

"The Universal Basic Income is the best solution to handle the large-scale displacement of labour due to automation in the coming years." Do you agree?

Economic theory suggests that automation reduces the number of workers required per unit of output, raising productivity and reducing prices in a competitive market¹. Ceteris paribus, demand for normal goods and services rises, increasing real wages. In previous waves of automation low-skilled jobs tended to be replaced by technology, resulting in upskilling of low-income workers into higher-paid jobs². There is, however, no economic law whereby labour displacement by automation is always upwards³. The WEF predicts that during the current wave of automation led by advances in artificial intelligence (AI), "overall job losses are to be offset by job gains", but "there will be a significant shift in the quality, location, format and permanency of new roles"⁴.

Moravec's paradox states that high-level reasoning requires less computational power than tasks demanding agile mobility⁵. Unprecedentedly, the new wave of AI-led automation replaces high-skilled routinised work, characteristically middle-income jobs. Accountants have a 94% chance of automation, despite being a 'skilled'⁶ job with average salary of £62,000⁷. Whereas, 40% of the industries with the projected fastest job growth are in lower-income nursing sectors⁸. Furthermore, the proportion of workers in the UK's gig economy has "more than doubled" since 2016, now accounting for 4.7 million workers⁹. Thus, more jobs are being created in sectors with low job and income security, creating a higher proportion of 'working poor' as the labour force is hollowed-out. The free market fails to consider income equality and enables wage bifurcation, so there is a need for more profound government intervention to ensure that continued automation remains socially sustainable.

A Universal Basic Income (UBI) is a progressive income distribution policy that could mitigate effects of large-scale labour displacement due to automation. Van Parijs defines UBI as "income paid by a government, at a uniform level and at regular intervals, to each

¹ Manyika et al. (2016) *McKinsey Global Institute Report*, [online]. Available from: <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Digital%20globalization%20The%20new%20era%20of%20global%20flows/MGI-Digital-globalization-Full-report.ashx>

² Niller, E. 'How the Second Industrial Revolution Changed American's Life' [online]. Available from: <https://www.history.com/news/second-industrial-revolution-advances> . [Last accessed 20 June 2019]

³ Brynjolfsson, E., McAfee, A., (2015) 'Will Humans Go the Way of Horses?' [online]. Available from: <https://www.foreignaffairs.com/articles/2015-06-16/will-humans-go-way-horses>. [Last accessed 20 June 2019]

⁴ World Economic Forum 'The Future of Jobs' Report 2018 Available from: http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

⁵ Moravec, H (1988) 'Mind Children' pg. 15. Harvard University Press

⁶ Tier 2 Visas, Shortage Occupation List

⁷ Accountancy Age 'Salary Survey 2018' [online]. Available from: <https://www.accountancyage.com/2018/04/18/salary-survey-2018-uk-accountants-earning-right-now/>. [Last accessed 18 June 2019]

⁸ US Bureau of Labour Statistics, 'Fastest Growing Occupations' [online]. Available from: <https://www.bls.gov/ooh/fastest-growing.htm>. [Last accessed 21 June 2019]

⁹ Partington, R. (28/06/19) 'Gig Economy in Britain Doubles, Accounting for 4.7m Workers' [online]. Available from: <https://www.theguardian.com/business/2019/jun/28/gig-economy-in-britain-doubles-accounting-for-47-million-workers>. [Last accessed 28 June 2019]

adult member of society”¹⁰, not contingent on employment status, income or wealth, but providing a ‘safety-net’ for everyone. It is assumed here that the UBI replaces the welfare state, covering cost of living at the most basic level¹¹. The UBI provides income security and is an insurance against poverty; cp, in a free market economy this reduces risk aversion and creates incentives to leave poorly-paid jobs for riskier, but potentially more lucrative ventures. This may include self-employment, entrepreneurship or further education in order to upskill and access higher-skilled, better paid jobs¹². The climate of innovation thus fostered reduces reliance on low wages and the need to compete with technology. With guaranteed income that is not dependent on job-searching, “workers will only take a job if they find it suitably attractive”¹³, decreasing occupational downgrading and improving workers’ bargaining power. This forces firms to improve work conditions, resulting in productivity gains as workers feel valued¹⁴. Consequently, a UBI addresses large-scale AI labour displacement because it is a constant support that encourages the ‘entrepreneurial instincts of the population’¹⁵ and facilitates transitions from employee to self-employed or freelancer.

A major concern with UBI is the removal of incentives to work by divorcing income from work. Without obligation to seek income through labour and provide value for the economy, some may free-ride on others’ hard-work. ‘Income Guarantee Experiments’ in the US indicated 24% reduction in work hours across the labour force¹⁶. However, this reflected workers remaining unemployed for longer. If the increased period of unemployment matched skills and jobs more effectively, this may have efficiency benefits¹⁷. The possibility remains, however, that long periods of dependency on the UBI may cause hysteresis and social tensions as psychologists have shown that the dignity of work is important to well-being¹⁸.

Conventional wisdom suggests that policy is designed to reward work rather than replace it, so a better solution to AI labour displacement may be a Jobs Guarantee (JG). Minsky’s

¹⁰ Van Parijs, P (2013) *The UBI: Why Utopian Thinking Matters, and How Sociologists Can Contribute to It* [online]. Available from: <https://www.ssc.wisc.edu/~wright/929-utopias-2013/Real%20Utopia%20Readings/Politics%20&%20Society-2013-Van%20Parijs-171-82.pdf> . [Last accessed: 15 June 2019]

¹¹ Murray, C (03/06/16) *‘A Guaranteed Income for Every American’* The Wall Street Journal Online. Available from: <https://www.wsj.com/articles/a-guaranteed-income-for-every-american-1464969586> . [Last accessed 18 June 2019]

¹² Sinn, H-W, (1995) *‘Social Insurance, Incentives and Risk Taking’* [online]. Available from: <http://www.nber.org/papers/w5335>. [Last accessed: 15 June 2019]

¹³ Van Parijs, P. (2004) *‘A Basic Income For All’* Boston Review. [Online] available from : <http://bostonreview.net/forum/ubi-van-parijs>. [Last accessed: 23 June 2019]

¹⁴ Matta, C., Half, R. (2018) *‘Why It’s Important to Feel Valued at Your Job’* [online]. Available at : <https://psychcentral.com/blog/why-its-important-to-feel-valued-at-your-job/>. [Last accessed: 17 June 2019]

¹⁵ *‘What Is Universal Basic Income and How Would it Work in Practice?’* (31/07/19) <https://www.independent.co.uk/news/uk/politics/universal-basic-income-work-john-mcdonnell-shadow-chancellor-a8472031.html> [Last Accessed: 25 June 2019]

¹⁶ Munnell, A. H. (1987) *‘Lessons from the Income Maintenance Experiments(1970s): An Overview’*, Federal Reserve Bank of Boston, vol. 30

¹⁷ Widerquist, K (2005) *‘A Failure to Communicate: What (if anything) Can We Learn from the Negative Income Tax Experiments?’* Journal of socio-economics vol. 34 issue 1 pg. 49-81, online. Available from: <https://www.sciencedirect.com/science/article/abs/pii/S105353570400109X> . [Last accessed: 19 June 2019]

¹⁸ Haidt, J. (2006) *‘The Happiness Hypothesis’* published by Random House Books

definition of a JG is one in which government funds a job creation programme that offers a uniform hourly wage with a package of benefits¹⁹, replacing unemployment benefit. With the goal of achieving full-employment, the government acts as employer of last resort. The wage rate of the JG is a de facto minimum wage, and subsequently would reduce worker-exploitation in the private market. Burgess and Mitchell argue that the right-to-work is a “fundamental human right”²⁰, thus it is the government’s duty to provide jobs. Proponents suggest that the government partners with local boards to connect willing labour to necessary work in sectors such as infrastructure and care. In a study carried by the DWP, 57% of those who had received training in the last 13 weeks said it was “offered by employers”²¹ therefore unavailable to the unemployed. JG that provides on-the-job training reduces likelihood of long-term unemployment as skills are developed enabling re-entry into the labour market.

To facilitate upward mobility through a JG, the jobs offered must allow members to gain evolving skills, as the half-life of a skill today is 4.5 years, compared to 26 years in a previous generation²². To maintain this pace of retraining, government must accurately predict the outcomes in the market. Based on current proposals of jobs in the JG such as ‘teaching assistants’, it is unlikely that government can strengthen skills that are highly-valued in the private sector without undermining employees within that sector. Moreover, the ‘guaranteed’ aspect of these jobs perpetuates low productivity, as it would be unlawful to deny anyone a job paid at the uniform rate, there is no income incentive to increase output. As automation threatens skilled middle-income jobs, downgrading into JG jobs may be demotivating. Practicing skills that are obsolete in the private sector would not improve chances of re-entering the labour market.

The paternalistic approach of the JG contrasts with the individual autonomy of the UBI proposal. Opposing Burgess and Mitchell, Wray considers the right-to-work to be a prerequisite only where income from work is an important determinant of access to resources²³. With a UBI, access to resources is dissociated from such work. Consequently, the right-to-work is no longer a ‘natural right’. Assuming individuals seek maximum utility²⁴, once provided with a UBI, some will reduce working time, perhaps to care for family. This should not seem reckless – boosting the labour supply is not an aim in itself, and an overworked economy has no inherent benefit, whereas, parental childcare

¹⁹ Minsky, H (1965) *Ending Poverty: Jobs, Not Welfare*, developed for the Centre for Full Employment and Price Stability, University of Missouri-Kansas City

²⁰ Burgess, J., Mitchell, W, (1998) *Unemployment, Human Right and A Full Employment Policy in Australia* [online]. Available from: <http://classic.austlii.edu.au/au/journals/AUJIHRights/1998/5.html>

²¹ Sin, Y.C., McKay, S, (2010) *Training and Progression in the Labour Market* [online]. Available from: https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/214451/rrep680.pdf. [Last accessed: 28 June 2019]

²² Roy, Indranil Deloitte’s Future of Work Centre of Excellence (2019) *Future of Work – An Introduction* [online]. Available from: https://www2.deloitte.com/content/dam/Deloitte/it/Documents/human-capital/Future%20of%20Work_Deloitte.pdf [Last accessed: 19 June 2019]

²³ Wray, L.R., M, Forstater (2004) *Full Employment and Economic Justice* in *The Institutionalist Tradition in Labour Economics* M.E. Sharpe

²⁴ Blume, L.E., Easley, D (2008), *Rationality* in *The New Palgrave Dictionary of Economics*

could benefit the economy by enhancing human capital in future generations²⁵. Similarly, those who seek to maximise income would be incentivised to work, as there is no ‘welfare trap’, workers are always monetarily better off accepting work. The UBI increases the attractiveness of lower-paid but socially beneficial jobs.

The most frequent criticism of the UBI is that it is too expensive. Assuming the UBI will cover basic cost of living and render the welfare state redundant, implementing a ‘fiscally neutral’ UBI provides each adult with £5,081 per year²⁶. Although further cost savings can be obtained from reducing administration, this value is only one-third of the annualised National Minimum Wage, £15,269 p/a²⁷. However, a basic income that covers necessities is “definitely affordable”²⁸. By considering the net cost of a UBI, after taxes on high-income earners, ‘net contributors’ and ‘net beneficiaries’ can be identified. Widerquist argues that a UBI of US\$12,000 per adult would cost US\$539bn pa, only 3% of GDP²⁹. While the process of taxing back the UBI requires administration, the universality of the UBI is preferred to a means-tested redistribution system. It seems futile to give Bill Gates a basic income that is simply taxed back. If, however, Gates did become destitute, the UBI provides protection and he would become a net beneficiary rather than a net contributor. Moreover, Oxford Economics estimates that a 30% rise in robot installations globally would increase World GDP by US\$5T³⁰; redistributing this as a UBI is achievable.

The nature of AI is causing accelerated labour-displacement, rendering more skills obsolete. As income inequality worsens from the hollowing-out of the labour force and falling income security, a UBI should be implemented to separate access to basic necessities from work. Until recently, policy has focused on maintaining full employment, but government cannot accurately predict the outcomes of the fast-changing labour-market. In the long-run, automation will further reduce the need for human labour. This seems to be a realisation of Keynes’ prediction that automation would lead to an “age of leisure and abundance”³¹.

Under a UBI scheme, everyone is provided with the possibility of fruitful employment in which one can gain recognition. While some may use the UBI as insurance against failure and create new businesses or freelance, others may choose to live off the UBI whilst upskilling or searching for a better-suited job. Although the unconditionality of the UBI will disincentivise some from seeking work, they may contribute to society in other ways. By

²⁵ Van Parijs, P. (2004) ‘A Basic Income For All’ Boston Review. [Online] available from : <http://bostonreview.net/forum/ubi-van-parijs>. [Last accessed: 23 June 2019]

²⁶ Edwards, J, Heilpern, W (06/06/16) <https://www.businessinsider.com/universal-basic-income-scheme-for-the-uk-2016-6?r=US&IR=T> [Last accessed: 21 June 2019]

²⁷ ONS (2018) ‘National Living Wage Earners Fall Short of Average Family Spending’ [online]. Available from: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/articles/nationalivingwageearnersfallshortofaveragefamilyspending/2018-03-28> [Last accessed: 27 June 2019]

²⁸ Pereira, R (2015) ‘Universal Basic Income and the Cost Objection: What are we Waiting For?’ [online]. Available from: <http://wer.worldeconomicassociation.org/files/WEA-WER-5-Periera.pdf>. [Last accessed: 15 June 2019]

²⁹ Widerquist, K (2017) ‘The Cost of Basic Income: Back-of-the-Envelope Calculations’ *Basic Income Studies* [online]. Available from: <https://works.bepress.com/widerquist/75/>. [Last accessed 25 June 2019]

³⁰ Oxford Economics for BBC (26/06/19) ‘Robots to Replace Up to 20 million factory jobs by 2030’ [online]. Available from: <https://www.bbc.co.uk/news/business-48760799> [Last accessed: 28 June 2019]

³¹ Keynes, J.M. ‘Economic Possibilities for Our Grandchildren’, 1930 [online]. Available from: <http://www.econ.yale.edu/smith/econ116a/keynes1.pdf>

dissociating income from work, the UBI corrects the market's failure to address rising inequality due to large-scale labour displacement by automation and is thus the best solution.

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Bibliography:

Bowles, J (24/07/14) '*Chart of the Week: 54% of EU Jobs At Risk of Computerisation*' <http://bruegel.org/2014/07/chart-of-the-week-54-of-eu-jobs-at-risk-of-computerisation/>

Brynjolfsson, E., McAfee, A., (2015) '*Will Humans Go the Way of Horses?*' [online]. Available from: <https://www.foreignaffairs.com/articles/2015-06-16/will-humans-go-way-horses>. [Last accessed 20 June 2019]

Coelho, A (17/01/19) '*UK: The Current Welfare State is Reaching Its Limit, as Evidence On Inequality and Poverty in the UK is surfaced*' <https://basicincome.org/news/2019/01/uk-the-current-welfare-state-is-reaching-its-limits-as-evidence-on-inequality-and-poverty-in-the-uk-is-surfaced/>

Collinson, P. (25/03/19) '*Automation threatens 1.5 million workers in Britain, says ONS*' <https://www.theguardian.com/money/2019/mar/25/automation-threatens-15-million-workers-britain-says-ons>

Ford, Martin (2017) '*How We'll Earn Money In a Future Without Jobs*' https://www.ted.com/talks/martin_ford_how_we_ll_earn_money_in_a_future_without_jobs/up-next?language=en

Lowrey, A (2018) '*Give People Money – the Simple Idea to Solve Inequality and Revolutionise Our Lives*'. Published by WH Allen
World Economic Forum '*The Future of Jobs*' Report 2018 Available from: http://www3.weforum.org/docs/WEF_Future_of_Jobs_2018.pdf

Ghatak, M., Maniquet, F. (2019) '*Universal Basic Income: Some Theoretical Aspects*' [online]. Available here: http://personal.lse.ac.uk/ghatak/UBI_theory.pdf

Haidt, J. (2006) '*The Happiness Hypothesis*' published by Random House Books

Keynes, J.M. '*Economic Possibilities for Our Grandchildren*', 1930 [online]. Available from: <http://www.econ.yale.edu/smith/econ116a/keynes1.pdf>

Manyika et al. (2016) '*McKinsey Global Institute Report*', [online]. Available from: <https://www.mckinsey.com/~media/McKinsey/Business%20Functions/McKinsey%20Digital/Our%20Insights/Digital%20globalization%20The%20new%20era%20of%20global%20flows/MGI-Digital-globalization-Full-report.ashx>

Matta, C., Half, R. (2018) '*Why It's Important to Feel Valued at Your Job*' [online]. Available at : <https://psychcentral.com/blog/why-its-important-to-feel-valued-at-your-job/>. [Last accessed: 17 June 2019]

Partington, R. (28/06/19) '*Gig Economy in Britain Doubles, Accounting for 4.7m Workers*' [online]. Available from: <https://www.theguardian.com/business/2019/jun/28/gig-economy-in-britain-doubles-accounting-for-47-million-workers>. [Last accessed 28 June 2019]

Russell, B (1996) '*The Proposed Roads to Freedom*' Chapter IV: Work and Pay. Project Gutenberg Etext. Available here: <http://www.gutenberg.org/ebooks/690>

Sinn, H-W, (1995) '*Social Insurance, Incentives and Risk Taking*' [online]. Available from: <http://www.nber.org/papers/w5335>. [Last accessed: 15 June 2019]

Smith, A., Anderson, J, (2014) '*AI, Robotics, and the Future of Jobs*' for Pew Research Centre

Vermeulen, B., Kesselhut, J., Pyka, A., Saviotti, P.P. (2018) '*The Impact of Automation of Employment: Just the Usual Structural Change?*'. Available here: www.mdpi.com/journal/sustainability

West, D.M. (18/04/18) <https://www.brookings.edu/blog/techtank/2018/04/18/will-robots-and-ai-take-your-job-the-economic-and-political-consequences-of-automation/>

Widerquist, K (2017) '*The Cost of Basic Income: Back-of-the-Envelope Calculations*' *Basic Income Studies* [online]. Available from: <https://works.bepress.com/widerquist/75/>. [Last accessed 25 June 2019]

World Economic Forum '*Future Workforce Strategy*' <http://reports.weforum.org/future-of-jobs-2016/future-workforce-strategy/>