The Effectiveness Of AI To Solve Economic Problems

Extraordinary innovations in technology promise to transform the world, but will Artificial Intelligence (AI) result in a more significant economic burden on the world, or change our lives for the better? Over the last few years, people have been overwhelmed by accounts of the impending shock to the economy and society from the development of robots and AI. Although many see the apparent benefits, such as the ability for AI to lead to enhanced automation and increased efficiency, promoting economic prosperity, AI possesses the technological ability to change our world for the worse. The effectiveness of AI needs to be assessed by analysing its ability to solve some of the most challenging problems of the next 20 years.

One of the biggest economic problems that exists is income and wealth inequality. As Dutch historian Rutger Bregman states, the gap between the rich and the poor is ‘already wider than it was in Ancient Rome’ (Bregman, 2014), an economy that was notoriously known for being founded on slave labour. With the USA having a Gini coefficient of 41.5 in 2016, compared to 27.1 for Finland in 2015, you’re much more likely to achieve the “American dream” if you live in Finland (World Bank Group, n.d.). According to Oxfam, the world’s richest 1% have more than twice as much wealth as 6.9bn people (Oxfam International, 2020).

So can the era of an ‘AI takeover’ help cure these problems or will it simply worsen them?

When illustrating how developments in AI can produce advantageous results for those on lower incomes, we should examine the effects of the introduction of Uber. The Uber taxi service has transformed travel throughout Europe, outcompeting the famous black taxi trade in London. Through developments in technology, Uber has benefitted, using this progress to allow them to easily identify and collect customers, rather than ‘learning the streets of London by heart’. In this example we see that the use of automation allows Uber to outcompete its competitors, despite not knowing much about the environment in which it is in. This has a positive effect on redistribution of income, as the increase in supply reduces the equilibrium price, resulting in the service being more affordable. Many argue that the success of Uber results in the owners getting richer, yet at this present moment in time, the company is making large losses.

As it is well documented that the AI era will replace many human jobs, it is understandable that people fear a future distribution of income in a robot and AI dominated world where the mass of people are scrambling to get low paid jobs. The wiping out of the middle class would result in these people accepting jobs that would have previously belonged to the lower class, and those in lower class jobs may become unemployed, resulting in increasing income inequality.

The Ai revolution will also halt the development of developing countries in the short term. Formerly, East Asian countries, such as Singapore, benefitted from economies of scale, using low labour costs to expand manufacturing sectors and increase exports. Yet the development of AI and robots will allow richer Western countries to manufacture locally using technology, thereby decreasing transport and other costs. Developing countries, such as China and India, on the pathway to becoming developed countries would face less of an uphill task as their massive internal markets will allow them to avoid dependence on exports as the route to success. Yet those at the bottom of the development ladder, aiming to follow the same

development path successfully used by countries in the East, would not have the financial capability to deploy AI and robots, and would have to rely on homegrown sources of demand. Ultimately, this is likely to result in these countries remaining behind on the development path, likely leading to more income inequality.

Yet as we do not know fully what the effects of AI will be, as it depends on multiple factors, we do know that economists will have a huge role to play. Economists need to decide whether it is a good idea to regulate and tax it, or whether a Universal Basic Income is a suitable method to decrease income inequality. Some argue that less regulation around the application of technology would fuel faster experimentation, innovation and development, while others argue that it would be beneficial for a system of taxing and regulation of AI and robots to be introduced, to keep up government revenue with the loss of jobs