

Written evidence from Royal Society for encouragement of Arts, Manufacturing and Commerce [PCW0047]

About the RSA

The RSA (Royal Society for the encouragement of Arts, Manufactures and Commerce) is an independent charity which believes in a world where everyone is able to participate in creating a better future.

Through our ideas, research and a 30,000 strong Fellowship, we are a global community of proactive problem solvers, sharing powerful ideas, carrying out cutting-edge research and building networks. We create opportunities for people to collaborate, influence, and demonstrate practical solutions to realise change.

Through the RSA's Future Work Centre, we seek to equip policymakers, employers and educators with the insights to prepare today's workers for tomorrow's workplace. Its latest report, *Blueprint for Good Work*, sets out key recommendations to reform the social contract to meet the challenges of a changing world of work.¹

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Consultation response

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

The RSA Future Work Centre deploys a ‘scenario-planning’ approach to defining the good work policy challenges that will emerge as part of the “fourth industrial revolution”. This, as set out our response to question two (see below), emerges largely from methodological concerns we have about the ability to capture the likely impact technology will have on the labour market in the medium and long-term. Rather than make neat forecasts of that nature, we have argued that policymakers should instead consider multiple scenarios of the future and prepare workers for a wide range of possible outcomes.

The major output of this approach is our 2019 report, *The Four Futures of Work*, which utilised a ‘morphological analysis’ variant of scenario-planning drawn up with consultants from Arup (who are leading practitioners of scenario-planning).² Key to this method is identifying high impact, highly uncertain drivers of change – “critical uncertainties” - and then exploring the different ways they could play out over time. In this way we believe that we capture a more dynamic analysis of how non-technology factors – for example, policy change or consumer behaviour – interact with technological capabilities to shape the economy and labour markets of the future. This resulted in four different scenarios for the future of work – the Big Tech, Precision, Exodus and Empathy economies. These scenarios are not exhaustive but are intended to be a deliberately provocative illustration of the breadth of future policy challenges agencies like the DWP must consider:

- **The Big Tech Economy describes a world where most technologies develop at a rapid pace, from self-driving cars to 3D printing.** A new machine age delivers significant improvements in the quality of products and public services, with the cost of everyday goods

¹ Lockey, A., Wallace-Stephens, F. (2020) *A Blueprint for Good Work*. London: RSA

² Dellot, B. Mason, R and Wallace-Stephens, F (2019) *The Four Futures of Work*. London: RSA.

including transport and energy plummeting. However, unemployment and economic insecurity creep upwards, and the spoils of growth are offshored and concentrated in a handful of US and Chinese tech behemoths. The dizzying pace of change leaves workers and unions with little time to respond.

- **The Precision Economy portrays a future of hyper-surveillance.** Technological progress is moderate, but a proliferation of sensors allows firms to create value by capturing and analysing more information on objects, people and the environment. Gig platforms take on more prominence and rating systems become pervasive in the workplace. While some lament these trends as invasive, others believe they have ushered in a more meritocratic society where effort is more generously rewarded. A hyper connected society also leads to wider positive spill overs, with less waste as fewer resources are left idle.
- **The Exodus Economy is characterised by an economic slowdown.** A crash on the scale of 2008 dries up funding for innovation and keeps the UK in a low-skilled, low-productivity and low-paid rut. Faced with another bout of austerity, workers lose faith in the ability of capitalism to improve their lives, and alternative economic models gather interest. Cooperatives and mutuals emerge in large numbers to serve people's core economic needs in food, energy and banking. While some workers struggle on poverty wages, others discover ways to live more self-sufficiently, including by moving away from urban areas.
- **The Empathy Economy envisages a future of responsible stewardship.** Technology advances at a clip, but so too does public awareness of its dangers. Tech companies self-regulate to stem concerns and work hand in hand with external stakeholders to create new products that work on everyone's terms. Automation takes place at a modest scale but is carefully managed in partnership with workers and unions. Disposable income flows into 'empathy sectors' like education, care and entertainment. This trend is broadly welcomed but brings with it a new challenge of emotional labour, where the need to be continuously expressive and available takes its toll.

Subsequently, we have identified four convergent systemic policy challenges – variants of which are present in each scenario – that will define the future of work:

- **Stronger worker voice:** How can we support trade unions to innovate and reverse the long-term decline in membership? What other mechanisms are needed to give workers more stakeholder power over how technology is adopted in the workplace?
- **Democratic data:** What rights should people have over the data that is collected on them at work? Can we reign in the power tech companies have over markets by regulating their power over data?
- **A modern safety net:** How can we support workers financially during potentially long periods of unemployment and retraining? How can we create parity of esteem between employees and independent workers, including those in the gig economy?
- **Lifelong learning:** How can we reskill workers for the jobs of the future, particularly those at risk of automation? Can we elevate the status of low-skilled work by creating opportunities for upskilling within these occupations?³

In summary, the DWP should prepare for the multiple ways the world of work could change – not just for the impact of job losses. There are obviously enormous challenges that will emerge directly from the Covid-19 pandemic and where the DWP will have to lead the Government response – income support and a much more active welfare to work policies that seek to redeploy workers in highly vulnerable sectors such as hospitality. Our answer here has not considered these challenges directly but we believe the benefits of this form of scenario planning are evident in the current crisis. While the Exodus Economy – our economic 'black swan' future - did not predict a global pandemic, it has proved prescient in

³ Lockey, A. and Wallace-Stephens, F. (2020) *A Blueprint for Good Work: Eight ideas for a new social contract*. London: RSA.

anticipating many of the impacts of the current crisis, such as the mass unemployment and potential de-urbanisation.

- 2. What do we know about the possible likely impact on the labour market? For example:**
 - a. Are some sectors or types of jobs more likely to be affected than others?**
 - b. Are some groups of people more likely to be affected than others?**
 - c. What new types of jobs and opportunities could become available?**
 - d. Is it likely that there will be a reduction in the number of jobs available?**

The RSA Future Work Centre is sceptical about our current ability to predict the impact of technology on the labour market with a high degree of precision. Methodological choices perhaps overstate the variation, but the fact that Oxford University (2013) suggested that 35% of UK jobs were at high risk of automation, whereas the OECD (2016) put it at 10% illustrates this is a challenging area of research.

One problem with all such predictions is their reliance on subjective expert opinion when assessing how likely it is a job can be automated – expert opinion which history often shows to be misplaced. However, perhaps the bigger problem is that this debate tends to overstate the theoretical possibility of automation (i.e. does the technology exist for this bundle of tasks or occupation to be automated) and understate the socio-economic constraints on technological adoption. Policy change, political resistance, consumer behaviour, business model integration, profitability – there are a lot of other factors that dictate whether a technology is likely to be deployed at scale, in a manner that materially affects workers. For that reason, the RSA prefers to use futures methods such as scenario planning (see above) to define possible policy challenges in the future of work.

The retail sector's changing business model provides a good illustration of this point. Few analysts would have predicted in 2010 that technology would turn 'van driver' into one of the fastest growing jobs of the decade. And yet, driven by the demand shift within retail from high street to online, only three occupational classes (programmers and software developers, private sector administrative roles, and financial managers and directors) saw stronger jobs growth between 2011 and 2019.⁴ This is a story of technology-driven labour market change that the conventional approach to predicting automation not only missed, but would still miss today.

More broadly, a heavy focus on predicting the exact number of job losses can overlook the fact that technology (including automation) is changing the labour market now and its effects are highly uneven. For example, existing ONS historical data, indicates short and medium-term losses will likely be felt much more acutely by women, young people, workers outside London and the South East, and those with lower levels of education. Whilst we strongly advocate a scenario planning approach to assessing and defining future labour market challenges (see above), we would also argue that this historical analysis of quantitative trends is a more important basis for short-term policy development than predictive crystal-ball gazing, not least because it is a highly relevant approach for capturing ongoing technology-driven trends – e.g. the changing composition of the retail sector (see below).

Furthermore, such predictions also tend to overlook 'black swan' economic events and the scarring effects of crisis – a point emphatically demonstrated by the Covid-19 pandemic.

⁴ Wallace-Stephens, F (2020) What new jobs will emerge in the 2020s? [Blog] RSA. Available at: www.thersa.org/discover/publications-and-articles/rsa-blogs/2020/01/new-jobs-2020s

A.

It is critical to stress that automation is not a problem for the future – it is happening here today.

RSA analysis of job changes over the last decade shows that the fastest shrinking professions by net employment change were national government administrators (-109,000, or -43%), retail cashiers and check-out operators (-75,000, or -32%), bank and post office clerks (-65,000, or -43%), sales and retail assistants (-64,000, or -6%) and personal assistants (-55,000, or -23%).⁵ Many of these declines are linked to new technologies, such as automated checkouts, online banking and the rise of e-commerce.

Public sector austerity was also another factor in job losses. While some public sector roles grew, especially those related to caring and education roles, administrative roles in both central and local government were particularly at risk.

B.

Our analysis of the last decade's labour market changes showed that women were worst affected and have been especially hard hit by the changes on the high street. Between 2011 and 2019, more than 289,000 traditional roles have been lost, 81% of which were held by women. This includes 75,000 retail cashiers (67,000 women); 65,000 post office and banking clerks (41,000 women); 64,000 sales assistants (77,000 losses from women while men increased by 13,000); 34,000 hairdressers and barbers (28,000 women), 27,000 shelf fillers (12,000 women) and 23,000 launderers (11,000 women).

Existing income inequalities could be exacerbated by both automation and Covid-19. Outside of key workers in the NHS and supermarkets, one of the biggest determining factors in the likelihood of being furloughed was the ability to work from home, and RSA research suggests these are much more likely to be low-paid professions already.⁶

Likewise, geographic inequalities could worsen. An RSA policy briefing on Covid-19's impact suggests that jobs in the 'knowledge economy' which can be more easily done from home are concentrated in London, Oxbridge and the capital's commuter belt. Meanwhile, we found that coastal and rural areas will be most at risk as a result of Covid-19. Areas in the North and the South West are likely to be hardest hit.

We are currently carrying out research into how key workers on low and middle incomes are affected as the lockdown lifts.

C.

In the last decade, our analysis shows that the fastest growing professions by net employment change were computer and software programmers (+162,000, or 72% growth), general admin (161,000, or 26%), finance managers and directors (115,000, or 51%), van drivers (102,000, or 54%) and marketing directors (100,000, or 56%).⁷

⁵ The RSA, 'RSA Future Work Centre: 289,000 high street jobs lost in last decade as new analysis reveals winners and losers of 2010s' (2019). Available at: <https://www.thersa.org/about-us/media/2019/289000-high-street-jobs-lost-in-last-decade-as-new-analysis-reveals-winners-and-losers-of-2010s>

⁶ F. Wallace-Stephens & W. Grimond, 'Low pay, lack of homeworking: Why workers are suffering during lockdown'. The RSA (2020). Available at: <https://www.thersa.org/discover/publications-and-articles/rsa-blogs/2020/04/low-pay-lack-homeworking>

⁷ The RSA, 'RSA Future Work Centre: 289,000 high street jobs lost in last decade as new analysis reveals winners and losers of 2010s' (2019)

Covid-19 will have likely hastened the trend towards an increase in van drivers. We also see no reason, looking both at historical data, current demand and our scenario-planning, why the growth of ‘caring’ professions associated with catering to the aging population will slow in the coming decades – if anything, Covid-19 may increase demand.

- 3. 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)?**
 - a. Is UBI an appropriate short-term response to shocks in the labour market?**
 - b. What can the Government learn from the international evidence on UBI?**

A. Universal Basic Income (UBI) is a policy that we have explored in great detail at the RSA, from our first report in 2015 through a programme of research, events and engagement leading up to today.⁸ An old idea, it is one that has picked up interest across the world during that period, as it offers a response to the challenges of economic insecurity and a changing labour market. We believe it is a policy idea worthy of consideration which could contribute to reinvigorating the social contract in the UK – but which also requires challenge and exploration to ensure it is the correct route forward.

UBI is both a short-term and long-term policy response. For the short-term, it could provide a buffer to shocks, such as those we are witnessing during the COVID-19 pandemic. The furlough scheme was necessary partly because of the absence of the secure foundation that a basic income would offer. The nature of the pandemic put pressure on those in precarious roles, particularly in the gig economy, to continue working even if against scientific guidance.

However, the furlough response in of itself has not been sufficient – many people in the UK, particularly those who are self-employed, have fallen through the gaps in the scheme, and have been forced onto Universal Credit. We have been consistent critics of Universal Credit - the punitive nature of Universal Credit, based on sanctions and conditionality, has been shown to be ineffective in creating the sort of behaviour it ostensibly wants to see rid of.⁹ A 2018 National Audit Office report critiqued the ability of the system to ever meet the goals that it was set up for.¹⁰ The current crisis has shown how many of the most punitive elements of Universal Credit are political choices rather than essential components, visible in the lack of resistance in parliament to rolling them away.

UBI could serve to alleviate economic insecurity in the long term. Individuals would be able to make longer-term decisions on spending and saving; and have the security to explore new opportunities, such as retraining or starting a business, which may arise in the Fourth Industrial Revolution. As UBI is not removed or altered when moving in and out of work, it could support flexibility and career changes which will be characteristic of the new labour market, and empower those currently disconnected from the labour market (e.g. people with disabilities; or carers, who are disproportionately women) to be able to explore opportunities without fear of it removing or impacting on their own responsibilities or financial supports.

Our 2018 report, *Pathways to Universal Basic Income*, outlined a gradual process by which the UK could introduce a form of UBI.¹¹ Offering access to UBI for two years out of a ten-year period, it would allow for

⁸ The RSA, *Creative citizen, creative state - the principled and pragmatic case for a universal basic income* (2015). Available at: <https://www.thersa.org/discover/publications-and-articles/reports/basic-income>

⁹ Economic and Social Research Council, *Welfare Conditionality Project, Final Findings Report*. University of York (2018). Available at: www.welfareconditionality.ac.uk/wp-content/uploads/2018/06/40475_Welfare-Conditionality_Report_complete-v3.pdf

¹⁰ National Audit Office, *Rolling out Universal Credit* (2018). Available at: www.nao.org.uk/wp-content/uploads/2018/06/Rolling-out-UniversalCredit.pdf

¹¹ A. Painter, J. Cooke & J. Thorold, *Pathways to universal basic income: the case for a Universal Basic Opportunity*

a UK-wide exploration of the impacts that a UBI could have on citizens. With the changes wrought by Fourth Industrial Revolution it would offer to space to both examine what people did with their access to secure money for a period of time; and to build up financial underpinnings for a more sustained or larger-scale policy (through ideas such as a sovereign wealth fund).

We further developed and modelled our thinking with our 2019 report, *A Basic Income for Scotland*.¹² Based on fieldwork with residents and stakeholders in Fife, alongside economic modelling, a proposal for a basic income of £4,800 per adult per year in Scotland (with different rates for children and those of retirement age) would eliminate destitution entirely in the country (based on Joseph Rowntree Foundation definitions), and significantly reduce wider poverty.

Table 4: Impact of Basic Income schemes on destitution (JRF measure)

| Group | Households | Children | Adults | Pensioners |
|---------------------------------------|------------|-----------|-----------|------------|
| Baseline (actual system) | | | | |
| Number in destitution | 52,875 | 1,697 | 76,372 | 2,516 |
| Total number in group | 2,543,235 | 1,028,566 | 3,460,912 | 1,000,410 |
| Proportion in destitution (percent) | 2.1 | 0.2 | 2.2 | 0.3 |
| Horizon 2 system | | | | |
| Number in destitution | 28,106 | 207 | 33,752 | 2,356 |
| change relative to baseline | -24,769 | -1,490 | -42,620 | -160 |
| Proportion in destitution (percent) | 1.1 | 0.0 | 1.0 | 0.2 |
| change relative to baseline (percent) | -1.0 | -0.1 | -1.2 | 0.0 |
| Horizon 3 system | | | | |
| Number in destitution | 0 | 0 | 0 | 0 |
| change relative to baseline | -52,875 | -1,697 | -76,372 | -2,516 |
| Proportion in destitution (percent) | 0.0 | 0.0 | 0.0 | 0.0 |
| change relative to baseline (percent) | -2.1 | -0.2 | -2.2 | -0.3 |

Moreover, this would be delivered within a bureaucracy-lite system, saving costs and complexity which are endemic to the current approach – and which would reach everyone, ensuring that gaps in support are avoided. The full-scale proposal, calculated at £9.6 billion for Scotland per year, would require co-operation between the Scottish and UK Governments, DWP, HMRC and Local Authorities, and new approaches to revenue generation. UBI will not be fiscally neutral. However, new approaches to social security and the economy should also require new approaches to revenue generation – we therefore do not believe UBI should be funded purely from income tax, but call for exploration of funding mechanisms such as a sovereign wealth fund, data taxation (currently being explored in the US), land value taxation and others.¹³

This modelling did not consider the behavioural impacts of UBI, but contributions from residents in Fife who participated in the work highlighted areas where they felt it could have a significant impact on their

Fund, The RSA (2018). Available at: <https://www.thersa.org/discover/publications-and-articles/reports/pathways-to-universal-basic-income-the-case-for-a-universal-basic-opportunity-fund>

¹² A. Painter, J. Cooke, I. Burbidge & A. Ahmed, *A Basic Income for Scotland*, The RSA (2019). Available at: <https://www.thersa.org/discover/publications-and-articles/reports/basic-income-scotland>

¹³ See the Data Dividend Project, for example: <https://datadividendproject.com/>

lives – ranging from access to housing to change of working opportunities and habits. This feeds into the findings of the recently published draft Final Report from the Scottish Government’s Basic Income Pilot Feasibility Group, which proposes a large-scale basic income experiment for Scotland – this presents an opportunity to test some of the ideas that the RSA has proposed (alongside others such as Reform Scotland and Compass) in the field.¹⁴¹⁵¹⁶ It also has wider implications beyond Scotland – there has been an uptick in interest in UBI experiments and policy across the UK, in particular the North of England with the UBI Lab network, and through interest from the Welsh Government. This offers DWP a chance to utilise basic income experiments as a response to regional inequalities and widespread economic insecurity.

The deployment of a full basic income model would take time, likely as a ten year project or longer. In our Basic Income for Scotland report we suggested a variety of funding mechanisms including a growth accelerator – a percentage of GDP growth allocated to UBI, which could fund around 38% of the ‘full’ basic income assuming 2% growth; increasing income tax on those on above median incomes; and reversing corporation tax cuts. These could be applied to a pan-UK basic income model.

B) International evidence from cash transfer programmes has demonstrated the impact basic income could have for the UK, and provides a response to some of the arguments raised against a UBI. From experiments with minimum income in the 1970s in Canada to the recently concluded and evaluated programme in Finland, UBI has shown positive impacts on participants.¹⁷ Available evidence from these trials suggest that participants feel more trusting of others and of the state; that they report improved wellbeing; small, but positive impacts of labour market involvement; and new opportunities for business creation.¹⁸

Examples from the experiments carried out in Namibia and India have demonstrated increased involvement for citizens previously disconnected from the labour market (particularly those with disabilities).¹⁹ While these represent very different social, economic and cultural contexts to the UK, this chimes with responses gathered with participants with disabilities in Glasgow, who expressed a belief that a UBI would allow them to interact with the labour market in ways currently not possible.

As the DWP looks to prepare the country for the challenges and opportunities which the Fourth Industrial Revolution will bring, UBI offers a chance for the social contract to be restored and for good work to be at the heart of economic activity. The DWP can be a constructive force at the centre of this work, and we would strongly urge the Committee to consider the evidence and activity undertaken to date; and to support the calls from across the UK to test out these ideas in practice.

¹⁴ Citizens’ Basic Income Feasibility Study Steering Group, *Assessing the Feasibility of Citizens’ Basic Income Pilots in Scotland: Final Report* (2020). Available at: https://basicincome.scot/wp-content/uploads/sites/75/2020/06/Draft-Final-CBI-Feasibility_Main-Report-June-2020.pdf

¹⁵ Reform Scotland, *One For All: The Case for a Basic Income Guarantee* (2020). Available at: <https://reformscotland.com/2020/04/one-for-all-the-case-for-a-basic-income-guarantee/>

¹⁶ S. Lansley, H. Reed, *Basic Income for all: From desirability to feasibility* (2019). Available at: https://www.compassonline.org.uk/wp-content/uploads/2019/03/Compass_BasicIncomeForAll_2019.pdf

¹⁷ Kela, *Results of Finland’s basic income experiment: small employment effects, better perceived economic security and mental wellbeing* (2020). Available at: https://www.kela.fi/web/en/news-archive/-/asset_publisher/IN08GY2nIrZo/content/results-of-the-basic-income-experiment-small-employment-effects-better-perceived-economic-security-and-mental-wellbeing

¹⁸ See E. L. Forget, ‘New questions, new data, old interventions: The health effects of a guaranteed annual income’, *Preventive Medicine* 57:6 (2013), Available at: <https://www.sciencedirect.com/science/article/pii/S0091743513001928> and Kela, *Results of Finland’s basic income experiment* (2020)

¹⁹ See Centre for Public Impact, ‘Basic Impact Grant (BIG) in Namibia’ (2016). Available at: <https://www.centreforpublicimpact.org/case-study/basic-income-grant-big-namibia/> and S. Davala, R Jhabvala, K. Mehta, and G. Standing (2015). *Basic Income: A Transformative Policy for India*. Bloomsbury Academic (2015).

4. Are DWP Work Coaches well equipped to advise people who are looking for work on new and emerging sectors and jobs?
 - a. How could DWP improve the training and advice it offers to jobseekers?

N/A

5. What support, advice and training should DWP offer to people who are looking to progress in work, or take up more hours?

N/A

6. What is DWP's role in ensuring that young people have the skills they need to get into and progress in work?

N/A

7. How could DWP work more closely with employers to ensure that claimants have the skills they need to find work in the future labour market?

N/A

8. As the workplace changes, will it be necessary to change the legal definition of employment to ensure that people continue to have the appropriate legal status and protections? Might any other legal changes be needed?

N/A

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