Research Report

Economic and Social Council (ECOSOC)

Issue 2: Evaluating the implications of artificial intelligence replacing human labor in developing economies

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Table of Contents:

Introduction 3

Definition of Key Terms 4

Background 7

Major Countries and Organisations Involved 10

Possible Solutions 12

Bibliography 13

Introduction

In recent years, 'AI' has been termed as "transformative technology," especially regarding the efficiency and advancement of new businesses. A question has been raised expressing serious concern over automation and job displacement, particularly in places where low-cost labour has been a competitive advantage ("AI's $4.8 Trillion Future: UN Warns of Widening Digital Divide without Urgent Action"). Further worsening the socioeconomic inequality gap, this creates the "AI Divide. "MEDCs disproportionately benefit from AI advancements, while low- and middle-income countries, particularly in Africa, lag. ("Mind the AI Divide").

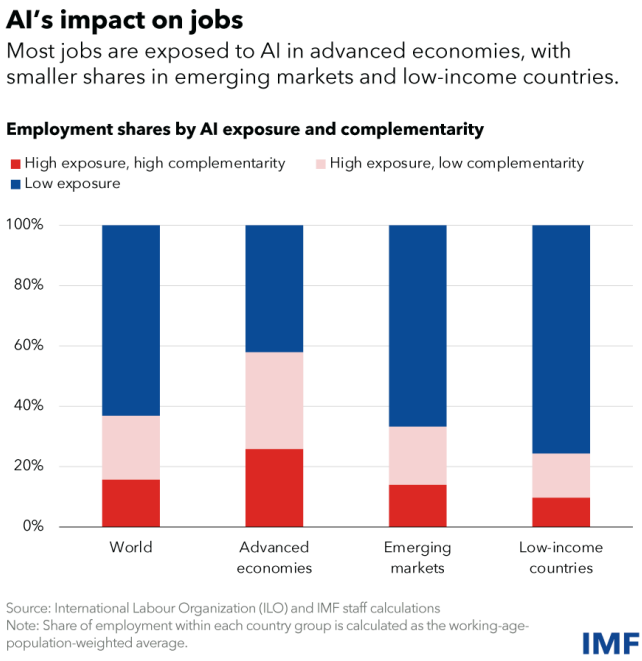

Fig.1. AI's impact on jobs (Editeur Metalab)

Whether through choice, need or global economic pressure, various economies are being rapidly drawn into this 'technological transformation'. AI contains the potential to increase productivity, economic growth, and enhanced service delivery in industries such as agriculture, manufacturing, education, and healthcare. However, the benefits of AI are not evenly distributed, especially in areas with weak labour markets and limited social safety nets. In various developing countries, employment is highly focused on low skilled, labour-intensive jobs, particularly in agriculture, textiles, mining, and informal services. But it is these jobs that are most vulnerable to automation. As AI continues to replace human labour in repetitive and predictable tasks, a significant part of the population faces the threat of job displacement (Gideon Olowu). According to a UNCTAD report, the AI market capitalisation is almost equal to

Germany's economy, with the technology driving productivity improvements and digital transformation. The agency expressed concerns about automation and job displacement, stating that AI might harm 40% of occupations worldwide. Likewise, AI is not inherently inclusive; economic rewards from the technology are " highly concentrated, according to the paper (Butts).

Definition of Key Terms

AI Divide

An observed widening gap of AI advantage that typically exists between MEDCs and LEDCs, with such factors as technology, skills, and infrastructure being measured.

Reshoring

Entails returning production to a country from an overseas location. Typically, this is done to help a company manage its supply chains efficiently.

Capacity Building

Strengthening developing countries' ability to adopt, regulate, and benefit from AI through training, funding and governmental support.

Digital Infrastructure

Broadband, cloud computing, data centres, and electrical stability are all critical to establishing the technological foundation required for AI adoption.

Generative AI

Systems capable of creating new content (text, images and code)

ILO (International Labour Organisation)

The UN agency focuses on human rights, employment policy, and social protection. Provides strategies for managing technological transformation and AI's impact on the workforce.

LDCs (Least Developed Countries)

Countries which are classified by the UN as having the lowest socioeconomic development, minimal industrialisation, and a significant vulnerability to economic shocks.

MEDCs (More Economically Developed Countries)

Wealthy and industrialised countries that significantly benefit from AI advancements

UNCTAD (United Nations Conference on Trade and Development)

Investigates and assesses global economic trends, including AI's impact on inequality, labour markets, and development

Vocational training

Specialised instruction that focuses on the practical, hands-on skills needed for certain occupations, jobs, and trades. (like arts, plumbing, or healthcare)

Background

AI has gradually replaced human labour in developing countries, capable of performing not only ordinary manual jobs but also cognitive, service, and management roles. This change, from agriculture to low-skilled manufacturing to higher-value services, puts traditional growth pathways at risk. AI enables reshoring from traditionally relied-on cheap labour abroad to high-income countries. Globalisation and technological advancement may aggravate inequality in wealth within countries, but in low-income countries, they can also contribute to eliminating poverty. They have done so not only in major countries like China and India, but also in many other countries, particularly in Africa. (UNCTAD).

The Artificial Intelligence market ($16 billion in 2017, now estimated at between ~ $ 244 – 391 billion, as of early 2026) continues to grow rapidly. The rise of large quantities of data, higher productivity, various applications, the availability of large-scale government financing, and breakthroughs in image and speech recognition technology are the primary drivers of supply-side market growth. The main supply limitation is a shortage of AI technology expertise. On the demand side, growth is being driven mostly by greater use of cloud-based apps and services, increased demand for intelligent virtual assistants, and increased customer satisfaction. One potential demand limitation is the perception that AI poses a threat to human dignity; the impact is expected to be minor. The AI industry is experiencing rapid employment growth. AI-related job posts on a worldwide employment related search engine increased by nearly 100 per cent between June 2015 and June 2018. A study covering 15 countries found that China was home to the most AI professionals, with 12,113 AI jobs, followed by the United States (7,465) and Japan (3,369). Software engineers and data scientists are the two most in-demand AI job categories (UNCTAD). However, countries such as Bangladesh, Kenya, and South Africa continue to suffer from the AI eclipse. Bangladesh's garment sector (4 million workers) is particularly vulnerable to AI-driven reshoring. Kenya and South Africa are digitally dynamic, yet they are examples of inequality in African economies, with Kenya's weak AI infrastructures and skills and South Africa's AI adoption limited to high-skilled workers, triggering inequality trends. UN News reports that automation and AI are diminishing the global labour income share, increasing inequality, which is an issue regularly emphasised in UN economic debates (“Tech Progress, Automation, AI, Cut Workers’ Share of Wealth: ILO”).

The United Kingdom is being struck harder economically by AI, with the country losing more employment than it creates when compared to competing countries. In the United Kingdom, enterprises reported that AI caused a net job loss of 8% over the previous 12 months, the highest percentage among comparable economies and twice the international average. The announcement comes at a time when UK workers are already battling a five-year high in unemployment and workforce shortages as businesses deal with higher national insurance premiums. Most of the jobs at risk appear to be those that can be easily replaced by artificial intelligence, such as software developers. UK firms terminated or did not rehire for approximately a quarter of their jobs owing to AI (elizabeth).

Countries have taken some steps to prepare their workforce for AI-induced job changes, although measures have been limited until now. Some countries, such as Ireland, have invested in increasing higher education programs, while others, like Germany, Finland, and Spain, have initiated projects to increase the population's AI skills through vocational training and lifelong learning. Whether globalisation or technological change aids or hinders catch-up between countries depends mostly on the policies in place.

In 2024, the United Nations passed a resolution regarding "Seizing the opportunities of safe, secure and trustworthy artificial intelligence systems for sustainable development", which was the first-ever global AI resolution. The Resolution primarily focus on international cooperation and capacity building for AI, especially in developing countries. (link to resolution in bibliography). UNCTAD Secretary-General Rebeca Grynspan emphasised the necessity of strengthened international cooperation in shifting the focus "from technology to people," and enabling countries "**to co-create a global artificial intelligence framework**". UNCTAD advocates for greater international cooperation to lead the development of artificial intelligence. It also suggests developing a public disclosure framework for AI, comparable to existing environmental, social, and governance (ESG) norms, to improve openness and accountability ("AI's $4.8 Trillion Future: UN Warns of Widening Digital Divide without Urgent Action").

International labour rules provide the foundation for how countries should manage technological change. The ILO's proposition on decent labour, employment policy, and social protection sets out the rights that should be safeguarded as artificial intelligence reshapes labour markets (*Mind the AI Divide Shaping a Global Perspective on the Future of Work*). UNCTAD also emphasises the importance of inclusive international frameworks, noting that 118 poor countries are under-represented in global AI governance.

The EU AI Act provides a risk-based approach to ensuring that AI systems are safe, transparent, traceable, and non-discriminatory, with human oversight. In the United States, the White House Office of Science and Technology Policy issued a Blueprint for an AI Bill of Rights in October 2022, outlining a road map for responsible AI use. In June 2022, Canada presented in Parliament the Artificial Intelligence and Data Act (AIDA), which demands "plain language explanations" of how AI systems achieve their results. Many countries, groups, and businesses are also evolving. The "Hiroshima AI Process" was initiated by G7 Leaders in May 2023 to align countries (including the EU) around a common approach to generative AI (“Editorial: Beyond the Hype on AI – Early Signs of Divides in the Labour Market: OECD Employment Outlook 2023”).

Major Countries and Organisations Involved

United States

The United States leads in global ranking due to its dominance in private investment, academic research, and AI startup activity. Its native IT companies and numerous research institutions drive a significant amount of global AI development (Routley).

China

China ranks among the world's top developers in terms of AI publications, patent applications, and large-scale AI adoption across industries. (Routley). China's artificial intelligence leadership widens the technology gap between rich and developing nations.

India

India is building a strong AI skill base and digital environment, but growing research infrastructure to compete with other countries remains a challenge (Routley). Its massive tech workforce and national AI policy establish it as a significant rising AI power.

Low-Income and least developed countries (LDCs/LEDCs)

Nations like Bangladesh and Nepal are vulnerable to AI-driven job displacement due to their significant dependence on labour-intensive industries like textiles, agriculture, and basic manufacturing, leaving them especially vulnerable to automation and AI-enabled reshoring

UN

The UN is a key player in global AI governance. Such crucial bodies would include the United Nations General Assembly, which issued resolutions on "safe and trustworthy AI" and capacity building for developing countries. The UNCTAD also investigates how AI influences global inequality and

development. Furthermore, the UNDP investigates how artificial intelligence affects human development and inequality.

ILO

The International Labour Organisation (ILO) addresses the fundamental problem of unequal AI adoption and its implications for global equity, fairness, and social justice. Emphasising the significance of focused and coordinated efforts to bridge the digital gap in order to secure AI's ability to promote sustainable development and reduce poverty.

G7

It is a significant intergovernmental organisation consisting of Canada, France, Germany, Italy, Japan, the United Kingdom, and the United States, as well as the European Union. Representing the world's top advanced economies, with an emphasis on global concerns such as economic policy, security, and climate change. Home to the world's largest AI businesses (USA, UK, Japan). They set global trends (EU AI Act and US AI Bill of Rights). While organising international AI safety and governance. Their policies significantly influence how AI spreads to emerging economies.

Possible Solutions

1. Protecting workers and assisting struggling economies:

- Provide social protection for displaced workers
- Diversification of economies
- Frameworks for ethical AI adoption
- Vocational training that adopts AI frameworks

2. Encouraging responsible AI innovation:

- UN-endorsed certification for ethical artificial intelligence
- Global AI safety standards
- Ensure transparency and fairness

3. Developing educational systems that provide people with the digital and problem-solving abilities required to flourish in an AI-driven future:

- Applying digital literacy at all levels of education.
- Increasing opportunities for STEM and technological education (ICT/AI)
- Partnership with tech companies for AI education
- Provide sufficient opportunities for digital education.

4. Align with the G7 Hiroshima AI process:

- International cooperation with G7 countries to seek out help and support

- Regulation based on risk

- Safe generative AI

Since you have made it this far, here is the link to the ALMUN ECOSOC '26 WhatsApp group ッ: https://chat.whatsapp.com/GVyPztdqVzvJ7KPvTKt7p7?mode=gi_t

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