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and Recovery after the Pandemic**

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ABSTRACT

Reforming Tax and Welfare: Social Justice and Recovery after the Pandemic

Capital income subsidies, and reliance on indirect consumption taxes have created an increasingly regressive overall tax system in the UK, US and elsewhere, with proportionately much greater impact on the poor than on the rich, and welfare cuts under ten years of austerity have had the largest impact on the most vulnerable and poorest, now magnified by the Covid-19 pandemic. We show how a progressive wealth tax combined with a uniform, linear tax on all incomes and a modest basic income, with no exemptions or reliefs and no indirect taxes except excise taxes such as fuel duties, could be highly progressive overall, as well as much fairer and simpler than the present system. Such reform would render the economy much more resilient, and potentially devastating economic consequences of the pandemic could be mitigated by an emergency basic income and suspension of rental payments.

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1. *Introduction*

While income taxes are generally progressive, with increasing marginal rates on higher incomes, these higher rates have been repeatedly reduced under Conservative governments while imposing austerity on the majority. Incomes from the most unequal capital ownership are taxed at lower rates, and indirect taxes such as VAT on consumption, have the largest proportional impact on the poor who consume most of their income. Thus, the poorest decile of all households pays on average about 70% of their original income as indirect taxes, while the top decile pays only about 10%. Economically justified duties on fossil fuels and tobacco are only a small proportion of total indirect tax revenue. The details presented below, of just how regressive, un-coordinated, inefficient, and unjust the distribution of taxes and benefits really is, have received little public attention, yet offer scope for radical simplification and reform.

Leading tax authorities Saez and Zucman (2019) favour replacing similarly regressive sales taxes in the US with a flat tax on all incomes, which we develop below in the UK context. They aptly castigate the US system as a ‘triumph of injustice’, with a lower overall tax rate on billionaires than on the poor and middle classes despite the most extreme inequality and poverty among advanced economies.

Taxation is even more unjust in the UK, where total taxes paid by the bottom decile of non-retired households amount to 80% of their earnings, and the top decile pay only 35%! Of course, the UK does provide a better – though still very far from adequate – social safety net, and most importantly, free health care. Yet cash benefits for the poorest decile are, paradoxically, *less* than benefits for the next three deciles. Poverty and child poverty were the highest in western Europe even before the Covid-19 crisis, which has had the greatest impact

on the less educated and lower paid in the most endangered occupations and deprived areas, as the UK response has been far less effective than in Germany and elsewhere.

Tax expert Richard Murphy (2020) summarises some basic problems, though our focus is somewhat different:

‘The UK tax system deeply undermines itself as a result of having:

- *lax company regulation that provides significant opportunity for tax abuse;*
- *many varying and deeply conflicting tax rates that provide massive opportunity for tax avoidance;*
- *a weak tax administration that has been starved of resources by successive governments over a period of about fifteen years:*
- *governments that have in recent years been quite hostile to tax compliance. This has been evidenced in particular by support for the UK’s many tax havens and by the creation of many arrangements that have provided those with high income and wealth, in particular, the chance to avoid tax.’*

There is growing support for an emergency universal basic income or UBI (Brown, 2020; Susskind, 2020) to cope with the crisis and protect the rapidly growing numbers of unemployed and destitute under current, grossly inadequate (and mistitled) ‘universal credit’ and sickness benefits. In the long run, there is an emerging realisation that only a progressive wealth tax and at least a modest UBI combined with a job guarantee and a drastically simplified tax and welfare system can provide social justice for all (Saez and Zucman, 2019; FitzRoy and Jin, 2018).

The long-abandoned macroeconomic goals of full employment and social justice are urgently needed to replace the widespread ‘debt delusion’, welfare cuts and other neoliberal policies which have inflicted untold misery in the UK and southern Europe through ten years of austerity after the Great Recession (Weeks, 2020; Standing, 2020). The most obvious policies, an emergency ‘green new deal’ and UBI, could simultaneously boost recovery from the corona

crisis, ensure social justice, generate full employment, and facilitate rapid transition to a low carbon economy – the only alternative to catastrophic climate change (FitzRoy, 2019; Rifkin, 2019). Many other progressive policies, proclaimed by Nobel prize winning economists such as Banerjee and Duflo (2019) and Stiglitz (2019), and well-tried in the Nordic economies, ‘constantly among the happiest in the world’, continue to be ignored under neoliberal ideology in the UK and US (Dorling and Koljonen, 2020; World Happiness Report, 2020).

2. Injustice and Welfare under Neoliberal Policy

After decades of reducing regulation, declining unionisation, ‘trickle down’ economics, and largely unconstrained, profit maximising by employers with growing market power, under neoliberal, conservative macroeconomic policies, the results for workers in the US and UK, and to some extent in most advanced economies have been dismal. As Stiglitz (2019) summarises, since about 1980, ‘the average income of the bottom 90% of Americans has hardly changed’, while the income of the top 1% more than doubled, and the income of the top 0.1% increased fourfold. Wealth inequality is even starker, with the top 1% holding about 40% of national wealth, compared to 20% of income, the highest shares since the ‘roaring twenties’. There is also a large educational divide: the median real income of white men without a bachelor’s degree declined by 13%, accompanied by an epidemic of opioid addiction, ‘deaths of despair’ and an unprecedented decline of life expectancy, while national income rose by 85% over this period (Case and Deaton, 2020), with similar developments in the UK discussed below.

Taxation does little to ameliorate inequality – the bottom half of the American income distribution pay total taxes amounting to about 25% of their income, although their average income is only \$18,500 per year. Even for the middle class and rich, taxes do not rise above 28%, while the 400 richest billionaires pay only 23%, as shown by Saez and Zucman (2019)

in a path-breaking study aptly titled *The Triumph of Injustice*. Labour's share of total income, union membership and influence, and social mobility have all sharply declined over several decades, while the profit share, and monopoly and monopsony market power have significantly increased.¹

Though not as extreme as in the US, UK income and wealth inequality have also risen dramatically since the 1980s, particularly when measured by shares of the top 1%, who now hold 20 % of national wealth, while the top 10% hold more than 50%.² Despite low measured unemployment, average real wages declined from 2008 – 2018; only Greece and Mexico performed worse out of the 34 OECD countries. Cuts in welfare and related services have hit the poorest hardest. Most of the recent growth in UK employment has been in part time and solo self-employment, usually low-paid and precarious (Standing, 2020).

The debilitating effects of such extreme inequality on many aspects of social and political life in the UK and US have been eloquently and forcefully described by many prominent economists and social scientists, including Dorling (2018), Wilkinson (2019), Case and Deaton (2020) and Stiglitz (2019). A further result of the prevailing neoliberal policy has been declining social capital, and rising inequality means that most of the gains from growth go to a small minority of the rich and super-rich, and life satisfaction or subjective well-being has failed to increase, or has even declined, for most people over time (Rojas, 2019; FitzRoy and Nolan, 2018).³

¹ See Stansbury and Summers, 2020; Case and Deaton, 2020; Stiglitz, 2019, *The Economist*, 2018.

² See Dorling, 2018; Major and Machin, 2018; Wilkinson and Pickett, 2018; Standing, 2020; Layard, 2020. Of course, the wealth of the very rich does fluctuate with the stock market, since the latter own most privately held shares, as well as a large proportion of property wealth, and asset values have grown much faster than national income or wages since the financial crisis and Great Recession.

³ At any given time, there is a weak, positive correlation between income and happiness, after controlling for the health, work and social relationships that are more important, known as the Easterlin Paradox. This is at least partly explained by the important role of relative income or ranking, which only changes slowly over time, for SWB.

The UK tax and benefit system represents another ‘triumph of injustice’. The bottom decile of non-retired households received *smaller* average cash benefits than the next three deciles, about £5,700 in 2017/18. Their total (direct, and mostly indirect) tax payments were about £5,800, greater than their cash benefits, and with average original income of £7,200, the poorest decile were subject to an astonishing 80% tax rate! Indirect taxes amounted to £3,900, or 54 % of their original income. Thus replacing (most) indirect taxes by a wealth tax which impacts mainly on the rich, as we discuss below, would in effect raise the bottom decile’s income by more than half!

The 2nd decile pay only slightly more tax, about £7,000, on an income of £13,700 (twice as large as the bottom decile’s), with larger cash benefits of £8,300 – resulting in a £1,300 net benefit or ‘surplus’, in contrast to the deficit for the bottom decile! ‘Benefits in kind’, mainly education and health services, are valued at about £9,000 for the lowest decile, greater than income or cash benefits, and slightly more for the next three deciles, and are the most progressive feature of the UK system (ONS, 2019).

The top decile pays only an average of about 34 % tax on declared income of £136,000, but their true income, particularly from capital, is sure to be much higher, and the tax rate therefore lower, due to widespread avoidance, and evasion via offshore tax havens, which is most prevalent among the rich, leaving a tax gap of nearly £100 billion (Murphy, 2019).

Looking at data for all households, thus including pensioners, we find a similar picture. The lowest decile with average income of about £5,000 received cash benefits of about £6,000, much less than cash benefits over £9,000 for the next three deciles! Benefits in kind were £8,000, but less than these benefits for the next *four* deciles. Total taxes for the poorest were

£5,200, thus, absurdly, *larger* than their original income, while indirect taxes were 70% of their income, an extreme manifestation of a chaotic, un-co-ordinated, and fundamentally unjust tax and welfare system. The top decile's average tax rate was again about a third of their income.

UK government expenditure is less than 40 % of national income, compared to over 50 % in Finland and other Nordic economies with the best welfare systems and highest happiness rankings (Dorling and Koljonen, 2020). One of the results is that a record 25% of adults and 30% of children in England, the highest rate in western Europe, are now officially below the poverty line of 60% of median income after a decade of austerity, with the largest welfare cuts affecting the poorest and most vulnerable, a resulting decline in life expectancy and health in the most deprived regions, a large gradient between the most and least deprived regions, a recent 'rapid rise in infant mortality', and long-lasting negative consequences documented for adults who suffered childhood poverty.⁴ Adding insult to historical injury, the Corvid-19 pandemic death toll has been twice the average in the most deprived areas, and low-paid, service workers are most likely to be infected because they generally cannot work from home, in contrast to better paid office workers.

Injustice also extends to the workplace. Workers in the UK appear to dislike what they are doing (when surveyed at random moments during their working time), more than any other voluntary activity (Bryson and MacKerron, 2017). More than a third of employees report having 'poor quality jobs', which are also associated with worse health (Tinson, 2020). Unpaid overtime affects nearly 20% of UK workers (Sellers, 2019), while a third of employees would

⁴ See Alston, 2019; Taylor-Robinson, et al., 2019; Dorling and Koljonen, 2020; Marmot et al., 2020; Standing, 2020, 2016.

prefer shorter hours (CIPD, 2018; Bell and Blanchflower, 2018). Lack of worker power and labour market regulation facilitate the persistence of appalling working conditions in e.g. the low-pay, privatised care sector or Amazon warehouses, graphically documented by Bloodworth (2018).

Hyman (2018, p.22) presents compelling evidence for ‘Lack of control and growing despair over reduced autonomy among professionals’ in the UK. In contrast, such evidence is ignored in the Taylor Review of working practices (Taylor, 2017), which extols the ‘flexibility’ of the relatively unregulated UK labour market. The Review only mentions ‘an imbalance of power between individuals and employers’ as a potential rather than a ubiquitous problem, and while recognising the importance of employee ‘voice’, rejects more regulation, neglects Nordic experience, and relies on frequently invoked but rarely observed ‘corporate responsibility’ for implementation. Wilkinson and Pickett (2018), on the other hand, show clearly that a legal framework for participation is essential to establish economic democracy in the workplace, and tax and welfare reform with a basic income are necessary to reverse the devastating effects of ever increasing inequality which they and others have documented in depressing detail (Dorling, 2018; Standing, 2020).

Though most extreme in the English-speaking countries, neoliberal policy influence reaches much further. For example, despite the generally recognised success of co-determination in Germany, and inclusion of the Social Democratic Party in the government coalition with the conservative Christian Democrats, the share of wealth held by the top 1% is even higher than in the UK, at about 24%. Scarcely noticed by the media, real household disposable income for the bottom decile has *declined* by almost 10% since 2000, and even the third decile experienced no income growth over the past two decades, a shocking increase in inequality and poverty under neoliberal policies far removed from social democracy, including substantial tax cuts for

the rich and welfare reduction for the poor, enshrined in the notorious ‘Hartz 4’ reforms finalised under a social democrat Chancellor, Gerhard Schröder, in 2004/5 (Tooze, 2019). The problems have been compounded by ‘debt fetishism’ and austerity policy - 19th century mercantilism, with a huge trade surplus and zero net public investment or capital formation since the 1990s.

3. Radical Tax Reform

Though little noticed in much of the discussion about inequality, one of the most regressive features of UK taxation is that about 40% of UK public revenue comes from regressive, indirect taxes such as VAT and property (council) taxes, more than the EU average, with greatest proportional impact on lower incomes, and only 25% of revenue from progressive income tax.

A comprehensive tax on all (capital and labour) income to replace indirect taxes, and without the numerous existing reliefs and exemptions benefitting mainly higher earners, coupled with a progressive wealth tax, including a land value tax, could most effectively remedy the current ‘triumph of injustice’, particularly since wealth is still more unequally distributed than income⁵. Asset prices have risen much faster than national income or wages since the Great Recession, due to ideologically driven policies favouring an overgrown and toxic financial sector⁶. The top 1% of UK households owns 20% of total wealth of £14.6 trillion, about 8.5 times net national income of £1.7 trillion in 2019, with an average wealth of nearly £20 million per household in the top 1% (not including extensive offshore holdings in tax havens favoured by the rich). The top 10% own about half of total wealth.

⁵ Landais et al (2020) discuss an EU -wide wealth tax to pay for the consequences of the Corvid-19 pandemic.

⁶ Blakely, 2019; Ryan-Collins, 2019; Nesvetailova and Palan, 2020.

Following Saez and Zucman (2019), a wealth tax is essential to mitigate extreme and growing inequality in the US. Hitherto little discussed in the UK context, we suggest that a wealth tax should also be one component of a much fairer and simpler tax system. For example, a 2 % average wealth tax would yield about 17% of national income, and could replace all regressive, indirect taxes (including VAT), except excise taxes or duty on fossil fuels (and other products with negative externalities), which needs to be raised for an effective carbon tax.

The wealth tax could start, say, at 1% and progress to 5% for the richest. The impact of a wealth tax would be highly progressive, for as noted above, simply replacing indirect taxes with a wealth tax *adds* 70% to the average income of the bottom decile of all households, who have little net wealth, and often substantial debt. Then even a flat tax of 32 % on all incomes with no exemptions (the level of current basic rate income tax plus national insurance contributions), together with such a wealth tax, and excise taxes, could yield over 50 % of national income to fund a Nordic-style welfare state, including a modest basic income of about £4,000 per year, which would compensate those earning below the current personal income tax (and NIC) allowances.

Such a UBI could replace part of existing means-tested benefits. Abolishing the personal allowance of £12,500 means that higher earners would pay an extra £4,000 under the 32% income tax, so they would not gain from the UBI, though they would benefit from dropping tax progression for higher incomes. However, the wealth tax would more than compensate for this in almost all cases.

UBI should be complemented by a job guarantee to augment local public services and provide jobs for all who were wanted to work (FitzRoy and Jin, 2018). This combination would be much more progressive than the current system with an 80% percent tax rate for the lowest incomes, and of course could be still more progressive with a progressive income tax.

However, the linear or flat tax on all income would offer much simplification, greatly reduce administrative cost, and remove distortionary incentives to shift incomes. High tax rates on the lowest incomes, coupled with an implicit tax of up to 80% as means-tested benefits are withdrawn when earnings rise, are also a major disincentive to labour supply by low earners.

4. Response to the Corona Pandemic

The UK had *five times* as many deaths per head of population as Germany by early May, with even lower rates in South Korea, Austria, Denmark, Portugal, and most of eastern Europe. On another important metric, the number of fatalities per 100 confirmed cases, or the observed-case-fatality-ratio, the UK had the second worst measure among advanced economies, only just below Belgium, with 15.4%, while Germany had only 4.1 %, or just over a quarter of the UK ratio (Johns Hopkins Mortality Analyses, Coronavirus Resource Centre).

Deprived areas and low-paid workers in public services, with a high proportion of women and minorities, have experienced the highest infection rates and fatalities, due in part to lack of protective clothing and equipment. Office workers with higher pay are much more likely to be home working, avoiding both unemployment and infection, so inequality and injustice are increased. The British government temporarily abandoned the most effective tracing, testing and isolation strategy in March. Following best practice elsewhere could have saved thousands of lives (Freedland, 2020).

Economic policy response to the collapse of the economy under lockdown has been equally inadequate. Assistance for the self-employed has been delayed until June, universal credit and sickness benefits are too meagre for growing numbers of jobless to survive on, help for stricken business is slow and bureaucratic, again all in stark contrast to rapid and effective help for many of those affected in Germany. Support for an emergency UBI as the simplest and most

comprehensive response, has been rising from across the political spectrum. As Susskind, formerly a UBI sceptic, writes in the FT (2020) : *‘A UBI could be affordable. For instance, handing out £1,000 cash per person per month would cost the government about £66bn a month — a fraction of the nearly £500bn bailout the UK needed to stay afloat during the 2008 financial crisis. It would only be a temporary measure.’*

Some housing and disability benefits would still be required, but such a UBI could replace many means tested benefits, so the net cost would be less. If added to taxable income, a part would be ‘clawed back’ from higher earners, and those who were still employed would probably pay down some outstanding debt, thus reducing the net addition to money supply.

Many businesses without customers or revenue face insolvency in the evolving economic collapse, since rental, mortgage, other interest payments, rates and taxes are fixed costs for most. Current policy of government guarantees for loans to maintain business solvency over the crisis basically just postpones the day of reckoning when repayment becomes due after an extended period of nominal losses and missing revenue. A better policy⁷ is thus to cancel all business and household rental and interest payments, including debt repayment, until the economy is returning to normal. The rentiers who receive these payments are mainly banks and other institutions which could be compensated by government, but their (usually wealthy) shareholders are the appropriate risk bearers, and would still be supported by UBI, as would individual landlords whose main income is rental.

Lonergan (2020) suggests supporting business and households through tax rebates and does not consider UBI. While this makes sense for firms that pay corporation tax, tax rebates for individuals would miss the poorest individuals who pay no income tax, and only removal of

⁷ This has been independently suggested by Lonergan (2020).

indirect taxes on consumption and a UBI to replace disastrous ‘universal credit’ can avert rapidly worsening poverty among the most vulnerable as the pandemic progresses.

Larger firms may incur substantial costs just for maintaining plant and equipment during enforced idleness, and airlines among others are demanding large public subsidies to tide them over the unprecedented depression faced by the global economy. Provided redundant workers are all supported by an emergency UBI, which is of course far from the case currently, then grants rather than loans to avoid capital destruction may be justified in some cases. However, they should be carefully calibrated to cover only part of essential costs, while all interest and dividend payments are suspended. At the same time, capital owners, usually considered to be ultimate risk bearers, should be required to contribute directly, as they would have to do under bankruptcy and restructuring to avoid total loss.

In the medium term after the pandemic, recovery can be accelerated by income support with a modest UBI, combined with a massive expansion of public employment and expenditure in a green new deal for the increasingly urgent transition to a low carbon economy. Particularly since the poorest suffer disproportionately under the pandemic, removal of the grossly inefficient, unjust, and regressive current tax system analysed above will be an essential component for restoring social justice in recovery.

5. Conclusions

While there has been growing concern over poverty and inequality in the UK, and failure of welfare under universal credit, the blatant injustice of the tax and welfare system revealed by our analysis of ONS data has, to the best of our knowledge, not been discussed in such detail before. While removal of subsidies for capital income and high earners, and simplification of the tax system proposed here have wide appeal, a substantial wealth tax (which is essential to

complement the simplicity of a uniform, linear income tax), is a radical policy idea which is only beginning to enter political discourse, and will appear utopian in the current UK context, although it was proposed by US Presidential contenders Alexandria Ocasio-Cortez and Bernie Sanders.

However, the economic crisis following the corona crisis will require a radical rethink of existing policies, as even conservative media such as the *Financial Times* are beginning to acknowledge. We hope the ideas presented here will stimulate such rethinking and discussion, and offer a constructive basis for much needed reform.

References

- Alston, P. (2019). Visit to the United Kingdom of Great Britain and Northern Ireland, <https://undocs.org/A/HRC/41/39/Add.1>.
- Banerjee, and E. Duflo, 2019, *Good Economics for Bad Times*, Allen Lane
- Blakely, G., *Stolen*, Repeater Books
- Bloodworth, J., 2018, *Hired: Six Months Undercover in Low- Wage Britain*, Atlantic Books
- Case, A., and A. Deaton, 2020, *Deaths of Despair and the Future of Capitalism*, Princeton University Press
- Dorling, D. (2018). *Peak inequality: Britain's ticking time bomb*, London, Policy Press
- Dorling, D., and A. Koljonen, 2020, *Finntopia*, Agenda Publishing
- FitzRoy, F. (2019). Some Simple Economics of Energy Transition. *Substantia*, 3(2), 55 – 67, <https://doi.org/10.13128/Substantia-276>
- FitzRoy, F., and J. Jin, 2019, Basic income and a public job offer: complementary policies to reduce poverty and unemployment, *J. of Poverty and Social Justice*, vol. 26, 2, pp. 191 – 206, <https://doi.org/10.1332/175982718X15200701225179>
- Freedland, J., 2020, Trump is handling coronavirus so badly, he almost makes Johnson look good, *The Guardian*, 1st May.
- Hyman, J., (2018). *Employee Voice and Participation*. London, Routledge.
- Landais, C., E. Saez and G. Zucman, 2020, A progressive wealth tax to fund the European COVID response, Vox CPER Policy Portal, <https://voxeu.org/article/progressive-european-wealth-tax-fund-european-covid-response>
- Marmot, M., et. al., 2020, *Health Equity in England: The Marmot Review 10 Years On*, The Health Foundation, <https://www.health.org.uk/publications/reports/the-marmot-review-10-years-on>
- Murphy, R. 2020, <https://www.taxresearch.org.uk/Blog/2020/04/27/tax-after-coronavirus-tacs-the-tax-spillover-methodology-that-underpins-the-work/>

Murphy, R. 2019, <https://www.taxresearch.org.uk/Blog/2019/06/19/the-uk-tax-gap-is-90-billion-a-year/>

Nesvetailova, A., and R. Palan, *Sabotage : The Business of Finance*, Allen Lane

ONS, 2019, www.ons.gov.uk/peoplepopulationandcommunity/

Ryan-Collins, J., 2019, *Why Can't You Afford a Home?* Cambridge, UK, Polity Press

Saez, E. and G. Zucman, 2019, *The Triumph of Injustice: How the Rich Dodge Taxes and how to Make Them Pay*, Norton

Standing, G., 2020, *Battling Eight Tyrants*, London: I. B. Tauris, Bloomsbury

Stansbury, A., and L. H. Summers, 2020, Declining worker power and American economic performance, *Brookings Papers on Economic Activity*, Spring.

Stiglitz, J. E., 2019, *People, Power, and Profits: Progressive Capitalism for an Age of Discontent*, Allen Lane

Susskind, D. 2020, Universal Basic Income is an affordable and feasible response to coronavirus, *Financial Times*, March 18, <https://www.ft.com/content/927d28e0-6847-11ea-a6ac-9122541af204>

Taylor-Robinson, D., E. T. C. Lai, S. Wickham, T. Rose, P. Norman, C. Bamba, M.T Whitehead, B.N Barr. Assessing the impact of rising child poverty on the unprecedented rise in infant mortality in England, 2000–2017: time trend analysis. *BMJ Open*, 2019; 9 (10): e029424 DOI: [10.1136/bmjopen-2019-029424](https://doi.org/10.1136/bmjopen-2019-029424)

The Economist, 2018,

<https://www.economist.com/britain/2018/07/26/the-british-economy-is-becoming-more-concentrated-and-less-competitive>

Tooze, A., 2019, German Questions(s): The Shocks that remade German Politics. <https://adamtooze.com/2019/07/14/german-questions-the-shocks-that-remade-german-politics/>

Weeks, J. F., *The Debt delusion*, Polity

Whitehead, B.N Barr. Assessing the impact of rising child poverty on the unprecedented rise in infant mortality in England, 2000–2017: time trend analysis. *BMJ Open*, 2019; 9 (10): e029424 DOI: [10.1136/bmjopen-2019-029424](https://doi.org/10.1136/bmjopen-2019-029424)

Wilkinson, R. and Pickett, K. (2018) *The Inner Level*, London, Allen Lane.

