Economic Feasibility of Universal High Income (UHI) in an Age of Advanced Automation

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Abstract

This paper analyzes five interlinked fiscal measures proposed to fund a Universal High Income (UHI) system in response to large-scale technological automation: a unity wealth tax, an unused land and property tax, progressive income tax reform, and the Artificial Intelligence Dividend Income (AIDI) program. Using dynamic general equilibrium modelling, IS-MP-PC frameworks, and empirical elasticity estimates, we assess the macroeconomic impacts, revenue potential, and distributional consequences of each measure. Results indicate that the combined measures could generate 8–12% of GDP in annual revenue, sufficient to sustainably support a UHI framework even with 80–90% unemployment. The wealth tax and land tax enhance fiscal resilience while reducing inequality; the progressive income tax improves administrative efficiency and boosts aggregate consumption; the AIDI channels the productivity gains of automation directly back to displaced workers and the broader public. Nonetheless, each policy presents limitations, including vulnerability to capital flight, political resistance, behavioural tax avoidance, innovation slowdowns, and enforcement complexity. AIDI, in particular, offers a novel mechanism to maintain consumer demand while moderating excessive automation, but demands careful regulatory oversight. Overall, the findings suggest that, if implemented carefully and globally coordinated, these measures provide a robust fiscal architecture to ensure equitable prosperity in a post-labour economy dominated by artificial intelligence. Strategic design and adaptive governance will be essential to maximize economic stability, technological innovation, and social welfare during this unprecedented economic transition.

Keywords: Universal High Income (UHI), Artificial Intelligence Dividend Income (AIDI), wealth tax, land value tax

1. Introduction

In today's rapidly evolving technological landscape, artificial intelligence (AI) stands at the forefront of economic transformation, especially in the professional sphere. Automation driven by AI and robotics is projected to disrupt traditional labor markets at an unprecedented scale, intensifying challenges around wealth distribution, employment, and financial security.

One emerging concept in response to this shift is Universal High Income (UHI), an evolution of Universal Basic Income (UBI). Proposed by technology industry experts like Elon Musk, UHI proposes a basic income level that is not merely sufficient for survival but ensures a dignified, flourishing standard of living for all individuals, regardless of employment status (Domingo, 2024). In this paper, we will use UHI and UBI interchangeably, conceptualizing UBI as a necessary transitional stage towards the broader goal of UHI.

The AI wealth divide i.e the growing gap between nations and individuals who control advanced AI systems and those who do not, is particularly stark when comparing the Global North and the Global South. According to Regilme (2025), advanced economies dominate the ownership of AI technologies, while developing countries risk becoming economically marginalized. This disparity feeds into a phenomenon known as “tech imperialism”, where the Global North consolidates technological and economic power at the expense of the Global South. Without targeted interventions, such as the introduction of UHI, these divides could widen, exacerbating global inequality and destabilizing emerging economies.

The need for UHI is further underlined by the widening threat of labor displacement due to AI automation (Howard, 2019). Our analysis of a Kaggle dataset — the "Job Threat Index" curated by Gupta (2023) — reflects the urgency of these challenges.

This dataset, meticulously assembled from leading job analytics platforms, AI impact studies, and organizational reports, gave a comprehensive view of how AI is reshaping labor demand across industries.

Given these trends, this research focuses on the economic feasibility of implementing UHI in an era where traditional labor income is increasingly unstable. Specifically, we investigate how UHI could be sustainably funded through various mechanisms.

Ultimately, we aim to highlight UHI not just as a theoretical construct, but as a critical policy tool to mitigate labor market shocks, resist market concentration, and ensure a just and inclusive economic future.

2. Methods

This paper evaluates the macroeconomic impacts of four proposed measures to fund a Universal High Income (UHI) system: a unity wealth tax, an unused land and property tax, progressive income tax reform, a corporate tax on AI and automation companies, and an Artificial Intelligence Dividend Income (AIDI) program. The macroeconomic analysis of UHI funding measures relies on established economic theories across all four tax proposals. The unity wealth tax analysis builds on Saez, Zucman, and Piketty's frameworks on wealth taxation and inequality, analyzed through an extended IS-MP-PC model. The unused land tax draws from Georgist economic theory modernized by Stiglitz, with Feldstein's efficiency metrics documenting minimal deadweight loss. The progressive income tax employs Diamond and Saez's revenue-maximizing framework, while the AI corporate tax applies the Devereux-Griffith model for optimal taxation of technology firms. International dimensions are examined through the Mundell-Fleming model, with distributional effects assessed via consumption functions and inequality metrics. Collectively, these frameworks provide the theoretical foundation for assessing the substantial revenue potential from the combined tax measures to fund UHI in an AI-dominant economy.

The wealth tax is modelled within the IS-MP-PC framework, with the IS curve:

$$y = -a(r - \pi^e) + bG + c(T) + d(W)$$

where taxation reduces wealth WWW while increasing government spending GGG. Fiscal dynamics follow:

$$G - T = \Delta B + \Delta M$$

Monetary policy is given by:

$$r = r^* + d(\pi - \pi^*) + ey$$

and inflation follows the Phillips Curve:

$$\pi = \pi^e + fy + \text{Supply Shocks}$$

Consumption is modified as:

$$C = a + b(Y - T) + c(W) + d(UHI)$$

The land value tax (LVT) is modelled by introducing a land tax term TlT_lTl into the government budget constraint:

$$G = T_i + T_c + T_l + \Delta B + \Delta M$$

with land prices adjusting as:

$$P = \frac{R - \tau}{r}$$

The progressive income tax reform is modelled using dynamic scoring, behavioural elasticity estimates, and expanded budget constraints:

$$G - T(y, \tau) = \Delta B + \Delta M$$

Automation diffusion is modelled by:

$$A(t) = \frac{K}{1 + e^{-r(1-\tau)(t-t_0)}}$$

We designed AIDI as a specific AI-focused tax and redistribution mechanism. Companies employing AI would pay a starting 4% AI Dividend Tax on monthly profits, rising based on company size and automation levels. Revenue is redistributed through flat monthly payments like ($1200/adult) with caps, inflation adjustments, and annual sliding tax scales. Governance is assigned to an AI Dividend Authority (AIDA), ensuring corporate transparency and cross-border cooperation to minimize regulatory arbitrage.

Furthermore, the Kaggle dataset utilized for the preliminary analysis can be found here, accompanied by our data visualization code here.

3. Results

Preliminary findings from "The AI Job Threat Index" revealed that occupations involving routine, predictive, and administrative tasks are particularly vulnerable to automation, placing millions at risk of unemployment or underemployment.

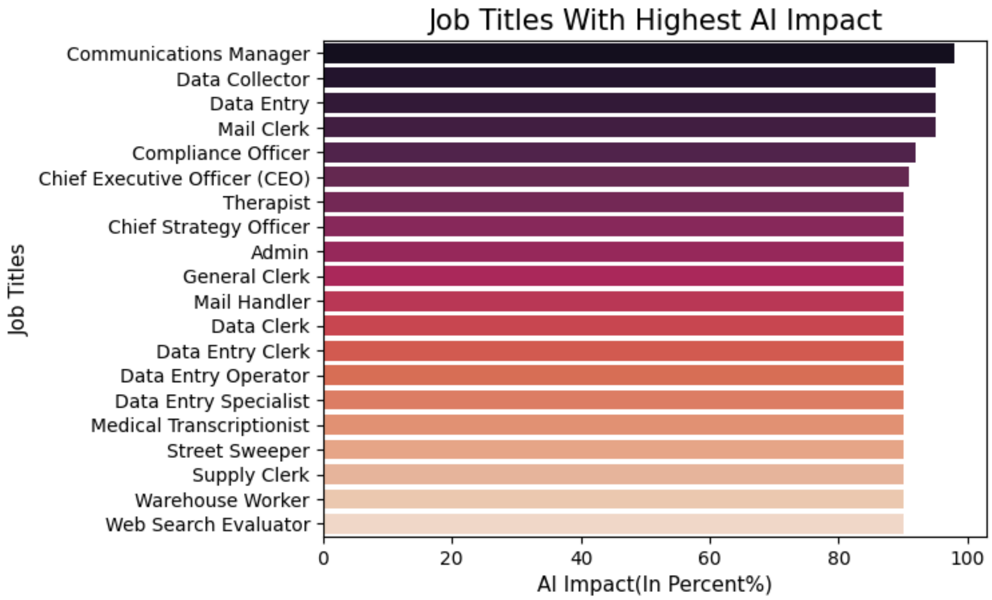

Figure 1 – Job Titles with Highest AI Impact

As for the measures proposed, quantitative assessments and analyses revealed the following findings.

The unity wealth tax would generate 2–4% of GDP annually, reducing the Gini coefficient by 0.03–0.05 over five years. Consumption would rise by 1.5–2.5% of GDP due to redistribution from low-MPC to high-MPC households. Financial market capitalization would decline temporarily by 3–7%, with capital flight risks of 30–40% if implemented unilaterally.

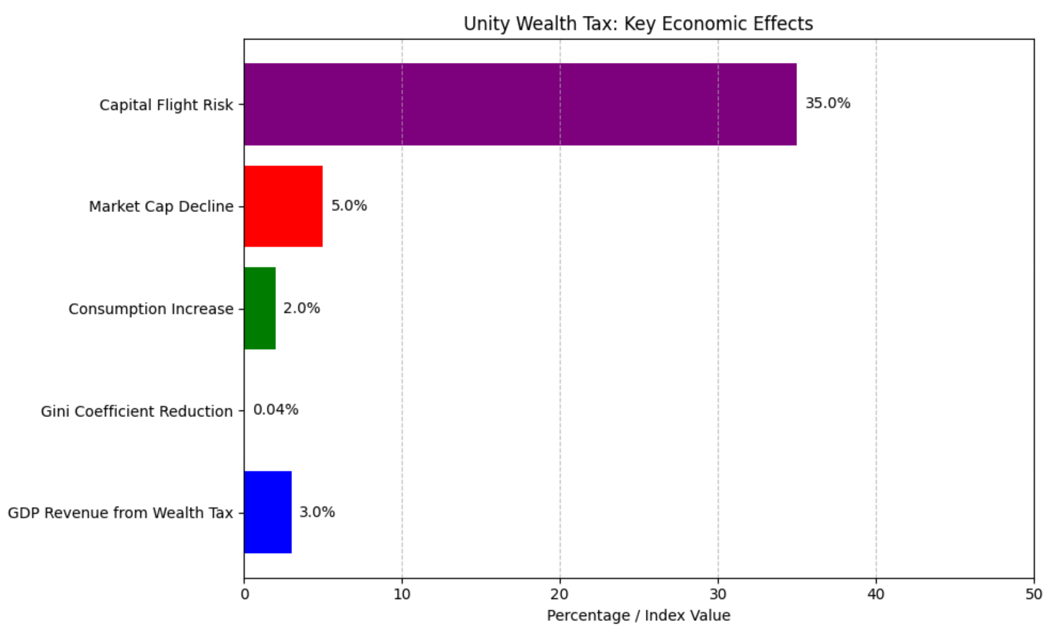

Figure 2 – Unity Wealth Tax: Key Economic Effects

The land and property tax would generate 0.8–1.0% of global GDP annually. Land prices would fall by 6–9%, and urban land vacancy would decline by 30–45%. Housing affordability would improve, with price-to-income ratios dropping by 8–12% across major cities. This measure exhibits minimal deadweight loss and is highly resistant to capital flight.

Progressive income tax reform would yield 2.5–3.5% of GDP in revenue, while improving distributional measures (Gini coefficient) by 0.03–0.04 points. It would also raise aggregate consumption by 0.5–0.8% of GDP, with modest increases in low-income labour supply.

The AIDI program would generate additional stable revenue, estimated at 2.7–4% of GDP initially, growing over time as AI adoption increases. The AI Dividend would provide households with monthly payments of at least $2,000 per adult, preserving consumer demand, cushioning displaced workers, and discouraging excessive automation through an ongoing cost mechanism on corporate profits.

4. Discussion and Conclusion

Together, the proposed measures could sustainably fund a Universal High Income system, generating 8.0–12.5% of GDP in annual revenues while increasing equity, preserving consumer demand, and maintaining macroeconomic stability during the transition to a highly automated economy.

However, The key economic challenge remains capital mobility in an open global economy. The Mundell-Fleming model and Zodrow-Mieszkowski model of tax competition both indicate that without coordination, mobile capital would flow to lower-tax jurisdictions (estimated at 30-40% under unilateral implementation). However, this is a coordination problem, not a fundamental economic flaw in the system design.

In addition, each policy also carries specific limitations. The unity wealth tax is highly vulnerable to capital flight without international cooperation and may provoke temporary volatility in financial markets. Enforcement challenges around asset valuation, particularly for non-publicly traded financial assets, could limit revenue efficiency.

The unused land and property tax, while efficient, depends heavily on accurate land valuation systems. Political resistance from landowners and developers may hinder its implementation, and adjustment periods could create temporary price distortions in property markets.

The progressive income tax reform would increase fairness but faces behavioural risks, particularly among high earners who may engage in tax avoidance strategies such as income shifting and offshore migration. Without complementary base broadening reforms, effective revenue collection could fall short of projections.

Finally, the AIDI program, while innovative and responsive to the realities of 21st century technological disruption, faces design challenges in ensuring accurate reporting of corporate automation levels and preventing manipulation of workforce classifications. Setting initial tax rates and sliding scales appropriately is critical to balance between funding stability and maintaining corporate incentives for productive innovation.

A tax on AI-driven companies is a logical and necessary policy response, given that artificial intelligence technologies are fundamentally built upon the data, labour, and intellectual contributions of individuals. The vast datasets that underpin modern AI models are not spontaneously generated; they are the cumulative product of human interactions, behaviours, and the intellectual capital fostered through academic research and industrial innovation. AI systems, therefore, are not autonomous entities but rather social constructs emerging from collective human effort. Imposing taxation on corporations that derive substantial profits from these technologies acknowledges the indispensable societal contributions that made AI advancement possible. Moreover, it ensures that the economic benefits of automation and AI are not disproportionately concentrated but are instead redistributed to support the broader public whose direct and indirect inputs sustained their development. Such a framework helps to mitigate the economic inequalities exacerbated by automation, reinforcing the principle that technological progress should serve societal welfare rather than deepen existing disparities.

Overall, while none of the measures are without risk, when combined they offer a robust, diversified fiscal framework capable of supporting Universal High Income in the AI-driven future economy. Strategic global coordination, careful phase-in designs, and adaptive regulatory frameworks will be crucial to maximizing benefits while mitigating downsides.

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