Forum:	ECOSOC
Issue:	Addressing the economic implications of Artificial Intelligence
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Overview

In a world where increased labor in global markets and technologies development influence much of the world's economy, the pursuit of technology in the international community today has reached a state where it is genuinely considered as next space race. Rather than arguing about the profound changes in technologies, such as Artificial Intelligence (AI), the debate has been more focused around how the world responds to these changes. For decades, the outright implementation of AI has remained a long term goal for most MEDCs. To understand the economic implication of AI, we need to consider the issue on the incorporation and development of Artificial Intelligence in the industries today and the unprecedented changes in a matter of years and decades. Critics would inevitably argue that innovative changes would alter conventional workforces, but the data has suggested that at the same time, the cost, or the rising employment rates, would reach an extent where the jobs of many would be loss, in the long run.

In essence, the international community must comprehend AI as not just a viable catalyst for global economy, but a potential threat reversing implied intentions. Additionally, the issue of Artificial Intelligence is also closely interlinked with national defense and security; with the development of Lethal Autonomous Weapons (LAWs), MEDCS have been heavily invested towards military AI weapons. Consequently, the implementation has received major backlash from rising protests calling for bans on LAWs whilst endorsed by notable figures including Elon Musk, CEO of SpaceX, Tesla Incorporation, and Neuralink. All in all, no matter where AI Applied, its consequences must be carefully analyzed and dealt with by countries to ensure that AI can be smoothly implemented without harming employment, especially in repetitive jobs easily replaceable by AI. In sector, such as by providing satellite data for farmers to predict harvest seasons.

Key Terms

Artificial Intelligence

According to Oxford dictionary, Artificial intelligence refers to "the theory and development of computer systems able to perform tasks normally requiring human intelligence, such as visual perception, speech recognition, decision-making, and translation between languages." Though the field of study is relatively new, basic forms of AI such as but not limited to speech recognition on smartphones of self-driving cars have already been implemented in the real world. Artificial Intelligence is not only limited to the more prevalent technological occupations including the automobile and mobile industry, but also have benefited the agricultural sector helped undertake real world situations. Because these programmable advancements are only in its early stages, the AI sector has yet to reach its full potential only through a matter of time.

Lethal Autonomous Weapons (LAWs)

Lethal autonomous weapons are autonomous robots in the military sector that are programmed to search or engage with targets under its constraints. As first used as land mines since the 1600s, the ban of LAWs has continued to remain controversial in a sense that it removes human decision when actively engaging targets, leading to an unmanned system that many experts believe is unacceptable. There is also a concern that LAWs may violate international humanitarian law for its speculated lack of ability to distinguish combatants from non-combatants.

Technological Unemployment

A phenomenon where people suffer from job loss due to technological applications, specifically including artificial intelligence. Historically speaking, the term has had great association with countries such as the United States since the Industrial revolution as a result of the booming economy due to technological innovations at the time. The consequences of implementing artificial intelligence would be inevitably worse for LEDCs due to pre-established economic constraints.

Automation

Automation refers to the development by which labor or tasks can be performed by machines without the human workforce. As a result of the implementation of AI, automation can range from small tedious tasks such as utilizing customer service robots on website platforms to enforcing self-driving automobiles in the real world. Ultimately, as a core principle of the issue, automation comes with both pros and cons, ranging from improved

quality and increase consistency of a product to high initial economic costs and even a loss of jobs resulting in a displaced workforce.

Important Events/Timelines

Date	Event
March, 1811	The Luddite Movement, consisted of a group of English radicals known as the luddites, protests against the use of machinery in textile factories. The group was later suppressed by the British army.
1840s	Computer mathematician Charles Babbage proposes the Analytical Engine, one of the earliest mechanical computer design that shapes much of modern computers in the electronic era. The industrial Revolution comes to its end.
1967-1972	Waseda University in Japan jumpstarts the WABOT project, eventually developing the first ever human-scaled humanoid robot. Though many scientists began developing AI projects, funds provided by governments were cut short due to the lack of progress.
October, 2005	A robot from Stanford wins the DARPA Grand Challenge, driving over 130 miles on a desert trail autonomously.
October 4th, 2011	Apple first implements Siri on the iPhone 4s, assisting users to perform actions through voice commands, adapting to the user's speech, searches, and general preferences.
November 17th, 2017	The United Nations holds a five-day initial meeting on the UN CCW where 22 nations call on a ban on the development and utilization of automated weapons or "killer robots".

Major Nations/Organizations

United Nations Convention on Conventional Weapons (CCW)

The purpose of this organization is to seeks to prohibit or restrict the use of certain conventional weapons which are considered excessively injurious or whose effects are indiscriminate. It also cooperated with a NGO to discuss the effects of implementing LAWs and considering a widespread ban of Artificial Intelligence.

United Nation Development Programme (UNDP)

One of the goals of UNDP is to accelerate structural transformation. According to the United Nations Development Program (UNDP), farmers in India are also using AI to predict weather patterns to predict when to sow, increasing their yield by thirty percent per hectare.

The United States of America

As a leader in the AI technological race, the United States has continued to heavily invest in economic resources to maintain its high rankings. Followed by the election of President Donald Trump, the president has since taken numerous strategic measures to enforce AI in modern industries and corporations. Since 2015, not only has the Federal Government's investment for AI increased by over forty percent, but the US Office of Management and Budget (OMG) and the White House Office Science and Technology Policy (OSTP) have led agencies to develop rising technologies such as AI and machine learning. The US Department of Defense (DoD) has also taken responsibility of the military aspect of AI when Deputy Defense Secretary Patrick Shanahan officially announced the establishment of the Joint Artificial Intelligence Center (JAIC) to supervise over 600 ongoing AI projects. Furthermore, with President Trump's signatory of the Presidential Memorandum prioritizing Science, Technology, Engineering, and Math (STEM) education, advocacy for artificial intelligence as initially pointed out in the National Security Strategy, and a request to prioritize AI and autonomous systems in the 2019 fiscal year budget, the US remains committed to compete against its economic rivals, namely China and Russia, to take a lead in the technological race.

Relevant UN Treaties and Events.

- The United Nations Convention on Conventional Weapons (UN CCW)
- The Dartmouth Research Summer Research Project on AI, 1956
- Economic and Social Council Resolution, 1965 (E/RES/1086(XXXIX))

Previous Attempts to solve the Issue

Established in 1968, the United Nations Interregional Crime and Justice Research Institute (UNICRI) was intended to expand the UN's activity towards fighting crime and criminal justice. The research institute assists governments and upholds international treaties

and law in order to promote national self-reliance. With the growth of artificial intelligence especially towards countries investing in LAWs, UNICRI values "artificial intelligence and robotics" as a priority under the UN. Additionally, UNICRI also offers many educational courses to share knowledge with other research institutes and universities. On September 7, 2017, the Director of UNICRI, Cindy Smith, along with the Ambassador of Netherlands to the International Organizations, signed the Host Country Agreement which created the first United Nations Center explicitly dedicated to artificial intelligence and robotics in The Hague, Netherlands. By expanding an international network to monitor worldwide developments towards artificial intelligence, UNICRI is able to enhance and inform policies regarding AI to promote technology for good. Recently, between July 11 and 12 of 2018, UNICRI along with the International Criminal Police Organization (INTERPOL) also held a two day conference with participants from over 20 countries to discuss recent developments of artificial intelligence and robotics. Private sector companies showed live demonstrations of AI applications such as facial recognition and incident prediction to inform the community as well as law making participants. Additionally, in countries such as Singapore already utilizing patrolling robots to assist the officers' daily lives, many countries were able to gain insights on the economic and social impacts of AI. The conference also outlined considerations such as the fairness and transparency of AI, frame working future challenges for major companies and countries.

Possible Solutions

Changes to the education system

To Effectively balance the employment rates and AI technology, one possible long-term solution would be the implementation of mass education to reskill workers. Although the solution may seem radical and unrealistic, such a solution has the potential to improve employment rates by leaving jobs AI cannot replace in the short term to educated workers. According to MIT economist Erik Brynjolfsson, he identifies that machines can only replace middle-skilled routine tasks including bookkeeping and legal aids under the status quo. Hence, there are jobs AI are incapable of replacing, even including simple tasks humans can accomplish such as walking over uneven terrain. By training and re-educating workers with a new set of skills, the economic implementation of AI can transition smoothly in correlation with the employment rates throughout the years. Furthermore, according to a report from The Future of Employment, jobs including telemarketing have a 00% of becoming automated due

to its highly routine and repetitive nature. However, countries should also consider the fact that such solution would only be more applicable towards MEDCs instead of LEDCs due to financial and economic constraint.

FIGURE 11.1 Labor Productivity and Private Employment

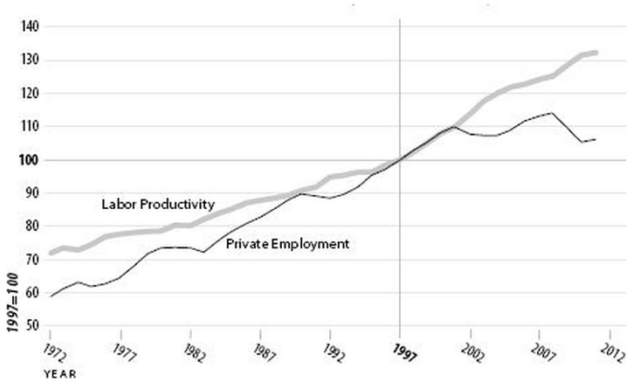

Figure: Erik Brynjolfsson- The Second Machine Age: Labor productivity and private employment

Changes to the education system

Another approach to the topic directly involves governmental policies. To adjust to the changing atmosphere of AI technology, the government can take action by implementing new job programs and even legislative standards if necessary. Critics have argued that by stalling innovation for AI technology, employment rates may rise, leading to a balance between labor productivity and private employment. However, given the status of countries such as China bolstering AI development, the UN along with other international organizations must provide a legal framework for such measures to be implemented.

Members of the international community much find the "sweet spot" between employment and technology to ensure that the global economic status can transition into a world of humanoid machines capable of making intelligent decisions. By limiting the use of robots in certain jobs or providing a safety net for workers under certain circumstances where workers become undermined, countries can work to ensure a more economically stable environment for laborers.

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