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BLOOMBERG  
SCHOOL *of* PUBLIC HEALTH

# Theories of Fertility Decline

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# Objectives of the Lecture

- At the end of this lecture, students will be able to:
  - Describe recent trends in fertility worldwide
  - Define *demographic transition theory*
  - Define *ideational theory*
  - Identify other ideas about fertility decline
  - Delineate arguments about the need for programs to halt rapid population growth
  - Delineate arguments about the efficacy of family planning programs



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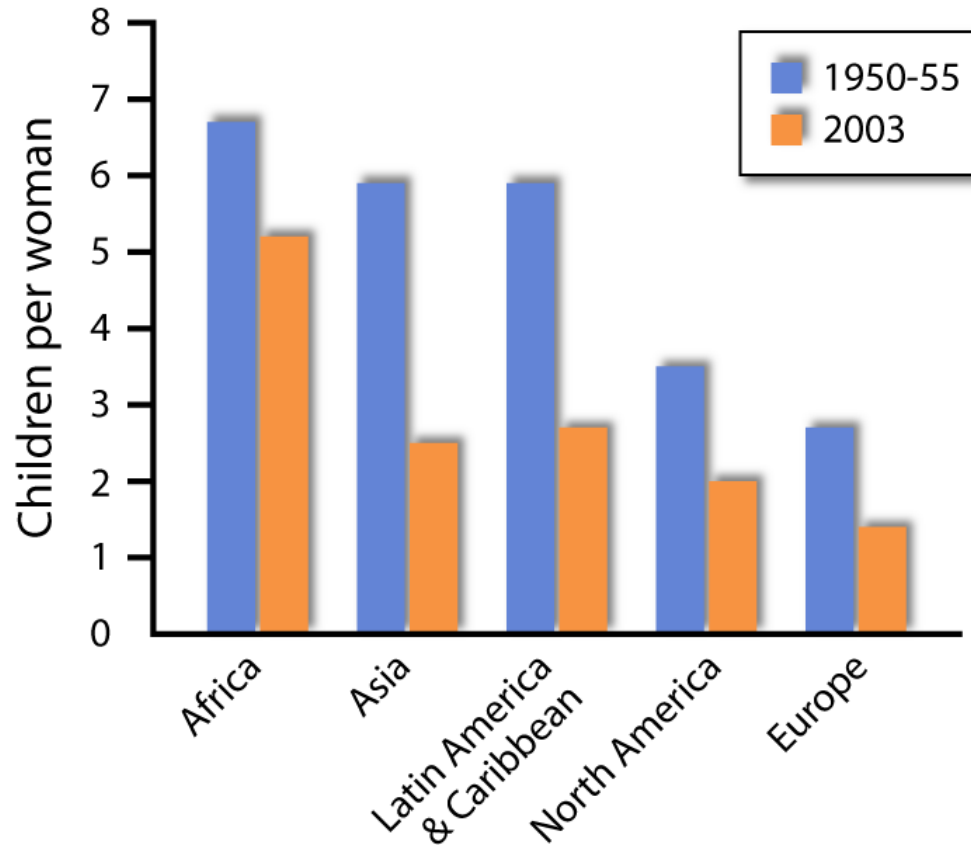
## Section A

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### World Fertility Trends

# Fertility Has Declined Virtually Everywhere

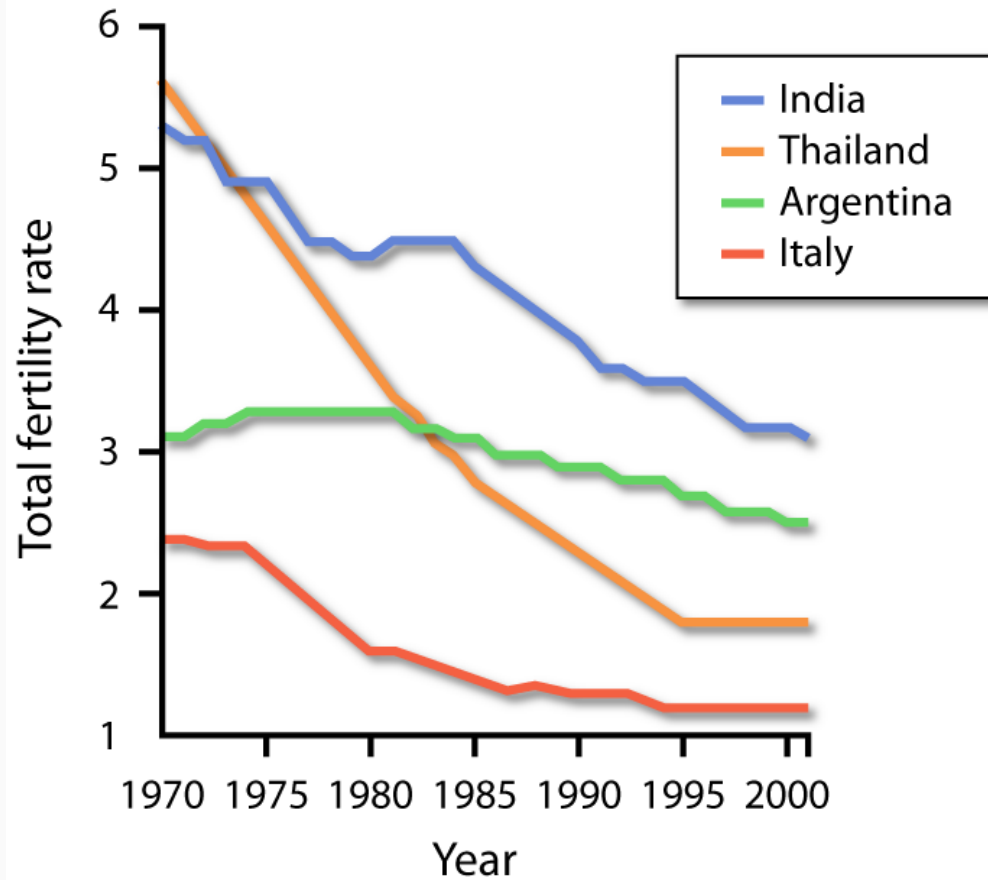
Fertility Levels in Major World Regions, 1950 & 2003



Adapted by CTLT from Population Reference Bureau Staff. 2004.  
"Transitions in World Population." Population Bulletin 59(1). Sources:  
UN Population Division, *World Population Prospects: The 2002 Revision*  
(2003); and C. Haub, *2003 World Population Data Sheet*.

# Not the Same Pattern or Degree of Decline Everywhere

Patterns of Fertility Decline, 1970 to 2001



Adapted by CTLT from Population Reference Bureau Staff. 2004.  
"Transitions in World Population." Population Bulletin 59(1).  
Sources: Registrar General of India; Instituto Nacional de Estadística (Argentina); Council of Europe; and Population Reference Bureau.



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## Section B

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### Demographic Transition Theory

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# Modernization Theory

- A body of scholarship that developed over the 1950s and 1960s to guide understanding about the process of economic development
  - Assumed that less developed countries would eventually look like Europe and the U.S.
  - Assumed that social and cultural institutions in Europe and the U.S. before economic development looked like those found in developing world at the time

# Changes Expected from Economic Development

- Family change
  - From extended households to nuclear households
    - ▶ Assumed that in historical Europe people had lived in extended households
  - From high fertility to low fertility
    - ▶ Assumed that in historical Europe fertility rates were as high as those observed

# Demographic Transition Theory

- Commonly called DTT
- Decline of mortality due to increasing living standards (nutrition and sanitation) and medical advances
- Industrial economy not compatible with large families
- Decline of fertility will follow as the night the day
- In order to have fertility decline, one must have economic development

# DTT Theorists Were Modernization Theorists

- Fertility decline and family change only one of a plethora of outcomes they were interested in
- Sideline, really
- Modernization theory reached its heyday before concern about rapid population growth

# Rapid Population Growth

- From Paul Ehrlich's *The Population Bomb*
  - “The battle to feed all of humanity is over. In the 1970s and 1980s hundreds of millions of people will starve to death in spite of any crash programs embarked upon now. At this late date nothing can prevent a substantial increase in the world death rate ...”

# Part of the Panic Was Because of DTT

- If mortality decline and economic development are necessary precursors to fertility decline, then world catastrophe is unavoidable
- Scientists set out to discover what aspects of economic development promote fertility decline in order to hurry it along
  - Fertility decline became the main focus

# European Historical Fertility Project

- Collected data on fertility for province (county) sized areas in Europe as far back as they could
- Hypothesized links between levels of economic development (measured various ways) and the onset of fertility decline

# England: Fertility Fluctuations, 1540 to 1860

- England prior to the Industrial Revolution experienced large fertility fluctuations, largely determined directly by changes in marriage patterns, and linked to economic conditions



# Results

- Fertility decline began at very different levels of development
- Very weak, if any, confirmation of DTT
- The onset of fertility decline followed cultural and, particularly, linguistic lines
  - Belgium and Spain



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## Section C

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### Ideational Theory

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# Ideational Theory

- Ideas about ideal family size and birth control practices spread more quickly in culturally homogeneous populations (weak)
- All people want to control family size, they just don't know how, once somebody figures it out, the idea will spread like wildfire (strong)

# Timing Was Serendipitous

- Ideational theory emerged at roughly the same time as concern with rapid population growth
- Arguments began to develop that perhaps the observed correlation between economic development and fertility was due to economic development requiring fertility decline in order to move forward

# Ideational Theory

- Scientific rationale for the efficacy of family planning programs
- Theory (perhaps not the theorists) is agnostic on the threat posed by rapid population growth or population decline



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## Section D

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Other Ideas about Why Fertility Declines

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  - **Identify other ideas about fertility decline**
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# Other Theories of Fertility Decline

- “Demise of DTT”
- Economic models
  - “Demand” for children (ideal family size)
  - “Supply” of children (ability to control fertility)

# Supply/Demand Models

- Caldwell's theory of wealth flows
  - Pre-fertility transition wealth flow is upward in the family, desired family size is high
    - ▶ "Morality" or ideology emerges to justify
  - Wealth flow shifts because of economic development
    - ▶ Ideology changes more slowly



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## Section E

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### Enduring Controversies

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# The Need to Curb Rapid Population Growth

- Neo-Malthusian arguments that (strong) catastrophic consequences will attend rapid population growth or that (weak) economic development will be impeded by rapid population growth
- Counter-arguments
  - Use of resources, not population
  - Cannot ask women to bear burden of demographic goals

# The Efficacy of Family Planning

- Fertility decline caused by changes in fertility preferences
- Fertility decline can be induced by IEC campaigns and hastened by the availability of family planning

# Important Distinctions

- Evidence for or against the *efficacy* of family planning interventions in affecting population change is not evidence for or against the *need* for population change
- Evidence for or against the need for population change is not evidence for or against the efficacy of family planning

# Important Distinctions

- Imperative for family planning for reasons of reducing rapid population growth
- Other imperatives for family planning
  - Human rights
  - Reproductive health
  - Maternal mortality