## First wave of globalization (19th century-1914)

The first wave of globalization was occurred over the century ending in 1914. By the end of the 18th century, Great Britain had started to dominate the world both geographically, through the establishment of the British Empire, and technologically, with innovations like the steam engine, the industrial weaving machine and more. It was the era of the First Industrial Revolution.

The "British" Industrial Revolution made for a fantastic twin engine of global trade. On the one hand, steamships and trains could transport goods over thousands of miles, both within countries and across countries. On the other hand, its industrialization allowed Britain to make products that were in demand all over the world, like iron, textiles and manufactured goods.

The resulting globalization was obvious in the numbers. For about a century, trade grew on average 3% per year. That growth rate propelled exports from a share of 6% of global GDP in the early 19th century, to 14% on the eve of World War I.

## Second and third wave of globalization:

The story of globalization, however, was not over. The end of World War II marked a new beginning for the global economy. Under the leadership of a new hegemon, the USA, and aided by technologies of the Second Industrial Revolution, like the car and the plane, global trade started to rise once again. At first, this happened in two separate tracks, as the Iron Curtain divided the world into two spheres of influence. But as of 1989, when the Iron Curtain fell, globalization became a truly global phenomenon.

In the early decades after World War II, institutions like the European Union, and other free trade vehicles championed by the US were responsible for much of the increase in international trade. In the Soviet Union, there was a similar increase in trade, albeit through centralized planning rather than the free market. The effect was profound. Worldwide, trade once again rose to 1914 levels: in 1989, export once again counted for 14% of global GDP.

Then, when the wall dividing East and West fell in Germany, and the Soviet Union collapsed, globalization became an all-conquering force. The newly created World Trade Organization (WTO) encouraged nations all over the world to enter into free-trade agreements, and most of them did, including many newly independent ones. In 2001, even China, became a member of the WTO, and started to manufacture for the world.

At the same time, a new technology from the Third Industrial Revolution, the internet, connected people all over the world in an even more direct way. The orders Keynes could place by phone in 1914 could now be placed over the internet. Instead of having them delivered in a few weeks, they would arrive at one's doorstep in a few days. What was more, the internet also allowed for a further global integration of value chains. You could do R&D in one country, sourcing in others, production in yet another, and distribution all over the world.

The result has been a globalization on steroids. In the 2000s, global exports reached a milestone, as they rose to about a quarter of Global GDP. In some countries, like Singapore, Belgium, or others, trade is worth much more than 100% of GDP. A majority of global population has benefited from this, more people than ever before belong to the global middle class and hundreds of millions achieved that status by participating in the global economy.

## **Globalization 4.0:**

In a world increasingly dominated by two global powers, the US and China, the new frontier of globalization is the cyber world. The digital economy, in its infancy during the third wave of globalization, is now becoming a force to reckon with through e-commerce, digital services, 3D printing. It is further enabled by artificial intelligence, but threatened by cross-border hacking and cyber attacks.

At the same time, a negative globalization is expanding too, through the global effect of climate change. Pollution in one part of the world leads to extreme weather events in another. And the cutting of forests in the few "green lungs" the world has left, like the Amazon rainforest, has a further devastating effect on not just the world's biodiversity, but its capacity to cope with hazardous greenhouse gas emissions.

But as this new wave of globalization is reaching our shores, many of the world's people are turning their backs on it. In the West particularly, many middle-class workers are fed up with a political and economic system that resulted in economic inequality, social instability, and — in some countries — mass immigration, even if it also led to economic growth and cheaper products. Protectionism, trade wars and immigration stops are once again the order of the day in many countries.