

# Industrial revolution in western europe

[History](#), [Revolution](#)



Industrialization also introduces a form of philosophical change where people obtain a different attitude towards their perception of nature, and a sociological process of ubiquitous rationalization. Positive work ethics in populations at large combined with skills in quickly utilizing new technologies and scientific discoveries were likely to boost production and income levels – and as the latter rose, markets for consumer goods and services of all kinds tended to expand and provide a further stimulus to industrial investment and economic growth. By the end of the century, East Asia was one of the most economically successful regions of the world – with free market countries such as Hong Kong being widely seen as models for other, less developed countries around the world to emulate. The first country to industrialize was Great Britain during the Industrial Revolution

### Description

According to the original sector classification of Jean Fourastié, an economy consists of a “ Primary sector” of commodity production (farming, livestock breeding, exploitation of mineral resources), a “ secondary sector” of manufacturing and processing, and a “ Tertiary Sector” of service industries. The industrialization process is historically based on the expansion of the secondary sector in an economy dominated by primary activities.

The first ever transformation to an industrial economy from an agrarian one was called the Industrial Revolution and this took place in the late 18th and early 19th centuries in a few countries of Western Europe and North America, beginning in Great Britain. This was the first industrialization in the world’s history.

The Second Industrial Revolution describes a later, somewhat less dramatic change that came about in the late 19th century with the widespread availability of electric power, internal combustion engines, and assembly lines to the already industrialized nations.

The lack of an industrial sector in a country is widely seen as a major handicap in improving a country's economy, and power, pushing many governments to encourage or enforce industrialization.

### History of industrialization

Most pre-industrial economies had standards of living not much above subsistence, among that the majority of the population were focused on producing their means of survival. For example, in medieval Europe, 80% of the labor force was employed in subsistence agriculture.

Some pre-industrial economies, such as classical Athens, had trade and commerce as significant factors, so native Greeks could enjoy wealth far beyond a sustenance standard of living through the use of slavery. Famines were frequent in most pre-industrial societies, although some, such as the Netherlands and England of the seventeenth and eighteenth centuries, the Italian city states of the fifteenth century, the medieval Islamic Caliphate, and the ancient Greek and Roman civilizations were able to escape the famine cycle through increasing trade and commercialization of the agricultural sector. It is estimated that during the seventeenth century Netherlands imported nearly 70% of its grain supply and in the fifth century BC Athens imported three quarters of its total food supply.

Industrialization through innovation in manufacturing processes first started with the Industrial Revolution in the north-west and Midlands of England in the eighteenth century.[5] It spread to Europe and North America in the nineteenth century, and to the rest of the world in the twentieth.

## **Industrial revolution in Western Europe**

In the eighteenth and nineteenth centuries, Great Britain experienced a massive increase in agricultural productivity known as the British Agricultural Revolution, which enabled an unprecedented population growth, freeing a significant percentage of the workforce from farming, and helping to drive the Industrial Revolution.

Due to the limited amount of arable land and the overwhelming efficiency of mechanized farming, the increased population could not be dedicated to agriculture. New agricultural techniques allowed a single peasant to feed more workers than previously; however, these techniques also increased the demand for machines and other hardware's, which had traditionally been provided by the urban artisans. Artisans, collectively called bourgeoisie, employed rural exodus workers to increase their output and meet the country's needs.

The growth of their business coupled with the lack of experience of the new workers pushed a rationalization and standardization of the duties the in workshops, thus leading to a division of labor, that is, a primitive form of Fordism. The process of creating a good was divided into simple tasks, each one of them being gradually mechanized in order to boost productivity and thus increase income.

The accumulation of capital allowed investments in the conception and application of new technologies, enabling the industrialization process to continue to evolve. The industrialization process formed a class of industrial workers who had more money to spend than their agricultural cousins. They spent this on items such as tobacco and sugar, creating new mass markets that stimulated more investment as merchants sought to exploit them.

The mechanization of production spread to the countries surrounding England in western and northern Europe and to British settler colonies, helping to make those areas the wealthiest, and shaping what is now known as the Western world.

Some economic historians argue that the possession of so-called ‘exploitation colonies’ eased the accumulation of capital to the countries that possessed them, speeding up their development. The consequence was that the subject country integrated a bigger economic system in a subaltern position, emulating the countryside, which demands manufactured goods and offers raw materials, while the colonial power stressed its urban posture, providing goods and importing food. A classical example of this mechanism is said to be the triangular trade, which involved England, southern United States and western Africa. Critics argue that this polarity still affects the world, and has deeply retarded industrialization of what is now known as the Third World.

Some have stressed the importance of natural or financial resources that Britain received from its many overseas colonies or that profits from the

British slave trade between Africa and the Caribbean helped fuel industrial investment.

### **Early industrialization in other countries**

After the Convention of Kanagawa issued by Commodore Matthew C. Perry forced Japan to open the ports of Shimoda and Hakodate to American trade, the Japanese government realized that drastic reforms were necessary to stave off Western influence. The Tokugawa shogunate abolished the feudal system. The government instituted military reforms to modernize the Japanese army and also constructed the base for industrialization. In the 1870s, the Meiji government vigorously promoted technological and industrial development that eventually changed Japan to a powerful modern country.

In a similar way, Russia suffered during the Allied intervention in the Russian Civil War. The Soviet Union's centrally controlled economy decided to invest a big part of its resources to enhance its industrial production and infrastructures to assure its survival, thus becoming a world superpower.[8]

During the Cold war, the other European socialist countries, organized under the Comecon framework, followed the same developing scheme, albeit with a less emphasis on heavy industry.

Southern European countries saw a moderate industrialization during the 1950s-1970s, caused by a healthy integration of the European economy, though their level of development, as well as those of eastern countries, doesn't match the western standards.[9][10]

## **The Third World**

A similar state-led developing programme was pursued in virtually all the Third World countries during the Cold War, including the socialist ones, but especially in Sub-Saharan Africa after the decolonization period.[citation needed] The primary scope of those projects was to achieve self-sufficiency through the local production of previously imported goods, the mechanization of agriculture and the spread of education and health care. However, all those experiences failed bitterly due to a lack of realism: most countries didn't have a pre-industrial bourgeoisie able to carry on a capitalistic development or even a stable and peaceful state. Those aborted experiences left huge debts toward western countries and fuelled public corruption.

## **Petrol producing countries**

Oil-rich countries saw similar failures in their economic choices. An EIA report stated that OPEC member nations were projected to earn a net amount of \$1. 251 trillion in 2008 from their oil exports.[11] Because oil is both important and expensive, regions that had big reserves of oil had huge liquidity incomes. However, this was rarely followed by economic development. Experience shows that local elites were unable to re-invest the petrodollars obtained through oil export, and currency is wasted in luxury goods.[12]

This is particularly evident in the Persian Gulf states, where the per capita income is comparable to those of western nations, but where no industrialization has started. Apart from two little countries (Bahrain and the

United Arab Emirates), Arab states have not diversified their economies, and no replacement for the upcoming end of oil reserves is envisaged.

## **Industrialization in Asia**

Apart from Japan, where industrialization began in the late 19th century, a different pattern of industrialization followed in East Asia. One of the fastest rates of industrialization occurred in the late 20th century across four countries known as the Asian tigers thanks to the existence of stable governments and well structured societies, strategic locations, heavy foreign investments, a low cost skilled and motivated workforce, a competitive exchange rate, and low custom duties.

In the case of South Korea, the largest of the four Asian tigers, a very fast paced industrialization took place as it quickly moved away from the manufacturing of value added goods in the 1950s and 60s into the more advanced steel, shipbuilding and automobile industry in the 1970s and 80s, focusing on the high-tech and service industry in the 1990s and 2000s. As a result, South Korea became a major economic power and today is one of the wealthiest countries in Asia.

This starting model was afterwards successfully copied in other larger Eastern and Southern Asian countries, including communist ones. The success of this phenomenon led to a huge wave of offshoring – i. e., Western factories or Tertiary Sector corporations choosing to move their activities to countries where the workforce was less expensive and less collectively organized.



China and India, while roughly following this development pattern, made adaptations in line with their own histories and cultures, their major size and importance in the world, and the geo-political ambitions of their governments (etc.).

Currently, China's government is actively investing in expanding its own infrastructures and securing the required energy and raw materials supply channels, is supporting its exports by financing the United States balance payment deficit through the purchase of US treasury bonds, and is strengthening its military in order to endorse a major geopolitical role.

Meanwhile, India's government is investing in specific vanguard economic sectors such as bioengineering, nuclear technology, pharmaceuticals, informatics, and technologically-oriented higher education, openly overpassing its needs, with the goal of creating several specialization poles able to conquer foreign markets.

Both Chinese and Indian corporations have also started to make huge investments in Third World countries, making them significant players in today's world economy.

### **Newly industrialized countries**

In recent decades, a few countries in Latin America, Asia, and Africa, such as Turkey, South Africa, Malaysia, Philippines and Mexico have experienced substantial industrial growth, fuelled by exportations going to countries that have bigger economies: the United States, Japan, China, India and the EU. They are sometimes called newly-industrialized countries.[citation needed]

Despite this trend being artificially influenced by the oil price increases since 2003, the phenomenon is not entirely new nor totally speculative (for instance see: Maquiladora). Most analysts conclude that in the next few decades the whole world will experience industrialization, and international inequality will be replaced with worldwide social inequality.

Other outcomes

## **Urbanization**

The concentration of labor into factories has brought about the rise of large towns to serve and house the working population.

## **Exploitation**

Workers have to leave their family in order to come to work in the towns and cities where the industries are found

## **Change to family structure**

The family structure changes with industrialization. The sociologist Talcott Parsons noted that in pre-industrial societies there is an extended family structure spanning many generations who probably remained in the same location for generations. In industrialized societies the nuclear family, consisting of only of parents and their growing children, predominates. Families and children reaching adulthood are more mobile and tend to relocate to where jobs exist. Extended family bonds become more tenuous.

## **Environment**

Industrialization has spawned its own health problems. Modern stressors include noise, air, water pollution, poor nutrition, dangerous machinery,

impersonal work, isolation, poverty, homelessness, and substance abuse. Health problems in industrial nations are as much caused by economic, social, political, and cultural factors as by pathogens. Industrialization has become a major medical issue worldwide.

#### Current situation

In 2005, the USA was the largest producer of industrial output followed by Japan and China, according to International Monetary Fund.

Currently the “ international development community” (World Bank, OECD, many United Nations departments, and some other organizations) endorses development policies like water purification or primary education. The community does not recognize traditional industrialization policies as being adequate to the Third World or beneficial in the longer term, with the perception that it could only create inefficient local industries unable to compete in a free-trade dominated world.