

Autonomy

GET REAL:

ACCURATELY COSTING A FOUR-DAY WEEK IN THE PUBLIC SECTOR

- Labour have proposed moving to a 32-hour week over the period of a decade, with no loss of pay.
- The Conservative Party and the Centre for Policy Studies estimate that this 'four-day week' would cost the public sector £17 billion annually.
- This estimate does not take into account various factors that would be at play in the event of a 32-hour week in the public sector, including a number of significant cost reductions that we can expect.
- On Autonomy's calculations, taking into account tax contributions and the current costs to public services of overwork-related sickness across the economy, the net cost of a 32-hour week would be £3.55 billion on modest estimates and £2.85 billion on less conservative estimates.
- The higher estimate of £3.55 billion is less than one fifth of the figure that the Conservative Party and the Centre for Policy Studies have estimated. It is over 6 times less than the annual Department for Work and Pensions' budget for housing benefit (£22.9 billion).
- The four-day week would therefore still require state expenditure, but not nearly as much as the Centre for Policy Studies suggest. This cheap price tag is even more striking considering that in the process of the transition to shorter hours, the public sector would be creating over 500,000 new jobs, greatly improving job quality for millions of public sector staff as well as reducing the carbon footprint of the sector.

The cost of a 32-hour week in the public sector would be relatively small, and yet think tanks and political parties have been calculating unrealistically high numbers.

The main thrust of the Centre for Policy Studies' calculation, and the Conservative Party's estimated cost, is that an expansion of the workforce would be necessary if the public sector were to implement a four-day week. They use a figure for total public sector compensation in 2017 of £183 billion, although this figure amounts to the total compensation paid to employees **before** employers social contributions, e.g. National Insurance contributions (NIC), are taken into account. This warps the numbers greatly.¹ According to the Annual Survey of Hours and Earnings,² the total compensation paid to public sector workers minus employer social contributions in 2018 was as follows:

ASHE full time public sector employee annual pay (mean 2018):	£34,759
ASHE part time public sector employee annual pay (mean 2018):	£14,950
ASHE number of full time public sector employees (2018):	3,738,000
ASHE number of part time public sector employees (2018):	1,703,000
ASHE total public sector compensation estimate (2018):	£155,388,992,000

Discrepancy between 2018 ASHE and Centre for Policy Studies figure:	£27,611,008,000
---	-----------------

This figure of £155 billion is already much lower than the £183 billion proposed by the Centre for Policy Studies. This is because the ASHE figures do not include social contributions from public sector employers. These mainly comprise NIC and pension contributions that are, on the whole, transfers from one part of the public sector to another.

Not all public sector employees are full-time

We also need to address the Centre for Policy Studies' error of assuming all workers in the public sector are full-time employees. Only 69% of workers are working at the mean average FTE of 37.1 hours per week and in actuality the cost of FTE workers in 2018 was just under £130 billion.

If we divide this figure by the number of hours in a full-time work-week, we arrive at the cost to the public sector of each full-time workforce-hour, which is just over £3.5bn. The public sector will need to hire an extra 5.1 hours per full-time employee per work-week if it is to make up for this lost labour time, which amounts to just under £18 billion per year using these figures.

Tax and National insurance contributions from new hires have to be taken into account

In addition, we also take into account the tax returns that would come from the workers themselves. Taking into account that, on average, UK workers pay a combined rate of 18% in income tax and NIC, we can price in this tax recovery from the new staff costs.³ Given that the public sector has a range of income levels, from Band 2 nursing assistants right up to consultants, using the average rate of contribution makes sense. 18% of the total extra labour costs above equals just over £3.2 billion, which when subtracted from the total leaves a new net cost of just under £15 billion .

1 In 2017, the compensation in terms of wages and salaries after employers social contributions are taken into account totalled £140.299 billion (not the £183 billion that Centre for Policy Studies proffer). See the 'General Government' sheet at: <https://www.ons.gov.uk/economy/grossdomesticproductgdp/compendium/unitedkingdomnationalaccountstheblue-book/2019/supplementarytables>

2 See the 2018 revised figures available here, specifically the PubPriv Table 13.7a, full-time and part-time: <https://www.ons.gov.uk/employmentandlabourmarket/peopleinwork/earningsandworkinghours/datasets/publicandprivatesectorshetable13>. These data are the most up-to-date revised figures - the 2019 figures are still provisional.

3 Resolution Foundation: <https://www.resolutionfoundation.org/app/uploads/2019/11/The-shifting-shape-of-UK-tax.pdf>

Factoring in productivity gains

Now we can subtract the £9 billion that the Centre for Policy Studies estimate would be returned in productivity gains from smarter working and greater staff motivation, leaving £5.65 billion. We could also take into account the savings made from reduced overwork-related absenteeism and presenteeism in the public sector, which we estimate could save around £1.2 billion, but let's assume that these savings are included in the Centre for Policy Studies' figure for productivity gains.

Savings to public services from having a 32-hour economy

However, we do need to take into account the savings that public services would accrue from a reduced working week across the wider economy - in terms of fewer overwork-related illnesses that reduce tax revenue and increase welfare spending and NHS costs.⁴ We conservatively estimate these savings to be between £2.1 and £2.8 billion.⁵

Subtracting the lower estimate (£2.1 billion) from our total, we come to the net cost of a 32-hour working week in the public sector of **£3.55 billion**.

Using our upper estimate of £2.8 billion of savings to public spending on overwork-related poor mental health, we come to a net cost of £2,845,921,073.962268, which we can round up to **£2.85 billion**. In spending this relatively tiny amount of money, the government would create the equivalent of 513,849 FTE jobs, and therefore help reduce unemployment and underemployment.

4 These savings would increase over time as the 32-hour week become integrated across the wider economy, e.g. over the period of 10 years.

5 See Appendices for these specific workings.

Appendix 1: costing the strain that overwork-related mental health across the UK economy has on public services

There are further factors to consider in the predictions of costs and benefits, beyond new staff and increased productivity. NHS spending, for example, is obviously not limited to extra labour costs, but also pertains to current pressures on the healthcare system. Some of these costs relate directly to poor mental health in workplaces across the economy. If poor mental health can be traced to overwork – or work-related stress, anxiety and other health issues – then we can discern figures for the current costs for the public purse by breaking down the public service costs of treating these overwork-related illnesses. Equally, we can also discern potential savings that a 32-hour week economy could bring in ameliorating some of these costs of overwork.

If a shorter working week could reduce levels of poor mental health across our economy – which we would expect it to – then this benefit needs to be accounted for when considering public finances. The government's 'Thriving at Work' report, building off a study from Deloitte, estimates that poor mental health at work costs the government alone between £24 - £27 billion per year (and the UK economy as a whole £74 - £99 billion).¹ This cost is the product of a combination of:

1. lost national insurance and/or tax revenue for those out of work or off work on sick absence (**£11bn to £14bn**)
2. NHS treatment costs (**£3 billion**)
3. welfare benefits paid out to those out of work for mental health reasons (**£10 billion**)

Applying the relevant percentage of cases of poor mental health caused by workload pressure across the economy (44%) to this figure (which is a conservative estimate),² we can surmise that £10.56 billion of the lower estimate of £24 billion of current costs to the public purse can be attributed to overwork. Using a higher estimate, e.g. of £26 billion, the cost of overwork to the public purse is £11.4 billion.

Savings to government that a 32-hour week would accrue

If we conservatively assume that a 32-hour week would reduce the rate of work-related mental health costs caused by workload pressure by 20% - i.e. the equivalent of one day off from a five day week, then the 32-hour week would bring further savings between **£2.1 and £2.28 billion**. In truth, we can expect a greater reduction than 20% as the health benefits of an extra day off cannot be quantified solely in terms of the specific amount of hours gained. Rather, the reduced workload pressure would contribute to an overall improvement of wellbeing that will feed back into working life.

We have not taken into account the effects that the creation of these good, 32-hour jobs will have on the associated costs of mental health problems and welfare services involving the unemployed and underemployed – who would now have greater opportunities for secure employment. This calculation would go beyond the scope of this note.

Appendix 2: savings from reduced absenteeism and presenteeism (not included in our calculation)

There are savings that public sector organisations would accrue as employers should their staff have shorter working weeks, and this would come from greater mental health of staff. Deloitte's study of the cost of poor mental health on the public sector in terms of labour costs shows that:

1 'Thriving at Work': https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/658145/thriving-at-work-stevenson-farmer-review.pdf

2 Health and Safety Executive 2019: <http://www.hse.gov.uk/statistics/causdis/stress.pdf>

1. Presenteeism costs public sector employers £6.35 billion per year (this is the mean average of Deloitte's low and high estimates).
2. Absenteeism costs public sector employers £2.2 billion per year.
3. Staff turn over costs a total of £0.8 billion per year.

We know that 54% of sick absences across the economy are caused by work-related stress anxiety and/or depression.³ We also know that public sector workers tend to suffer from stress - from overbearing workloads - more than private sector workers on average. Deloitte's analysis estimates that the cost per employee of mental ill health is higher in the public sector (£1,551-£1,878 per year) than the private sector (£1,119-£1,481 per year). Within the health sector these costs are even higher, potentially more than £2,000 per employee per year.⁴

Education. In the 'Education and Support Partnership's latest Health Survey, 75% of people working in education staff reporting suffering from stress in the last 2 years with lack of flexibility and unacceptable workloads being identified by teachers and teaching unions as significant factors for poor mental health in the profession.⁵

Healthcare. In public healthcare, research from the University of Leeds found that the proportion of healthcare staff feeling unwell due to work-related stress has risen from 28% in 2008 to 37% in 2016, and double the number of NHS staff left due to poor work-life balance in 2015 compared with 2011.⁶

Savings from reduced absenteeism

Using HSE's figure of 54% to determine how many sick absences are overwork-related, we can estimate that overwork costs public sector employers £1.19 billion (of £2.2 billion overall). If we assume that a 32-hour working week could reduce overwork-related sick absences by as much as 40% then we would see a saving of £595 million. If we assume a lower estimate of 20% then the savings would be £238 million.

Savings from reduced presenteeism

Regarding presenteeism, we can use the Health and Safety Executive surveys that show consistent figures for the main causes of poor mental health at work. The main factor is workload. 44% of all instances of work-related stress, anxiety or depression stem from overwork.⁷ Applied to Deloitte's figure of £6.35 billion for the costs of presenteeism, we can estimate that overwork costs the public sector approximately £2.79 billion per year. As this is the public sector, 44% is most likely a lower estimate, as workload pressure tends to be greater. A more realistic estimate would be nearer 50%, making the costs £3.12 billion.

We can assume that with more staff hired and with a 20% greater work-life balance, staff will experience a compound effect on their workload pressures, potentially reducing overwork-related stress by 30% - 40%. The lower estimate of 30% would mean savings of £838 million if we use the conservative

3 Health and Safety Executive 2019: <http://www.hse.gov.uk/statistics/causdis/stress.pdf>

4 See Deloitte's paper here: <https://www2.deloitte.com/content/dam/Deloitte/uk/Documents/public-sector/deloitte-uk-mental-health-employers-monitor-deloitte-oct-2017.pdf>.

5 'Thriving at Work': https://assets.publishing.service.gov.uk/government/uploads/system/uploads/attachment_data/file/658145/thriving-at-work-stevenson-farmer-review.pdf

6 Johnson, J., Hall, L. H., Berzins, K., Baker, J., Melling, K., & Thompson, C. (2017), 'Mental healthcare staff well being and burnout: A narrative review of trends, causes, implications, and recommendations for future interventions'. International Journal of Mental Health Nursing,(1):20-32. <http://eprints.whiterose.ac.uk/125589/3/VERSION%20FOR%20ARCHIVING.pdf>

7 HSE: <http://www.hse.gov.uk/statistics/causdis/stress.pdf>

estimate of the costs of overwork-related presenteeism of £2.79 billion, and £952 million if we use the more likely figure of £3.12 billion.

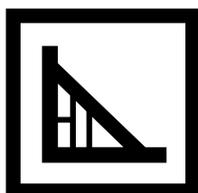
This is not factoring in overwork-related staff turnover costs, although we these would surely have a modest impact on public employer costs.

Appendix 3: Increasing the pay of part-time workers

Reducing the working week by 5.1 hours for FTE employees in the public sector would constitute a time reduction of 13.75%, and would effectively increase their hourly wage by the same 13.75%. If the government wanted to, it could decide to increase average part-time pay by a proportional amount. This would be desirable from an equity perspective, as the majority of part-time workers in the public sector are female.

The total average part-time pay for public sector workers was just under £25.5 billion in 2018. An increase of 13.75% amounts to around £3.5 billion, which would be the amount required to increase part-time hourly pay by the same proportion as the increase in full-time hourly pay implied by the four day week. This would constitute a £2,000 annual pay rise for part-time workers, but (in principle) could also be taken in reduced work hours of around 2.6 hours per week.

Rob Calvert Jump and Will Stronge for Autonomy



Autonomy