

Malthusian Theory and Demographic Transition Theory

by Sophia Tutorial



WHAT'S COVERED

This tutorial will cover theories of population growth, through the definition and discussion of:

- 1. Thomas Malthus and Malthusian Theory
- 2. Demographic Transition Theory
- 3. Population Pyramid

1. THOMAS MALTHUS AND MALTHUSIAN THEORY

Thomas Malthus was a famous and influential British thinker in the late 1700's and early 1800's, around the time of Enlightenment. Malthus was writing in a time when thinkers were consumed with the idea of progress. They believed that human society and the human species could be perfected, and that people were marching on a path towards perfection and the final evolution of human society. These ideas essentially underpinned the notion of the Enlightenment in Europe.

Against this contextual backdrop, Thomas Malthus argued the exact opposite--that society was actually in trouble and not going to progress like they thought. **Malthusian theory** claimed that people would not be able to perfect their society as claimed because there was a problem with food production and population growth. He said that nature limits people's ability as a human group to expand because nature puts limits on the expansion of the population, due to the need to produce food for everyone.

EXAMPLE Society may contain rapidly multiplying people, but it also requires plants and vegetables to be produced to feed people. Malthus argued that society can only produce so much subsistence, which will then limit the ability to expand.

Malthus was writing just as capitalism was about to industrialize and with industrialization, technology and technological advancement provided more food. It opened up new ways to grow more crops and to produce food more efficiently. Therefore, there was more food, and Malthus's claims were forgotten. People thought they had overcome any obstacles, and the extent of industrialization raised living standards and increased food production.

IN CONTEXT

Today, there are 7 billion people in the world, many of whom are in want of food, living in abject poverty, with food prices at an all time high in developed countries. Some scholars argue that the world is entering a food crisis.

In the long run, Malthus may be correct--society simply hasn't hit his predicted limits yet.

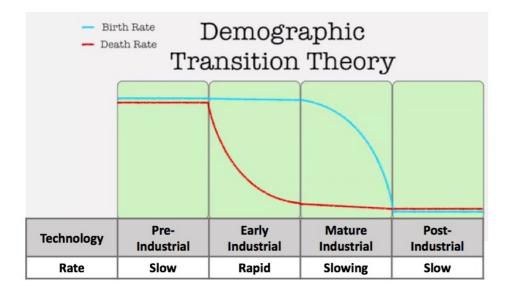


Malthusian Theory

A theory of population growth that argues that rapid population growth increases would outpace food production leading to social chaos.

2. DEMOGRAPHIC TRANSITION THEORY

Malthus' theories revolve around a very important idea in society, which is the relationship between technology, the ability to wield technology to produce subsistence, and its relationship to population growth. This relationship is at the core of **demographic transition theory**, which is the theory that relates birth rates and the overall population to levels of technology. This graph is a visual representation of demographic transition theory.



The bottom of the graph represents the different levels of technology: pre-industrial, early industrial, mature industrial, and--the current level--post-industrial. Below those levels are shown the rates of population growth.

- 1. Pre-Industrial Society: There are slow rates of population growth in pre-industrial societies, because even though the birth rate is very high due to the lack of contraceptives and the fact that children are economically valued to contribute to the society, the death rate is also very high because of the lack of medicine. During early industrialization, they didn't have the medical resources to treat outbreaks of disease, and famine occurred. This translates to the slow population growth in pre-industrial societies.
- 2. **Early Industrial Society:** In the early industrial level, as society starts to industrialize, there are rapid rates of population growth, because industrialization increases living standards and productivity, enabling the

- population to expand and provide more people to devote to medicine and the like. Birth rates remain high, but the death rate, represented by the black line, begins to lessen, due to medical advances.
- 3. **Mature Industrial Society:** As industrialization matures, you see the two lines--birth rate and death rate--beginning to come together as they begin slowing.
- 4. **Post-Industrial Society:** Finally, in post-industrial society, the current level--society has reached such a level that education is much more widespread, careers for both men and women are abundant, people choose to marry less or marry later, and they're more educated. Children become very expensive--they're not as economically valued as in pre-industrial society, so people are choosing to have fewer children. The lines representing birth rate and death rate start to converge.

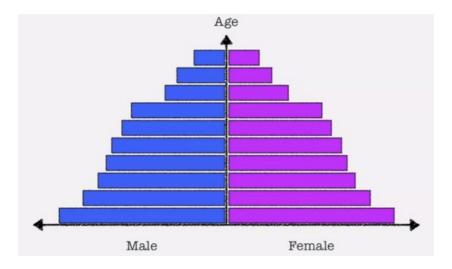


Demographic Transition Theory

A theory of population growth that argues that population growth varies as society progresses technologically.

3. POPULATION PYRAMID

Another way to graphically represent demographics and the overall population in society is a **population pyramid**, which is a graphical representation of population broken down by age and sex.



Males are on one side of the line, and females are on the other. Each level, or step, of the pyramid represents an age segment--for example, males ages zero to ten, 10 to 20, 20 to 30, 30 to 40, 40 to 50, and so on, with the age segments ascending up the pyramid. The length, or size of each step represents a share of the total population, as a percentage.

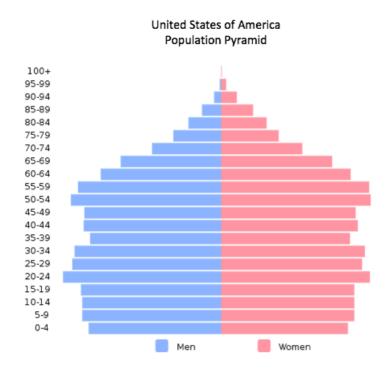
You can see that there are more young people in society and with each successively older age bracket, the percentage share of the total population gets smaller, and takes a pyramid shape. Population pyramids are helpful for describing and enabling sociologists to ascertain a **sex ratio**, which is the ratio of males to females in society.



Looking at the population pyramid, what can you infer about the population? You can infer that there are significantly more young people in this society than old people. What is happening to preventing all of these

people from reaching old age?

If you look at the United States' population pyramid, it might look a little different--a little more square-shaped than pyramidal. The U.S. has a more equal distribution of the population in society. By looking at the different makeup of population pyramids, you can make inferences about the nature of demographics in each particular society, which is why they're a useful tool for demographers.



TERMS TO KNOW

Population Pyramid

This pyramid graphically represents a population broken down by age and sex.

Sex-ratio

A way to express the number of males relative to the number of females in a population.

SUMMARY

Today you explored an introduction to population and learned about theories of population growth, including the ideas of **Thomas Malthus and Malthusian theory**, **demographic transition theory**, and the **population pyramid**.

Source: This work is adapted from Sophia author Zach Lamb.

ATTRIBUTIONS

• United States Population Pyramid | Author: Wikipeda | License: Creative Commons

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