

3. The advent of electricity and of information technology are often referred to as the Second and Third Industrial Revolution. Choose one of these revolutions and compare and contrast its effects to that of the First Industrial Revolution (the one that you've read about this term).

This article aims to define the main drivers of the first and second industrial revolution, and provide a systematic breakdown of their impacts on the economy evaluated in connectedness and production.

The first industrial revolution between 1760 and 1850 is widely characterised by the introduction of machines and steam engines which replaced human labour. New combinations of labour and capital in product manufacturing led to greater labour productivity and hence, higher wages. This was a major turning point in Europe, where labour was more expensive than coal and other capital goods. Technology and its practical possibilities encouraged further knowledge expansion, leading the path for the second industrial revolution. Skilled labour (knowledge to operate machines) saw wages rising, leading to a quick rise in the rich-poor gap.

Along with production, the first industrial revolution enabled increased connectedness of the world. Prior to the discovery of steam engines, the main mode of transport was by horse carriages or bicycles. This new technology created possibilities for sea travel and opened countries up to foreign trade. This allowed for cultural exchange, geographical movement and also foreign trade, resulting in increased incomes.

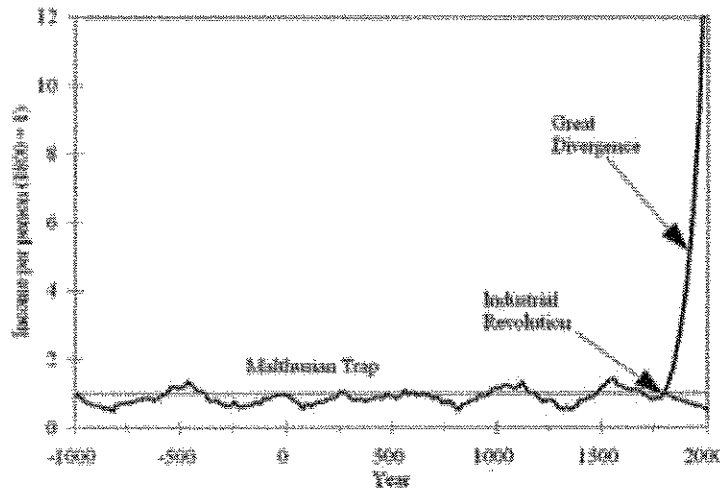


Source: Clark, 2005

During the second industrial revolution between 1850 and 1910, electricity and advanced technologies such as the internal combustion engine were introduced. Major discoveries such as the

use of electricity by Micheal Faraday and coal gas were also made. Electricity was cheaper and more efficient; soon replacing steam as the main source of power in manufacturing. This allowed for mass production, and it came with its relevant economies of scale as firms started to expand. Unemployment shrank and wages increased. Skilled labour continued to be high in demand, exacerbating inequality in the economy.

With electricity replacing steam engines, transportation became faster and its networks wider. People could travel between nations quickly and cheaply. Easier geographical movement encouraged trade and access to cities which led to sustainable increase in income year over year.



**Figure 1 World Economic History in One Picture.** After 1800 income in some societies rose sharply, while in others it declined.

The Industrial revolution has led to major improvements we enjoy today. Each phase of development has its own unique invention but their positive effects are felt cumulatively and should be evaluated together.

#### References:

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