Houston Area Model United Nations
Standard Committee

ECOFIN

Chair | Jay Natarajan
Topic B: Balancing Innovation from AI
Houston Area Model United Nations 50
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Atilgan Ozdil/Anadolu Ag

Note to Delegates

Dear Delegates,

Hello! My name is Jay Natarajan and I'm a sophomore at Rice University studying Cognitive Science. I'm very excited to be your chair for the Economic and Financial Committee (ECOFIN) this HAMUN! I became involved with Model U.N. as a sophomore in high school. As for my experience with HAMUN, I attended the conference for 3 years as a delegate, and had the chance to staff HAMUN last year as well. MUN is a great opportunity to gain a deeper understanding about the world around us and engage in critical discussions over a variety of key topics. I'm glad I get to share that experience with you all!

This year, ECOFIN will target important questions posed by increased involvement with technology in a constantly growing economy: cryptocurrency regulation and balancing artificial intelligence innovation with human employment. Understanding how to approach new forms of currency in the market and addressing potential job insecurity due to artificial intelligence are paramount to run a functional global economy in today's era.

To all the delegates - whether it is your first conference or your fiftieth - look to freely share, engage, and collaborate. My suggestion to you is to voice your opinions, but also remain open to hearing those of others. Wishing you the best of luck in committee, and I hope that your HAMUN experience is both insightful and memorable.

Cheers,

Jay Natarajan
Chair of ECOFIN
HAMUN 50
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Background Information

Introduction to ECOFIN

The Economic and Financial Committee (ECOFIN), also known as the Second Committee of the United Nations General Assembly, was formed in 1945 to deal with questions arising from economic growth and development. Established as one of the six main committees of the General Assembly, ECOFIN addresses a broad range of topics, including sustainable development, international trade, economic growth, poverty eradication, and financing for development. The committee plays a vital role in formulating policies and recommendations to promote global economic stability and equitable development. ECOFIN's goal is to foster international economic cooperation and address economic disparities between nations, ensuring that all countries can benefit from economic progress and sustainable development.

Executive Summary

Artificial Intelligence has transitioned from being a theoretical concept to a transformative force, reshaping economies, industries, and daily life. Its rapid development in areas like machine learning, deep learning, and neural networks has revolutionized sectors such as finance, healthcare, manufacturing, and beyond. However, this surge in AI innovation is a double-edged sword: while it holds the promise of driving economic growth, improving efficiency, and creating entirely new industries, it also raises significant concerns about the future of employment.

At the heart of this issue lies a critical question: how do we balance the incredible potential of AI with the protection of jobs? The introduction of AI into the workforce threatens traditional job categories and creates anxiety over widespread displacement.

Automation, predictive analytics, and AI-driven decision-making can reduce the need for human labor in various sectors, from factory floors to service industries. Despite these concerns, AI could also lead to the creation of new opportunities, demanding a reimagining of current jobs to future proof their existence.

As AI is still evolving, it is imperative to anticipate future developments while creating adaptable policies that can evolve alongside the technology. Through collaboration, ECOFIN can work towards fostering international cooperation to ensure that AI's benefits are maximized without leaving large segments of the workforce behind. An overarching goal for the committee will be to seek out ways in which innovation can coexist with job security, ensuring AI-driven growth is inclusive, sustainable, and equitable.

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Topic Concept

The rapid growth of AI in recent times has pushed forth the need for changes in the global economy and the nature of work. From automating routine tasks to enabling highly complex decision-making processes, AI systems are used in sectors ranging from finance and healthcare to manufacturing and retail [1]. These advancements offer unprecedented potential to drive economic growth through improving productivity. However, the adoption of AI also presents a series of challenges, most notably the disruption of traditional employment models. As automation increasingly replaces human labor, particularly in low-skill tasks, concerns about large-scale job displacement are rising.

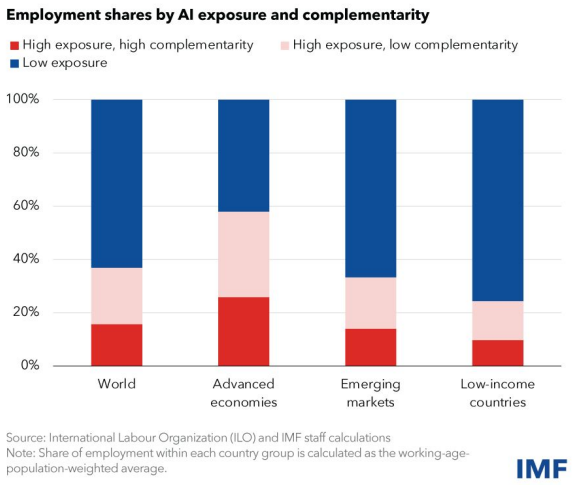
Artificial intelligence has seen explosive growth in recent years, fueled by advancements in computing power, the availability of big data, and breakthroughs in machine learning algorithms. In 2022, the AI market was valued at approximately $86.9 billion and is expected to grow to nearly $407 billion by 2027 [2]. This growth is driven by a range of applications that span across industries, including automated manufacturing, predictive analytics in healthcare, self-driving vehicles, financial fraud detection, and personalized marketing.

AI is transforming the efficiency of entire industries. For example, AI-powered robots in the manufacturing sector may now carry out labor-intensive assembly activities that previously required human labor. AI-driven diagnostic technologies in healthcare have the ability to diagnose illnesses early and with greater accuracy than in the past. AI is being used by the financial services sector to forecast market trends and spot dangerous transactions, which lowers human error and boosts revenue.

However, these innovations come with a cost. It is predicted that up to 30% of hours worked could be automated by 2030 [3]. Industries most at risk of automation include retail, transportation, manufacturing, and administrative support. This raises essential questions about how countries can protect workers who are at risk of displacement and what role governments, corporations, and international institutions should play in this transition.

AI's impact on the global economy is profound. On one hand, it promises to enhance productivity and contribute trillions of dollars in economic growth. It is a well known fact that a huge goal of AI is to optimize processing efficiency of tasks. Broadly, with effectively unlimited knowledge, AI could make calculated decisions about how to improve efficiency in its use case, boosting productivity in the short and long run. In more specific uses, AI-enabled automation can reduce the need for manual labor in supply chains, while AI-driven analytics can optimize marketing strategies, improving return on investment [4].

However, these economic benefits are unevenly distributed. While high-income nations are expected to benefit significantly from AI innovations, low-income and developing countries could face greater risks of job displacement without the resources to transition their workforces effectively. Automation could cause existing economic inequalities to exacerbate, particularly in regions where manufacturing jobs are more crucial to the economy.



AI's Impact on Jobs in Different Markets [5]

While automation is likely to eliminate some low-skilled positions, it may also create demand for higher-skilled roles, such as AI developers, AI lawyers, and other specialists that would manage the use of AI [6]. This poses a unique challenge because it requires that workers have the skills and education necessary to succeed in an AI-driven world. Without significant investment in education and reskilling programs, large portions of the global workforce could be left behind.

Beyond the economic impacts, AI raises serious ethical and social questions that are directly related to its influence on employment. With the eventual goal of machines performing tasks better than humans, it is important to consider what the future role of humans will be. Another concern is the potential for AI to reinforce or even worsen existing social inequalities. For example, low-income workers, especially those in more manual jobs, are more likely to be replaced by automation than high-skilled professionals. This could lead to a deepening of the socioeconomic divide, as displaced workers struggle to find new roles while those with specialized AI-related skills enjoy greater job security and higher wages.

To mitigate the risks posed by AI while harnessing its benefits, several policy interventions are being proposed. One of the most prominent solutions is the regulation of AI technologies. Establishing international standards for the ethical deployment of AI is critical to ensure that its development does not come at the expense of workers' rights and well-being.

Several countries, including the US and the EU have come up with frameworks to deal with AI usage, with an emphasis on ensuring accountability and responsible usage [7]. These frameworks take into account several considerations, such as governance and monitoring data usage to ensure that AI is managed properly.

The rise of artificial intelligence has massive upsides, but also equally large downsides. While the economic gains might be enticing, it is just as important to deal with the job displacement and growing inequality that would be associated with an AI takeover of a lot of jobs. This topic must be adequately addressed from both sides of the aisle, as there is no one size fits all solution to the future of the workplace. By setting the proper regulations and frameworks right now, ECOFIN can ensure that the global workforce can thrive in an AI-driven world.

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Topic History

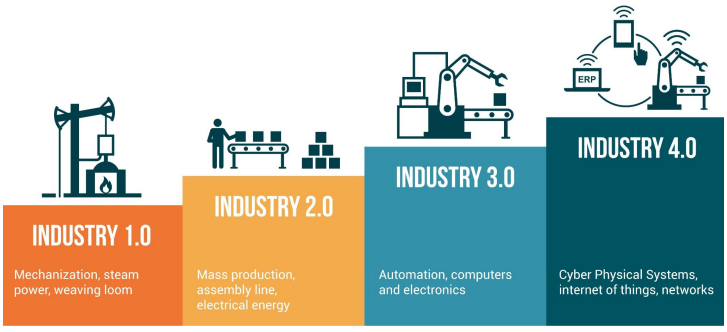
As the leader in dealing with all things economic and financial, ECOFIN is directly tasked in dealing with the growing pressure of AI in our society. Due to AI being applied in the workforce in more recent times, there has not been a lot of progress in the realm of regulations set by the ECOFIN committee. Regardless, the presence of AI is well-noted worldwide and countries have begun to draft extensive plans for dealing with artificial intelligence to bring to the global stage.

In the broad scope of the UN, Secretary General António Guterres introduced the Roadmap for Digital Cooperation, which touches upon AI and its economic impacts. The roadmap came about as a result of the "High-Level Panel on Digital Cooperation", which called for better coordination on AI governance globally [8]. This report introduced a framework that pushes stakeholders to promote the use of digital technology (including artificial intelligence) in a manner that is both safe and equitable. While this is a generally broad statement, some key points of the framework were achieving universal connectivity by 2030, ensuring the protection of human rights in the digital era, and supporting global cooperation on artificial intelligence.

In the UNCTAD conference, the relationship between technology and international trade was explored, which has direct ramifications on the global economy. UNCTAD's report highlights the division between developing countries as a result of digitalization, citing environmental costs and increasing digital waste [9]. The report encourages a shift towards a "circular digital economy" where digital products are responsibly used and recycled, creating sustainable business practices. Only in doing so can LDCs avoid becoming ostracized from the global stage as a result of this natural growth.

Case Study: Germany

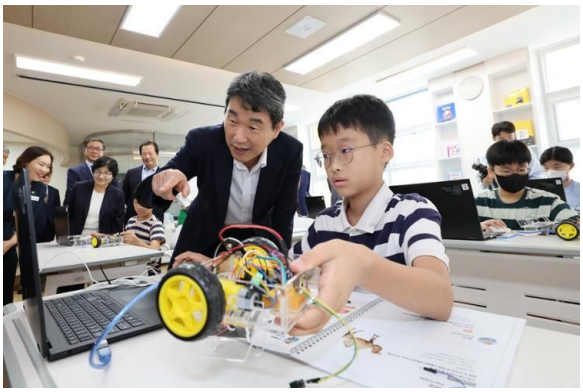
Germany, a global leader in manufacturing, has been at the forefront of integrating AI and automation into its industrial sector. The government's "Industry 4.0" initiative, launched in 2011, aimed to digitize and automate manufacturing processes through AI, robotics, and the Internet of Things [10]. It has led to widespread automation in industries like automotive manufacturing, where robots perform complex tasks on the assembly line. The German government, unions, and industries worked together to create worker protection measures while advancing automation. Instead of mass layoffs, the government emphasized reskilling programs to prepare workers for new roles created by AI and automation.



Comparing the Various Industries [10]

Case Study: South Korea

South Korea has embraced AI as a key component of its economic growth strategy. In 2019, the South Korean government launched the National AI Strategy, aiming to become a global AI powerhouse by 2030 [11]. This included investing in AI research and development, incentivizing private sector innovation, and incorporating AI into public services. The Ministry of Employment and Labor collaborated with educational institutions to establish AI-focused curricula in universities and vocational schools, focusing on fields like AI development, machine learning, and data analysis. The government also created AI-specific tax incentives for companies that implemented AI in ways that created new jobs, rather than just automating existing roles.



South Korea Bringing AI to Classrooms [12]

Questions to Consider

- How will AI affect different sectors of the economy in your country? Which industries are most at risk for automation, and which are likely to benefit from AI innovation?
- Is there a way to bridge MDCs and LDCs through artificial intelligence?
- What is ECOFIN's role in setting international frameworks regarding AI? Does this issue even require international cooperation?
- How do we draw the line between boosting job productivity without entirely eliminating the need for human roles?
- What are some concrete regulations that can be proposed to properly control the impact of AI? Is it reasonable for governments to implement these regulations?

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