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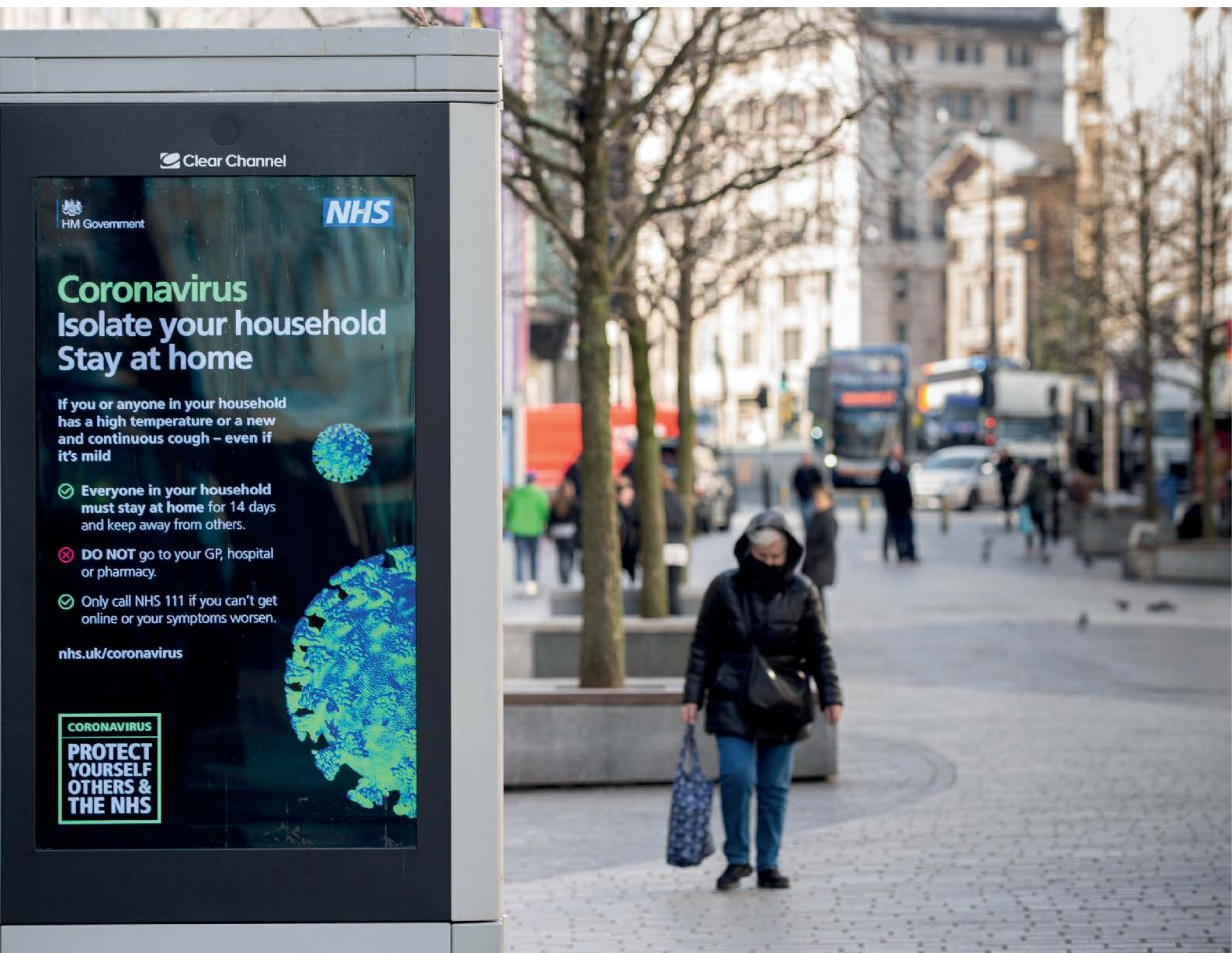

Heseltine Institute COVID-19 Project: Working Paper

Change! Strengthening the Resilience of British Cities in Preparation for Future Pandemics

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1. Introduction

For most of 2020, the United Kingdom government failed in its mission to suppress the SARS-nCoV-2 2019 virus and stop COVID-19 from becoming a national disaster. Spectators watched with incredulity as the world's fifth largest economy recoiled from death rates that ranked amongst the worst in the world. A cornucopian 'miracle' – an effective vaccine developed at 'warp speed' – has pulled us back from the brink. But recent success cannot and must not erase or obfuscate prior failure; history instructs that countries which rely on technological fixes to engineer themselves out of trouble rarely fail forward.

If we are to emerge from the pandemic stronger, it is imperative that we get to the bottom of why the United Kingdom failed the COVID-19 test and what failure tells us about what the government needs to fix if it is to strengthen the resilience of the country in preparation for future pandemic events.

On May 11th 2021, United Kingdom PM, Boris Johnson, confirmed that an independent public inquiry with statutory powers would be launched to investigate 'rigorously and candidly' the government's response to the COVID-19 global pandemic but intimated that owing to the ongoing threat of new variants no inquiry would be take place until at the earliest spring 2022. Political opponents and critics – including and in particular the COVID-19 Bereaved Families for Justice Group – have argued that nothing less than an immediate and full statutory public inquiry will suffice. Delay could cost lives.

Adjournment is both understandable and regrettable. For researchers, it does at least have the virtue of opening up a window of time to generate an adequate evidential base from which lessons can be extracted. It is imperative that forensic diagnoses precede and guide remediation. Amidst a deluge of manifestos claiming to know how afflicted countries might 'reimagine, rebuild, and recover' and 'build back better', we would do well to heed Amaryta Sen's sage advice that when it comes to people living in precarity and poverty, 'a misconceived theory can kill'. In our case, this is true, literally.

It is incumbent on the research community to exploit the likely interregnum, then, to ensure that when it is eventually convened, any public inquiry has at its disposal an archive of high quality, intelligence-led submissions. The University of Liverpool's Heseltine Institute is dedicated to the project of strengthening the resilience of cities – and in particular former industrial cities and city regions in the throes of regeneration, such as the Liverpool City Region – in anticipation of future pandemics. The first working paper to emerge from an ongoing research project in support of this commitment, this report is intended to serve as a first instalment in the Heseltine Institute's contribution to such an archive.

In this report, we will address four key questions:

- On the basis of which metrics has the United Kingdom government failed the COVID-19 test?
- What might we miss if we blame failure only on government ineptitude?
- Why has the United Kingdom failed the COVID-19 test?
- What does failure tell us about what the United Kingdom government needs to fix?

2. Methodological parameters

The methodological limits of our study merit stating from the outset, to orient the

reader to what this report does and does not do; indeed, what it can and cannot do.

- The focus of this report is confined to the public health crisis and its remediation: the considerable challenge of strengthening the resilience of the United Kingdom in preparation for future pandemics. A more substantial contemplation on 'building back better' would require us to attend to COVID-19's cascading economic, social and environmental aftershocks but these concerns fall beyond the scope of this particular study.
- Our approach is predicated upon a global compartive study. We ask: what can we learn from interrogating the efficacy of the United Kingdom government's response *in relation* to the efficacy of the responses of international peers? To understand what went wrong in the United Kingdom we cannot study only the United Kingdom. Only by understanding the progenitors of COVID-19's global geographies will we be in a position to ask the right questions and understand why and how, in our case, particular determinants which we know to be causally significant globally combined with local determinants to amplify the prevalence and lethality of COVID-19.
- Throughout the pandemic, the Office for National Statistics published trustworthy data on COVID-19 cases and deaths in the United Kingdom. Alas, not every country has met such a quality threshold. The World Health Organization (WHO), Johns Hopkins Coronavirus Resource Centre (CRC), the US Centre for Disease Control (CDC) and the European Centre for Disease Prevention and Control (ECDC) provide the most authoritative, up-to-date data on COVID-19 at the global scale. But each warns that because reporting criteria and testing capacity vary between countries, it is highly likely that countries with poor data infrastructures or particularly politicised census offices will be under-reporting the extent to which they have been impacted by the outbreak. This said, there is no reason to suppose that data collected in other OECD countries is especially inferior or misleading. Moreover, some Global South countries have excellent epidemiological data infrastructures and we must not generalise. In addition, death certification is (even if only to an extent) universally practised and standardised (at present, still to the WHO's ICD 10th Revision) and statistics on mortality are likely to yield more meaningful insights than those on cases.
- Our method of investigation is predicated upon a search for plausibility, not causality. We identify a wide range of conjectures and test these conjectures, probing for refutations. This method can certainly help us to sift and sort possible causal factors into those which appear to be more and those which appear to be less compelling. But the data assembled – comprising a diverse range of data sets, collected by different organisations and published in multiple formats – does not permit definitive conclusions to be reached, at least for now.
- By admission, our investigation suffers from a degree of methodological nationalism and glosses over important sub-'national' variations in . how each of the nations of the UK – and to a lesser degree, the devolved administrations in England – have handled the pandemic in distinctive ways and witnessed different outcomes. At times we will speak about responses that only pertain to the English case. Nevertheless, the significance of these differences diminishes when all juridstictions are

cast in international relief and the conclusions we reach ought to be relevant across the United Kingdom.

- Undertaking scholarship which tries to make sense of a pandemic unfolding in real time is itself a hazardous endeavour. What needs emphasising is that this report has been written whilst the pandemic continues to unfold. Nevertheless, the world historical import of the pandemic and the extent of its impact on the United Kingdom dictates that analysis be undertaken, even if it runs the risk of being overtaken by events.

3. On the basis of which metrics can the United Kingdom government be said to have failed the COVID-19 test?

On December 31st, 2019, the Wuhan Municipal Health Commission reported to the WHO the existence of a cluster of pneumonia cases in Wuhan, Hubei Province, China. Eventually, the novel coronavirus (severe acute respiratory syndrome coronavirus 2, or SARS-CoV-2), a highly contagious airborne communicable disease with an estimated case fatality rate of 1–2%, was identified as the pathogen responsible. By January 30th 2020, WHO reported that they were aware of a total of 7,818 cases across 18 countries (but almost all in China) and 43 recorded deaths (again, almost all in China). That same day, WHO declared coronavirus 2019 (COVID-19) a Public Health Emergency of International Concern (PHEIC). By March 11th 2020, 118,000 cases had been recorded in 110 countries, resulting in over 19,000 deaths. On that day, WHO upgraded COVID-19 to the status of a global pandemic.

The first case of COVID-19 in the United Kingdom was confirmed on January 31st 2020 and the first death on March 5th 2020. Subsequently, the country has witnessed three distinctive waves and associated spikes (Figures 1, 2, 3 and 4).

The first wave began in earnest in early March 2020. Daily cases peaked on April 26th 2020 at 4,846 new confirmed cases per day, whilst daily confirmed deaths peaked at 983 per day on April 15th. From these highs, the United Kingdom government began to supress the pandemic and by June had succeeded in flattening the curve. By July 6th confirmed cases had fallen to 356 per day, whilst confirmed deaths troughed at seven per day on August 21st.

Notwithstanding this progress, from July 31st and especially from August 31st 2020, confirmed cases began to rise again, and from September 5th 2020, so too confirmed deaths. This second wave finally peaked on November 10th 2020 at 22,785 confirmed cases (on that day) and November 28th at 486 confirmed deaths (on that day). By December 3rd 2020, this had fallen to 14,237 confirmed cases (on that day) and by December 15th confirmed deaths troughed at 411 (on that day).

Respite was to be short-lived. As winter took hold and especially across the 2020 Christmas period, a third wave developed which proved to be more severe than the first two. A sharp rise in cases led to peaks of 59,809 confirmed cases on January 10th (on that day) and 1,263 confirmed deaths on January 24th (on that day). From these heights the pandemic has steadily been brought under control – greatly accelerated by a rapidly deployed and ‘best in class’ vaccine programme. On May 21st 2021, the United Kingdom recorded just 1,595 confirmed cases and six confirmed deaths.

When set into international relief, it is evident that the United Kingdom has witnessed a very high number of confirmed cumulative COVID-19 cases per capita and ranks amongst the world’s poorest performers in terms of cumulative

COVID-19 deaths per capita (Figures 5 and 6 and Map 1).

As of May 21st 2020, the United Kingdom had recorded no fewer than 4.47 million confirmed cases and 127,912 confirmed deaths (or 65,971 confirmed cases per million and 1,899 confirmed deaths per million). For context, that same day, globally, 166.5 million confirmed cases had been recorded with 3.44 million confirmed deaths (or 23,314 confirmed cases per million and 441 confirmed deaths per million). By comparison, the OECD countries had recorded 93.6 million confirmed cases and 1,855,421 confirmed deaths (or 67,932 confirmed cases per million and 1,360 confirmed deaths per million); whilst the European Union (EU 28) had recorded 31.4 million confirmed cases and 718,056 confirmed deaths (or 72,315 cases per million and 1,613 deaths per million).

With only 0.8% of the global population, the United Kingdom has presided over 2.6% of confirmed cases and 3.7% of confirmed deaths. With only 4.5% of the OECD population, it has registered 4.7% of confirmed cases and 6.9% of confirmed deaths. And with only 12.9% of the EU28 population, it has witnessed 14.2% of confirmed cases and 17.8% of confirmed deaths.

Perhaps a more realistic evaluation of the United Kingdom's encounter with COVID-19, pre-vaccine, can be gleaned by confining attention to, say, the 12-month period from March 5th 2020 (the date of the first death in the UK) to March 5th 2021 (by which point its vaccine roll-out was gathering pace). Yet, when bracketed to these dates, the United Kingdom's relative rankings deteriorate further. Even if compared only with other Global North countries with high GDP per capita and very high HDI scores and countries with large population sizes, ageing population structures, and concentrated poverty, the United Kingdom presents as an especially 'at risk' country, occupying leading positions in global, OECD and EU league tables (Figures 6-11).

The UK in global context

(Global *n* = 133, OECD *n* = 37, EU *n* = 28)

Cumulative cases per million

March 5th 2020 to March 5th 2021

Global rank	17th
OECD rank	9th
EU rank	11th

March 5th 2020 to September 5th 2020

Global rank	19th
OECD rank	10th
EU rank	11th

September 5th 2020 to March 5th 2021

Global rank	16th
OECD rank	9th
EU rank	9th

Cumulative deaths per million

March 5th 2020 to March 5th 2021

Global rank	4th
OECD rank	4th
EU rank	4th

Rank relative to top 20 countries …

by GDP per capita	2nd
by HDI score	2nd
by population size	1st
with high % of people living beneath the poverty line	1st
with a high % of people aged > 70.	3rd

March 5th 2020 to September 5th 2020

Global rank	4th
OECD rank	3rd
EU rank	3rd

September 5th 2020 to March 5th 2021

Global rank	4th
OECD rank	4th
EU rank	4th

4. What might we miss if we blame failure only on government ineptitude?

Providing a robust explanation for a phenomenon as complex as a nation state's resilience to a global pandemic constitutes a challenging research problem. Such a problem is unlikely to yield to cheap conclusions; if we are to untangle and appraise the complex brew of potential causal variables which have been mooted, a considerable and painstaking job of work lies ahead.

Any future public inquiry will undoubtedly focus upon the United Kingdom government's handling of the pandemic, and government ineptitude and at times administrative incompetence has undoubtedly played a role in generating very poor outcomes. But it would be a cardinal mistake to reduce it to such. When set into international relief, the United Kingdom's particularly deleterious encounter with COVID-19 was no outlier or aberration. At least to date, COVID-19 has been especially troubling for many Global North countries and in particular liberal capitalist democracies in the OECD world. This observation raises an uncomfortable reality: unless mismanagement has been ubiquitous across – and significantly confined to – the OECD world, something more systemic and structural must be at play.

In this section we will argue that focussing on the efficacy of the United Kingdom government's response is both necessary and insufficient. That response must be set into context. We offer the provocation that four decades of neoliberalism and market fundamentalism has ingrained within many advanced capitalist economies *legacies and logics* which now combine to create a hostile environment for effective public health interventions. British neoliberalism, in particular, has proven an inadequate and actively harmful foundation for crisis management and hampered the United Kingdom's response to the COVID-19 pandemic.

The role of government Ineptitude

In his book *The COVID-19 Catastrophe: What's Gone Wrong and How to Stop It Happening Again,* editor-in-chief of *The Lancet*, Richard Horton (2020), argues that the elevated impact of COVID-19 in the United Kingdom reflects, at root, government incompetence. For too long the pandemic was written off as no worse than the flu, supplies of virus-related products were in short supply, test, track and trace procedures were introduced too late and were inadequate, poorly conceptualised ideas of 'herd immunity' guided responses, international air travel continued, and mask wearing was optional. Horton argues that it is erroneous to imply that COVID-19 was unexpected: in fact, epidemiologists have been warning governments for years about the imminent threat of airborne communicable disease. For Horton, COVID-19 stands as the greatest science policy failure in a generation.

It would be disingenuous to say that the United Kingdom government failed to intervene to protect lives and livelihoods during the pandemic. A number of prolonged national lockdowns were introduced and significant economic support packages were created to provide some help to employers and employees disrupted by the crisis. And the government's investment in vaccine development and the roll-out of its vaccination programme has rightly been acclaimed. But, a case can be made that, especially throughout 2020, the government failed to act with the necessary speed, stringency or coordination to adequately limit the spread of the virus, enabling it to circulate within the community and exert a high death toll on the population. Measures taken have too often been 'too little, too late'; reluctant

concession to the spiralling crisis, rather than positive, pro-active and pre-emptive intervention at the earliest opportunity.

The Oxford COVID-19 Government Response Tracker (OxCGRT) demonstrates clearly how the speed at which containment measures – such as international travel bans and lockdowns, mass testing, contact tracing, and mandatory mask wearing – have been adopted, has been critical to preventing the spread of the virus. While other governments around the world immediately, or even pre-emptively, introduced effective measures to curb the virus as reported cases began to rise, the United Kingdom government's response was hesitant and delayed, leaving the country behind the curve and playing catch-up. For example, after initially introducing a series of international travel measures from late January onwards, the United Kingdom government withdrew all border measures between 13th March 2020 and 8th June 2020. Moreover, the UK's first national lockdown did not come into effect until 26th March 2020, almost two months after the first local cases were recorded and when over 1,800 people had already died of the virus. The second and third national lockdowns (on October 31st and January 6th) also came only after cases and deaths were surging.

Testing capacity has been inadequate. On April 10th 2020, the United Kingdom's positivity rate (the share of tests returning a positive result) stood at 30% and it took until May 7th 2020 for the country to secure a positivity rate beneath the WHO recommended 5%. And from October 8th to January 27th, as the second and third waves unfolded, positivity rates once again exceeded 5%, climbing to as high as 12.8% on January 4th 2020. In England, contact tracing was initially carried out by Public Health England, working with local authorities. However, on 12th March 2020, as the number of cases in the community outstripped testing and tracing capacity, widespread contact tracing was stopped and resources reserved for those in hospitals and other high-risk settings. A new system, NHS Test and Trace, was launched on 28th May 2020 to increase national capacity. The UK government has created an overly complex web of public-private partnerships that utilised the NHS, Public Health England, university and military resources, as well as the services of private sector firms such as Deloitte, G4S, Serco and Amazon. Despite costing an estimated £37bn, the British House of Commons *Public Accounts Select Committee* has raised concerns about delays in the implementation of NHS Test and Trace and has suggested that, to date, the extent to which it has made a difference is unclear.

It is now apparent that procurement practices had not factored into the equation the possibility of an airborne infectious disease pandemic. Coupled with the government's comparatively slow response to the pandemic and the long-term deficit of a clear, strategic industrial policy (and the withering of domestic manufacturing capacity and related domestic supply chains), the UK has been exposed to endemic shortages of vital personal protective equipment (PPE) for health workers, ventilators, and other key medical supplies. This meant the UK was left to fight for supplies on the global market amidst unprecedented demand. This led to farcical scenes, such as the shipment of PPE purchased for the NHS from Turkey which, once flown to the UK by the Royal Air Force and after much ministerial fanfare, was found to fall short of UK quality standards. These shortages of key equipment may have contributed to the UK's slow adoption of public mask-wearing as a way to limit the spread of the virus. Indeed, concerns that public mask-wearing would threaten the supply of PPE to healthcare workers were highlighted by SAGE and meant that the

recommendation for the public to wear masks was delayed significantly. Wearing a face covering only became compulsory on public transport in England and at NHS facilities across the UK on June 15th 2020, and in shops and supermarkets in England on July 24th 2020.

What can COVID-19's global geographies teach us?

It is not yet entirely clear how, in the end, the burdens of the global pandemic will be distributed geographically and who will be most impacted, where, why, when, in what ways, and with what consequences. Emerging COVID-19 geographies at all scales already signal the likelihood of a highly variegated and complex outcome. No world region or given politico-economic-institutional model is liable to exit the pandemic unscathed; all have to varying degrees been humbled.

Nevertheless, at least to date, COVID-19 appears to have been more of a communicable disease of the OECD world than one of the Global South. Against all expectations, COVID-19 has impacted more severely (as measured by both morbidity and mortality rates) Global North countries with (very) high levels of human development than Global South countries with (very) low levels of human development. In particular, advanced liberal capitalist democracies – OECD countries, and especially the United States, United Kingdom and European Union (EU) member states – appear to have borne a heavy burden. It is shocking to witness wealthy countries with strong institutional capacity, which hitherto had been understood to have reached the 'finish line' of the epidemiological transition, consistently rank at the top of the league table of the world's most impacted states, both in terms of absolute cases and deaths and cases and deaths per million.

With only 18% of the global population, OECD countries constitute 56.1% of confirmed cases and 53.9 % of confirmed deaths, whilst with only 5.7% of the global population, the EU has endured 36.2% of confirmed cases and 19.7% of confirmed deaths. The top ten countries by death rates per million are all OECD countries and 18 of the top 25 belong to the OECD world. Furthermore, nine of the top 25 countries by mortality per million are members of the EU (EU28), whilst 16 of the top 25 are from the EU.

We hypothesise that the COVID-19 crisis in the UK is not just an outcome of administrative mismanagement, but is also a product of long-term systemic failures driven by the logics and legacies of neoliberalism. In order to build back better from the pandemic, the UK will require a new guiding understanding of the role of the state that is fundamentally post-neoliberal in design.

Of course, it is necessary to qualify and temper such an assertion by attending to variations in the prevalence and lethality of COVID-19 across capitalism's geographies. By and large, corporatist-statist (European) and social democratic (Nordic) capitalisms have weathered the storm better than liberal *laissez-faire* market (liberal meritocratic) capitalisms. But again, due diligence is required.

- Whilst many liberal market economies have witnessed relatively poor outcomes (United States, United Kingdom, Chile), some have enjoyed comparatively better results (Australia and Canada).
- Equally, whilst many co-ordinated market economies have performed relatively poorly (France, Belgium, Spain), others have achieved better outcomes (for example, Japan, Taiwan South Korea and to an extent Germany and the Netherlands).
- Moreover, whilst the social democratic Nordic countries of Norway, Denmark

and Finland (and here we place too New Zealand) have performed well, Sweden has trodden a different path and presided over poorer outcomes.

We might also take instruction from countries that have recently and / or are currently in the throes of transitioning to market rule and who have, or who are currently courting, neoliberal reform.

- For most of 2020, the hybrid market economies of Eastern Europe appeared to have had escaped the worst of the pandemic. But more recently they have witnessed extraordinary waves and peaks and are now among the most adversely affected (Hungary, Poland, Czechia Slovenia, Slovakia, Macedonia).
- Beyond the advanced capitalist economies, the virus has exacted a very heavy toll in Latin America – historically the most developed region within the Global South – impacting in particular Peru, Brazil, Mexico, Colombia, Chile, Argentina, Panama and Bolivia. Of course, of all the continents, Latin America has been most impacted by the Washington Consensus development agenda, and from the 1970s and 1980s has been on the receiving end of a suite of neoliberal Structural Adjustment Programmes. In consequence, Latin America has some of the sharpest wealth and income inequalities in the world.
- Many East Asian states have proven capable of mounting fast and effective responses to the pandemic (including Japan, South Korea and Taiwan). Given that the countries straddling this region encompass a wide range of politico-economic-institutional models, the implication may be that a specifically 'Asian' cultural factor is at work.
- That said, given their greater capacity and latitude to swiftly impose highly stringent and effective lockdowns among their populations, it has become popular to assert that authoritarian governance models lie behind the comparative success of states such as China and Vietnam in suppressing the virus. But equally, the Russian model of command capitalism and the autocratic patriarchal monarchies and theocracies which prevail in the Arabian Peninsula and near East (Saudi Arabia, Qatar, Oman, Iran and Yemen) have been less succesfull in controlling the pandemic. Are some authoritarian states more effective than others?
- African exceptionalism is perhaps the most surprising feature of COVID-19's geographies. South Africa and Libya present as an exception in the wider African narrative, being amongst the most severely impacted countries in the world. Otherwise, it comes as a welcome surprise that, against all odds, it is the countries which hitherto have been perceived to be especially vulnerable to communicable disease – Sub-Saharan African countries (including the very poor and very populous countries of the Democratic Republic of Congo, Malawi and Nigeria) – which at least to this point have escaped the worst of the pandemic. Conditions do not inspire confidence that Africa will emerge from the pandemic unscathed however; the puzzle is how it has managed to outperform OECD countries to this point.

The legacies of neoliberalism

Our provocation then, is that the United Kingdom's failure to respond effectively to the pandemic is not just an accident of administrative mishandling or carelessness, but a predictable consequence of the country's decades-long experiment with neoliberalism and the corrosive effects this has had on the

public realm, community cohesion and the political imagination.

The ingrained norms, logics, and social consequences of neoliberalism have contributed significantly to the United Kingdom's (comparatively) weak and hesitant response to the pandemic, creating a hostile environment to effective public health intervention. The United Kingdom government's response must surely be seen as a consequence of deeply ingrained and instinctual prejudice against state activism in social and economic life. A philosophical presumption against state interference has helped give rise to a flat-footed and reticent state response to the crisis, whilst the legacies of inequality and austerity have corroded the resilience of communities as well as their trust in the state and its ability (and responsibility) to intervene in crisis.

The pandemic has added a fresh existential threat (without historical precedent) to the catalogue of problems that OECD countries were grappling with up until yesterday – which were, and which remain, momentous in themselves. A century of de-industrialisation, forty years of liberalised market fundamentalism and boom and bust economics, and the 2008 global financial crash and subsequent period of austerity, have combined to seed a combustible brew of growing inequalities, declining social solidarity, alienation from the political system and populist nationalism. Uneven geographical development and socio-spatial inequalities have given rise to a more polarised and polarising politics and growing dissonance between representative democracy and popular sovereignty. 'Whiteshift' has fuelled the rise of right-wing populism and given birth to a new politics of hospitality. A climate and ecological emergency threatens us with ecocide. A mental health tsunami signals distress among the citizenry. And corporate media and digital communications have depleted the public square, giving birth to a dangerous new post-truth era.

These historical dynamics are especially evident in a post-imperial United Kingdom, a heartland of neoliberalism and market fundamentalism. The decline of empire and rise of a new international division of labour has etched an indelible imprint on the geography of the space economy, leaving a much-discussed North-South divide, although in reality spatial injustice and disparities in living standards are distributed in complex ways at a variety of scales throughout the entire country. An overly centralised state and an aggressive neoliberal economic policy has led to an accelerated growth of the UK's capital city as a cosmopolitan 'alpha' global city and global financial services centre whilst de-industrialisation of once vibrant imperial industrial workshops and port cities, in particular northern English city-regions, has led to declining and alienated 'left behind' 'rustbelt regions' with limited futures. Caustic voices now challenge the right of the representative regime to enjoy custody over democracy. Distrust of politicians and dis-alignment of political parties from their bases, has led many to register their disaffection with the political status quo by voting to 'Brexit' from the EU. Inequality has sabotaged solidarity and eroded social capital. 'Whiteshift' has aggravated these trends and heightened a sense of estrangement within migrant communities. Notwithstanding claims of a global Britain, isolationism and protectionism lurk and changing attitudes to international trade posture as potential obstacles to accelerated global cooperation.

Our hypothesis then is that the COVID-19 pandemic has cruelly exposed the failings of the neoliberal system cultivated in the United Kingdom in recent decades. This system has hollowed out the state, making it slow and less responsive in its responsibilities to protect the wellbeing of

citizens. It has hollowed out the economy, making it less resilient to disruptive shocks and less dynamic in the wake of crisis. And it has hollowed out communities, allowing inequalities to metastasise to an extent that has undermined lives and livelihoods across the country. As we seek to build back better from the pandemic, we must recognise that this system is on critical life support and is no longer fit for purpose. As the United Nations Special Rapporteur on extreme poverty and human rights summarised following a visit to the UK in 2019:

"The bottom line is that much of the glue that has held British society together since the Second World War has been deliberately removed and replaced with a harsh and uncaring ethos" (United Nations 2019, 1).

5. Why has the United Kingdom failed the COVID-19 test?

The field of Hazards Studies provides intellectual resources which can help us to better understand the ways in which the underlying health of the western market democratic polity has worked in parallel with immediate, proximate and contingent drivers that are bespoke – in our case to the United Kingdom.

Any thesis that tries to explain the United Kingdom's disastrous Covid-19 outcomes with reference to the government's weddedness to a *neoliberal* liberal meritocratic politico-economic-institutional model will need to be able to explain exactly how this model has impaired and jeopardised the government's ability to respond effectively to the pandemic. Asserting a link that requires a leap of imagination from the reader is not sufficient – the connection needs to be thought through and clearly demonstrated. Through what mechanisms exactly has forty years of neoliberalism conspired to render the United Kingdom a less hospitable environment for public health intervention and a more hospitable environment for Covid-19?

To further our case, we argue that the risk of being harmed by COVID-19 is a function of both 'fundamental conditions' and 'proximate determinants'. These two domains are independent but functionally related. The causal significance of fundamental conditions is complicated and far from linear. Fundamental conditions refer to the efficacy and health of the prevailing politico-economic-institutional model – in the case of the United Kingdom liberal democratic market rule, and in particular the neoliberal variant of this model that has been preferred by successive governments since 1979. But social, economic, political and cultural contexts work through, alongside and occasionally in opposition to, a wider and more complex brew of proximate determinants.

Countries will be at heightened risk of harm from COVID-19 when fundamental conditions inflate the impact of proximate determinants and proximate determinants expose and aggravate structural precarities. A perfect storm will be the inevitable result: countries that find themselves in this position will be most likely to turn a COVID-19 hazard into a disaster, and a COVID-19 disaster into a catastrophe.

The overarching framework guiding our approach can be summarised using the formula:

Risk = Fundamental Conditions in union with Proximate Determinants

Or **R = FC U PD**

Where:

Risk: the likelihood, or the probability, that COVID-19 will lead to a given level of harm and loss in a given country.

Fundamental conditions: the efficacy and performance of the prevailing politico-economic-institutional model in that country.

Proximate determinants: the wide range of immediate or direct progenitors (epidemiological, demographic, health, social, economic, political, and environmental) which have combined to put that country in harm's way.

The proximate determinants of COVID-19's geographies are then broken down as follows:

Proximate Determinants = Exposure x Vulnerability (Immunity Status + Susceptibility + Preparedness) x Response

Or **PD = E x V (I + S + P) x R**

Where:

Exposure: the location of a country with respect to the origin and uneven diffusion of COVID-19.

Vulnerability: systemic weaknesses which render some populations more vulnerable and predisposed to feel the full ferocity of COVID-19.

Immunity status: vulnerabilities wrought by variations in population wide levels of immunity to SARS-nCoV-2 2019.

Susceptibility: social, political, cultural, and economic processes which marginalise and impoverish some social groups to the extent that their existence is so precarious that small setbacks have significant consequences.

Preparedness: the calibre of prior disaster risk management institutions, infrastructure and plans.

Response: the competence of those responsible for coordinated emergency management in real time.

In what sense might these fundamental conditions have increased the exposure of (neo)liberalised market democracies – and in particular the United Kingdom – to the SARS- nCoV-2 2019 virus, rendered these economies more vulnerable to being harmed by COVID-19, and diminished the adequacy of national responses? To explore this question, we gather together a variety of conjectures (24 are considered here) that have been ruminated over in academic, political and practitioner literature and in the popular media. Our orientation is to refute each conjecture by amassing evidence which reveals its limitations. When refutation proves difficult, we conclude that a particular conjecture continues to present as a potential candidate and merits further scrutiny.

Appendix 2 provides a summary of our provisional conclusions (for further details, see also the addendum to this working paper). This table employs a traffic light system to summarise our findings: green is used to colour code conjectures we judge to be most compelling, orange for those we consider to be suggestive but in need of clearer supporting evidence, and red for those we find to be most wanting.

This traffic light system is a heuristic device for orientation only – as and when further data and evidence emerges, the actual importance of each of the conjectures we place under scrutiny will undoubtedly become more apparent.

Our capstone is that neoliberalism has proven an inadequate and actively harmful foundation for state governance of crisis, principally because it has denuded the appetite and capacity of the United Kingdom government to prepare for and take the steps necessary to curtail a pandemic event, and broken the social compact required to furnish the state with the kind of social license it would require to enact effective interventions. But its impact has worked through a number of localised progenitors of poor outcomes that are rooted in but which cannot be reduced in any simple way to the prevailing politico-economic-institutional model. This leads to the conclusion that we must hold in tension 'build back better' strategies which seek to change the fundamental conditions in which public health interventions work, *and* which recognise that because the political-economic-institutional context is only contingently related to (at least some) localised progenitors of COVID-19 outcomes, there is much we can do in the interim.

6. What does failure tell us about what the United Kingdom needs to fix if it is to fall forward

The concept of resilience is central to disaster risk reduction. But what does building resilience actually mean? Resilience is understood variously in both academic and practitioner communities. This matters; framings play a crucial role in shaping the kinds of resilience-building strategies which might be imagined and enacted. We use the term 'resilience politics' to refer to the differential consequences of different perspectives on how to build resilience in the wake of a disaster and against the backdrop of a looming risk or hazard. When rebuilding societies in the name of strengthening resilience, political leaders need to recognise that they are making political choices about the kind of future they are working to create.

- Resilience as robustness scrutinises the amount of shock a system can absorb and continue to function effectively and works to strengthen the resistance of systems to external disturbances.
- Resilience as recovery focuses upon the capacity of systems to return to a steady initial equilibrium state after a shock and prioritises solutions which help systems heal and repair faster.
- Resilience as reform re-centres attention upon the capacity of systems after a shock to adapt and evolve so that they are stronger than before and emphasises reform within the same politico-institutional norm.
- Resilience as redesign brings to the fore the necessity of reconfiguring systems root-and-branch after a shock and affords priority to politico-institutional transformation as the only lasting solution.

Clearly, robustness, recovery, reform and reconstruction all have strengths and weaknesses in different contexts. Engineering systems so that they might increase their immunity to external disturbances affords reassuring protection but there will be hazards which overwhelm even the strongest of vaccines and in these instances resistance will be futile. Helping vulnerable populations recover from a disaster is a worthy endeavour but not if it merely serves to preserve the social, economic, cultural, and political processes that produced precarity in the first instance. Strengthening the rights of citizens by reforming the existing political order is obviously a welcome development

but not if it produces tokenistic transfers of power that only marginally reduce risk. Finally, transforming societies so as to address the root causes of precarity may provide the only durable solution to human-induced vulnerability but it is questionable whether deep-seated societal reconstruction is wise in times of existing upheaval or in the immediate aftermath.

The idea that the COVID-19 pandemic is a moment that the United Kingdom must build back better from is one that has gained traction across the political spectrum, and has even been referenced by the Prime Minister, Boris Johnson, as an ambition for the nation's post-pandemic recovery. This suggests that post-pandemic recovery will require a process of transformation and improvement; rebuilding the UK's economy and society to be both different and superior to the status quo found pre-pandemic. However, so far, there has been insufficient consideration of what successfully building back better actually means, and requires, politically.

We conclude by extracting early and provisional lessons to emerge from this project. We argue that if we are to emerge from COVID-19 stronger, it will be necessary to attend to the immediate causes of failure. And so, if we are to fall forward attention will need to be paid also to resilience as robustness and recovery. But interventions will not be curative until they are properly political, doing more than compensating for the status quo. We will not fortify resilience, nor fall forward, if we simply medicate ourselves with neoliberal prescriptions and allow our response to be limited by parameters imposed on us by the existing politico-economic-institutional model. COVID-19 points to the importance of resilience as reform and perhaps even redesign. There is much we can do now to respond, reimagine and rebuild (small caps) but unless we also Respond, Reimagine and Rebuild (large caps), we will be swimming against a strong tide, going against the grain, and pushing a large rock up a hill.

Priority Action 1 – For a new social compact for disaster risk management

Given the comparative failure of the UK's neoliberal system to respond adequately to the COVID-19 crisis, the foundations for post-pandemic renewal, categorically, cannot be neoliberal. To double down on the norms, logics, and approaches of neoliberalism now would only serve to rebuild a political order that has been shown to be practically, as well as ethically, unsound – potentially leaving the UK population as at risk from COVID-20 as it was from COVID-19. The influence of neoliberal ideas, policies, and ways of thinking on the British state, society, and economy have been deeply corrosive, both before and during the pandemic. Therefore, if we are to truly build back better, we must first reject and replace neoliberalism as the hegemonic political project in the United Kingdom.

Neoliberalism has proven an inadequate and actively harmful foundation for state governance of crisis, principally because it has broken the social compact between the government and the citizenry. Without such a compact it is impossible to conceive of, let alone enact, an impactful public health response to a pandemic event.

At the heart of this dislocation are three 'denudations'.

A denuded state

In responding to the pandemic, the United Kingdom government has had to overcome significant cognitive dissonance to work against the grain of forty years' worth of embedded neoliberal thinking about the roles and responsibilities of the British state – that the state should refrain from intervening in the lives and

livelihoods of citizens; indeed, that doing so is vital to protect essential rights and liberties, as well as the market. That this negative way of thinking about the potential of a democratic state has been an albatross around the United kingdom's neck is now plain to see. The COVID-19 pandemic has brought into stark relief the inadequacy and incapacity of a British state undermined by neoliberal disdain for the roles and responsibilities that a properly functioning democratic state ought to embrace – to proactively promote and prioritise the interests of its citizens. Left to the exigencies of a dispassionate free market and guided by a neoliberal prejudice against state intervention, the United Kingdom has been made weaker, less resilient, and less dynamic in the face of the crisis.

A denuded democracy

When market relations come to take such a central normative role in human life, the value and importance of democratic participation is diminished. If it is the market where we exercise our freedom, express our interests, and generate social good, what need do we have for democratic politics? What if the whims of the democratic public could unduly influence or upset the function and outcomes of free market exchange? The neoliberal model therefore promotes a denuded public sphere, and an infantilised democracy – one in which citizens are not understood to be equal, active participants in the political life of their communities, but instead merely political-consumers who (infrequently) have the opportunity to vote for electoral candidates and their precisely focus-grouped policies and campaign slogans. Under neoliberalism, the state is not a democratically co-owned and co-operated enterprise for actively discovering and pursuing the common good, but merely a tolerated guarantor of market functions. And as such, under the neoliberal state, the future is not to be shaped politically by the needs, aspirations and imaginations of democratic citizens, but by the aggregated economic outcomes of free market exchange.

A denuded citizenry

Estranged from a highly centralised nation-state, and debilitated by growing socio-spatial inequalities, diminishing social coherence, declining trust in politicians and faltering democratic polities, a growing climate and ecological crisis, and a crisis in mental health, it is little surprise that faith in democracy and social capital have depleted significantly in the United Kingdom. One response has been rising rising populist and nationalist movements and an increasingly polarised and polarising politics, and a more inhospitable climate for those deemed 'other' and 'foreign'. The pandemic has exposed the corrosive effects of widening inequality and the decline of community, mutuality and solidarity. This alienation has been further aggravated by the clear socio-economic gradient in deaths from COVID-19 by class, location and ethnicity. Indeed, COVID-19 has been a wildfire, able to spread rapidly through communities dried out by decades of state austerity, deepening poverty, and the erosion of trust.

To truly build back better, the UK must now decisively break with the neoliberal order. No longer can neoliberal discomfort at the idea of state intervention be tolerated while lives are put unnecessarily at risk. Instead we must offer a confident, positive, and optimistic account of the democratic state's potential, and capacity, to better promote the health, wealth, and wellbeing of people and communities.

Social democracy describes a particular kind of relationship between the state, the market, and society – the market is embedded within, and guided by, a state-led framework of regulation and

interventionist economic policy to help ensure it functions to support the public good. The UK government must now rediscover the positive potential of progressive, prudential, public spending. Universalist systems for welfare and social insurance, as well as essential public services, are established and maintained by the state to narrow inequalities and improve quality of life. Progressive taxation, and the public investment it affords, is viewed as conducive to progress and development. And this is all mediated, and legitimised, through the nurturing of a peaceful, open-ended democratic culture through which society and the economy can be continuously improved.

A new social democratic model fit for the twenty first century is needed. According to US economist, Joseph Stiglitz, it is surely time for world leaders to respond to the emerging "global social movement for well-being," shift from measuring GDP growth to "measuring what actually counts," and develop "a market economy that works for people and not the other way around." In calling for a radical rediscovery of the United Kingdom's social democratic foundations we do not intend necessarily to make a nostalgic argument that yearns for a return to some perceived "golden age" between, say, 1945 and 1975. Instead we argue that, to build back better from the pandemic, the state must recapture the spirit and the purpose of mid-century social democracy, reinterpret how social democratic ideas can be relevant in the context of the 2020s, and then reimagine the social democratic institutional frameworks that underpin our politico-economic system. To rebuild the trust in the social contract that has been so critically eroded by four decades of neoliberalism, people must now be given a renewed sense of ownership in the political and economic life of the society in which they live. They must become the architects of a renewed social democratic state, and the authors of what building back better really means.

For a bespoke United Kingdom Sendai Framework for Disaster Risk management (2015-2030)

The United Nations Office for Disaster Risk Reduction (UNDRR) is the mandated focal point for disaster risk reduction in the UN system. The Sendai Framework for Disaster Risk Reduction 2015–2030 champions four priorities – understanding disaster risk; strengthening disaster risk governance to manage disaster risk; investing in disaster risk reduction for resilience; and enhancing disaster preparedness for effective response and to 'build back better' via recovery, rehabilitation, and reconstruction.

The United Nations convenes a biennial Global Platform for Disaster Risk Reduction to take stock of progress in the implementation of the Sendai Framework and to share good practices. The next Global Platform is scheduled for 2021; it is to be expected that the COVID-19 global pandemic will have dramatically transformed approaches to risk management by that point, and it remains to be seen if the Sendai approach and targets will have to be fundamentally rethought before the 2030 end date.

The United Kingdom can strengthen its capacity to manage future disaster events – including pandemics – by engaging more fully the intellectual, policy and practical resources codified in the Sendai framework. Here we draw upon some Sendai principles and our analytical framework and analysis presented above to indicate some of actions which might countenanced.

EXPOSURE

Establish mechanisms to break connections between globalised and localised flows of people, capital, and

goods and the transmission, circulation, and diffusion of pathogens.

- Restore links between public health and urban governance / planning / place-making (for example by adopting innovations such as 2m planning and the 15-minute city).
- Accelerate moves towards Universal Basic Income and a future world of work where home working and a three- or four-day working week becomes the norm.
- Leverage the benefits of online shopping.
- Reconfigure global production networks (GPNs) and in particular rethink TNC logistics and procurement practices.
- Tackle digital poverty and enhance the ability of digital communications to be used to equalise rather than aggravate social inequality.
- Exploit innovations in ICT and promote new attitudes to international travel.

VULNERABILITY

Immunity status

Fortify the resilience of those placed in harm's way disproportionately due to prior underlying health inequalities.

- Place preventative and anticipatory public health intervention at the centre of the NHS. Revalorise and reinvigorate strategies for healthy ageing and for tackling health inequalities by delaying until later in life the onset of chronic degenerative disease, addressing the problem of multiple comorbidities.
- Consider again the merits and demerits of universal BCG (and other) vaccination programmes.

Susceptibility

Fortify the resilience of those placed in harm's way disproportionately due to prior underlying socio-structural disadvantages.

- Build communities, revalorize social capital, prioritise social inclusion, and enhance social coherence.
- Restore public trust and confidence in institutions of democracy and reinvigorate a healthy public square and hopeful, vibrant futurity speech.
- Reduce wealth and income inequalities and sever the link between wealth and income by promoting genuine equality of opportunity.
- Align and strengthen multi-scalar governance arrangements, fortifying the powers and resources of regional and local authorities who are closest to the people they serve.

Preparation

Fortify the resilience of those placed in harm's way disproportionately due to poor prior disaster planning and preparation.

- Engage more fully the Sendai Framework for Disaster Risk Reduction 2015-2030 and the 'Bangkok Principles' for the implementation of the health aspects of the framework.
- Rethink the impact of epidemiological transition on disaster risk management and health care strategies and systems, and reprioritise emerging and (re-)emerging infectious disease.
- Rethink supply chains and build and stock large warehouses of essential medical supplies, including supplies of personal and protective equipment.
- Remediate broken long-term home care services for the elderly.
- Bank learning from COVID-19 in the form of a living and easily accessible

public repository, using the United Kingdom's world-class digital humanities, library and archivist capacities.

- Rethink isolationist policies, restore global leadership, and commit to global and international partnerships for coordinating public health responses. Build and support global institutions capable of coordinating international responses to pandemics, including revalorizing WHO.
- Create a national data cooperative to support a pandemic data-sharing infrastructure and unlock through AI, digital innovation and technology the capacity of big data to assist in pandemic management.

RESPONSE

Fortify the resilience of those placed in harm's way disproportionately due to ineffective and incompetent handling of the pandemic.

- Conduct an independent public inquiry with full statutory powers and be prepared to ingest the findings of this inquiry without political restraint.
- Strengthen real-time institutional checks on government incompetence, and call to account key actors who have mismanaged responses to the pandemic.
- Scale and mainstream NHS Test and Track and undergird contact-tracing technology with a data trust agreement with democratic oversight. Roll back infringements to personal liberties and rights imposed during the pandemic, and prioritise data sovereignty.
- Oversee an ethical and equitable distribution of COVID-19 vaccines globally.

7. Conclusion

COVID-19 provides further impetus for the liberal capitalist democratic politico-economic-institutional model to transition to a better version of itself. So-called 'one in-100-year' disasters are now occurring, it seems, once a decade or even more frequently! To endure, if not prosper, at the very least, this model will need to convince doubters that it is committed to preparing the world for a COVID-20 or COVID-21 and that it is up to the job. The United Kingdom could emerge from COVID-19 emboldened if it embraces a more inclusive, just, and compassionate market economic model; restores social cohesion; reinvigorates democratic institutions; takes more seriously healthy aging, health inequalities, and communicable disease; and provides wise leadership by making and remaking generous and effective global partnerships. But regressive actions, such as embracing neoliberalism redux and introducing post-recession austerity and stringent fiscal discipline, could further diminish public trust and confidence in democratic institutions and push the country in a worrying direction.

Neoliberalism has proven tenacious and well-equipped to prosper in inhospitable environments; after the global financial crash in 2007-8, market fundamentalism demonstrated a remarkable capacity to appropriate a crisis it was centrally implicated in causing, to gain further momentum and entrenchment. But it would be a mistake to construe any apparent continuity, pre- and post-crash, as a simple reset after a shock or a blip; instead, it has to be viewed as an active, historically novel, contested and ultimately vulnerable reinvention and reimagining. The United Kingdom's ongoing regulatory reorganisations, redesigns and recalibrations are best understood as less a fix and more a contingent process: a creative invention, still in mutation,

provisional and vulnerable to contestation. Crises invite scrutiny of the place-specific structuration of already existing neoliberal institutions; the regulatory experiments which are generated in response; and the invention and institutionalisation of novel and embryonic neoliberal designs as recovery unfolds. As Arundhati Roy notes:

'*Our minds are still racing back and forth, longing for a return to "normality", trying to stitch our future to our past and refusing to acknowledge the rupture. But the rupture exists. And in the midst of this terrible despair, it offers us a chance to rethink the doomsday machine we have built for ourselves. Nothing could be worse than a return to normality. Historically, pandemics have forced humans to break with the past and imagine their world anew. This one is no different. It is a portal, a gateway between one world and the next.'*

(Arundhati Roy The pandemic is a portal, NYT, 3 April 2020)

Appendix 1. Figures and maps

Figures 1-4

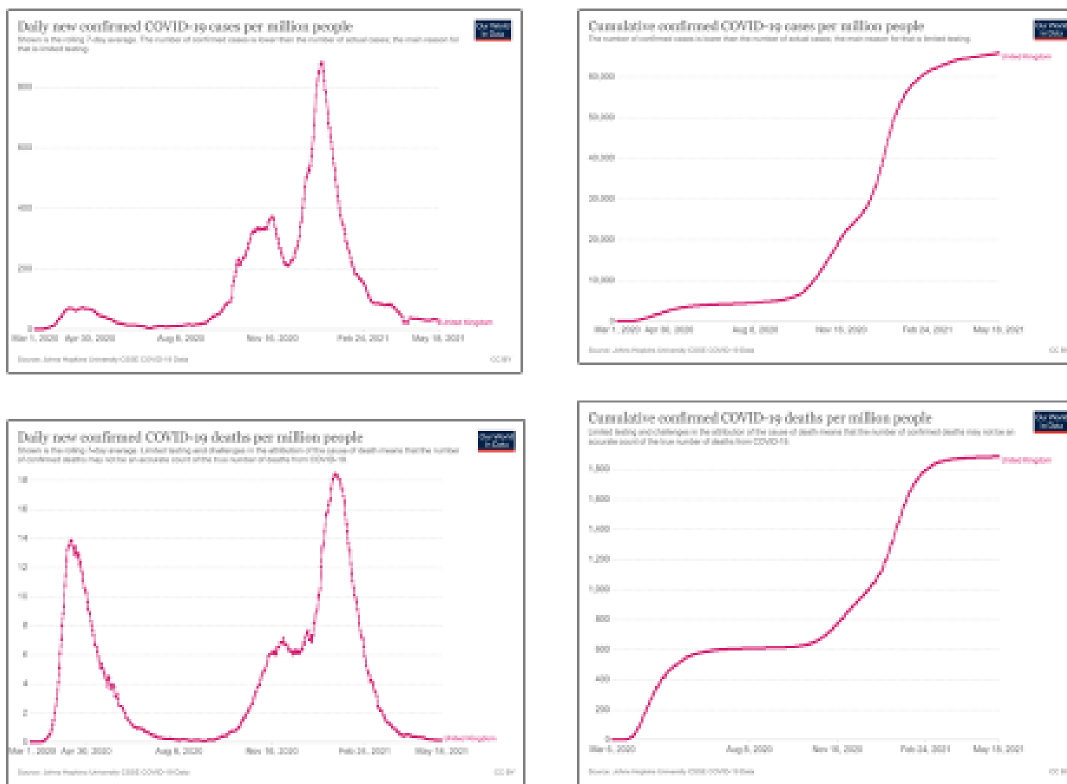


Figure 5

UK Relative to World Regions

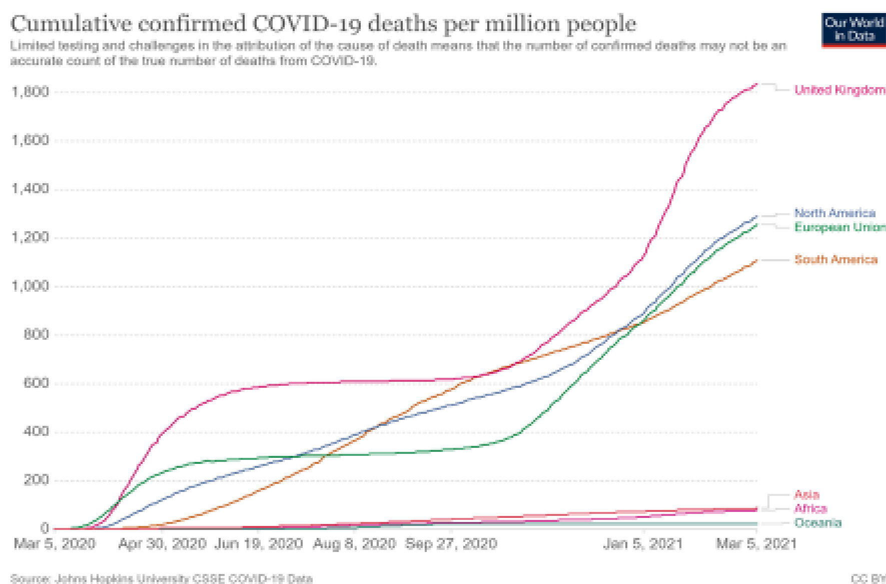


Figure 6

UK Relative to World Regions

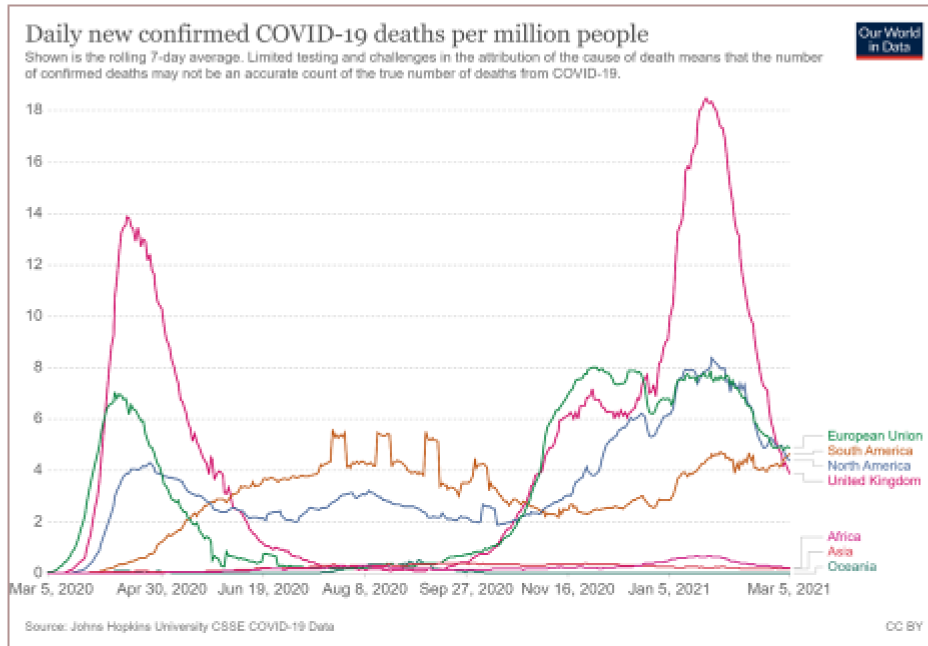


Figure 7

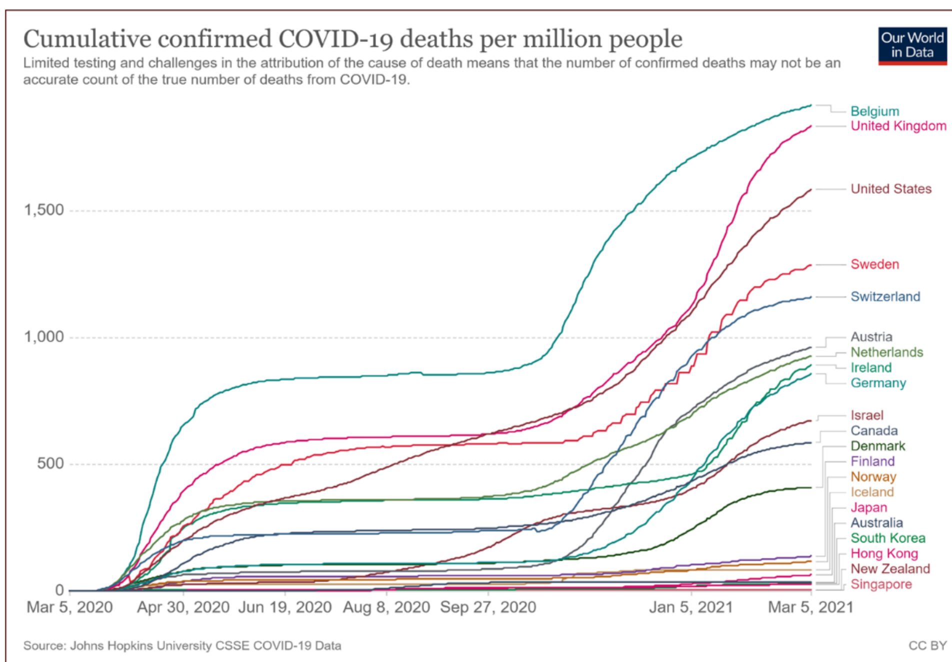


Figure 8

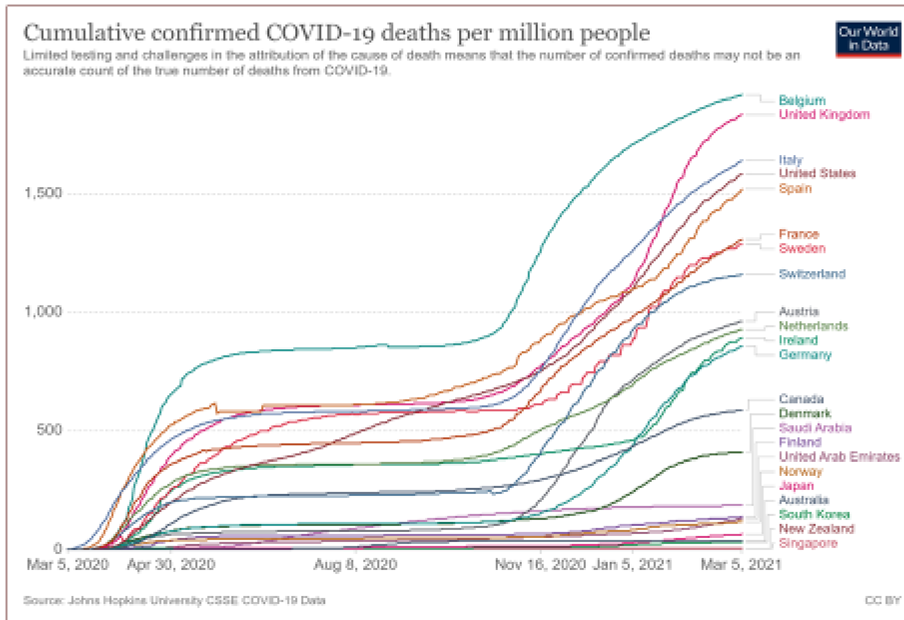


Figure 9

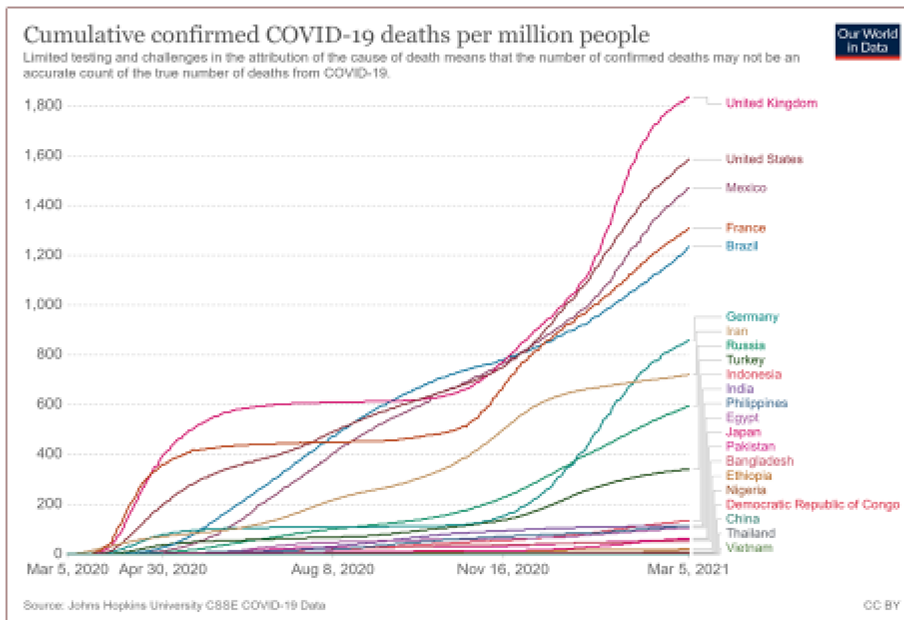


Figure 10

UK Relative to Top 20 by % Population >70

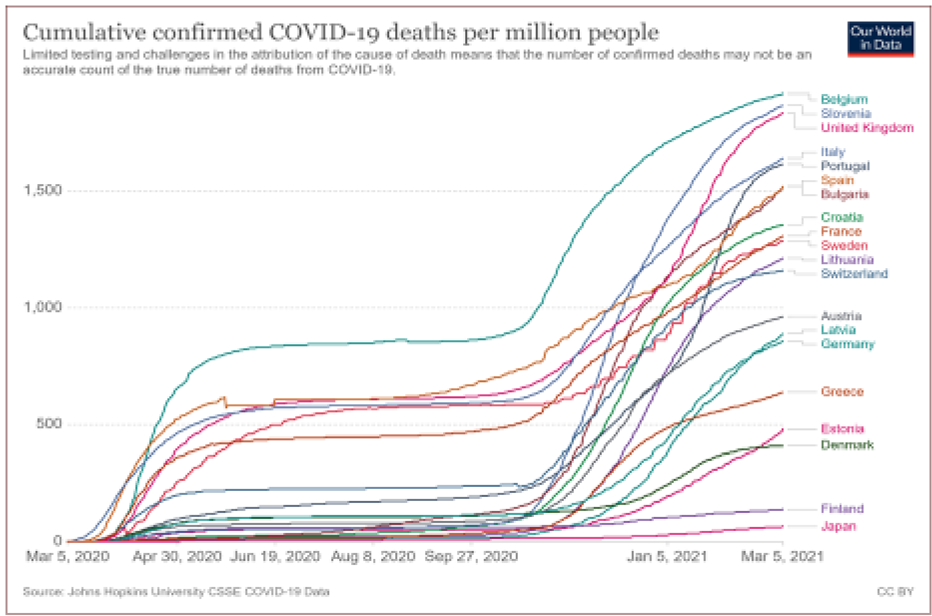


Figure 11

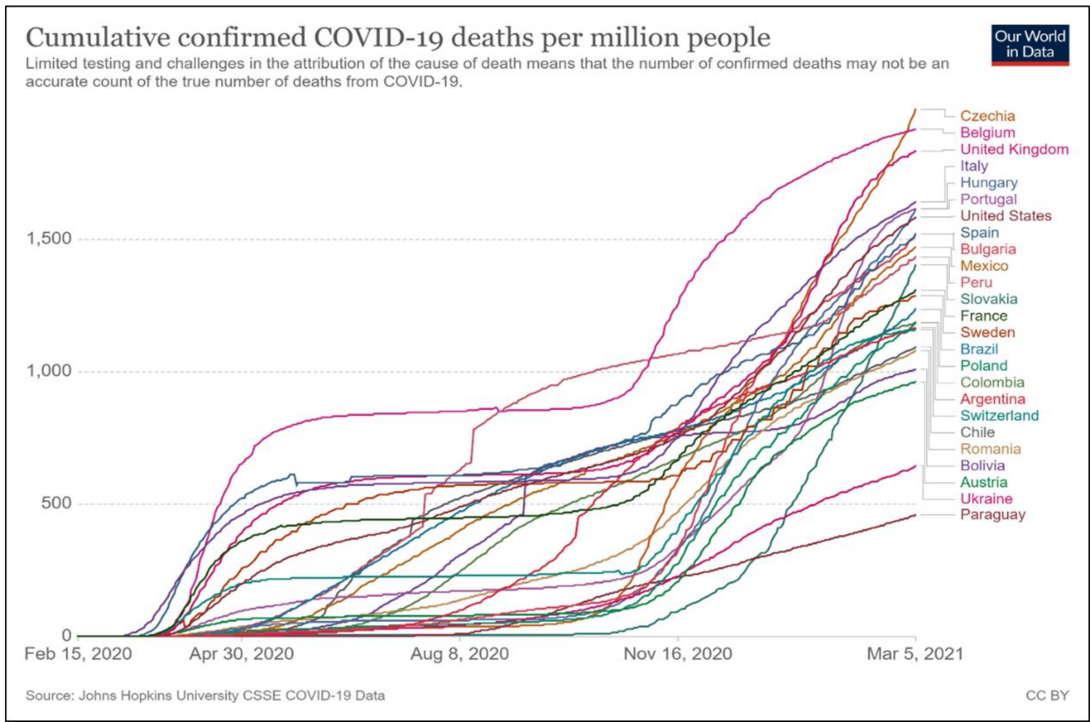
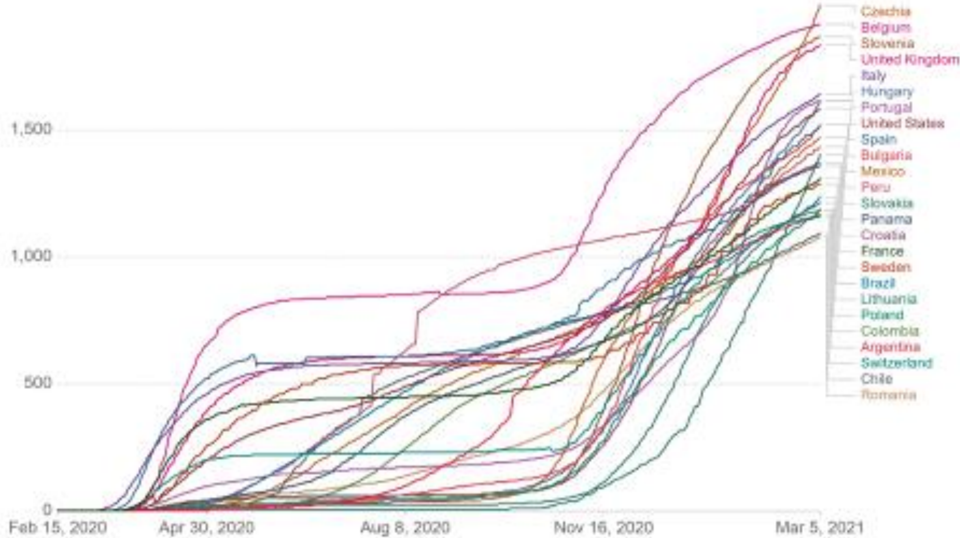


Figure 12

UK Relative to Top 25 by Cumulative Deaths (pop >2 million)

Cumulative confirmed COVID-19 deaths per million people

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

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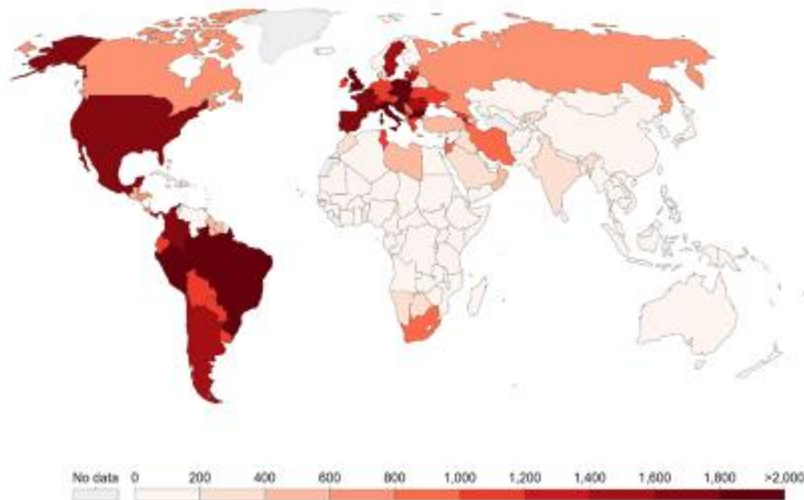
Map 1

Cumulative confirmed COVID-19 deaths per million people, May 18, 2021

Limited testing and challenges in the attribution of the cause of death means that the number of confirmed deaths may not be an accurate count of the true number of deaths from COVID-19.



Source: Johns Hopkins University CSSE COVID-19 Data

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Appendix 2. Conjectures and refutations: in search of the causes of the United Kingdom's exceptionally high COVID-19 death toll

Risk = Exposure x Vulnerability (Immunity Status + Susceptibility + Preparedness) x Response	***Estimated causal status***

EXPOSURE

Could COVID-19's geographies reflect uneven exposure to the pathogen SARS- nCoV-2 2019 and variations from place to place in viral load?

Impact of the fundamental conditions which prevail in OECD countries wedded to market fundamentalism and in particular in deeply neoliberal United Kingdom.

Risk arises from geographical proximity to epidemiological events. Scholars of (re-)emerging infectious diseases argue that globalising capitalism and its attendant socioeconomic and socioecological changes (industrialisation, rapid urbanisation, transportation, forest clearance and biodiversity loss, mining and the plundering of nature for natural resources, pollution and global warming, growing mountains of waste, etc.) have shaken free dormant viruses from the natural habitats they were previously trapped or locked in and created a more hospitable environment for the incubation and proliferation of these viruses. If true, OECD countries bear significant responsibility for (re-)emerging infectious disease. A weddedness to rapid and endless GDP growth and a climate and ecological crisis have taken the planet to the edge of ecocide. Moreover, it is certainly clear that SARS- nCoV-2 2019 has spread unevenly and mutated in virulence variously over space; not every country has been equally exposed to the pandemic. Globalising capitalism and command-and-control nodes in the global economy (like London) have presided over particularly poor outcomes. Advanced economies, hard-wired into global circuits of fast-moving capital, predicated upon the hyper-mobility of goods and people, and organised around large global cities in which urban planning and public health have long since divorced, have turbo-charged the transmission of SARS- nCoV-2 2019. The dense mesh of capillaries which emanate from these global nerve centres render them porous to pathogen transmission, mutation and infection and subject to heightened viral load.

Conjecture	Estimated causal status
Conjecture 1: Societies whose position in the world economy demands that they function as critical nodes and hubs in global flows of people will be exposed to a greater number and variety of corridors of transition.	
Conjecture 2: Given its transmissibility, COVID-19 will thrive in countries with higher population densities and less space per capita.	
Conjecture 3: Given its transmissibility, urban density is the enemy of public health, and COVID-19 will thrive in more urbanised countries.	
Conjecture 4: Climatic cycles have conspired to increase the intensity of outbreaks of COVID-19 in the Global North.	
Conjecture 5: Uneven geographies of COVID-19 reflect mutations in SARS-nCoV-2 2019.	

VULNERABILITY

IMMUNITY STATUS

Could COVID-19's geographies reflect uneven immunity to the pathogen SARS- nCoV-2 2019 and variations from place to place in immunity status?

Impact of the fundamental conditions which prevail in OECD countries wedded to market fundamentalism and in particular in deeply neoliberal United Kingdom.

Although the human immune system is universal in its constitution, its robustness varies between societies – evolution and genetic lineage can mediate our innate (or natural or species) immunity; current life circumstances play a role in the evolution of our adaptive (or active or biography specific) immunity; and social interactions determine the extent of our passive (or borrowed or shared) immunity. In consequence, not everyone has an equally robust immune system. Most OECD countries have passed through demographic and epidemiological transition and are characterised by older population profiles, populations who are burdened by health inequalities, and significant COVID-19 linked comorbidities. Many have discontinued mass BCG vaccination programmes. Moreover, the 'sterile' western body, dwelling in hyper-sanitised environments, has become in some way less fortified and potentially even immunocompromised.

Conjecture	Rating
Conjecture 6: Uneven geographies of COVID-19 reflect historical and racial differences in immunity to SARS (-like) viruses.	(red)
Conjecture 7: Uneven geographies of COVID-19 reflect historical and socio-economic differences in immunity to SARS(-like) viruses	(green)
Conjecture 8: Given their ageing demographic structures, North American and European populations have been more vulnerable to COVID-19.	(amber)
Conjecture 9: Because COVID-19 linked co-morbidities vary between populations, so too there exists an uneven geography of vulnerability to COVID-19.	(green)
Conjecture 10: Government policies towards Bacillus Calmette-Guérin (BCG) help to explain COVID-19 geographies.	(red)

SUSCEPTIBILITY

Could COVID-19's geographies reflect uneven susceptibility to being impacted by the pathogen SARS- nCoV-2 2019 by dint of variations from place to place in social, economic and political conditions?

Impact of the fundamental conditions which prevail in OECD countries wedded to market fundamentalism and in particular in deeply neoliberal United Kingdom.

Although variegated exposure to hazards remains a crucial risk factor, increasingly it is recognised that it is primarily social, economic, and political forces that turn natural hazards into disasters and disasters into catastrophes. COVID-19 is less a freak of nature or act of god and more a socially produced hazard event, that has been made to be a disaster or a catastrophe only in certain places. Social, political, cultural and economic processes marginalise and impoverish some social groups to the extent that their existence is so precarious that small setbacks have significant consequences. The vicissitudes and existential precarities of late capitalism (not least its endless and socially painful cycles of boom and bust) are exerting a historically unprecedented toll on human health and well-being: the social determinants of poor physical and mental health are today coalescing in especially intense ways in disempowered, disadvantaged, 'left-behind' communities, creating class, gender and race-based health inequalities and co-morbidities into which COVID-19 is playing. Highly centralised nation-states, growing socio-spatial inequalities, rising populist and nationalist movements, diminishing social coherence, declining trust in politicians and faltering democratic polities, increasingly polarised and polarising politics, increasingly isolationist policies, and a more inhospitable climate for those deemed 'other' and 'foreign', have offered a perfect petri-dish for COVID-19. A penetration of market relations (predicated upon maximising shareholder value (MSV) into every aspect of economic and social life has weakened community and diminished the welfare state and care-giving. Unsustainable human ecologies (including the building of ever-larger cities whose chaotic expansion, poor quality built environments, and frantic and frenetic everyday rhythms are taxing the structure and functioning of the human central nervous system) are becoming manifest in a global mental health crisis.

Conjecture 11: The uneven impact of COVID-19 is rooted in growing socio-spatial income and wealth inequalities.	
Conjecture 12: Authoritarian regimes which command public trust have been more able to mobilise and give effect to stringent public health controls than democratic governments which have lost their social licence.	
Conjecture 13: Centralised political systems which govern regions and cities from a distance preside over poorer outcomes than federalised states with decentralised / devolved powers and bespoke localised responses.	
Conjecture 14: The uneven impact of COVID-19 is rooted in the demise of social cohesion; countries where social capital, solidarity, mutuality and reciprocity have been eroded and depleted most will suffer disproportionate harm.	

PREPAREDNESS

Could COVID-19's geographies reflect uneven geographies of institutional capacity, especially the quality of already existing disaster risk management institutions, infrastructure, resources and plans, and the strength of co-ordinated emergency response systems?

Impact of the fundamental conditions which prevail in OECD countries wedded to market fundamentalism and in particular in deeply neoliberal United Kingdom.

The calibre of prior disaster risk management institutions, plans and infrastructure plays a significant role in the production of vulnerability. The ability of a society to cope with a hazard event is a function of competencies in the areas of disaster *preparation* (the quality of forecasts and early warning systems), disaster *management* (the readiness of emergency and humanitarian services to evacuate; provide medical support; conduct search and rescue; provide temporary shelter; distribute food supplies, and maintain law and order), and disaster *recovery* (the availability of resources to rebuild and repair communities and infrastructure; social insurance schemes). Wealthy societies generally have stronger institutions and superior systems of governance and are better able to engage in long-term planning. Lesser developed societies, in contrast, tend to suffer from weak and failing institutions and poorer governance, and as a consequence find it difficult to formulate and implement long-term disaster mitigation plans. So why the COVID-19 geographies reported above? Could it be that austerity has weakened Global North disaster risk management? Could it be that COVID-19 has demanded remediating actions which lie beyond already existing capacity? Could it be that erroneous assumptions and perhaps even complacency have led to an underestimating of the risks posed by infectious disease?

Conjecture	
Conjecture 15: Countries with institutional capacity to give effect to disaster risk reduction plans and with effective co-ordinated emergency management have escaped the worst of COVID-19.	
Conjecture 16: Countries with well-established and high performing medical and public health services will be better able to suppress the COVID-19 pandemic; those with inadequate health care systems will suffer most.	
Conjecture 17: Health care and public health systems in Western OECD countries are designed to remediate degenerative disease and lack the institutional capacity and disaster risk management infrastructure needed to tackle airborne infectious disease.	
Conjecture 18: Societies with more experience in handling communicable disease and disease outbreaks have stronger muscle memory and have been able to respond more quickly and effectively.	
Conjecture 19: Transition to a services-based economy and offshoring of manufacturing alongside private ownership of the means of production have reduced industrial capacity in OECD countries and increased the difficulty of speedily pivoting factories towards the production of virus-related products.	

RESPONSE

Could COVID-19's geographies simply reflect variations in the competency of governments and in particular the inadequacy of some government responses? Might it reflect, in particular, limitations and competency shortfalls within populist governments?

Impact of the fundamental conditions which prevail in OECD countries wedded to market fundamentalism and in particular in deeply neoliberal United Kingdom.

OECD responses have been characterised by government mismanagement: too many OECD countries – including and in particular the United Kingdom – responded too late and have presided over inept lockdowns, social distancing, mask wearing, PPE procurement and test, track and tracing programmes (the United Kingdom's £37bn test, track and trace systems have proven to be an expensive investment without consequential impact). Populist governments have found it especially difficult to reconcile the imposition of state-led public health mandates with the protection of civil liberties and freedoms cherished not least by their own political bases. The rise of corporate media and social media has led to a post-truth 'digital' public realm, obfuscated public understanding of the policies and performance of political leaders, made it harder for science to gain respect and authority, and diminished democratic accountability. Privatisation and austerity have led too many OECD countries to have a broken long-term care home sector for the elderly, and too many adopted a morally unjustifiable triage system in which the elderly were placed at the end of the queue. As ever, cornucopian beliefs and confidence in technological solutions lie at the heart of the OECD's response; in this case hope is resting on the rapid production of a safe and effective vaccine. Whilst an effective vaccine has enabled the United Kingdom to recover lost ground, is it 'too little too late'? Will a 'United Kingdom First' vaccine roll-out serve the United Kingdom well in the long run?

Conjecture	
Conjecture 20: COVID-19 geographies arise from variations in the efficacy of governments' public health responses: those that have gone hard and gone early have enjoyed greater success in the suppression of the virus.	
Conjecture 21: COVID-19 geographies will be inflated in countries which fail to provide meaningful income support, affordable finance and debt relief.	
Conjecture 22: The extent of COVID-19 deaths in long-term care homes (LTCH) in European and North American countries points to their moral failure to protect vulnerable elderly groups.	
Conjecture 23: Weakened by populist governments, the West has failed to show global leadership and this failure to step up has boomeranged back and caused self-harm.	
Conjecture 24: As we reach the end of the pandemic cycle, new COVID-19 geographies are emerging as a reflection of the ownership and distribution of safe and effective vaccines.	

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A good introduction to geographical writings on COVID-19 can be found in Dialogues in Human Geography Volume 10 (2020) *Special Issue: Geographies of the COVID-19 pandemic* 97-295.

Data Resources

This report makes substantial use of data culled from a variety of sources that are listed in the addendum.

It makes particular use of Our World in Data charts: https://ourworldindata.org/coronavirus

Important websites providing authoritative data and analysis of COVID-19 and its geographies include:

- World Health Organization https://www.who.int/
- Association of American Geographers http://www.aag.org/COVID-19TaskForce
- World Bank https://www.worldbank.org/en/topic/health/coronavirus
- International Monetary Fund https://www.imf.org/en/Topics/imf-and-covid19
- European Union https://europa.eu/european-union/coronavirus-response_en
- US Centre for Disease Control and Prevention (CDC) https://www.cdc.gov/coronavirus/2019-nCoV/index.html
- The Lancet Journal https://www.thelancet.com/coronavirus
- The British Medical Journal https://www.bmj.com/coronavirus
- The UK Office for National Statistics https://www.ons.org/coronavirus
- Johns Hopkins University https://coronavirus.jhu.edu/
- European Centre for Disease Control and Prevention (ECDC) https://www.ecdc.europa.eu/en/coronavirus

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