

Demographic Transition Theory

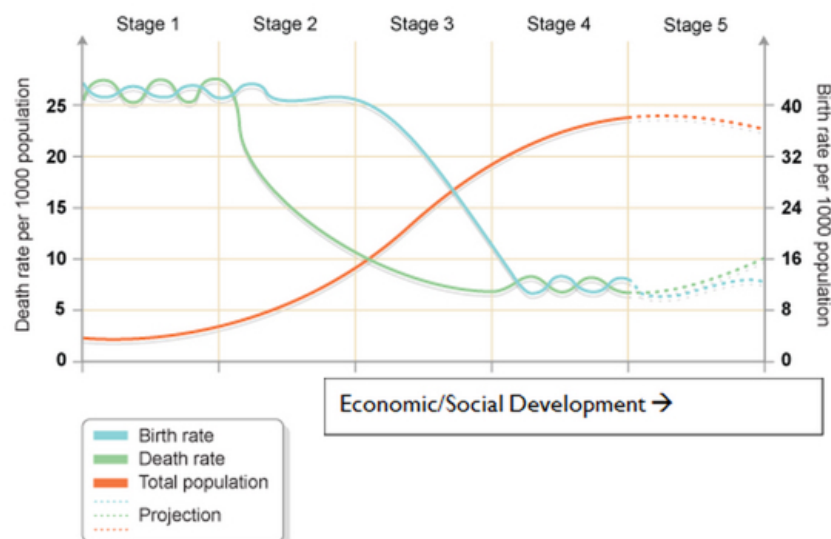
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The **demographic transition theory studies the relationship between economic development and population growth**. It discusses about **changes in birth rate and death rate** and consequently growth rate of population in assonance with the process of growth and development. It is also used to describe and predict the future population of any area.

The theory tells us that the population of any region changes from **high births and high deaths to low births and low deaths as society progresses** from the rural agrarian and illiterate to urban industrial and literate society.

These changes occur in stages which are collectively known as the demographic cycle. There are four stages of demographic transition related to the state of economic development.

“Demographic transition refers to a population cycle that begins with a fall in the death rate, continues with a phase of rapid population growth and concludes with a decline in the birth rate” – E.G. Dolan.



Demographic Transition Theory

Demographic transition is a term, first used by **Warren S. Thompson (1929)**, and later on by **Frank W. Notestein (1945)**, referring to a historical process of change which accounts for the **trends in births, deaths, and population growth** that occurred in today's industrialized societies, especially European societies. This process of demographic change began for the most part in the later 18th century.

Demographic transition should not be regarded as a 'law of population growth', but as a generalized description of the evolutionary process. In simple terms, it is a theory which attempts to specify general laws by which human populations change in size and structure during industrialization. It is frequently accepted as a useful tool in describing the demographic history of a country.

The theory postulates a particular pattern of demographic change from **high fertility and high mortality to low fertility and low mortality** when society progresses from a **largely rural agrarian and illiterate society to a dominant urban, industrial, literate and modern society.**

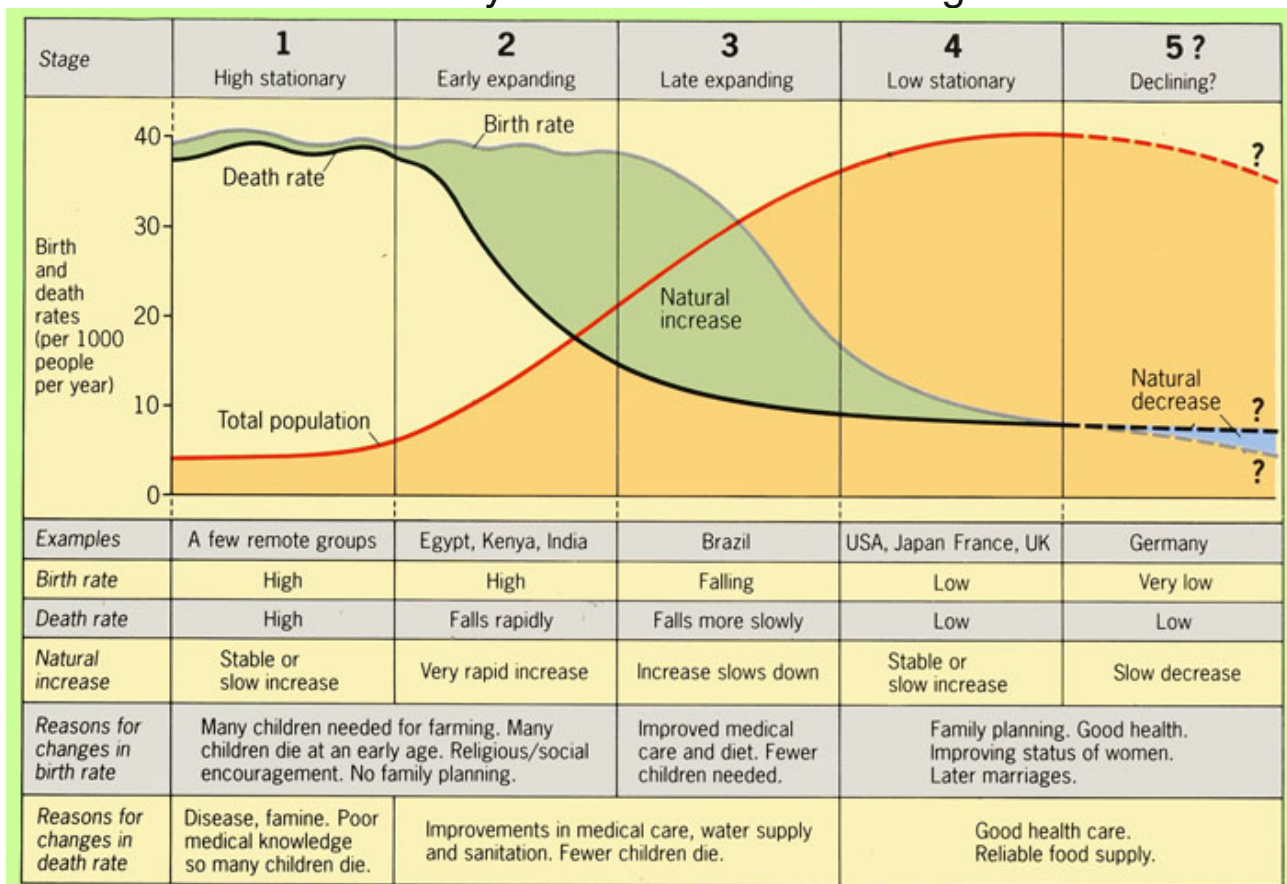
It is typically viewed as a **three-stage process:**

- (i) that the **decline** in mortality comes before the decline in fertility,
- (ii) that the **fertility** eventually declines to match mortality, and
- (iii) that **socio-economic transformation** of society takes place simultaneously with its demographic transformation.

The demographic transition theory is characterized by conspicuous transition stages.

The transition from high birth and death rates to low rates can be divided into three stages (**some scholars like Haggett, 1975 have divided into four or five stages**):

- **Pre-transition stage** – High and fluctuating birth and death rates with little population growth.
- **Stage I:** High birth rates and declining death rates with rapid population growth.
- **Stage II:** Low birth and death rates with slow population growth.
- **Stage III:** Birth and death rates both decline appreciably leading to zero population growth. The theory holds that pre-industrial societies were characterized by stable populations that had both a high death rate and birth rate. It postulates a little and slows population growth. The theory states that the high mortality rates characteristic of undeveloped areas will decline before fertility rates which are also high.



First Stage or Stage of High Birth Rate and High Death Rate

In the first stage, the **country is at a low level of economic development. Agriculture is the main occupation of the people.** The standard of living of the people is low. The **death rate is high because of a lack of medical facilities, epidemics, famines, and illiteracy.** The birth rate is high because of social and economic reasons. The key notable features of this stage are as follows:

- Population Pyramid in the first stage is Expanding at the bottom
- Stable population
- High birth rate, High infant mortality, and High death rate = low life expectancy
- Many young people, very few older people
- High fertility rate (8+)
- A society dominated by religious belief
- The stagnant economy, No surplus subsistence type of living
- Ex – Sierra Leone, Somalia

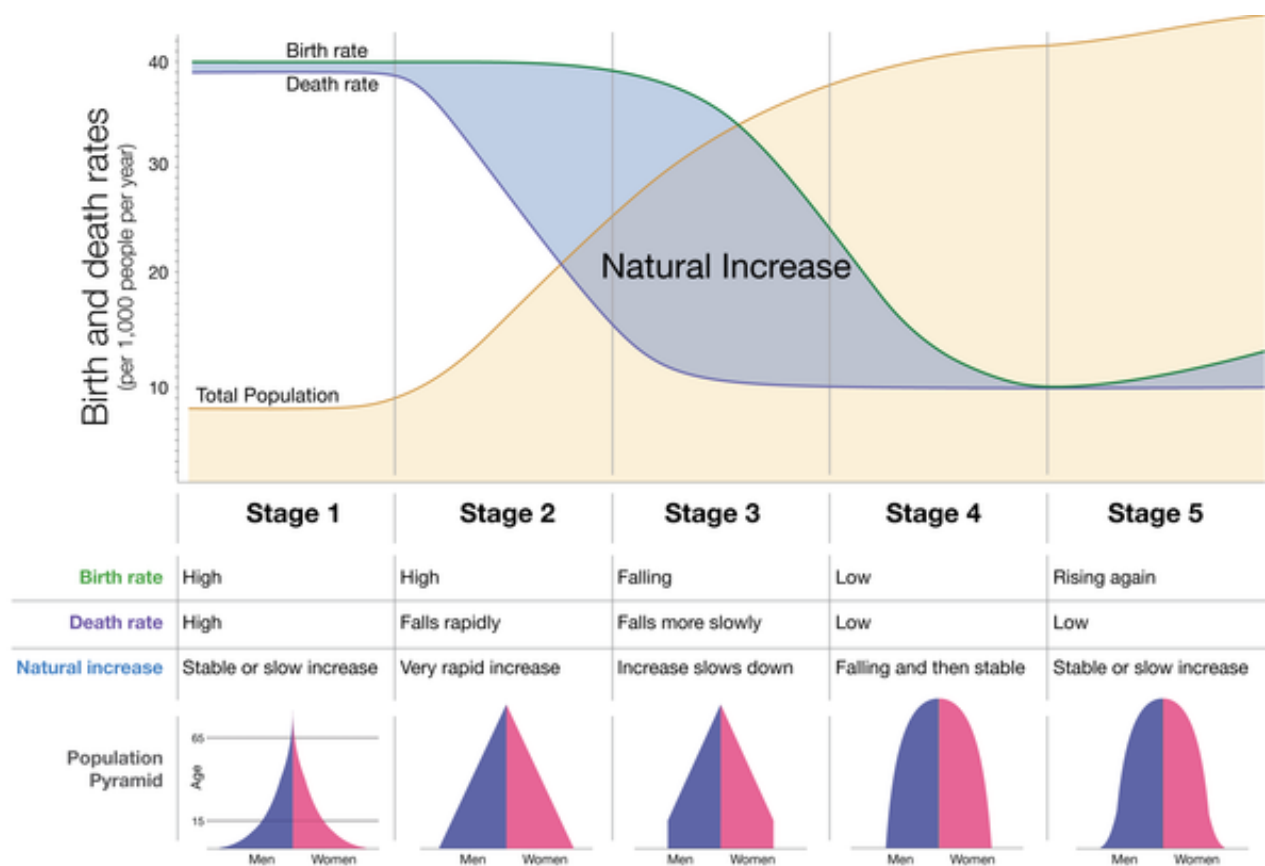
The first stage has **high fertility and high mortality because people reproduce more to compensate for the deaths due to epidemics and variable food supply.** The **population growth is slow and most of the people are engaged in agriculture where large families are an asset.** Life expectancy is low, people are mostly illiterate and have low levels of technology. Two hundred years ago all the countries of the world were at this stage.

Second Stage or Stage of High Birth Rate and Low Death Rate or Stage of Population Explosion

In this stage, **the birth-rate is high but the death rate is low.** It results in a **high growth rate of the population.** In this stage, **income begins to rise and economic activities expand.** On account of better health facilities and a nourishing diet, the death rate falls rapidly. The **birth rate remains high due to social backwardness and limited access to contraceptives.** The key notable features of this stage are as follows:

- Population Pyramid in this stage is **Rapidly Expanding**
- Very rapid increase in population (population explosion)
- **Rapid decline in death rate** but death rate remains below the birth rate
- Fertility rate remains high
- High birth rate
- High rate of natural increase
- Decline in infant mortality
- Many young people

Fertility remains high at the beginning of the second stage but it declines with time. This is accompanied by a reduced mortality rate. **Improvements in sanitation and health conditions lead to a decline in mortality.** Because of this gap, the net addition to the population is high.



Third Stage or Stage of Declining Birth Rate and Low Death Rate
 In the third stage, a **declining birth rate and low death rate lead to low population growth.** Along with the economic development of the country, structural changes in the economy begin to take

place. A large population begins to reside in urban areas. **People start considering large families as a liability.** Consequently, **the birth rate begins to fall.** The **death rate continues to be low.** The **growth rate of the population declines.** India is passing through this stage of demographic transition. The key notable features of this stage are as follows:

- The Population Pyramid in the third stage is Stationary
- Population growth slows down
- Birth rate declining rapidly
- The decline in fertility rate
- Death rate declining slowly
- Birth rate approaching death rate
- High life expectancy
- An increasing number of older people

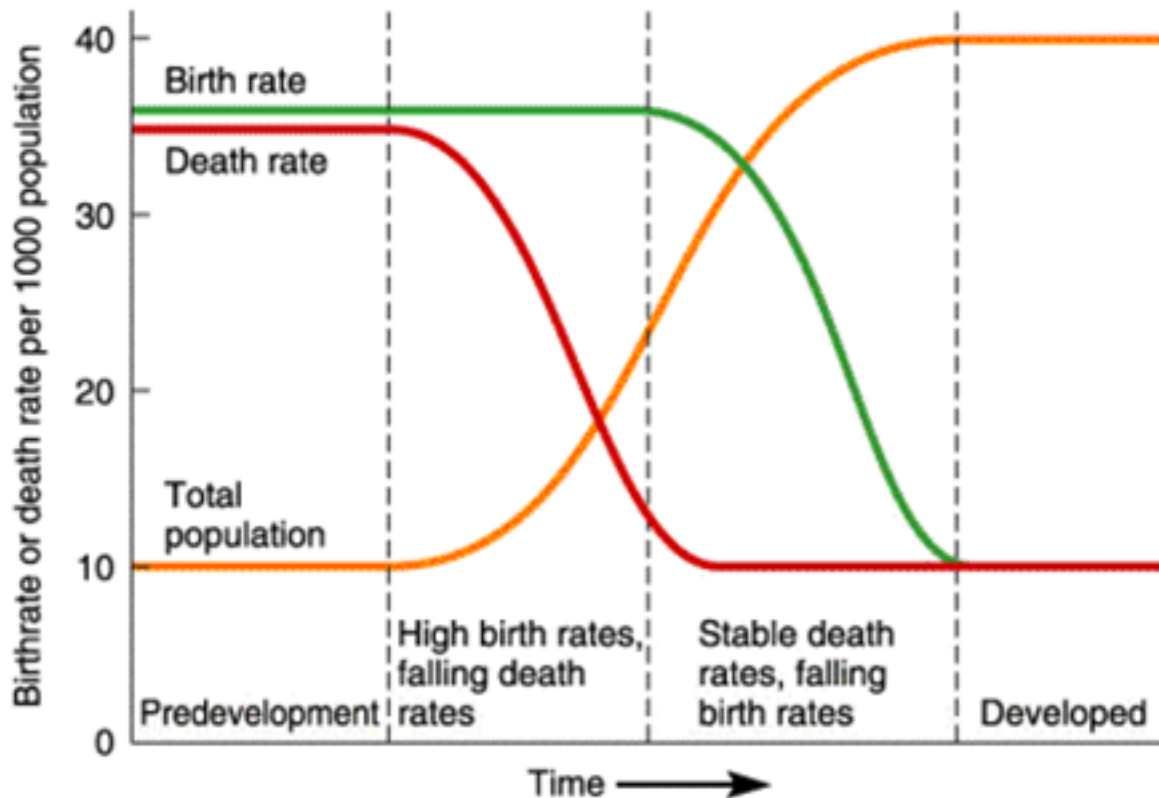
Fourth Stage or Stage of Low Birth Rate and Low Death Rate

In the fourth stage, a **low birth rate and a low death rate lead to Population stabilization.** In this stage, because of rapid economic development, **the standard of living of the people becomes very high. Quality of life is given a priority to the size of the family.** The key notable features of this stage are as follows:

- Population Pyramid is Contracting
- Stable or slow population increase
- Low birth rate
- Low death rate
- High life expectancy
- Birth rate is approximately the same as the death rate
- The fertility rate is close to or below 2.1
- Many older people

In the last stage, both fertility and mortality decline considerably. The population is either stable or grows slowly. The population becomes urbanized, literate, and has the high technical know-how, and deliberately controls the family size. This shows that

human beings are extremely flexible and are able to adjust their fertility. In the present day, different countries are at different stages of demographic transition.



Criticism

Although the **theory of demographic transition has been appreciated widely by the demographers**, it has been criticized on many grounds also. There are even critics who have gone to the extent of saying that **it cannot be called a theory**.

Demographic transition stages are not always sequenced in order. After the breaking of the USSR, erstwhile USSR countries apart from Russia shown increases in death rate and went the first stage of the demographic transition from the second & third stage of the demographic theory, because of the withdrawn of the social security scheme.

The main points of criticism are:

- Firstly, this **theory is merely based upon empirical observations or the experiences of Europe, America, and Australia.**
- Secondly, **it is neither predictive nor its stages are segmental and inevitable.**
- Thirdly, **the role of man's technical innovations cannot be underrated, particularly in the field of medicine,** which can arrest the rate of mortality.
- Fourthly, **neither does it provide a fundamental explanation of the process of fertility decline, nor does it identify the crucial variables involved in it.**
- Fifthly, **it does not provide a time frame for a country to move from one stage to another.**
- Finally, **it does not hold good for the developing countries of the world, which have recently experienced unprecedented growth in population due to the drastic decline in death rates.**

In spite of these criticisms and shortcomings, **the demographic transition theory does provide an effective portrayal of the world's demographic history at the macro level of generalizations.** As an empirical generalization developed on the basis of observing the demographic trend in the West, the transition process for any country can easily be understood.