



ARTIFICIAL INTELLIGENCE AND GLOBALIZATION: THE CASE OF GLOBAL ECONOMIC OUTCOMES FOR DEVELOPING COUNTRIES

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ABSTRACT

Globalisation and Artificial Intelligence (AI) have together shaped the modern world, becoming the most powerful forces¹. However, both are working simultaneously as globalisation connects people through the trade of goods or ideas across borders, and connections are established to speed up communication, trade, and education². This transformation altered the functions of societies and created several challenges, including job losses, privacy issues, and ethical risks³. This paper observes the positive and negative sides of how AI influences globalisation and how countries coordinate with each other to leverage the benefits of technology for everyone. The study uses secondary data, and reports submitted globally to examine how society, economy and governance are reshaped by AI⁴. Policy recommendations are provided at the end of the paper by the author for balancing innovation and ethics.

INTRODUCTION

Globalisation transformed the world from ancient Silk Roads to the digital highways of today⁵. This capital mobility changed the lifestyle of people, and the emergence of AI in the 21st century boosted globalisation as a driving force⁶. AI is not just a tool, but it is working as a silver bullet, as it has benefited sectors such as healthcare, education and business. However, keeping silver aside, bullets cannot be ignored as developed nations often get more benefits

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¹ World Bank. (2024). *AI and development: Revolutionary potential and huge uncertainties*

² World Bank. (2024) (n-1)

³ OECD. (2023) Organisation for Economic Co-operation and Development. (2023). *AI and Work: Implications for Labour Markets*. OECD Publishing.

⁴ Creswell, J. W. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*.

⁵ Zuboff, S. (2019). *The age of surveillance capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.

⁶ McKinsey & Company. (2024). *The State of AI in Early 2024: Generative AI Adoption and Growth*.

because they have infrastructure, structured data and a skilled workforce to use and govern AI more effectively. Meanwhile, developing nations are still struggling due to limited access to technology⁷. This research paper discusses how AI and globalisation collaborate and analyse both the scope and criticisms of this relationship, and fills up gaps between them by suggesting some ways to make AI-driven globalisation more inclusive and efficient⁸.

HISTORICAL PERSPECTIVE OF TECHNOLOGY AND GLOBALISATION

Globalisation is not a new regime, but it has evolved from the printing press to the steam engine. Each step taken towards growth enabled trade and allowed ideas to spread more quickly. The industrial revolution pushed international trade with mass production, and the internet made capital mobility across continents instant. AI is the most recent but powerful emerging evolution, not only acting as a communication tool but also making decision-making smarter. Unlike other technologies, AI learns itself through the machine learning process (MLP) and deep learning process (DLP). This caught global attention and acts as a source of power in countries and corporations that control the technology.

THE LINK BETWEEN GLOBALIZATION AND AI

Globalisation and AI are directly proportional to each other, as AI depends on global data. The more data it has, the smarter it becomes; however, on the other side, globalisation depends on AI for efficiency and speed⁹. For instance, AI is used by many international companies for business analysis in context to analyse customer behaviours or market trends across borders¹⁰. Global trade and security are managed through AI by governments, and even educational platforms are adopting AI to collect and display different learning materials for students worldwide¹¹. AI accelerated digital globalisation, leading to the growth of software, data, and online services even faster than physical goods could¹². Global companies such as Google and Amazon are great examples, powered by AI algorithms that have adopted various languages and cultures. This shows how AI acts as a superpower while creating a digital divide and power imbalance.

⁷ World Bank. (2024) (n-1)

⁸ Tallberg et al. (2023) Bäckstrand, K., & Scholte, J. A. (2023). *The Global Governance of Artificial Intelligence: Next Steps for Research*. *Global Policy*, 14(2), 67–85.

⁹ McKinsey & Company. (2024) (n-6)

¹⁰ World Bank (2024) (n-1)

¹¹ IMF (2025) *The Global Impact of AI: Mind the Gap in Preparedness IMF Working Paper*.

¹² OECD (2023) (n-3)

RESEARCH QUESTIONS AND METHODOLOGY

This global reach raises questions as follows:

1. Who inputs and controls the data & how can privacy be protected?
2. How does AI collaborate with and reshape the concept of globalisation?
3. How are developing countries being affected by AI-driven globalisation economically, and in the context of labour and governance?
4. What are the policy recommendations to promote a sustainable and equitable AI-driven global framework?

This paper presents a qualitative and analytical approach based on secondary data. Sources include institutional reports of the IMF, OECD, World Bank, and UN; academic journals and policy analysis of the last five years. Data is observed thematically to study trends in AI-driven globalisation. This paper adopts the conceptual synthesis method with the combination of law to offer interdisciplinary analysis and insights from economics and international relations.

POSITIVE IMPACTS OF AI ON GLOBALISATION

Economic Growth and Innovation: Productivity and innovation are promoted by AI as a support to industries. For instance, international trade becomes more efficient with the use of AI-powered robots work which reduces human errors¹³.

Global Communication and Collaboration: Translation and communication across languages are made faster, enabled by AI¹⁴. CHATBOT or Google Translate made interaction easier for individuals or businesses globally. This boosted trade and cultural exchanges.

Healthcare and Crises Response: Even during the pandemic, AI helped scientists from different countries to analyse virus data and predict infection, which showed technology can unite better as seen during global crises¹⁵.

¹³ McKinsey & Company. (2024) (n-6)

¹⁴ OECD. (2023) (n-3)

¹⁵ UN. (2024) United Nations. (2024). *Governing AI for Humanity: UN White Paper on AI Governance*.

EDUCATION AND SKILL DEVELOPMENT- AI personalises learning via platforms like Duolingo. Students from rural households can easily access quality education, which was once limited to elite universities¹⁶.

CHALLENGES AND RISKS

Several challenges are faced by AI, despite being this innovative and helpful to many sectors, such as:

Inequality Between Nations: Research and development of AI is mainly dominated by developed countries. There is a report of the IMF showing 70% of global AI patents served from only three regions, that is, the U.S, Europe and China, which confirms that developing nations are still struggling and, however, depend on imported technologies, opting as consumers rather than developers.

Job Displacement: AI replacing jobs, especially low-skilled ones. For example, human labour in industries is replaced by work such as customer service and manufacturing. According to the World Economic Forum (2004), 800 million jobs would be affected globally by 2030. However, new jobs will also emerge, but they will require new skills.

Privacy and Surveillance: Massive data is collected by AI; however, this can lead to privacy concerns, as personal information can be misused. Many global tech companies use data collected across borders, which raises the question of consent.

Ethical And Legal Challenges: AI globalisation raises questions like: who owns this data, and who will be accountable when algorithms fail? What are the implications of technologies that are being exported across borders? AI challenges sovereignty as algorithms can be interpreted and manipulate information, which can also influence elections beyond national borders.

LITERATURE REVIEW

AI as a Driver of Global Economic Change: According to the reports of the World Bank, AI would contribute to a 15% rise in GDP by 2030 by optimising logistics and digital services, and the reports of the IMF (2025) note that AI has reduced transaction costs, boosted efficiency

¹⁶ World Bank. (2024) (n-1)

through automation, thereby accelerating global economic integration. Digital Globalisation emerged as a newly coined term for exchanging data rather than goods.

Uneven Adoption and the Global Digital Divide: Global distribution of AI is highly unequal, as there are advanced research systems contained by developed nations with high computing capacity and skilled labour, while the global south lags due to its limited resources and investments, according to the report of OECD (2023). More than 70% of global investment is incurred by North America, Europe, and East Asia, as shown in the AI report given by McKinsey's State of AI report (2024). This may risk global inequalities as nations that lag AI capacity tend to depend on external technologies, which dots the patterns of digital colonialism (Niazi, 2024) and this global dependence also raises concerns about data sovereignty and ethical exploitation.

AI and Labour Market Disruption: According to the reports of OECD (2023), the rise of AI automation threatens more than 14% of jobs in developed economies. However, AI may also generate new employment in sectors such as digital services, data annotation and AI ethics, which require advanced skills that developing countries may struggle with. Reskilling programmes and education reforms are much needed by developing countries so that AI-driven globalisation could exacerbate wage inequality and unemployment, as shown in the reports given by the IMF (2025).

AI, Geopolitics, and Global Governance: Tallberg et al. (2023) refer to global governance as a "fragmented regime complex" where cooperation hinders competing national strategies as AI governance emerged as a central geopolitical concern. EU, China, and the U.S. act on different governance of AI as the EU places more emphasis on human rights, China prioritises technological sovereignty, while the US relies on market trends and innovation with voluntary guidelines. This divergence of interests among major powers makes consensus troubleshooting tend to create splinternets shaped by incompatible political ideologies and standards.

SOCIO-ECONOMIC IMPLICATIONS

The Digital Divide: The digital divide is, however, worsening the situation of societies and pushing inequalities as women and low-income groups are left out.

Ethical and Legal Concerns: The legal system is challenged by AI and also raises questions like who will be responsible for the acts and omissions performed by AI: the user, government

or developer? Exploitation increases among international laws as there is a lack of global AI ethics standards.

Global Power Shifts: AI emerged as a powerful tool for geopolitical competition. Countries such as China are gaining global influence in AI development as they focus on becoming a world-class leader by 2030, while other countries, such as the UK and Europe, are trying to develop a framework to draw a balance. Older patterns of globalisation can be observed, as in old times, power was concentrated only in a few nations.

THE ROLE OF GOVERNMENTS AND GLOBAL COOPERATION

It's all about how governments regulate it, as in some countries like Singapore and Japan, AI governance models are so advanced, which include transparency, ethics, and social inclusion; however, others focus on speed and profit instead of social or ethical implications.

National Policies: Policies that promote innovation should be created by the government while protecting citizens and workers. For example, a reskilling programme is one of them that can prepare employees for jobs that are driven by technology. However, countries like India launched some national AI strategies, which are AI for all to promote inclusive growth, as these policies are framed to ensure the growth of AI literacy, funding research and supporting local innovation.

Global Regulation: A global AI governance body is trying to emerge under the United Nations, as primarily, there is no single set of rules available, so this is a step taken to set international standards for data sharing, ethics or safety without risk fragmentation, as nations lack cooperation. As said, there is no single set of rules available, so different rules of AI created barriers to trade and communication among countries. To deliver new technologies to developing nations, a multilateral framework is much needed to ensure ethical compliance.

Public Awareness And Education: AI literacy is important and must become a part of the education system, as citizen should understand the impacts of AI on their lives, as it's a transformation from news recommendations to a job automation system. This public awareness initiative may settle trust in AI and its responsible use. Main roles are played by academia, civil societies and industries in spreading awareness.

FINDINGS AND ANALYSIS

AI as a Catalyst of Digital Globalisation: Connectivity and optimising global operations may lead to globalisation accelerated by AI. Algorithms facilitate cross-border collaboration by enabling real-time language translation and financial analytics. Companies like Amazon, Alibaba, and Tesla can now operate seamlessly across continents with the help of AI, as it powers global supply-chain management and e-commerce by being playing a role as a catalyst of globalization which leads to centralization of powers majorly in global north as treated as a headquarter for controlling functions of AI such as AI infrastructure, cloud services and data centres which may result into concentration of powers only into few countries.

Asymmetrical Economic Gains: AI adoption is primarily focused on nations with robust digital infrastructure and skilled personnel, as identified by the IMF (2025) as a 'preparedness gap'. As a technological as well as an institutional gap increases, for instance, AI can lead to 20% growth in developed nations but less of around 5% growth in the least developed ones. However, developing nations face technological dependency as they rely on foreign algorithms and data frameworks. The economic divide will deepen without active investment.

Labour Market Polarisation: AI automation led to the loss of jobs in the market as routine tasks such as manufacturing, clerical work and transportation face more risk. Despite transition, transition creates skill polarisation, creating high skill tech workers' benefits and displacement is faced by middle-skill workers. Challenges are dual in developing economies, as insufficient digital upskilling infrastructure and job displacement, but AI literacy, lifelong learning and vocational training help to mitigate these effects. However, AI has not eliminated jobs and never will, but it will surely redefine them as skills are needed for economic participation.

Geopolitical Rivalries and Technological Sovereignty: Technological rivalries show a mirror to past global AI, such as the nuclear and space races. For example, the United States leads in AI innovation, and China invest heavily in the strategies. Dimensions are working simultaneously, cooperative and conflictual. On one hand, it encourages innovation, whereas on the other hand, it stimulates data nationalism and export controls.

POLICY RECOMMENDATIONS

Establish Multilateral AI Governance Framework: The UN in 2024 recommended establishing a *Global AI Council*, as International Cooperation is essential to prevent regulatory

fragmentation. A multilateral institution facilitates technology transfer and ensures ethical compliance. A framework balancing innovation with accountability.

Invest in AI Capacity Building in the Global South: The World Bank in 2024 submits a report advocating increased investment in broadband connectivity, digital infrastructure and AI education. The government should participate in incentivising local innovation and the national education system through research grants and tax benefits.

Support Ethical AI Development: Transparency, explainability and fairness require ethical AI. Algorithmic audits and impact assessments should be mandated by countries. Some open-source AI initiatives can reduce monopolistic controls by reducing dependency on the few powerful corporations, and also empower local innovators, as said by McKinsey in its 2024 report.

Sustainable AI Development: Energy-efficient AI models and a green data centre to mitigate environmental impact should be promoted.

Ethical AI Certification & Cultural Protection: Certification for AI systems meeting ethical, transparency and safety standards can be established globally, and cultures can be protected by developing an AI system that can respect and preserve local language and traditions.

CONCLUSION

AI has become a bullet train engine of a new, complex phase of globalisation, which connects nations and drives innovation, despite the challenges also raised, such as inequality and cultural homogenization. Only through collective action, AI-driven globalisation evolves into a system that not only connects the world but uplifts it. If managed responsibly, AI can act as a silver bullet as AI need governance and can make globalisation inclusive, sustainable and human-centred. The world has the opportunity to use AI to connect societies, improve lives, and bridge divides to make it more meaningful than ever before, and then the world can see phase two of AI, where AI can do wonders from wonders.

REFERENCES

1. Acemoglu, D., & Restrepo, P. (2021). *Automation and the Future of Work*. MIT Press.
2. International Monetary Fund. (2025). *The Global Impact of AI: Mind the Gap in Preparedness*. IMF Working Paper.
3. McKinsey & Company. (2024). *The State of AI in Early 2024: Generative AI Adoption and Growth*.
4. Niazi, M. (2024). *Conceptualising Global Governance of AI*. *Journal of Global Technology Studies*, 12(2), 45–58.
5. Organisation for Economic Co-operation and Development. (2023). *AI and Work: Implications for Labour Markets*. OECD Publishing.
6. Tallberg, J., Bäckstrand, K., & Scholte, J. A. (2023). *The Global Governance of Artificial Intelligence: Next Steps for Research*. *Global Policy*, 14(2), 67–85.
7. United Nations. (2024). *Governing AI for Humanity: UN White Paper on AI Governance*.
8. World Bank. (2024). *AI and Development: Revolutionary Potential and Huge Uncertainties*. World Bank Open Knowledge Repository.
9. World Economic Forum. (2024). *The Future of Jobs Report*. Geneva: WEF Publications.
10. Zuboff, S. (2019). *The Age of Surveillance Capitalism: The Fight for a Human Future at the New Frontier of Power*. PublicAffairs.