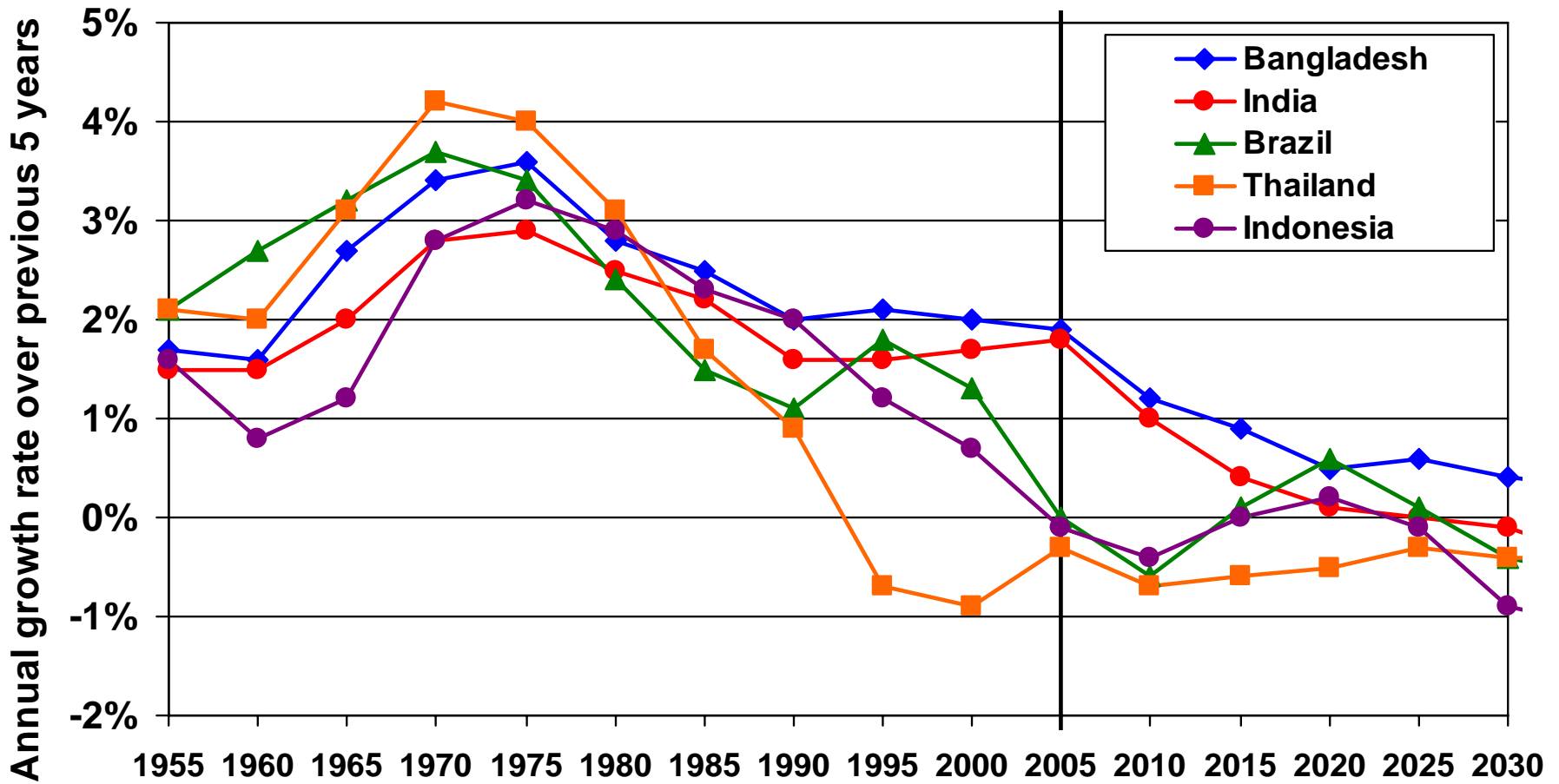
Ratio of population 12-24 to population 25-59



Source: United Nations Estimates and Medium Variant Projections

# Growth rate of youth population peaked in 1970s in many countries

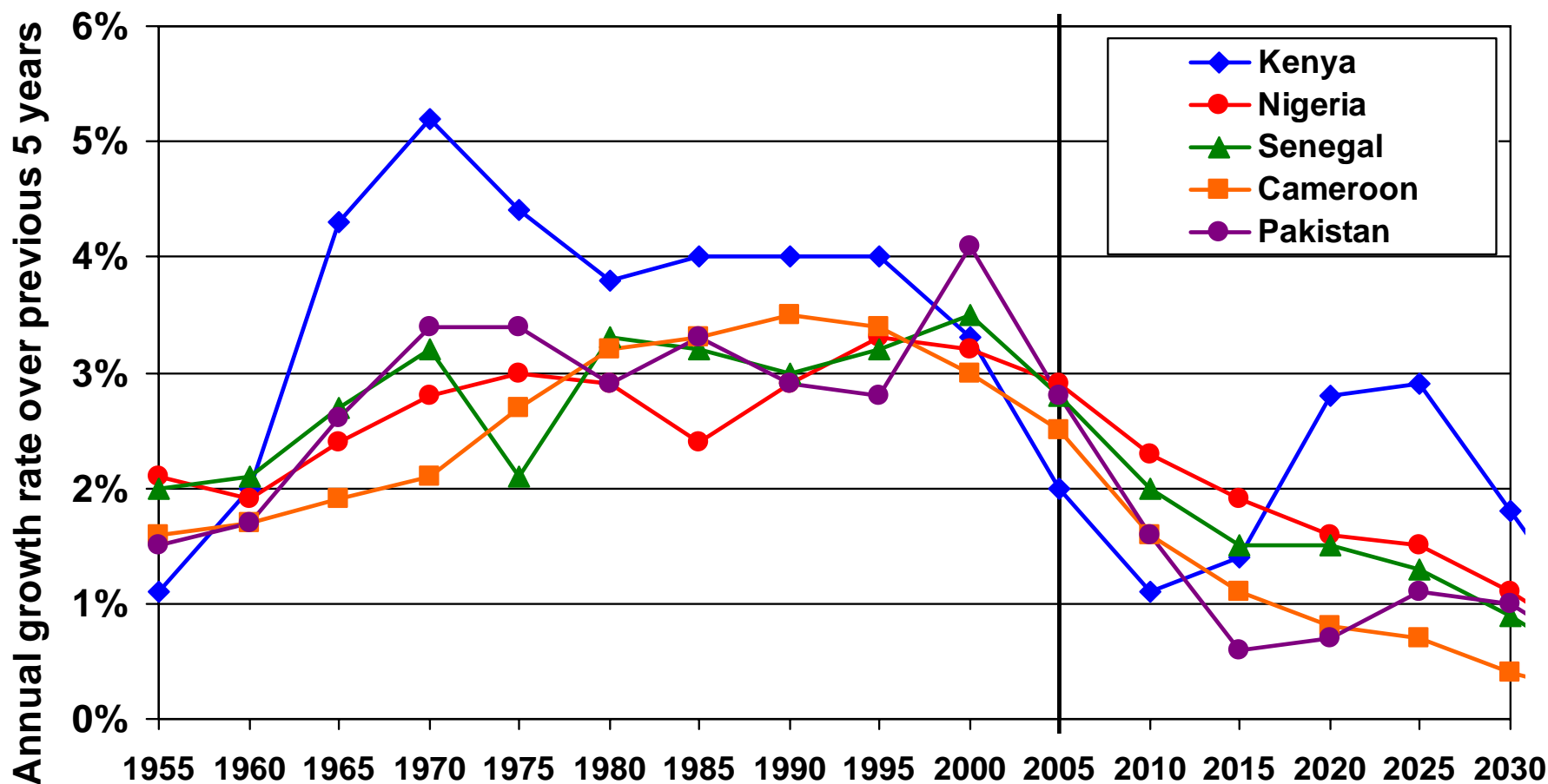
Growth rate of population aged 12-24, 1950 to 2050



Source: United Nations Estimates and Medium Variant Projections

# Growth rate of youth population peaked more recently in late fertility decline countries

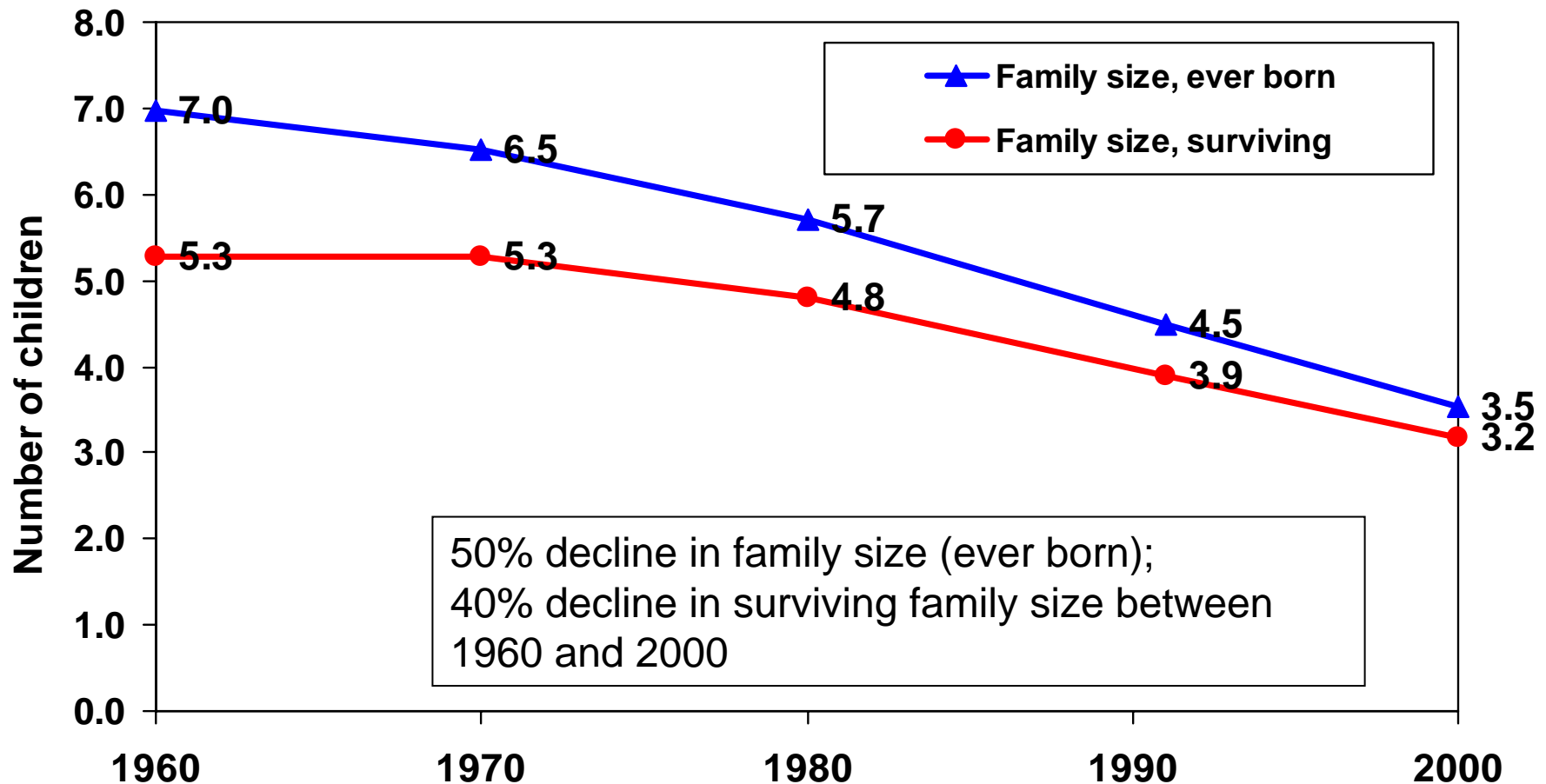
Growth rate of population aged 12-24, 1950 to 2050



Source: United Nations Estimates and Medium Variant Projections

Although current youth cohorts are large, these youth come from relatively small families

Family size of Brazilian youth age 12-14, 1960 to 2000



# Summary

- There are 1.5 billion 12-24 year-olds in the world, a historically unprecedented number
  - In most of Asia and Latin America this is the historic peak, with declines in coming decades
  - In Africa and South Asia the numbers will continue to grow for several more decades
- These large numbers of young people will generate pressure on schooling, youth labor markets, and provision of services
- Some positive trends offset these challenges
  - The growth rate of the youth population was much higher in the 1970s and 1980s
  - Most developing countries are benefiting from the demographic “window of opportunity” of falling dependency ratios
  - Today’s youth cohorts come from smaller families and have better educated parents than previous youth cohorts