Technological Breakthroughs, Not Trade Protectionism, Are Key to Economic Renaissance

By Kazumasa Kusaka

In factories today, we see fewer and fewer workers on assembly lines and more robotics, and its parts and components are coming from all over the world. This is the case at General Motors, Ford, Toyota and Honda factories, regardless of their location in the United States, Canada, Mexico, the United Kingdom or Japan. Given this situation, the question arises of whether protectionist measures to suppress imports, if adopted, are really a solution to securing employment, such as President Donald Trump is saying in the US. We have to analyze whether a possible threat to employment can be mainly attributed to globalization, and if not, what are the forces behind this threat, in order to effectively cope with it.

It is not unusual for political or business leaders to assume that their national companies are more competitive than any other county's companies but that foreign competitors enjoy unfair support from their own country. When the argument is that the manufacturer or service provider enjoys a home-game advantage while the foreign business suffers from an away-game disadvantage, as many assert in some kind of sports analogy, a neutral venue for competitiveness would be in a third country market to judge what is the choice of consumers. But manufacturers and service providers also choose the most investment-friendly or business-friendly countries for their operations. Therefore the countries providing open and business-friendly markets for FDI alone can get the benefits of FDI, which can spur globalization and serve the host country's interest.

A more fundamental question is what are the forces behind recent developments in industries? Will technological breakthroughs lead to widespread unemployment, as in the case of UBER which poses the threat of replacing professional drivers with available drivers without professional licenses, or in future with AI-assisted self-driving cars? Will AI-assisted machines be advanced enough to replace humans in providing better services in increasing numbers of jobs? Historically, the industrial revolution of the 18th and 19th centuries rapidly destroyed the Indian textile industry. In the UK itself, the revolution faced conservative reaction from the "Luddite" movement. Yet we also know that historically technology has created more jobs than taken them from human beings through economic growth, as well as liberating humans from painful manual labor.

Is it different this time? Has AI so advanced, as in the case of Go matches where we were surprised by the Google AI "Master" version, improved from the AlphaGo Deepmind, that since the end of last year kept winning against the world's top five Go players in Internet matches? Yet the objective of developing the Master program was said to be not for the game itself but to deal with complicated situations and tasks which require the best brains of human beings. Another point is the speed of innovation and its deployment. If it takes one generation for disruptive new technology to replace old ways of manufacturing or service businesses, older workers might not be forced to be trained in quite different skills or to be moved to different regions.

Harvard Business School Prof. Clayton Christensen's analysis of disruptive innovation first focused on how it disrupts the old successful products, businesses and companies. Yet the disruption goes beyond business boundaries and transforms society. In the industrial revolution in the UK, the high growth period in Japan, and more recently in China, the introduction of innovative technology and investment embodying it had been supported by the mobility of people from rural areas to industrial cities. Economic growth was made possible by not only geographical mobility but also social mobility.

So, the question is whether this time we can manage to get the fruits of innovation without disrupting society and the democratic political system? How can we overcome this challenge? The good news is that Japan can be a testing ground. You might wonder why Japan, a rather conservative country that generally avoids taking risks, can take that risk as a frontrunner. The reason is necessity, and the limited resistance to it. Last February the unemployment rate hit the lowest level for the 22nd year in a row, lower than 3%, creating wage increase pressure. Longer-term demography dictates a shrinking workforce and graying population. This means that AI-assisted robots will be encouraged to replace human jobs or to assist workers in various sectors. Healthcare, nursing care for the elderly, transportation and delivery services, and construction sites are the immediate areas needing new technology.

The countries that have some reservations about deployment of job-replacing technology can see the outcome of Japan's experiments — whether the technology could create more value-added job opportunities for human beings or whether AI will be controlling human society and humans becoming increasingly subservient.

I am rather optimistic. History shows that building water wells and changing cooking fuel from wood to oil released women and children from spending whole days transporting water and fuel, and empowered women with education opportunities. We need technological innovation to meet the new challenges ahead.

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