

Written evidence from UBI Lab Leeds [PCW0029]

UBI Lab Leeds is part of the UBI (Universal Basic Income) Lab Network. Our role is to promote a discussion in Leeds about the possibility of a Universal Basic Income as a way of providing a basic level of financial security for all citizens. For many years, our members - which include academics, entrepreneurs and key workers - have been researching the implications of the Fourth Industrial Revolution on the economy and society, the challenges and opportunities created by automation and the role of the social security system in responding to these challenges. These topics will be the focus for our submission to this inquiry into the DWP's Preparations for Changes in the World of Work.

What are the main challenges that DWP faces as a result of the “Fourth Industrial Revolution”?

This section will highlight some of the main challenges that the DWP and Leeds residents face as a result of the ‘Fourth Industrial Revolution’.

Research highlights that automation threatens jobs and economic security for many people across the UK and within the Leeds City region. By threatening employment security, the Fourth Industrial Revolution will put more pressure on the DWP to support people affected by automation and the increasing economic insecurity it creates. The DWP will have to play a bigger role in supporting people through the transitions caused by automation. A University of Oxford study by Carl Frey and Michael Osborne on the ‘future of employment’ predicts that up to 35% of existing jobs in the UK are at risk of computerisation within the next two decades.¹ An analysis by the West Yorkshire Combined Authority (WYCA) and the Leeds City Region Local Enterprise Partnership

¹ Frey and Osborne (2013), [‘The Future of Employment: How Susceptible are Jobs to Automation?’](#), University of Oxford.

(LEP) also found that 34% of jobs were at risk of automation in Leeds – close to the national average – with agricultural, hospitality, sales, operative and admin occupations at the greatest risk.²

The studies from Frey and Osborne and the West Yorkshire Combined Authority found that, with notable exceptions (such as accountancy), highly skilled and highly paid jobs were the least affected by automation. It also notes that there will likely be a further decline of middle skilled clerical and manual roles, reducing progression opportunities for those without a degree, while having a negative impact on service intensive roles with high levels of employment – thus reducing opportunities for people with low skills. As a result, automation risks threatening ‘inclusive’ economic prosperity, increasing economic and employment security for the many affected and to growing economic inequality.

Moreover, automation is already affecting the labour market today. According to the Office for National Statistics (ONS), ‘self-checkouts at supermarkets are now a common sight, reducing the need to have as many employees working at checkouts.’³ Large employers are rapidly investing in automation right now. For instance, as Maja Korica, associate professor of organisation at Warwick Business School, points out, Amazon introduced more than 50,000 new robots in 2017, a 100% increase from the previous year and estimates suggest that 20% of its workforce may already be made up of robots.⁴

A growth in precarious employment in the gig economy:

Alongside the opportunities and threats posed by automation to employment, it is likely that the proportion of people employed in the gig economy will continue to grow. A Future of Work report found that ‘automation will accelerate the need for and size of the gig economy, as it displaces jobs and sources the talent able to deliver on certain competencies and tasks.’⁵

² West Yorkshire Combined Authority and Leeds City Region Local Enterprise Partnership (LEP) (2014), [‘Impact of Automation in Leeds City Region’](#), West Yorkshire Combined Authority.

³ BBC News (2019), [‘Automation could replace 1.5 million jobs, says ONS’](#), BBC.

⁴ Ibid.

The gig economy makes up 4.7 million jobs in the UK and this has more than doubled in size over the past three years.⁶ While greater gig economy employment can have positive elements (such as flexibility), many gig economy jobs lack the security, employment conditions and protections of traditional work. A 2019 report from think tank 'Doteveryone', 'Better Work in the Gig Economy', found that 'workers in Britain's gig economy are struggling to escape from a toxic combination of pervasive financial insecurity and indignity, as temporary jobs leave them with little certainty over their future'.⁷ The Covid-19 crisis has exposed the lack of financial security for millions of workers in the gig economy and the difficulty in securing adequate social security protections, such as sick pay.⁸

The rise of the gig economy will require the DWP to provide sufficient financial security for those in insecure work. The welfare system will also need to adapt to the changing circumstances of gig economy workers, where people's hours and earnings will be regularly changing. This is why ideas like a Universal Basic Income have become increasingly appealing for those concerned with these issues, as it provides a foundation of security that is not withdrawn when people find work or increase their hours.

Increasing regional inequality

The University of Sheffield has found that the UK has higher levels of regional inequality than any other large wealthy country.⁹ Automation and the FIR is likely to increase inequality, as studies by MIT economist Daron Acemoglu have shown that it has already done, by concentrating wealth and income in areas with high levels of skills and an existing tech industry.¹⁰ Therefore, automation risks exacerbating inequality and the

⁵ Forrester Research (2020), [The Future of Work: Working in a world of intelligent technologies](#), Forrester.

⁶ Partington, R. (2019), ['Gig economy in Britain doubles, accounting for 4.7 million workers'](#), *The Guardian*.

⁷ Doteveryone (2019), ['Better work in the gig economy: enabling gig workers to live financial security, dignity and dreams'](#).

⁸ Mason, R., and Booth, R. (2020), ['Coronavirus UK: unions warn over lack of sick pay for gig economy workers'](#), *The Guardian*.

⁹ The University of Sheffield (2019), ['UK has higher level of regional inequality than any other large wealthy country'](#), *University of Sheffield*.

differences between large urban areas, with large tech industries, on the one hand and small towns and more rural areas on the other.

In conclusion, the DWP has a vital role to play in providing some financial security and protection for those affected by automation and employment insecurity, while reducing the inequality that is likely to be exacerbated by the Fourth Industrial Revolution.

What do we know about the likely impact on the labour market? For example: Are some sectors or types of jobs more likely to be affected than others?

As highlighted in the answers above, Frey and Osborne's 2013 Oxford University study showed that high income jobs will be the least affected by automation.¹¹ At the same time, automation will threaten middle-income routine and manual jobs, as well as those in service-intensive industries and it will reduce opportunities for progression and economic opportunity for workers in less qualifications and skills.¹²

Are some groups of people more likely to be affected than others? What new types of jobs and opportunities could become available?

Studies have shown that automation is likely to have inequitable impacts, not just on income, but also on gender. The ONS found that over 70% of jobs at high risk of automation are held by women.¹³ Given that, according to the Equality and Human Rights Commission, the BME population are more likely to be in poverty, earn lower wages and less likely to be in managerial positions than the white population, there is a risk that the disproportionate impact of automation on lower skilled work will also have a detrimental impact on racial inequality.¹⁴

¹⁰ Dizikes, P. (2020), '[Study finds stronger links between automation and inequality](#) [Job-replacing tech has directly driven the income gap since the late 1980s, economists report](#)', *Massachusetts Institute of Technology (MIT) News*.

¹¹ Frey and Osborne (2013), 'The Future of Employment: How Susceptible are Jobs to Automation?', *University of Oxford*;
https://www.oxfordmartin.ox.ac.uk/downloads/academic/The_Future_of_Employment.pdf

¹² Ibid.

¹³ BBC News (2019), '[Automation could replace 1.5 million jobs, says ONS](#)', *BBC*.

¹⁴ Equality and Human Rights Commission (2016), '[Is England Fairer? The state of equality and human rights 2016](#)', Equality and Human Rights Commission.

Is it likely that there will be a reduction in the number of jobs available?

New research from MIT economist Daron Acemoglu (2020) has shown that since 1987, automation has taken away jobs from lower-skill workers without being replaced by an equivalent number of labour-market opportunities.¹⁵ Acemoglu has found that this effect holds true in the U.S.A. and France, so it is highly likely that this will translate to other developed countries like the UK. Acemoglu and Restrepo (2020) found that across the US between 1993 and 2007, each new robot displaced 3.3 jobs and led to a reduction in wages in the areas with the highest levels of automation.¹⁶

The World Economic Forum has predicted that AI and robots 'could create as many jobs as they displace', but this prediction seems to be at odds with what Acemoglu and Restrepo have shown to have actually happened in recent decades, with automation replacing more jobs than it creates. In any scenario, there is a consensus that automation will displace a large number of jobs, which means that the DWP has a role in supporting people who are displaced and looking for new opportunities.

Is there a need to consider new, long-term approaches to addressing change in the labour market: for example, introducing a Universal Basic Income (UBI)? Is UBI an appropriate short-term response to shocks in the labour market?

As a result of automation, many people will be facing more economic insecurity and uncertainty. The DWP have a role to play in supporting people through transitions, particularly those caused by losing jobs to automation or the rise of the gig economy. The DWP will need to guarantee sufficient financial security to support people as they look for new work, gain extra skills or even work on their own small business idea. A Universal Basic Income would help to provide a more secure financial foundation underneath everybody, which does not require means-testing or bureaucracy and

¹⁵ Dizikes, P. (2020), [Study finds stronger links between automation and inequality](#) *Job-replacing tech has directly driven the income gap since the late 1980s, economists report*, *Massachusetts Institute of Technology (MIT) News*.

¹⁶ Dizikes, P. (2020), [How many jobs do robots really replace?](#) *Massachusetts Institute of Technology (MIT) News*.

misses nobody out. At this point it is worth stressing that high earners would simply pay back their UBI in tax.

The future economy is likely to have a higher proportion of self-employed workers, which has increased from 3.3 million in 2001 to 4.8 million in 2017.¹⁷ Self-employment presents an opportunity to work more autonomously, but income flows can be more insecure than permanent contracts. A Universal Basic Income would guarantee a basic level of financial security for the self-employed, while supporting people as they worked on small business ideas or gained further education and training to take advantage of new job opportunities. A UBI would also provide financial support to those doing vital unpaid work, such as caring for loved ones.

A UBI would be appropriate as both a short-term response to labour market shocks – by maintaining consumer demand in the economy – and as a long-term response to the growing financial insecurity caused by a rise in insecure, short-term gig economy work and self-employment, alongside the job displacement caused by automation.

Studies from a range of economists and think tanks have shown that a UBI would reduce poverty significantly. A UBI proposal from economists Howard Reed and Stewart Lansley would reduce child poverty by more than a third, working-age poverty by a fifth and pensioner poverty by almost a third (p. 18).¹⁸ A proposal from the Royal Society of Arts would eliminate destitution and reduce household poverty by 33% (p.4).¹⁹ Dr. Malcolm Torry's report for a 'Citizens Basic Income' would reduce working age poverty by over 30% and child poverty by 25% (p.11).²⁰ Even the National Economic Foundation's more modest basic income proposal would lift 200,000 families out of poverty.²¹ All of these proposals would see income gains for the majority of households, while the highest earning households would effectively pay their UBI back in tax.

¹⁷ Office for National Statistics (ONS) (2018), '[Trends in self-employment in the UK](#)', ONS.

¹⁸ Lansley, S. and Reed, H. (2019), '[Basic Income for All: From Desirability to Feasibility](#)', *Compass*.

¹⁹ Painter, A., Cooke, J., Burbidge, I., and Ahmed, A., (2019), '[A Basic Income for Scotland](#)', *The Royal Society of Arts (RSA)*.

²⁰ Dr. Malcolm Torry (2020), '[Evaluation of a Recovery Basic Income, and of a sustainable revenue neutral Citizen's Basic Income, with an appendix relating to different Universal Credit roll-out scenarios](#)', Citizens Basic Income Trust.

²¹ Stirling, A. (2019), '[Nothing Personal](#)', New Economics Foundation.

All the above reports have shown how to pay for a UBI that reduces poverty and provides an income boost to the majority of citizens. Financing mechanisms include more progressivity in income tax, so that higher earners will pay their UBI back in tax; closing some of the 1,156 tax loopholes and reliefs - the Resolution Foundation think tank estimates to cost the Treasury £164 billion per year, while Professor Guy Standing estimates that it costs £430 billion²²; as well as considering other options such as a carbon tax and using the revenues to help fund a UBI, which was supported by William Hague and Alistair Darling in a report from Policy Exchange.²³ Others have considered the possibility of wealth and land value taxes to fund a UBI.²⁴

We must also consider the cost-saving potential of a Universal Basic Income. For instance, in a Canadian trial in the 1970's, greater income security from a UBI was linked to reduced mental and physical ill-health, leading to a 8.5% reduction in hospitalisations.²⁵ The potential for a UBI to improve mental health and wellbeing was demonstrated in the 2017-18 Ontario trial, as well as the recent trial in Finland, which demonstrates the potential for a UBI to reduce the economic and social costs associated with mental illness.²⁶

A UBI, like other universal policies such as the NHS, or near-universal policies like child benefit, ensures that everyone who needs support will get it. It must be stressed that higher earners (who don't need it) will pay it back in taxation, a factor which is frequently overlooked by critics. The problem with means-tested benefits is that they are complicated and bureaucratic, meaning that millions of low-income households miss out

²² Resolution Foundation (2019), [UK's tax relief bill has grown to £164bn – more than the country's entire health spend](#), *Resolution Foundation*.

²³ Rooney, M., Burke, J., Taylor, M., and Lightfoot, W., ['The Future of Carbon Pricing: Implementing an independent carbon tax with dividends in the UK'](#), *Policy Exchange*.

²⁴ Farley, M. (2016), ['Why Land Value Tax and Universal Basic Income Need each other'](#), *Basic Income: Articles about Universal Basic Income*.

²⁵ Forget, E. (2013), ['New questions, new data, old interventions: The health effects of a guaranteed annual income'](#), *Preventative Medicine*.

²⁶ Basic Income Canada Network, 'Signposts to Success: A report of a survey of Ontario Basic Income Recipients, report of Ontario Basic Income recipients - https://assets.nationbuilder.com/bicn/pages/42/attachments/original/1551664357/BICN_-_Signposts_to_Success.pdf

Kela (2020), ['Results of Finland's basic income experiment: small employment effects, better perceived economic security and mental wellbeing'](#), Kela

on means-tested benefits they are eligible for²⁷; while arbitrary cut-off points can punish those who are ineligible. This is what has happened with the Government's proposals during this crisis. While these measures were welcome, millions are still falling through the cracks of the Government's coronavirus measures.²⁸ A UBI, alongside progressive taxation, is a fair and effective way of guaranteeing a basic level of financial support for everyone.

What can the Government learn from the international evidence on UBI?

Evidence from international trials (in places like Finland, Canada, India and Namibia) have shown a number of positive effects of a UBI, including significantly improving mental health, child nutrition, reducing indebtedness, reducing crime and increasing school attendance.²⁹ Trials have also found evidence that a UBI boosts local economies, through fuelling consumer demand, while encouraging people to start or expand small businesses and take on further training and education.³⁰

In a 1970s Canadian trial, the UBI was linked to an 8.5% reduction in hospitalisations in the area that was trialled, saving significant amounts in healthcare costs.³¹ In a 2017-18 trial in Ontario, Canada, 88% reported reduced stress and there was a 73% drop in those experiencing depression during the pilot.³² The pilot in Ontario was discontinued for political reasons and not on account of the evidence.

²⁷ Finn, D. (2017), '[Here's how four million UK families have missed out on the benefits they're entitled to](#)', *The Independent*.

²⁸ Krebel, L., Jaccarini, C., Stirling, A. (2020), '[Millions slipping through the cracks](#)', *New Economics Foundation*.

²⁹ Centre for Public Impact (2016), Basic Income Grant (BIG) in Namibia, <https://www.centreforpublicimpact.org/case-study/basic-income-grant-big-namibia/>; Basic Income Canada Network, 'Signposts to Success: A report of a survey of Ontario Basic Income Recipients, report of Ontario Basic Income recipients - https://assets.nationbuilder.com/bicn/pages/42/attachments/original/1551664357/BICN_-_Signposts_to_Success.pdf

³⁰ Basic Income Canada Network, 'Signposts to Success: A report of a survey of Ontario Basic Income Recipients, report of Ontario Basic Income recipients - https://assets.nationbuilder.com/bicn/pages/42/attachments/original/1551664357/BICN_-_Signposts_to_Success.pdf

³¹ Forget, E. (2013), '[New questions, new data, old interventions: The health effects of a guaranteed annual income](#)', *Preventative Medicine*.

³² Basic Income Canada Network, 'Signposts to Success: A report of a survey of Ontario Basic Income Recipients, report of Ontario Basic Income recipients - https://assets.nationbuilder.com/bicn/pages/42/attachments/original/1551664357/BICN_-_

The final results of the most recent trial in Finland showed a positive effect on perceived economic security and mental wellbeing, it also showed that recipients of a UBI were slightly more likely to be in work than those who did not receive it.³³ Despite some claiming that a UBI would disincentivise work, this has never been born out by the evidence. The evidence from UBI trials so far – in developed and developing countries - is that a UBI *does not* disincentivise work. The fact that it is not withdrawn as people get a job or increase their earnings, means that it avoids the disincentives and high marginal deduction rates associated with means-tested benefits.

Conclusion

In conclusion, the key challenges presented by automation are the displacement of jobs and increasing employment insecurity, particularly for workers with lower skills and qualifications, and increasing economic inequality. The DWP, therefore, has a vital role in guaranteeing a basic level of economic security, to support people as they transition between jobs, gain new skills to take advantage of any new jobs created and/ or develop a self-employment opportunity.

This submission has highlighted a Universal Basic Income as an idea that the DWP should explore, to guarantee a basic level of financial security in an age of increasing economic insecurity for many. It has highlighted the reports, developed by economists, which show how we can finance a UBI scheme that reduces poverty and provides an income boost for the majority of households (while higher earning households effectively pay it back in tax). The international evidence on UBI has so far demonstrated a positive impact on economic security, mental wellbeing, consumer demand and supporting people to set up small businesses.

So far, the international evidence has shown that a UBI *does not* disincentivise work. If anything, the opposite is true. Given the need for the DWP to tackle the insecurity created by automation, and the international evidence in support of a UBI, it is surely

[Signposts to Success.pdf](#)

³³ Kela (2020), '[Results of Finland's basic income experiment: small employment effects, better perceived economic security and mental wellbeing](#)', Kela.

sensible for the DWP to explore the potential of a UBI. This could begin by commissioning a UBI pilot in one or more of the seven local authorities which have called for a UBI pilot (Fife, Glasgow, Edinburgh, North Ayrshire, Liverpool, Sheffield and Hull).

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