

COVID-19: Summary of external research

11/06/2020

This newsletter series presents a digest of external research that the Greater London Authority is making available for the benefit of external stakeholders in tackling the COVID-19 crisis. These summaries have been prepared under challenging circumstances and to short timescales. They are not intended to be comprehensive and exhaustive and do not represent the full body of evidence on which Mayoral Policies are or will be based.

1. Introduction and summary

This is the latest edition in a series of briefings highlighting key statistics and external research and recommendations relevant to the GLA's response to the COVID-19 pandemic. Each briefing will offer short summaries and a deep-dive into one or two topics. In this issue, the deep dive looks at the [effect of loosening restriction on infection rates](#). The newsletter also includes regular sections on relevant [external research](#) and [policy recommendations](#).

2. The effect of loosening restrictions on infection rates

The lockdown introduced in late March successfully in curtailing the spread of coronavirus and has led to a steady fall in the rate of new cases and deaths since April. As the initial wave of infections has ebbed, so the government has begun to loosen restrictions, with outdoor gatherings of up to six people now being permitted and a reopening of high street retailers set for 15 June.

A great deal of attention is now focussed on how the easing of restrictions will change infection rates. The lockdown measures are estimated to have reduced the effective reproduction number R of the virus from 2.6 (i.e. each infected person infecting an average of 2.6 others) to around 0.7. For decision makers, the critical value for R is 1 – values above this represent a return to exponential growth of the virus and the potential for a second wave of cases.

This week we highlight some of the key external research relevant to the questions of how virus transmission may change as restrictions are eased and how these changes can be monitored to help inform policy decisions.

Quantifying the impacts of policy changes

Imperial College - [Restrictions, interventions and the effect on COVID transmission rates](#) (08-06-2020)

The authors consider mobility data as a proxy measure of social distancing and infer the relationship between mobility metrics, published by Apple and Google, and transmission rates across 53 countries. They report consistent relationships between mobility and transmission within and across countries that explained more than 85% of the observed variance in transmissibility. These relationships are used to quantify

country-specific mobility thresholds that represent the level of mobility under which the effective reproduction number would be expected to remain below 1.

Though the UK's recent estimated R values are significantly below 1, they are still sufficiently high that even if lockdown restrictions continued, epidemic in the UK would likely continue for months. Population-wide social-distancing measures are effective to control COVID-19 but easing of restrictions must be accompanied by alternative interventions, such as efficient contact tracing, to ensure control. Small increases in contact rates are likely to risk resurgence even where COVID-19 is apparently under control. Without other changes (e.g. no increased in contact tracing), an increase in mobility can be expected to lead to a rapid reversion to growing numbers of cases.

The authors conclude that short-term forecasting of transmission based on assumptions of future mobility is possible and that future epidemiological forecasts may increasingly rely on such approaches as more real-time mobility data becomes available.

Tony Blair Institute for Global Change: [Smart Exit: A Covid-19 Early Warning Model](#) (19-05-2020)

The Tony Blair Institute propose using mobility data and the relationship with transmission rates as the basis for an 'early warning system' to help inform decisions about relaxing and tightening restrictions. The authors have attempted to use aggregate mobility metrics from Google and daily case data from PHE to quantify these relationships to upper-tier local authority level.

In common with Imperial's work, they estimate the 'headroom' available for mobility to increase and suggest that such information could be used to:

- Maximise economic activity while retaining control of the virus spread
- Allow quicker interventions to stop the spread of the virus
- Facilitate locally targeted measures to control outbreaks while minimising disruption to unaffected areas
- Allow real-time assessment of the effectiveness of new containment measures

[Determining the optimal strategy for reopening schools, work and society in the UK](#) (01-06-2020)

This work co-led by UCL and the London School of Hygiene & Tropical Medicine assesses how changes in strategy, including scenarios for school reopening and broader relaxation of social distancing, may impact the spread of COVID-19.

The authors used a stochastic agent-based model to predict the outcomes of a range of alternative strategies, including the number of new infections, deaths, and effective reproduction number. This model included representations of individuals' contact networks across household, school, work and community layers.

The model suggests that increased testing (25%-72% of symptomatic people) and effective contact-tracing and isolation could prevent an epidemic rebound across all school reopening scenarios. If UK schools reopen in phases from June 2020, prevention of a second wave would require testing 51% of symptomatic infections, tracing of 40% of their contacts, and isolation of symptomatic and diagnosed cases. However, without such measures, reopening of schools together with gradual relaxing of the lockdown measures are likely to induce a secondary pandemic wave, as are other scenarios for reopening.

The authors conclude that to prevent a secondary COVID-19 wave, relaxation of social distancing including reopening schools in the UK must be implemented alongside an active large-scale population-wide testing of symptomatic individuals and effective tracing of their contacts, followed by isolation of symptomatic and diagnosed individuals.

CMMID working group - [Combining fine-scale social contact data with epidemic modelling reveals interactions between contact tracing, quarantine, testing and physical distancing for controlling COVID-19](#) (25-05-2020)

This paper examines how the real-world networks could influence the effectiveness and efficiency of case isolation and contact tracing in helping to control COVID-19 outbreaks.

The effects of different control strategies were simulated in a realistic social network, constructed using data from the BBC Pandemic project that collected social contact and movement data from Haslemere. The authors found that:

- tracing contacts-of-contacts reduced the size of simulated outbreaks more than tracing only direct contacts but resulted in almost a third of the local population being quarantined at a single point in time.
- Testing and releasing non-infectious individuals reduced the numbers of quarantined individuals without large increases in outbreak size, but high testing rates were required for this to be effective.
- If testing availability is constrained, a combination of physical distancing with contact tracing could enable epidemic control while reducing the number of quarantined individuals.

The study highlighted the importance of network structure and social dynamics in the potential impact of COVID-19 control measures. However, it remains unclear whether the insights gained can be extrapolated to larger-scale social systems.

Monitoring mobility and infection rates

Imperial College - [Anonymised and aggregated crowd level mobility data from mobile phones suggests that initial compliance with COVID-19 social distancing interventions was high and geographically consistent across the UK](#) (29-05-2020)

The authors used two datasets (from the Facebook app and anonymised and aggregated crowd-level data from O2) to assess changes in average mobility. These datasets allowed metrics to be produced for high and low population density areas, and to identify changes in the distribution of journey lengths.

The data shows a rapid overall reduction in mobility the following the lockdown announcement, which was highly synchronized across the UK. Mobility has remained low since 26 March, a gradual increase since that time is apparent.

- The two datasets produce similar trends, albeit with some location-specific differences.
- There were slightly larger reductions in average mobility in high-density areas than in low-density areas, with greater variation in mobility in the high-density areas: some high-density areas eliminated almost all mobility

CMMID - [Analysis of temporal trends in potential COVID-19 cases reported through NHS Pathways England](#) (29-05-2020)

The NHS Pathways system is being used throughout England to assist individuals reporting potential COVID-19 symptoms. In the absence of wide-scale testing, the dataset provides a possible proxy for COVID-19 incidence in the community.

Analysis of the data showed good correlation with deaths data, with deaths lagging Pathways reports by 16 days. The authors also demonstrated the use of Pathways data to produce daily estimates of the effective reproduction number of the infection in the community.

The GLA publishes daily reports on [mobility](#), [new cases](#) (including the latest NHS Pathways data) and [deaths](#) on the London Datastore.

3. COVID-19 external research

This section highlights external research into the economic and social impact of COVID-19.

[OECD - UK Economic Outlook \(10/06/2020\)](#)

- As a service-based economy, the UK is being heavily affected by this crisis, with trade, tourism, real estate and hospitality all being hard hit by confinement restrictions.
- **The OECD expects a gradual recovery, with two possible scenarios seen as equally likely: a single hit scenario and a double-hit scenario.**
- **In the single-hit scenario, GDP is projected to decline by 11.5% in 2020**, with activity picking up from the third quarter of 2020. Unemployment rate surpasses 10%. GDP levels will remain more than 5% below the level projected before the crisis by the end of 2021. Measures to limit the effects of the crisis in that scenario would push the fiscal deficit up to at least 14% of GDP in 2020.
- **In the double-hit scenario, a second wave of the virus in the fourth quarter this year would lead to a fall in GDP by 14% in 2020.** Growth is expected to recover to 5% in 2021 as confinement measures ease. Employment will remain below pre-crisis levels and the unemployment rate will stay at around 10% in 2021.
- While the government's job retention scheme will preserve some jobs, it will probably not be able to fully offset lasting effects on employment. In turn, a higher unemployment rate will damp wage growth and subdue consumption, and limited unemployment benefits may encourage jobseekers to take on less qualified jobs.
- Investment growth is projected to remain subdued and the outlook for trade remains weak as well. **Even if the United Kingdom moves to a basic free trade agreement with the European Union at the end of 2020, as assumed in the projections, trade costs will increase and exports will fall in 2021.**
- **The failure to conclude a trade deal with the EU by the end of 2020 or put in place alternative arrangements would have a strongly negative effect on trade and jobs.**
- Besides Brexit, there is considerable uncertainty about how prolonged restrictions on activity or lower than expected demand would affect financial stability. A failure to provide credit to capital-weak small enterprises would result in higher business failures and unemployment, while a larger-than-expected fall in house prices might weigh on banks' capital buffers and reduce their lending capacity at a critical time.
- According to the OECD, **the exceptional economic measures put in place by Government should be kept in place as long as they are needed and fiscal policy should remain supportive.** Specifically:
 - Higher unemployment benefits should be extended beyond the fiscal year 2020-21 to help support demand during the recovery.
 - A temporary extension of existing trading relationships with the EU beyond the end of 2020 would help reduce uncertainty.
 - Public investment supporting the recovery should underpin progress in digitalisation, sustainability and inclusiveness.

[Resolution Foundation – The Macroeconomic Policy Outlook Q2 2020 \(28/05/2020\)](#)

The second Macro Policy Outlook from the Resolution Foundation, covering three main points for policy-makers to consider:

- Evidence of concern amongst workers about catching the virus means that **even a full relaxation of the lockdown would not lead to a rapid return to business as usual.**
- **Both the supply and demand sides of the economy will be affected**, and policy makers need to respond to those shocks in different ways as the crisis unfolds. For example, in the lockdown phase, demand support must be targeted because of the distributional effects of the crisis.
- **There are several ways in which the hit to the economy might be made worse by existing vulnerabilities** and policy should take these into account e.g. disruption to world trade, disruption to the financial system, and a lasting increase in the amount of savings held by households. For the most part those risks do not appear to be crystallising so far but, there is already evidence of an unprecedented increase in savings and more could follow, leading to a weaker recovery.

[Jonathan Portes – The lasting scars of the Covid-19 crisis: Channels and impacts \(01/06/2020\)](#)

Article identifying five conceptually separate channels that could lead to lasting economic damage, finding that **the magnitude of these potential scarring impacts is significant – and dwarfs the short-term costs of the restrictions.** The potential channels identified are:

- **Unemployment:** short-term unemployment during lockdown could adversely impact individual's future employment and wage prospects via human capital depreciation (e.g. skills may atrophy, their labour market attachment may diminish, or their mental health might suffer). The impacts are particularly severe for young people and increase non-linearly with the length of unemployment.
- **Loss of job-matching capital:** conceptually different from the damage to an individual's labour market prospects is the economic loss resulting from job separation itself. Workers accumulate job-specific capital – that is, they become more productive in their job than another job over time. Job loss will destroy that capital and negatively impact the productivity of the firm.
- **Firm-specific capital:** the nature of the pandemic means that many firms – who would otherwise be viable – are now facing severe liquidity problems. If these firms are dissolved, there will be a loss of intangible capital that is largely or wholly dissipated (e.g. organisational capital).
- **Education:** schools being closed during lockdown could diminish the acquisition of human capital, and in the long-run, the potential earnings of the students affected.
- **Business investment:** business investment is likely to fall sharply in the short term and remain very weak for a period, given uncertainty about economic prospects in the short to medium term.

In Table 1, rough estimates of the potential impact on GDP of these scarring effects are presented for the short to medium term (1-2 years) and longer term (5+ years). The estimates are based on historical estimates and are subject to high levels of uncertainty. However, they are useful for understanding which impacts are likely to be the most damaging: *“In the short to medium term, job separations and business failures dominate, so action – like furlough schemes – to keep firms in business and keep workers employed in their current jobs is justified. But over the longer term, the main channels are individual-specific human capital. At some point the focus needs to switch to active labour market policies – including subsidies to facilitate retraining and labour reallocation – and education (Portes and Wilson 2020)”*

Table 1: Estimates of the potential GDP impact of scarring effects

	Short to medium term	Longer term
Unemployment	3-4%	2-3%
Job separation	5%	zero
Organisational capital	2%	zero
Education	zero	2-2.5%
Business investment	1%	1%
Total GDP "at risk"	12%	5-6.5%

Source: author's calculations

Social Market Foundation – Assessing the economic implications of coronavirus and Brexit (31/05/2020)

A joint-impact analysis of COVID-19 and Brexit, considering two scenarios at the end of the transition period: implementation of the Government's Free Trade Agreement (FTA) or leaving without a deal. Analysis shows that **ending the transition period without a deal would severely impact parts of the country that are also likely to suffer most from the medium-term economic consequences of coronavirus.**

Analysis of the impact of coronavirus, where construction and banking, finance and insurance are the most exposed, suggests that London and the East of England will face the greatest proportional underperformance based on their sectoral makeup. The impact of Brexit will also be felt differently across regions, depending upon reliance on the EU for trade or workers. The North East would experience the largest percentage reduction in GVA under either Brexit scenario, whereas London is likely to experience the smallest change compared to remaining in the EU. Taking these two impacts together shows that:

- If the FTA is implemented, the five English regions most affected are the South East, East of England, West Midlands, North West and North East.
- If the UK fails to secure a trade deal, the overall impact will be more severe, with the most impacted regions being the East of England, West Midlands and the North East.

Alongside regional analysis, the double impact is estimated for local areas (NUTS3) by categorising them into five quintiles of severity, with 1 representing the mildest harm and 5 the most severe. They find that:

- If the FTA is implemented, the areas hardest-hit will be parts of London and the South of England.
- If the UK fails to secure a trade deal, the overall impact will be more severe, with areas in London highly affected (95% of local areas are in quintile 4 or 5) and the South of England. However, the North West is also affected with 50% of areas in quintile 5 and 40% in quintile 4.

CEPR – Production networks and epidemic spreading: How to restart the UK economy? (28/05/2020)

The authors use an input-output (IO) model to assess the economic and epidemiological impacts of five scenarios for restarting the UK economy: keeping lockdown, opening Manufacturing and Construction; opening all industries except consumer-facing industries; same, but also opening all schools; and opening all industries.

The IO model is specifically designed to address the unique features of the pandemic: firstly, they depart from the standard production function assumption by assuming that firms keep producing as long as they

have access to 'critical inputs' (rather than all inputs). Secondly, they use a COVID-19 specific treatment of consumption, by incorporating the demand shocks that are caused by changes in consumer preferences. R_0 is estimated under each scenario by estimating each industry's relative contribution to overall work-related and consumption-related infections.

The results show that at one extreme, reopening only a very limited number of industries can create bottlenecks in the supply chains that might actually decrease aggregate output. In contrast, reopening all industries would most likely increase R_0 above. **There is a reasonable compromise that yields a relatively small increase in R_0 and delivers a substantial boost in economic output: this corresponds to a situation in which all non-consumer facing industries reopen, schools are open only for workers who need childcare, and everyone who can work from home continues to do so.**

[**CEPR - The Covid-19 crisis response helps the poor: The distributional and budgetary consequences of the UK lockdown \(05/06/2020\)**](#)

This paper published on the latest issue of the CEPR's Covid Economics, Vetted and Real-Time Papers publication looks at the impact on public finances and at the distributional consequences of the rescue package introduced by the UK government.

The modelling approach combines input-output analysis of COVID-19 scenarios with the UKMOD microsimulation model of tax and benefit changes. It does not reflect behavioural responses. The approach also makes conservative assumptions about the exit strategy and recovery phase, meaning it assumes a rapid return of the economy to pre-COVID-19 equilibrium.

On these bases the authors estimate that in the absence of a support package the Covid-19 crisis would have reduced average household disposable income by 3% and increased the poverty rate – for a constant poverty line – by 1.2 percentage point compared to a pre-Covid-19 situation. By contrast **the rescue package will contain the reduction in the average household disposable income to 1% and reduce the poverty rate by 1.1 percentage points.** The authors go on to show that **this progressive effect is due to the increased generosity of Universal Credit.**

The authors also estimate rescue package will increase the cost of the crisis for the public budget (compared to what would have happened as a result of changes in tax revenues and automatic stabilisers) by an additional £26 billion to a total of over £60 billion. Only 20% of the costs of the rescue package is accounted for by Universal Credit.

[**IFS – How are mothers and fathers balancing work and family under the lockdown? \(27/05/2020\)**](#)

Report presenting new survey research on couple households with children, collected since late April. Key findings include:

- On average, **parents are doing childcare during nine hours of the day, and housework during 3.**
- **Mothers are one and a half times more likely to have lost or left their job**, and 9 percentage points less likely to be in paid work than fathers. They are also more likely to have been furloughed.
- **Mothers are doing childcare or housework during 2 more hours per day, on average, than fathers.**

- Importantly, the difference in childcare of housework between mothers and fathers is not fully explained by their different labour patterns during lockdown. Gaps exist even when comparing mothers and fathers in paid work, and mothers and fathers out of paid work.
- In couples where one parent has lost work, if the mother lost their job they do twice as much childcare and housework as the father. If the father lost their job they share childcare and housework more equally.
- Despite doing less childcare than mothers, **fathers have nearly doubled the amount of time they spend on childcare.**

[**IFS Deaton Review: Covid-19 Inequalities \(11/06/2020\)**](#)

Review of what we know so far about the impact of the coronavirus crisis on inequalities across several domains. The report makes several general points, including:

- Households were in a precarious position in the years leading up to the Covid-19 crisis. In particular, pay growth has been weak and reduced public spending has weakened the safety net.
- In most cases, the crisis has exacerbated deeply-rooted inequalities, rather than generating new ones.

Specific findings include:

- **Household finances:** eighty per cent of workers in the bottom tenth of the income distribution work either in a shut-down sector or are unlikely to be able to work from home. Low-income households spend a high proportion of their income on necessities that are hard to scale back, compared to higher-income households who have experienced 'forced saving', reducing spend in many of the sectors, such as retail and hospitality, where lower-paid individuals work.
- **Gender in work and care:** as noted above, additional childcare and housework duties have fallen more on mothers and fathers, with potential long-term implications for the gender wage gap.
- **Educational attainment:** school shutdowns are highly likely to exacerbate the attainment gap in education.
- **Public finances:** the government's capacity to mitigate inequalities will be constrained by record levels of debt.
- **Deaths:** the report re-iterates that there have been sharp differences in age-adjusted mortality between deprived and less deprived areas, and between ethnic groups. They also note that lower-income working class households are the most likely to have underlying health conditions that make them vulnerable to covid-19.

[**ONS – More than one-fifth of usual household spending has been largely prevented during lockdown \(11/06/2020\)**](#)

Evidence from the ONS using data for the financial year 2018/19 on household spending, modelled to show the likely impact of the Covid-19 crisis on spending for different groups of households. The ONS have done this by dividing household spending into 'non-discretionary' or 'essential' items, such as food and housing costs, and 'Spending that has been prevented during lockdown', which includes spending on goods and services provided by sectors that have largely shut down (e.g. buying alcohol in a pub), purchases that have been more difficult (e.g. clothing), and purchases that have been discouraged (e.g. public transport), over the crisis period. Key findings include:

- **More than one-fifth of usual household spending has been prevented during the lockdown.**

- There are inequalities in household spending that are relevant. For example, **renters spend a higher proportion of their budget on essential items that cannot be cut back**, largely driven by higher housing costs for this group.
- There are also inequalities by age. **Younger households spend more on essentials**. 58 per cent of the weekly budget of younger households (those where the household head is under 30 years of age) goes on essentials, compared to 43 per cent of households with a head aged between 65 and 74.
- The report also includes interesting data by region, finding that **'households in London spend the most on essentials and the least on goods and services that have been unavailable during lockdown'**.

The Economic and Social Research Council (ESRC) - ECO (11/06/2020)

- The ESRC has provided funding for the launch of an [Economics Observatory \(ECO\)](#).
- This will be a cross research institution initiative that tries to answer questions from policy-makers and the public about the economic impact of the COVID-19 crisis and plans for the recovery.
- Institutions included in the initiative include the CAGE, IFS, NIESR, and a variety of universities.
- A number of COVID-19 related research areas are covered including lessons from history, families and households, inequality & poverty, and energy and climate change topics.
- The ECO has already highlighted quite a few research reports including: ['How is coronavirus affecting inequalities across ethnic groups?'](#), ['How is coronavirus affecting the self-employed?'](#), ['Should Brexit trade policy changes be delayed because of Covid-19?'](#).

4. COVID-19 external policy recommendations

This section highlights policy recommendations that have been published in the last weeks by influential external organisations. Inclusion in this section does not mean the recommendations are endorsed in any way by the City Intelligence Unit.

Resolution Foundation – A new settlement for the low paid (03/06/2020)

Report arguing that the UK's low-paid workers have shouldered a disproportionate burden of job losses, are more likely to have been furloughed and more likely to work in jobs that expose them to the virus. As a result, the report argues that a post-pandemic settlement should look to improve the quality of low-paid work. To do so, the report proposes a series of recommendations:

- **Higher wages:** The Low Pay Commission should aim to abolish low pay by the middle of the 2020s by increasing the National Living Wage to two thirds of typical hourly pay.
- **Control of working hours:** workers should receive new rights over contractual hours, advance notice of their work schedule, compensation for cancelled shifts and the right to request longer hours.
- **Control of pay frequency:** workers in large firms should be able to choose how frequently they get paid.
- **New rights at work:** sick pay should be extended to low earners and workers should qualify for protection against unfair dismissal after a year.

The report also argues that labour market enforcement should be robust, well-funded and have the ability to levy larger fines. Unions should be given the right to enter workplaces to raise awareness, and new 21st

Century Wage Boards should be set up in particular sectors in need of improved standards such as social care.

[Policy Exchange – A pro-growth economic strategy \(04/06/2020\)](#)

Outline several policy recommendations to aid the UK economy in its recovery, including that the government should take advantage of the low cost of debt by increasing borrowing, use the crisis as an opportunity to simplify the tax system by combining national insurance contributions and personal income taxes, and reduce social distancing measures to one metre. Overall, they recommend a new macroeconomic policy framework based on three arrows:

- **Credible fiscal activism:** avoiding austerity, tax increases and a near-term fiscal squeeze, and instead retaining a counter-cyclical stance by cutting VAT and stamp duty on house purchases and stressing the low cost of debt to increase the attraction of borrowing.
- **Monetary and financial stability:** recommend a new remit for the Bank of England, replacing the 2% inflation target with a 4% nominal GDP target, to protect against higher inflation in an upturn and guard against weaker demand in a downturn.
- **A supply-side agenda:** outlining a supply-side agenda with a focus on the 'I's' of investment, infrastructure, innovation, incentives (tax) and ensuring inequality continues to fall.

[Social Market Foundation – Bounce back Britain \(04/06/2020\)](#)

Argue that instead of cutting business taxation, the Government should 'embark on an ambitious programme of structural reform to UK plc in the wake of coronavirus'. The policy recommendations put forward are:

- **A new 'Contract with Britain'**, with businesses and the state prioritising investment over the next three years to help the economy to bounce back quickly.
- **A new 'British Business Renewal Act'** to reform company law and spread best practice across all UK businesses to raise standards and performance.
- **A new British Business Tax Roadmap**, so that businesses are encouraged to invest and generate positive social and environmental impact.
- **A new National Awards Evening** to give businesses, particularly SMEs, a positive platform
- **Using social value in procurement** to drive higher performance from British businesses and shape markets.

[Centre for Economic Performance \(LSE\) – Covid-19 and social mobility \(28/05/2020\)](#)

Research report with policy recommendations to support social mobility. The paper provides a summary of research on the social mobility of the Covid-19 pandemic. It finds:

- Rising educational and economic inequalities risk **long-term scarring effects for under-25s**
- Transmission mechanisms for scarring could include **long-term unemployment** and **failure to achieve the exam results needed to progress** into work or further/higher education
- Economic shocks include rising wage and income inequality and the fact that young and lower-paid workers are more likely to have been affected by job and earnings losses
- Educational shocks include loss of living time, driven by the lockdown and inequality in the intensity of home schooling taking place, catching up the third of the school year loss, and the potential for this to have long-term effects through educational scarring

The paper proposes a series of policies to tackle the inequality in employment and education that has been exacerbated:

- **Recommendations around educational inequality** include the creation of a national tutoring service, a more credible vocational stream in schools, random admissions selection among candidates achieving a threshold selection criteria.
- **Recommendations around labour markets** include the implementation of job guarantees for those who are in danger of long-term unemployment, training/reskilling informed by evidence of skills supply and demand at the local level and broadening the apprenticeship levy to cover a wider range of lifelong learning. The report also recommends the voluntary Living Wage Rate should be paid to all key workers, with parity between in-house workers and contractors.
- **A one-off wealth tax** should be levied on the top 1 per cent of richest individuals.