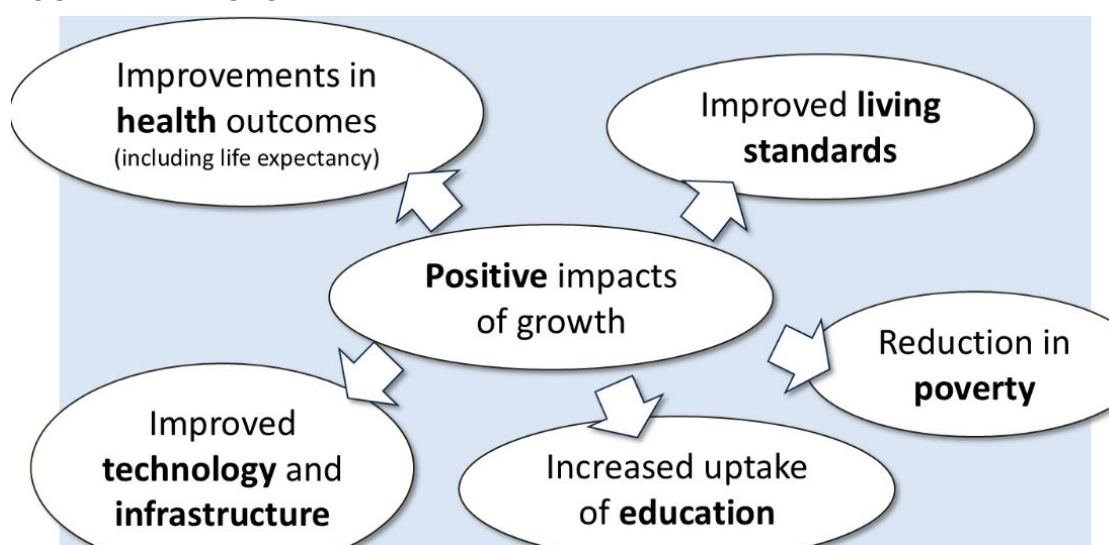


## The consequences of economic growth

Economic growth has also attracted attention because of the **positive** impact it has on society, as it has been associated with benefits such as increased wealth and standards of living among others. Aggregate growth is possibly the single most important factor influencing individual income levels. However, economic growth has also had **negative** impacts on society.

### POSITIVE IMPACTS



### Improved living standards

When rich countries today are compared to their own history, there is a vast difference in the standards of living. There has been an unprecedented increase in living standards in most parts of the world over the last half century. While the life expectancy of a person born in Japan in 1880 was 35 years, today the life expectancy in Japan is now around 83 years. Also, the average worker in the United States would have had to work for 333 hours to buy a refrigerator. Today, a better refrigerator can be bought in 20% of that time by an average worker. While having a reading light in the night was once a luxury which only the very rich could afford, today about 75% of the world has access to electricity in their homes.

### Reduction in poverty

There is a positive relationship between economic growth and the rate of poverty reduction in developing countries. There has been a significant increase in the global per capita GDP from 1970 to 2010 with the average person clearly increasing their income over time. This has meant that people are able to afford to purchase more goods and services and can improve their quality of life. Countries such as South Korea and Singapore have made the transition "from pauper to an industrial power in a single generation".

## Education

Education has a positive impact on economic growth and economic growth has increased access to education and time spent in education. There is a positive long-run relationship that exists between economic growth and education. The higher the level of economic development, the higher the demand for higher education. This could be because as the economy grows and GDP per capita increases, the government and/or people will, on average, have more to spend on education, in terms of increasing the number of people who have access to education at all levels, as well as improving the quality of education by hiring more teachers, a wider access to educational materials, books etc.

## Improved technology and infrastructure

As economies continue to experience growth, the amount that is spent on infrastructure such as transportation networks, communication, electricity, gas, water supply as well as various technologies has also increased. There is strong evidence of the influence GDP has on the infrastructure stock in a society. This has in turn led to an improvement in living standards of the population in general, and has also led to further increases in economic growth.

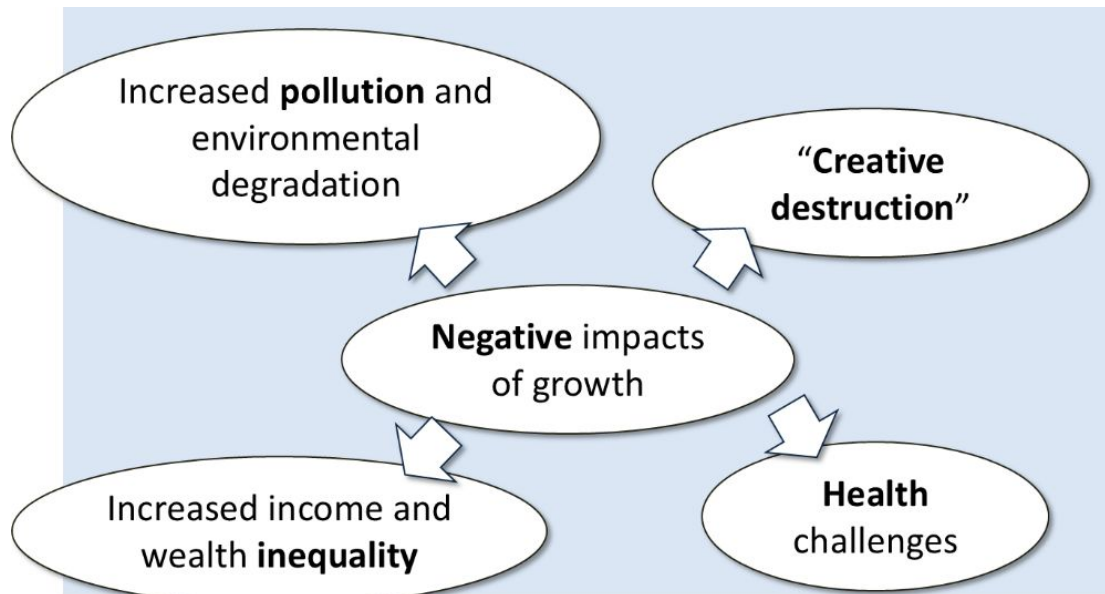
## Health

Improvements in living standards due to economic growth have also led to improvements in the health of the population in general, as they have more of things such as food, shelter and clothing than can enable them to live longer. This is because poverty, through child malnourishment and mortality, has an adverse effect on life expectancy. Education can also have a positive impact on health as well. Economic development is the most important factor determining life expectancy. In 1950, 280 out of every 1000 children in the developing world died before the age of five. However, by 2008, this number fell to 118 per 1000 in low income countries, and 57 out of every 1000 children in middle income countries. Households which have experienced economic growth spent less on health care, but have better quality care and are better off in terms of accessing and using health services.

Some of the reasons for this are that with increased incomes brought about by economic growth, governments as well as individuals are able to spend more on health in terms of health facilities and infrastructure, improved nutrition and sanitation, research on diseases, innovations in medical technologies etc. And, although expenditure on health is determined mainly by the national income, it increases faster than income. When the level of government expenditure on health is high, then this has a positive influence on the quality of healthcare, compared with low income areas where out-of-pocket expenditure on health care has significant negative economic effects on households. This therefore highlights the influence of economic growth on health. Nevertheless, another extreme has begun to emerge in developed countries, diseases brought on by too much food have replaced those

arising from too little food as a major health issue. Although improvements in technology and increased research could also lead to improvements in health care in general, these problems as well as several others are still associated with economic growth.

## NEGATIVE IMPACTS



Generally, economic growth is good for the welfare of an economy. However, it tends to create both winners and losers. Schumpeter (1942) also coined the term 'creative destruction' which highlights how the progress brought on by economic growth could lead to a destruction of an old economic structure, in the process of creating a new one. This implies that a society cannot reap the benefits of creative destruction without acknowledging that there will be some individuals who will end up being worse off. Productive relationships, firms and sometimes individual livelihoods will be destroyed by the process of economic growth, because growth is brought about by the introduction of new technologies and creation of new firms, and these replace firms and technologies currently in existence. Economic growth also leads to a shift in the structure of production, with a move from agricultural and manufacturing to services. For instance, in the United States, at the start of the nineteenth century, around 90% of the population was engaged in agriculture. However, in the second half of the nineteenth century, there was a considerable decline in the percentage of employment in agriculture, and an increase in both manufacturing and services to over 20% of employment. Over the years, both the shares of employment in agriculture and manufacturing have experienced a decline, while over 70% of the current U.S. population now work in service industries.

However, **in the long-run**, this may not necessarily be a negative effect on the whole. This is because with a shift in the structure of production to services, there has also been an increase in household income in general. Furthermore, despite a

decline in the percentage of people employed in agriculture, improvements in technology have led to an increase in agricultural output.

### Health Challenges

There are new health challenges arising with increases in economic growth. Health systems currently face complex challenges due to new pressures such as **ageing populations**, an increase in the occurrence of chronic illnesses (due to more sedentary lifestyles and an aging population), and an intensive use of health technologies which, while essential, are also expensive.

Increased access to information, campaigns on relatively low cost ways to enhance the health of the population such as eating the right kinds of food in the right portions can minimise the effect of over-eating, or eating large quantities of food with low nutritional value. Examples of such include the five a day campaign taking place in various developed countries such as the United Kingdom and the United States, which involves eating recommended portions of fruits and vegetables daily.

### Increase in Income Inequality

An increase in income inequality is another possible effect of economic growth. There has been an increase in the dispersion of income distribution for a number of countries from the period 1970 to 2010, which as earlier noted, was a period with increased economic growth.

China and some other large countries such as India have experienced a rise in income inequality. Over a 188-year period from 1820 to 2008, the gap between the rich and the poor has widened considerably. In 1820, the income per capita of the richest part of the world was three times that of the poorest part of the world. However, in 2008, this income per capita ratio increased to seventeen to one. The experience of South Africa also illustrates this on a country level. Based on data available from the start of the twentieth century till the collapse of apartheid, there was a considerable increase in GDP per capita in South Africa. However, black South Africans, who comprised the majority of South Africa's population, actually experienced a fall in real wages. Experiences such as these could be one of the reasons why some sections of society tend to support institutions and policies which do not necessarily encourage growth.

Income inequality is a major issue because it leads to a number of other adverse effects. These includes the undermining of social stability and solidarity and its unfairness to some sections of the society. As income inequality increases, the fraction of a population that can qualify for some form of credit reduces. When low income individuals are unable to borrow money, they may also be unable to afford education for their children, start businesses, and save, thus consequently leading to a lower overall rate of saving in the society. High inequality also encourages rent seeking behaviour, where the rich focus on encouraging outcomes which benefit

them and may also divert resources from productive purposes which could further enhance growth to other less productive purposes. Nevertheless, increased investments in public health, education and other relevant infrastructure could help reduce this adverse effect of income inequality.

### **Increased Pollution**

Increased pollution has also been cited as a downside of economic growth. The World Bank (2014) states that while many people have benefited from an improved quality of life due to economic growth, these gains have not been even, and economic growth usually has negative environmental consequences. According to The World Bank (2014), the rate at which natural resources, i.e. land, water and air, are being degraded in many countries is 'alarming'. (E.g. China )The health of many is also threatened by factors such as air pollution, waterborne disease and exposure to harmful chemicals. This is particularly so in developing countries due to their high levels of dependence on natural resources, a limited capacity for adaptation to the changing climate, and limited resources to remedy the effects of these changes. Furthermore, with changes in the climate globally, there is also an increased risk of natural disasters and other environmental risks.

However, there has been conflicting evidence regarding the relationship between economic growth and various environmental indicators. Studies of economic growth and the environment that have used various indicators including concentrations of urban air pollution and various contaminants of river basins, have found no evidence that an increase in economic growth leads to a deterioration of environmental quality.

While there can be an initial period of deterioration, in the long run there subsequently follows an improvement phase, thus negating the deterioration effect – air and water quality may at first deteriorate as an economy grows, but wealthier countries have stricter environmental legislation. Nevertheless, in a study of the cost of pollution in China, The World Bank states that although strong economic growth in China over the last quarter of the century has had positive impacts on the environment due to improved resource utilisation, increased energy efficiency, pollution control efforts, technologies which are cleaner and more energy efficient, and implementation of policies for environmental pollution control, new challenges have also been created. For instance, energy consumption increased by 70% from 2000 to 2005, coal consumption increased by 75%, air pollution emissions have either gone up or remained the same, and surface water quality deteriorated from 2000 to 2005. This has led to not just increased pollution, but also a depletion of resources in general.