The Centre for Economic Justice

THE FUTURE IS OURS

WOMEN, AUTOMATION AND EQUALITY IN THE DIGITAL AGE

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SUMMARY

Automation – or the substitution of labour for capital – has triggered dystopian visions of mass joblessness, as well as utopian visions of a world with no work. Yet despite the growing capability of robots and artificial intelligence (AI), we are not on the cusp of a 'post-human' economy. Automation will produce significant productivity gains that will reshape specific sectors and occupations. In aggregate, however, these gains are likely to be recirculated, with jobs reallocated rather than eliminated, economic output increased, and new sources of wealth created. The problem, instead, is likely to be one of how income and wealth are distributed. Automation could create a 'paradox of plenty': society would be far richer in aggregate, but, for many individuals and communities, technological change could reinforce inequalities of power and reward.

These changes may well affect men and women differently, because men and women tend to have different jobs in the UK labour market. Our analysis shows that twice as many women as men work in occupations with a high potential for automation (9 per cent compared to 4 per cent of men), and that 64 per cent of jobs in these occupations are held by women. Migrants, and lone parents (typically women) are more likely to hold jobs with high automation potential.

But technology is not destiny. How automation reshapes the economy, and who benefits, will depend on where in the economy automation takes place; who holds power in the economy; who has the 'in-demand' skills in the future economy, and how those skills are valued; who is able to find new roles and withstand periods of unemployment; and how the gains are shared.

This paper argues that automation presents an opportunity to narrow gender inequalities. An acceleration of automation could increase productivity and enable higher pay in currently low-paid roles dominated by women. New jobs will be created that could provide high-quality opportunities for women to take up. Automation could create a society of plenty, both financially and with more time for life outside of the workplace, which could relieve women of the 'double shift' of paid and unpaid work that many face and rebalance unpaid work between genders. But a more gender-equal future will not happen spontaneously. Realising this opportunity will require a managed acceleration of automation, led by those who could be affected by it, including women.

This report sets out four propositions for change based on this premise.

1. We should seek to accelerate automation to increase productivity in low-pay sectors. This should be led by workers.

Managed automation poses an opportunity to drive up productivity and pay, and to transform how we value key job roles that have historically been characterised by feminised work performed primarily by women, for low wages. Maximising the benefits of automation will require improving the rate of diffusion of technologies from the minority of frontier firms to the majority of slow-adopting, low-productivity firms in the rest of the economy. It will also require ensuring that both quantity- and quality-driven productivity gains are shared with workers through higher pay. The voices and leadership of women and other workers should be central to a managed acceleration of automation.

To achieve this, we recommend the following.

- A managed acceleration of automation, governed by those affected. If a 30 per cent target of women on boards is not reached by large companies by the end of 2020, legislation should be introduced requiring a 50:50 split by 2025. All large companies should also be required to have two elected employees on their board and remuneration committee.
- A new social partnership body, Productivity UK, that would support firms in the everyday economy to adopt automating technologies, with a strategic focus on low-paid sectors including those that disproportionately employ women.

- Measures to increase pay with productivity, including raising the minimum wage to the real living wage, sector-level collective bargaining, and use of procurement powers to push up wages.

2. We should ensure the benefits of higher productivity are shared by all.

Increasing use of automation in the production process could result in rising financial returns to the ownership of machines – or, more broadly, capital, if the economy becomes more 'capital intensive'. This could lead to the deepening of existing inequalities, because capital is held very unequally across the economy. Women are half as likely as men to hold employee shares, and own on average less wealth in pensions, shares and unit trusts. To ensure that everyone can benefit from returns to capital, we recommend the following.

- An expansion of employee ownership trusts (EOTs), as well as a requirement to include share options in pay gap reporting.
- Extending automatic enrolment, with relatively smaller employer contributions, below the current threshold of £10,000 – potentially benefitting over 1.5 million women who work.
- A Citizens' Wealth Fund to ensure that everyone can benefit from increasing returns to capital even if not in formal, paid work.

Increased productivity could enable not just higher incomes, but also allow us to produce the same amount with less work. This could enable a reduction in working time, potentially relieving the 'double shift' of paid and unpaid work faced by many women and facilitating a more equal balance of unpaid work between genders. We recommend the following.

- An increase in annual leave entitlements, a proportion of which could be in the form of bank holidays, and that we join other European countries in restricting the ability to 'opt-out' of the European Working Time Directive.

3. New jobs in the future must be made accessible to everybody.

As tasks and whole occupations are made redundant, others will take their place. The impact on gaps in pay and conditions will depend on who is able to access the good jobs in the future economy. In particular, roles in tech are both highly paid and occupied primarily by men: just 16 per cent of people working in tech are women. Opportunities in the future economy must be accessible to women. We recommend the following.

- Support for carers to retrain, including 30 hours free childcare entitlement for people who are studying and a returners programme for women re-entering the labour market to work with tech.
- Stronger legislation to ensure good jobs are accessible, through 'use-it-or-lose-it' paternity leave, a requirement for all jobs to be advertised as flexible by default, and requirements on tech firms to demonstrate progress to gender-equal workforces.
- That schools, FE institutions and universities are required to report gender balance at GCSE and A-Level subject choices. Universities should pay a financial penalty for failing to achieve reasonable gender balance in STEM subjects.

4. We must ensure that technologies are not biased against particular groups, including women.

Algorithms offer opportunities to make huge strides in terms of productivity, accuracy and insights, but they also risk magnifying human bias – and error – on an unprecedented scale. To prevent bias in automating technologies that rely on algorithms and data generated by platforms, we recommend the following.

- The Centre for Data Ethics and Innovation is given regulatory powers to inspect audit trails of how anti-discrimination measures have been built in from the design stage.
- The Centre should also assess how the 2010 Equality Act could be strengthened to provide protection against discriminatory practices perpetuated by algorithmic or data bias.

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