



## Will Technology Support Global Growth? by Dambisa Moyo

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At a time of rapid technological advancements and innovation, what impact might these trends have for global growth? In particular, can technology help boost economic growth across the developing world – home to 90 percent of the world’s population – as a period of unprecedented economic expansion begins to slow in some places and regress in others?

On the one hand, technological shifts hold promise to meaningfully, and positively, transform livelihoods by enhancing the efficiency and ease of information transfer, connectivity and communication.

Already there are measureable improvements in healthcare access in parts of Asia and Africa, where households are now able to receive text messages and other mobile based notifications as to when doctors and healthcare workers will be visiting their neighborhoods or vicinity. Also in the realm of social development, there is notable evidence that technological advances are breaking down traditional hurdles to education access; not only increasing the sheer quantity of those that have access to education, but also, without relying on a single teacher, improving the quality of education available to many millions of people.

Mobile phone penetration will continue to play an immeasurable role, even in regions that have traditionally been viewed as laggards in the adoption of new trends. Today, roughly 82 percent of Asians (excluding India and China) and 55 percent of Africans have a mobile phone. Using mobile telephony, subsistence farmers, particularly in remote areas, are able to collect and compare the market prices they can earn for their goods and services without having to transport their wares between towns in search of the best price. Aside from mitigating risk, farmers are afforded more transparent and real-time information that better help them manage their investments and, over time, improve their incomes. These trends point to a large potential to improve productivity and, concomitantly, global growth; whether through innovations in agriculture, processing, health care, industry, or simply how business is done.

Yet, despite these unambiguous “wins”, there remain legitimate concerns on the net effects of technological advances – particularly in respect to whether and how automation will disrupt and erode (low skilled) jobs – the hallmark of emerging markets.

The British economist John Maynard Keynes famously predicted a 15-hour workweek by 2030 due to the combination of seven-fold economic growth and “technical improvements”. Today, just 15 years from his target date for the three-hour workday, technological innovations continue to increase productivity – but increasingly without the need for human workers. Advances in robotics and artificial intelligence have made it possible for blue collar and unskilled jobs to be filled by robots, which are incapable of “human error”, never tire and operate at a fraction of the

cost of human labor. A recent Oxford University study suggests that 47 percent of jobs in the United States alone could become automated in less than twenty years.

Across the developing world, where populations are skewed to the young, and where, on average, 70 percent of the population is less than 25 years old – this prospect is particularly disconcerting. The ILO reports that there are over 85 million young who are unemployed, many of them with no discernable education or skills, and thus the most vulnerable to the technological shifts that are already afoot.

For every gadget that enables us to process data and information faster and more cheaply, there is a burgeoning social and public policy challenge of rising unemployment that has dire consequences for growth. Those lower on the skill ladder will have more limited job opportunities, and will only be employable at lower wages, contributing to a widening income gap *between* poor and rich economies; but also a worsening income gap *within* countries between those who have capital for investment (where returns are higher) and those who can only supply labor.

The management of, transition to, and adoption of, the digital age will no doubt contribute to technological unemployment as the private sector becomes less of an engine of job creation. The onus therefore, will increasingly, although not exclusively, fall on governments to pick up the slack, and find new uses for labor. After all, by operating at the frontier of innovation and global trends, the private sector will continue to contribute to the creation of new industries and opportunities that should offer employment and support entrepreneurs in the 21st century tech-based economies.

Ultimately, it is incumbent on public policy to manage and anticipate the technological transformations that could markedly improve the prospects and path of human progress; but could also prove so disruptive as to worsen the living standards across the world and create widespread greater political and social instability across the globe.

**About the author:**

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