

DEMOGRAPHIC TRANSITION THEORY

April 29, 2009

Final Exam:
125 Kildee Hall
Monday, 2:15 p.m.

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MALTHUSIAN THEORY

- Thomas Malthus (1766-1834) claimed that population increases geometrically (2, 4, 8, 16...), but food production increases arithmetically (2, 3, 4, 5...)
- The result will be worldwide starvation
- Malthus' predictions proved wrong
- Population growth rates don't always increase
- Food production has kept pace with population increase

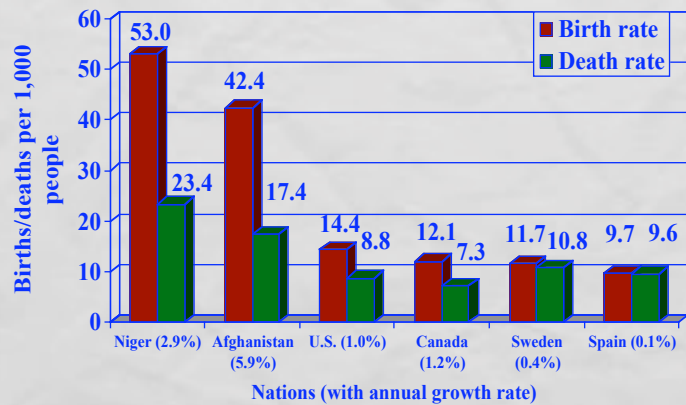
DEMOGRAPHIC TRANSITION THEORY

- Demographic transition: stage of societal development in unindustrialized countries marked by growing life expectancy and high birthrates; concept used to explain why populations in less-developed countries grow faster than those in more developed countries
- Three stages
 - Stage 1 (preindustrial): slow growth because of very high birth and death rates
 - Stage 2 (early industrial): Rapid growth because death rate drops, but birth rate remains high
 - Stage 3 (later industrial): Slow growth because birth rate drops to approach death rate

CONSEQUENCES OF DEMOGRAPHIC TRANSITION

- Most worldwide population growth happened in past 200 years
 - First billion reached in 1804, sixth billion in 1999, 6.5 billion in 2005
 - UN estimated range is 7.6-10.6 billion by 2050
- World population growth is stabilizing
 - Highest growth rate (2.04%) in late 1960s; now at 1.21%
 - U.N. projects rate of 0.37% by 2045-50
 - U.N. projects total fertility rate of 2.05 by 2045-50
- Growth rates vary among nations
 - Most growth is in developing nations (1.4% annual growth)
 - Most developed nations approach or are below zero population growth (ZPG)
- Age structures and sex ratios vary among nations

BIRTH RATES/DEATH RATES OF SIX NATIONS, 1998



TOTAL FERTILITY RATES OF SELECTED NATIONS, 2000-05

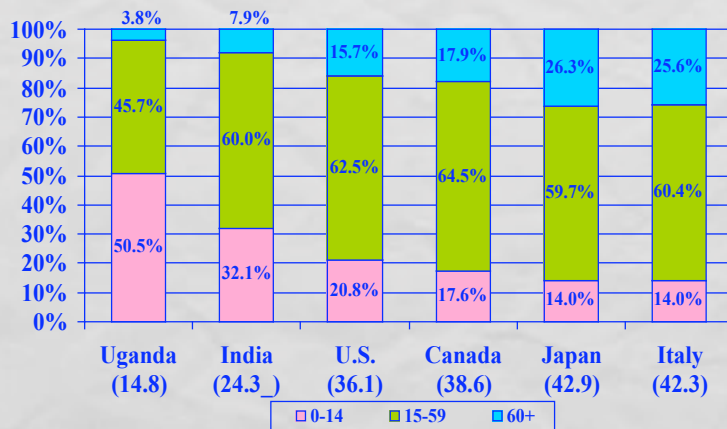
At or approaching ZPG

Hong Kong	0.94
Ukraine	1.12
Czech	1.17
South Korea	1.23
Bulgaria	1.24
Italy	1.28
Germany	1.32
Canada	1.51
United Kingdom	1.66
Australia	1.75
Russia	2.03
United States	2.04

Higher TFR

Niger	7.91
Afghanistan	7.48
D.R. of Congo	6.70
Yemen	6.20
Zambia	5.65
Kenya	5.00
Sudan	4.45
Haiti	3.98
Egypt	3.39
India	3.07
South Africa	2.80
Mexico	2.40

AGE STRUCTURES IN SIX NATIONS, 2005



SEX RATIOS

- Sex ratio at birth: 105 males to 100 females
- Sex ratio for world population: 101
- Nations with older populations have fewer men than women because women live longer
 - E.g., Italy 94 sex ratio, Spain 95, Japan 96, U.S. 97
- Other nations have more men than women because women are selectively aborted, neglected or killed
 - China (106 sex ratio) has one-child policy
 - India (105) has dowry tradition
 - Afghanistan (107) limited women's medical care under Taliban
 - Highest ratios are on Arabian Peninsula, including UAE (214), Qatar (206), Oman (128), and Saudi Arabia (117)