

# [Demography essay: study of human population dynamics](https://assignbuster.com/demography-essay-study-of-human-population-dynamics/)

Demography is the study of human population dynamics. Population is shaped by a number of factors including fertility, mortality, migration and urbanization. Significant demographic changes have been shown in many parts of the world. The world population growth has been decelerating since 1970s. Fertility rates in more developed countries (MDCs) have been showing a declining trend, whereas an increasing one in the less developed countries (LDCs). Mortality rates have gone down in both MDCs and LDCs due to medical advancement. Consequently, the population of the countries with low fertility rates aged more quickly, and the world population growth will be concentrated in those developing countries where fertility rates remain high. Uneven population growth among nations accelerated the migration of people across nation borders and the growth of cities. The changes of these interrelated factors with their causes and problems of each of the factors will be discussed, followed by some possible plans and opportunities that may benefit from these changes.

## 1 – Fertility

Fertility is the incidence of childbearing in a country’s population. Fertility rates have been falling in the MDCs. Findings from PRB (2009a) showed that the growth of future population would be almost entirely in the LDCs, with the most rapid growth in the poorest countries and regions where fertility rates still remain high.

In the past 2 decades, countries with Total Fertility Rate (TFR) lower than the replacement rate of 2. 1 were all MDCs including Netherlands, Norway, Sweden, Japan, Singapore, and Hong Kong etc. (see table 1. 1). HK has been experiencing a decreasing fertility rate since 1970s and it reached the historical low of 0. 9 in 2003. CSD (2010) projected that TFR of HK continue to decline over the next 30 years. Japan and HK have the lowest projected TFR in 2039 which is 1. 25 and 0. 94 respectively (see table 1. 2).

The declining fertility trend can be attributed to a number of factors. Women nowadays have more educational and career opportunities as a result of socio-economic development in many countries, which encourages them to grab these opportunities before they start a family. Marriage postponement in HK is revealed by the increasing median age at first marriage for women, which rose from 26. 1 in 1989 to 28. 5 in 2009 (CSD 2010). Late marriage for women shortens their childbearing exposure period. Also, women have more access to reliable family planning methods. Worldwide, the use of contraception rose from less than 10% for married women of childbearing age in the 1960s to 62% in 2009 (PRB 2009b).

Low fertility rate has led to the decline of young population, and hence, a slow growth of the working population would slow down the economic growth. CSD (2010) projected that the proportion of the HK population aged 65 and over would rise markedly from 13% in 2009 to 28% in 2039. The median age would also increase from 40. 7 in 2009 to 47. 6 in 2039. An ageing population will put a huge pressure on public finances. Tax base will become narrower because of the shrinking working population. On the other hand, expenditures related to the elderly such as medical and social security payments will increase substantially.

The government could stimulate fertility by subsidizing childbirth costs. For example, the Japanese government introduced a new plan in Apr 2009, to pay for all childbirth costs with the public funds (Shimbun 2008). Moreover, regulations and laws should protect and be more favorable to the pregnant women. For example, to extend the maternity leave period.

Increasing number of working parents has created a great need for quality childcare. That need is creating a great entrepreneurial opportunity for people who love children and want to start a business in childcare. Childcare services range from small home-based operations to large commercial centers.

## 2 – Mortality

Mortality refers to the incidence of death in a country’s population. The phenomenal increase in world population in the 20th century was a consequence of the worldwide trend towards increasing life expectancy and declining mortality, as a result of health and medical advancements.

However, the levels in mortality vary from country to country. Although deaths of children in poorer countries like those in the sub-Saharan Africa make up a large fraction of all deaths, the decreasing mortality rate has declined enough to fuel rapid population growth. Nearly 11 million children died under the age of five in 2003 (UNDESA 2005). 98% of these children lived in developing countries. Sub-Saharan Africa got the highest regional average of under-five mortality in 2003 (see table 2. 1), and it also experienced the least reductions over the 1990s.

The lack of progress in sub-Saharan Africa can be attributed to the increase in child deaths from AIDS in some countries. For most countries, efforts to reduce malnutrition and provide appropriate interventions to address diseases like pneumonia, vaccine-preventable diseases and malaria were inadequate. Poor health systems and socio-economic stagnation due to instability have been the obstacles to the progress in the region (UNDESA 2005).

Over 2, 000 children die from malaria each day in sub-Saharan Africa. Episodes of fever and anaemia damage the mental and physical development of those children who survive. As the children is the source of the future workforce, it is important to keep them grow up healthily. If situation never improves, the society will never increase its competitiveness.

The 4th Millennium Development Goal (MDG) of the United Nations Development Programme (UNDP) called for reducing child mortality. Its target is to reduce the under-five mortality rate by two-thirds, between 1990 and 2015.

There is a great need of nutritious food and medical and vaccine treatment for children in countries where child mortality rate remain high. In fact most of the diseases could be avoided if the children are provided with nutritious food and proper vaccination which are not high at cost. Food manufacturers and pharmaceutical company could find the markets there.

## 3 – Migration

Migration refers to the movement of people into and out of a particular territory.

The annual number of legal immigrants has been increasing since the 1950s, and the regions sending migrants have shifted from Europe to Latin America and Asia (see figure 3. 1). In 2005, the U. S. was home to more foreign-born residents than any other country, accounting 38 million of people. Russia was the second, which accounted for 12 million immigrants, and Germany was the third with 10 million.

Globalization, economic differences across nations, and uneven population growth and have increased the flow of people across national borders. In 2005, 62 millions of immigrants from moved from LDCs to MDCs, while 61 million moved from one LDC to another for work opportunities. Others have moved to escape from economic problems, civil unrest or natural disasters. (PRB 2009b)

The Federation for American Immigration Reform (FAIR) impugned in large-scale immigration – leading to excessive population growth and environmental degradation, displacing low-skilled American workers and depressing their wages, and threatening the cultural bonds that hold Americans together (Martin & Midgley 2006).

Martin & Midgley (2006) has also discussed some recommendation suggested by the U. S. Commission on Immigration Reform (CIR). In 1997 CIR recommended that the federal government do more to “ Americanize immigrants”. They advocated that Americanization, accommodating and integrating immigrants, is a two-way street. The CIR also recommended federal grants to communities with large numbers of immigrants to create resource centers that promote immigrant-native interactions. It also urged U. S. businesses to do more to help integrate immigrants they hire.

Self-employment is often used as a proxy measure for entrepreneurship. Self-employment rates were especially high among some groups: 28% of those born in Korea, as were 20% or more of those born in Russia and Iran. Self-employment normally declines with economic development, as farmers leave the land for urban jobs in factories and offices. However, in the new service economy, it has become easier to be self-employed, and immigrants may be in a unique position to spot opportunities (Martin & Midgley 2006).

## 4 – Ageing Population

World population ageing is unprecedented and enduring. By 2050, the number of older persons in the world would exceed the number of young for the first time in history (UNDESA 2009).

There would be more young people in LDCs than in MDCs (see figure 4. 1). About one-forth of the population in Japan, Italy and Germany aged over 60 in 2002 and the percentage was expected to exceed 30% by 2025 (see figure 4. 2). The proportion of the HK population aged 65 and over was projected to rise markedly from 13% in 2009 to 28% in 2039 (CSD 2010). The median age of the above mentioned countries/region are well above 40 in 2010 according to CIA (see table 4. 3).

Ageing population is a consequence of declining fertility and increased life expectancy resulting from declining mortality as mentioned in the previous sections. The problem concentrates in the Northern Hemisphere where fertility rate and mortality rate are low.

Problems associated with ageing population are closely related to those associated with declining fertility as discussed in previous section. Japan expected its workforce to shrink by 16% (about 10 million people) from 2006 to 2031 (The Economist 2006a).

Corporations could consider keeping and hiring old employees. The following are examples discussed on The Economist (2006b): Toyota has adopted its workstations to older workers, and IBM used its network to recruit retired people for particular projects. The HK government have attracted 200, 000 talented people from Mainland China and overseas to HK since 1997, aiming to improve the population structure (The 2008-09 Budget 2008).

The market will consist of growing number of elderly customers in the next few decades. A great market lies in the increasing the awareness of financial planning, health and fitness. Banks nowadays could spend more effort in their financial planning programs. As good health should be developed from young, fitness centres, health food manufacturers could grab this opportunity to sell this concept to their potential customers.

## 5 – Urbanization, the Growth of Cities

Urbanization is defined as the concentration of humanity into cities. Cities have existed for thousands of years but grew faster after the industrial revolution. Since the 1950s, rapid urban growth has become a global phenomenon.

The world population was expected to increase from 6. 7 billion in 2007 to 9. 2 billion in 2050 (UNDESA 2008). Population living in urban areas was projected to gain from 3. 3 billion in 2007 to 6. 4 billion in 2050 (see figure 5. 1), and most of the urban population growth would be concentrated in the cities of the less developed regions (see table 5. 2). Asia, in particular, was projected to increase by 1. 8 billion, and Africa by 0. 9 billion (see table 5. 3). Population growth is therefore becoming largely an urban phenomenon concentrated in the developing world.

Population growth has been the main factor in the growth of cities in LDCs, whereas rural-urban migration has been the main reason for cities growth in industrialized countries. Furthermore, global economic growth, urban-urban migration and international migration have also affected urban growth (UN 2010).

Problem of urbanization is manifestation of lopsided urbanization, poor urban planning, poor economic base and without having functional categories. India for example, urbanization was followed by some basic problems in housing, slums, transport water supply and sanitation, water pollution and air pollution, inadequate provision for social infrastructure and poverty (Datta 2006).

Redirection of migration flows is required to relieve the problem of overcrowding and unemployment in cities. A strong economic sector in the urban economy is needed (Kundu and Basu 1998), more efforts and investments should be allocated to small cities which have been neglected. Policies should relate to proper urban planning emphasizing improvement of urban infrastructure and restoring original status of old building monuments which have historic value (Datta, 2006).

Urbanization critically depends on the necessary infrastructure otherwise it could turn out to be a curse. Investments are required in urban infrastructure, urban transport and urban renewal. Sectors which can find the most opportunities include construction, materials (e. g. steel, copper, aluminums, cement), capital goods, and transportation.

## Conclusion

Are the above mentioned interrelated demographic changes an opportunity or a threat? There is a great potential of economic growth in the LDCs with an increasing population growth, but only if the governments could create a better functioning market, and set appropriate policies to cope with the problems brought by rapid population growth. Ageing population is a common problem among the MDCs. Governments should invest more in education for the society, so as to develop a knowledge-based economy, and enhance the skills and competitiveness of people of all ages in order to cope with the shrinking workforce.