

## Unit II: Population

### Distribution of World Population

- Population concentrations
  - *The four largest population clusters – E Asia, S Asia, W Europe, NE North America*
  - *Other population clusters*
- Sparsely populated regions
  - *Dry lands – Cold lands – Sahara, Greenland*
  - *Wet lands – High lands – Rainforest Africa/South America – Andes, Himalayas*
- Population density
  - *Arithmetic density*
  - *Physiological density*
  - *Agricultural density*

### World Population Cartogram

#### Demographic data may include:

- Analysis of the population as based on factors relating to the size and density of each cohort.
  - Age, parentage, physical condition, ethnicity, occupation, & civil position
- Changes in the population as a result of birth, marriage, & death
- Statistics on migrations, their effects, & their relation to economic conditions
- Statistics of crime, illegitimacy, & suicide
- Levels of education
- Economic and social statistics, especially those relating to insurance.

### World Population Distribution

#### Population Growth

- Demographers assume that world population will stabilize at about 10.7 billion just after the year 2200
  - with over 95% of the growth occurring in countries now considered “developing.”

### Global Population Growth

- The greatest numerical growth during the 1990s occurred in Asia, and sub-Saharan Africa had the highest percentage increase.
- Differential growth rates will alter the relative CE 2000 rankings of regions by the year 2050, with sub-Saharan Africa replacing Europe/Russia in second position and Latin America a moving from fourth to third.
  - “Europe and Russia” includes the Eastern European and Caucasian states that were republics of the former Soviet Union and all of Russia, including Siberia.

### Millions vs. Billions

- Money:
  - \$1,000,000
    - 11 cm (4.3 in) high stack of \$1,000 bills.
  - \$1,000,000,000
    - 109 meters (357 ft) of \$1,000 bills
- Time
  - 1 million seconds = 11.6 days
  - 1 billion seconds = 31.7 years
- Speed
  - The Concorde could circle the globe in 18.5 hours going 1340 mph
    - 31 days to go 1,000,000 miles
    - 85 years to go 1,000,000,000 miles

### Expansion of the Ecumene 5000 B.C.–A.D. 1900

#### Arithmetic Population Density

#### Physiological Density

#### Distribution of World Population Growth

- Natural Increase
- Fertility
- Mortality
- Population geography
  - How people live, how they interact with one another, how they use the land, what pressure on resources exist, and what the future may bring

- Demography
  - The statistics relating to population geography
- Cohorts
  - Measures that connect data to a population group unified by a specified common characteristic
    - Ex: age cohorts
      - Preschoolers, sophomores, class of 2005

#### **Cohorts**

- A cohort measures refer data to a particular population group unified by a specific common characteristic
- For example, age, gender, ethnicity, nationality, or social and/or economic status => cohorts.
- Charts show the proportion of inmates in state and federal prisons in the United States by sex, race, and age.

#### **World Population Growth 1950–2000**

#### **Rates**

- Rates simply record the frequency of an occurrence of an event during a given time frame for a designated population.
- For example, counting the number of marriages per 1000 people per year within a designated area.
- Rates of marriages and divorces in the United States between 1920 and 1990.
  - In 1920 the proportion of divorces to marriages was far less, but in more recent years the number of divorces has grown while the number of marriages has taken a downturn.

#### **Natural Increase Rates**

#### **Crude Birth Rates**

#### **Crude Birth Rate (CBR)**

- CBR is the annual number of live births per 1000 members of a population
- Worldwide
  - Niger (53) is highest
  - Many European countries are very low (9 or lower).
- High CBR
  - 30 or higher per 1000
- Low CBR
  - 20 or lower per 1000
- Transitional
  - 20 to 30

#### **High vs. Low CBR**

- High CBR's
  - Apply to over 1/5th of world's nations
  - Countries are predominantly agricultural/rural
  - High proportion of population young and female
  - Southern and Western Asia & Latin America
- Low CBR's
  - Predominantly industrialized/urban
  - Fewer young people
  - Europe, Anglo-America, Japan, Australia/New Zealand
  - China because of government's population policies
- Mid-transitional CBR's
  - Characterize many smaller "developing countries"
  - India – a demographic "giant" recently entered this category in 1994

#### **Changes in CBR**

- CHINA:
  - Restrictive family planning rapidly reduced the rate from 33/1000 in 1970 to 18/1000 in 1986.
- JAPAN:
  - Highly industrialized and developed
    - Nihon experienced a 15 point drop between 1948-58 with no government intervention.
- Stage of Economic Development
  - Is a closely (though not perfectly) related factor in determining birth rates among countries.

#### **Religion & Politics are Factors**

- High CBR's
  - Roman Catholic (850 million) and Islamic (1.2 billion) religious beliefs encourage high birth rates among their followers
    - Who constitute roughly 1/3rd of the total population of the earth.
- Some governments (European) subsidize births
  - Why would they be doing this in an overpopulated world?

- Others try to implement policies to lower them (China).

#### **Total Fertility Rates**

**Total Fertility Rate (TFR) shows amount of reproduction in a population**

- Worldwide TFR is 3.0
  - ZPG (Zero Population Growth) TFR = 2.1
  - TFR is still over 5.0 many places & even over 7.0 in some places.
  - TFR is a more accurate predictor than is CBR. Why?
- “China’s Way – and Others”**
- China instituted new policies designed to curb the rapid population growth
    - “One couple, one child” policies determining family planning
    - Encouraging late marriage
    - Free contraception
    - Cash awards for limited families and steep fines for second births in families
    - Abortion and sterilization
    - Some practiced infanticide (killing of infants)
      - Since males are generally given a higher value within society, female infanticide is more prevalent
  - Statistics show that generally when women are better educated within developing societies – they have lower fertility and birth rates. (Hitting the books = fewer children?)

#### **Infant Mortality Rates**

##### **TFR vs. CBR**

- Crude Birth Rates may display regional variability because of:
  - Differences in age and gender/sex composition
  - Disparity in births among the reproductive-age cohort rather than the total population (ie. all age cohorts)
- Thus, the TFR is a more accurate predictor than the CBR in assessing the amount of reproduction taking place in a given population.
  - The TFR tells us the average number of children that will be born to each woman if, during her childbearing years, she bore children at the current year’s rate for women that age.

#### **Life Expectancy at birth**

##### **Crude Death Rates**

- While economic growth, particularly in China and India, is lifting millions out of poverty in other parts of the developing world, Africa’s economy is barely keeping up with its expanding population.
- According to UNDP, the world’s 25 least developed countries are all in Africa.
- Life expectancy is lower in Sub-Saharan Africa than in any other continent.
- This is partly because it is the continent hit hardest by HIV/Aids, with two-thirds of the world’s cases.
- Half the population lacks access to safe water, and other health indicators are getting worse, not better.

#### **Gender and Education**

##### **Variations in Population Growth**

- The Demographic Transition
  - 1. *Low growth* – 3. *Moderate growth*
  - 2. *High growth* – 4. *Low growth*
- Population pyramids
  - *Age distribution*
  - *Sex ratio*
- Countries in different stages of demographic transition
- Demographic transition and world population growth
- The Demographic Transition
- Demographic Transition in England
- Percent of Population under 15
- Population Pyramids in U.S. Cities
- Rapid Growth in Cape Verde
- Moderate Growth in Chile
- Low Growth in Denmark
- Will the World Face an Overpopulation Problem?
- Malthus on overpopulation
  - *Population growth and food supply*
  - *Malthus’ critics*
- Declining birth rates
  - *Malthus theory and reality*
  - *Reasons for declining birth rates*

- World health threats
  - *Epidemiological transitions*

### **Food and Population, 1950–2000 *Malthus vs. Actual Trends***

#### **Thomas Robert Malthus 1776-1834**

- Malthus predicted population would outrun food supply, leading to a decrease in food per person.
- This prediction was based on the idea that population if unchecked increases at a geometric rate (i.e. 2, 4, 8, 16, 32, 64, 128, etc.) whereas the food supply grows at an arithmetic rate (i.e. 1, 2, 3, 4, 5, 6, 7, etc.) resulting in the *Malthusian catastrophe*.
- Only misery, moral restraint and vice (which for Malthus included contraception) could check excessive population growth.
  - Malthus favored "moral restraint" (including late marriage and sexual abstinence) as a check on population growth.
  - However, it is worth noting that Malthus proposed this only for the working and poor classes.
  - Thus, the lower social classes took a great deal of responsibility for societal ills, according to his theory.
  - Essentially what this resulted in was the promotion of legislation which degenerated the conditions of the poor in England.

#### **What is a *Neo-Malthusian*?**

- Malthus continues to have considerable influence to this day.
- One famous recent example of this is Paul R. Ehrlich, author of *The Population Bomb*.
- Ehrlich predicted, in the late 1960s, that hundreds of millions would die from a coming overpopulation crisis in the 1970s, and that by 1980 life expectancy in the United States would be only 42 years.

- Crude Birth Rate Decline, 1981–2001
- Use of Family Planning
- Cholera in London, 1854
- Tuberculosis Death Rates, 2000
- SARS Infections in China, 2003
- HIV/AIDS Prevalence Rates, 2002

### **Migration**

#### **Essential Questions**

- Why do people migrate?
- Where are migrants distributed?
- Why do migrants face obstacles?
- Why do people migrate within a country?

#### **Why do people migrate?**

- Reasons for migrating
  - *Push factors*
    - Economic
      - i.e. poor harvests, lack of jobs
    - Cultural/Political
      - i.e. refugees from wars
    - Environmental
      - i.e. floods/storms, droughts
  - *Pull factors*
    - Economic
      - i.e. job opportunities
    - Cultural/Political
      - i.e. freedom
    - Environmental
      - i.e. amenities
  - *Intervening obstacles*
- Distance of migration
  - *Internal migration*
  - *International migration*
- Characteristics of migrants
  - *Gender*
  - *Family status*

#### **Where are migrants distributed?**

- Global migration patterns
  - International migration reasons
    - Combination of economic problems at home and the prospect of better conditions at the new location

- U.S. immigration patterns
  - First era – dominated by Europeans
    - *Colonial immigration*
      - *Economic & political/religious*
    - *19th century immigration*
      - *Economic*
  - Second era – (20<sup>th</sup> century) dominated by Latin Americans and Asians
- Impact of immigration on the United States
  - *Legacy of European migration*
  - *Undocumented immigration*
  - *Destination of immigrants within the U.S.*
- Discussion topic:
  - The United States as a nation of immigrants
  - Have people’s perceptions changed in recent years regarding this issue?

### **Global Migration Patterns**

**Refugees:** Sources and destinations

**Net Migration** (per population)

**Migration to U.S.**, by region of origin

**Migration from Asia to the U.S.**

**Migration from Latin America to the U.S.**

**Undocumented Immigration: *Mexico to Arizona***

**Some migration issues currently in the public forum**

- Large-scale illegal or undocumented immigration – especially from Mexico into the United States
  - Should the U.S. government crack down on undocumented immigration – or tolerate it?
  - Do undocumented immigrants benefit the U.S. economy by filling jobs that Americans are unwilling to do?
  - Alternatively, by accepting lower wages, do illegal immigrants take away jobs from Americans?
    - Argument against the Irish in the late 19<sup>th</sup> century!
  - Should undocumented immigrants be allowed to attend school and utilize public services?
    - Wouldn’t it benefit the U.S. in the long-run to allow our southern neighbors to improve their condition – education, health care, technology transfer
    - Does a tolerant attitude among Americans merely encourage more illegal immigrants to arrive?

### **U.S. States as Immigrant Destinations**

#### **Why do migrants face obstacles?**

- What are some of the major problems migrants encounter in their desired destination?
  - Gaining permission to enter another country
    - Much more difficult globally since 9/11
  - Facing hostility from local citizens once they arrive
- Immigration policies of host countries
  - *Desired country’s quota laws*
  - *Guest worker issues*
    - *Temporary migration for work*
    - *Time-contract workers*
  - *Economic migrants or refugees?*
    - i.e. when did Southeast Asian political refugees become economic refugees – who is more desirable?
- Cultural problems living in other countries
  - *Opposition to new immigrants*
    - *socioeconomic, religious, racist, fear*
  - *U.S. attitudes to immigrants*
    - *New immigrants often live in poor social conditions with fewer abilities to improve or change their situations (circular problem)*
  - *Attitudes to guest workers*
    - *Immigrants are often scapegoats for societal problems (again, a circular problem)*

### **Guest Workers in Europe**

#### **Emigration from China**

#### **Migration of Vietnamese Boat People**

#### **Why do people migrate within a country?**

- Internal migration patterns
  - Interregional migration
    - Migration between regions of a country

- i.e. migration between regions within the U.S.
  - » *Most and least popular destination choices for college grads?*
- Migration between regions in other countries
- Intraregional migration
  - Migration within one region
    - Rural-urban migration
    - Urban-suburban migration
      - » Growth of the American suburbs in the 1950s - reasons?
  - Migration from metropolitan to non-metropolitan regions
    - » *Counterurbanization* - experienced by many relatively developed countries in the 1970s
    - » pattern stopped in the 1980s since job opportunities declined in non-urban areas

**Interregional Migration in the U.S.**

**Center of Population in the U.S.**

**Intraregional Migration in the U.S.**