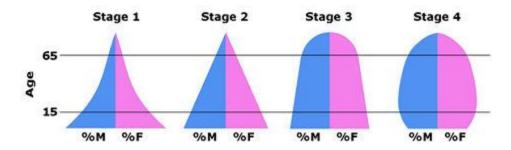
## **Demographic Transition Model**

Model Proposed by Warren Thompson (USA)

He proposed that all countries will transition through (4) four stages ranging from high birth rates (Stage 1) to low birthrates and death rates (Stage 4)

He stated that these transitions are related to industrialization, urbanization and resulting changes in social trends (status of women, education and improvements in health care).



Details for each stage

Stage 1: Primitive (Expansive) (Pre-Industrial) – Developing Country

A country in this stage experiences a high fertility rate, but an equally high mortality rate balances the overall growth of the population. This happens because there is relatively little growth economically, as most of the population is dependent on subsistence activities such as agriculture. In typically subsistence-based agricultural economies, the need for a large family (to assist in daily activities to benefit the whole family unit) is characteristic.

In such economies, the cost of a child is very low, as food requirements are catered for by the family's agricultural output, and often children are not educated beyond their teens. The contribution of the child (in terms of work) therefore usually exceeds the total cost of raising the child. Also, people in such economies are dependent on their children to take care of them in their later years, so more children equates to a reasonably comfortable old age. The whole population therefore is relatively young, even though both birth and death rates fluctuate according to natural disasters and outbreaks of disease.

## Stage 2: Early Expanding (Rapid Growth) – Developing Country

A development or change in the basis of the economy has usually been the reason for a country to move from Stage One into Stage Two. In Europe, for example, this change started with the onset of the Agricultural Revolution in the eighteenth century. In terms of pure demographics, the mortality rate of the nation starts to decline because of improvements in food supply and transportation (thereby almost entirely negating the

effects of starvation as a cause of death), as well as improvements in public health factors – particularly in the childhood years – such as better sanitation, personal hygiene and ways in which food is handled.

Since mortality rates decline first, and the fertility rate of the country remains unchanged in the interim, a resultant burst in population growth is experienced. Since more children are surviving their childhood years (unlike the phenomenon experienced in Stage One), the population is not only larger, but relatively younger. Most of sub-Saharan Africa is classified as being in Stage Two on account of the young population and relatively low level of economic development (although present and growing), such as the Sudan, the DRC, Ethiopia, Tanzania and Angola. In the rest of the world, Afghanistan, Laos and Palestine provide good examples of such countries.

## Stage 3: Late Expanding (Stationary) – Developed Country

Birth rates fall due to access to contraception, increases in wages, urbanization, a reduction in subsistence agriculture, an increase in the status and education of women, a reduction in the value of children's work, an increase in parental investment in the education of children and other social changes. Population growth begins to level off. The birth rate decline in developed countries started in the late 19th century in northern Europe. While improvements in contraception do play a role in birth rate decline, it should be noted that contraceptives were not generally available nor widely used in the 19th century and as a result likely did not play a significant role in the decline then. It is important to note that birth rate decline is caused also by a transition in values; not just because of the availability of contraceptives. Countries that are currently showing characteristics of Stage Four development include the USA and Canada, Argentina and Brazil, New Zealand and Australia, most European countries, China, North Korea and Thailand, among a few others.

## Stage 4: Zero Population Growth (Declining) – Developed Country

Both low birth rates and low death rates. Birth rates may drop to well below replacement level as has happened in countries like Germany, Italy, and Japan, leading to a shrinking population, a threat to many industries that rely on population growth. As the large group born during stage two ages, it creates an economic burden on the shrinking working population. Death rates may remain consistently low or increase slightly due to increases in lifestyle diseases due to low exercise levels and high obesity and an aging population in developed countries. By the late 20th century, birth rates and death rates in developed countries leveled off at lower rates. Many European countries along with Japan are good examples.