Update COVID-19 and Mobility

20 January 2021

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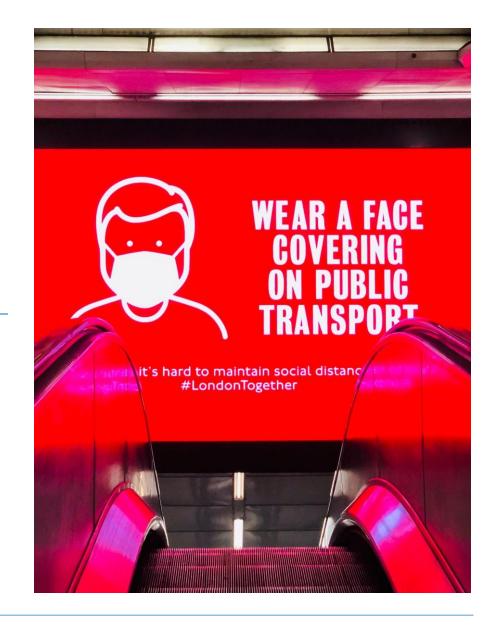
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The UK entered 2021 in the grip of a dangerous third wave of the pandemic, despite Lockdown 3.0 over Christmas, driving down trips taken by people to depressed levels last seen in Lockdown 1.0, reducing economic activity for Q1

Time spent at home closely tracks
the severity of lockdowns and
mandates to work from home (WFH).
Underpinned by the UK's advanced
digital infrastructure and services,
WFH is providing resilience to Gross
Value Added (GVA) creation, while
staff in B2C activities are furloughed

The City of London is emblematic of the potential for outsourced GVA creation under WFH. Its skilled and highly paid staff are too valuable to employers to risk exposure to the virus. WFH, largely preserving GVA, will anchor the future of work

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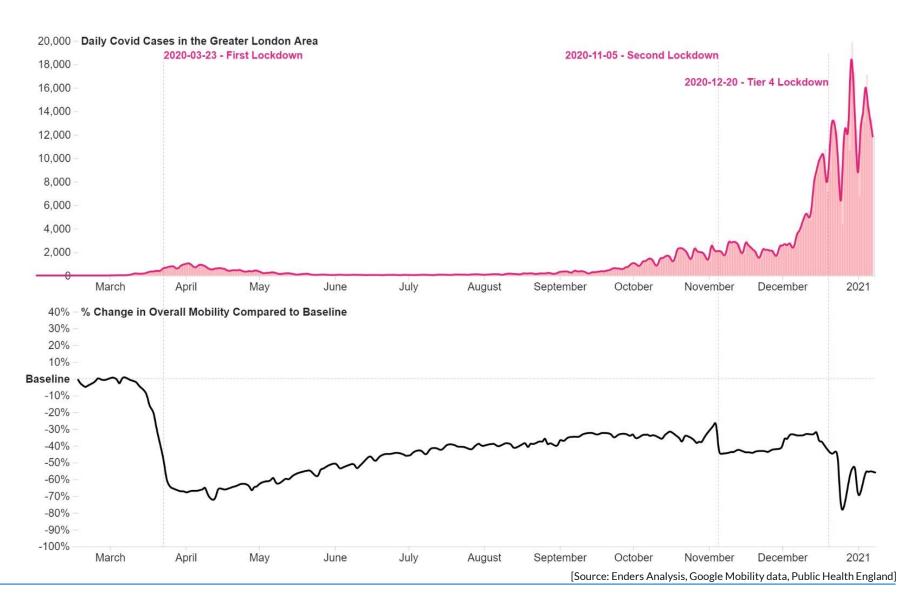
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Introducing Google mobility data

- From mid-February 2020, Google has produced a robust data series that tracks mobility around the world, aimed to help public health officials evaluate their responses to the pandemic
- Google tracks daily mobility, aggregated to anonymise individuals, and presented as a deviation from a pre-pandemic baseline number of visits, across five categories:
 - Retail and recreation
 - Supermarkets and pharmacies
 - Public transport
 - Workplaces
 - Parks
- Google also tracks the amount of time people are spending at home, which is a duration metric distinct from visits
- This report contains our processing of the data series to mid-January 2021, encompassing:
 - The national Lockdown 1.0 from March to May, adopted to flatten the curve and release pressure on public health services in the pandemic's first wave, followed by the public policy responses of tiers
 - Lockdown 2.0 in the autumn in England, Wales and Scotland, in response to their public health challenges
 - Starting in the South East, including Greater London, on 20 December 2020, Lockdown 3.0, which continues in 2021 in all nations, possibly until March, in response to the outbreak of the more infectious "UK variant" of the virus

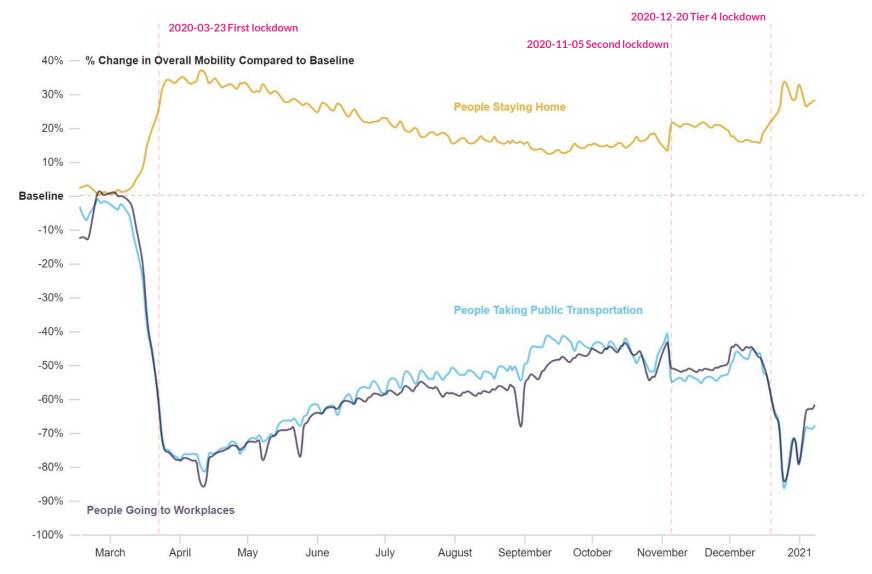
In Greater London, COVID-19 cases in 2021 no longer track with mobility

- Lockdown 1.0 in March 2020 closed workplaces, shops and schools and only essential personnel could travel. Mobility in Greater London sank to c.65% below the baseline in early April
- Falling cases during the summer restored confidence in mobility, a trend flattened by the resurgence of cases in September
- In Lockdown 2.0 on 5 November, schools and many shops were kept open, but compliance also waned.
 After lifting on 2 December, shoppers ventured forth and trips rose modestly
- Lockdown 3.0 on 20 December led to a greater fall in the expected squiggle of mobility over Christmas and New Year, with mobility in January 2021 at c.60% below baseline
- Much higher daily case numbers reported in January 2021 than in April 2020 (noting mass testing started only in May) reveal community transmission of the "UK variant"



People have spent much more time at home since March 2020

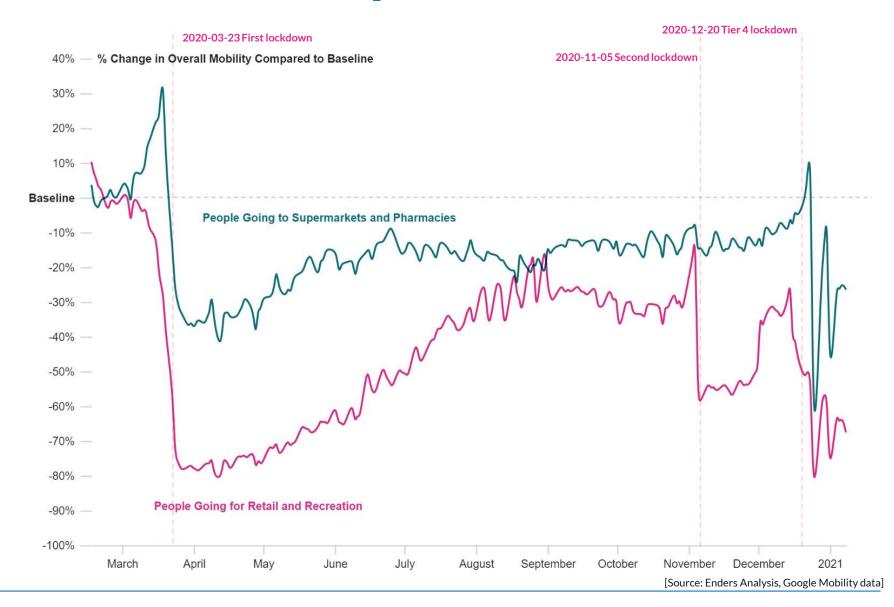
- Lockdown 1.0 increased the amount of time people spent at home to c.35% above the baseline—the mirror image is trips to workplaces falling to c.75% below the baseline
- Employers mandated "work from home" (WFH) for staff—using their computers, broadband and services to replicate Gross Value Added (GVA) creation, the foundation of GDP, away from offices. The digital age makes the UK's GDP resilient to the pandemic in a way it was not 100 years ago at the time of Spanish flu
- Deserted workplaces also led to the decimation of expenditure on officerelated B2C services such as cafes, pubs, gyms, hairdressers, etc. forcing many B2C employers to furlough staff (which is slated to end in April 2021) but no value is created
- In London, people going to workplaces tracks closely people taking public transportation—which is in a financial crisis due to low revenues



[Source: Enders Analysis, Google Mobility data]

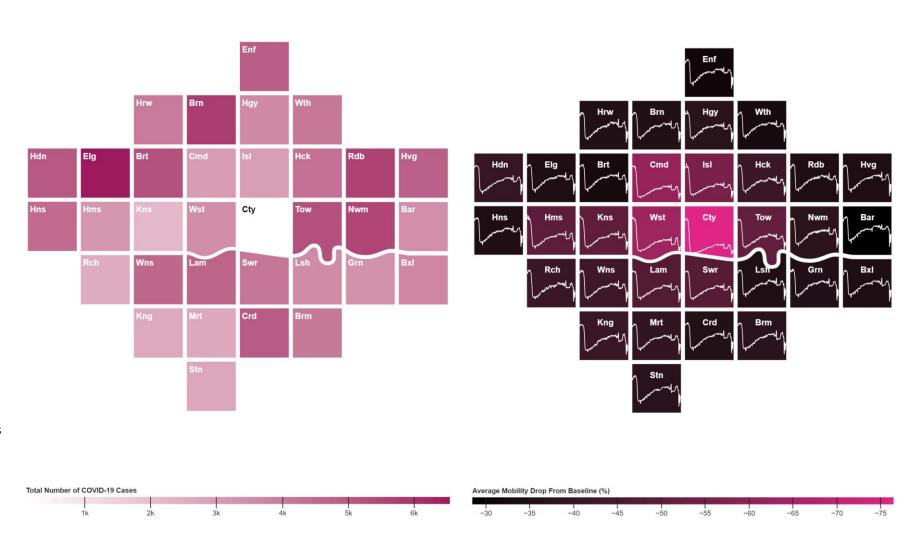
The lockdowns have driven essential and recreational trips

- The mirror image of WFH is a higher reliance on out-of-home trips in the local area, including shopping for necessities at supermarkets and pharmacies, and enjoying recreation in outdoor parks
- In Lockdown 1.0, supermarkets and pharmacy mobility spiked c.35% above baseline due to stockpiling and panic before plummeting. Stockpiling was not repeated for Lockdown 2.0 and Christmas 2020 occasioned some advance shopping for food and drink
- Visits to retail and recreation in Lockdown 1.0 plummeted by c.80% as these were deemed non-essential.
 Visits snapped back in mid-June after non-essential retailers opened, but Lockdown 2.0 decimated trips again, before bouncing back when the high street was opened for the pre-Christmas period
- Lockdown 3.0 is extending the gloom on the high street amidst the deep abyss of trips to now closed shops



In Lockdown 1.0 mobility vanished in the City; it has not returned

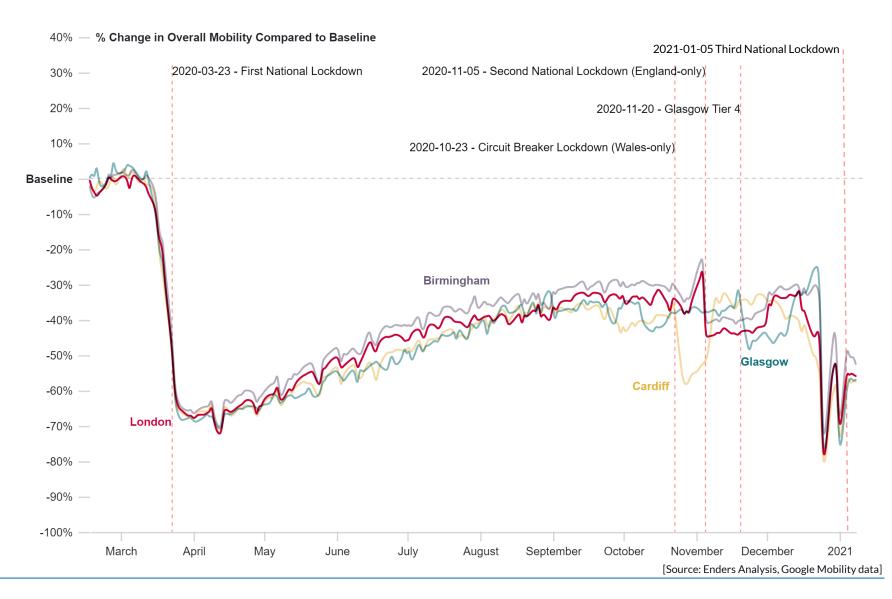
- In Lockdown 1.0, the City of London suffered the greatest decline in mobility among boroughs (see right hand side chart) and no cases of the virus (see left hand chart), being nonresidential and deserted by travelers
- Still emptied of workers, the City of London exemplifies the new paradigm created by WFH
- The City's towers are emblematic of GVA creation in the 21st century by highly skilled and high-rate taxpaying financial service providers too valuable to their employers to risk to the virus, armed with Bloomberg terminals. This GVA creation has proved easy to adapt to mandated WFH—more generally true of B2B service activities in the pandemic
- GVA creation of B2B service activities is outsourced to people in WFH situations, and the entrance of employers into the home raises questions about the future of work



[Source: Enders Analysis, Google Mobility data]

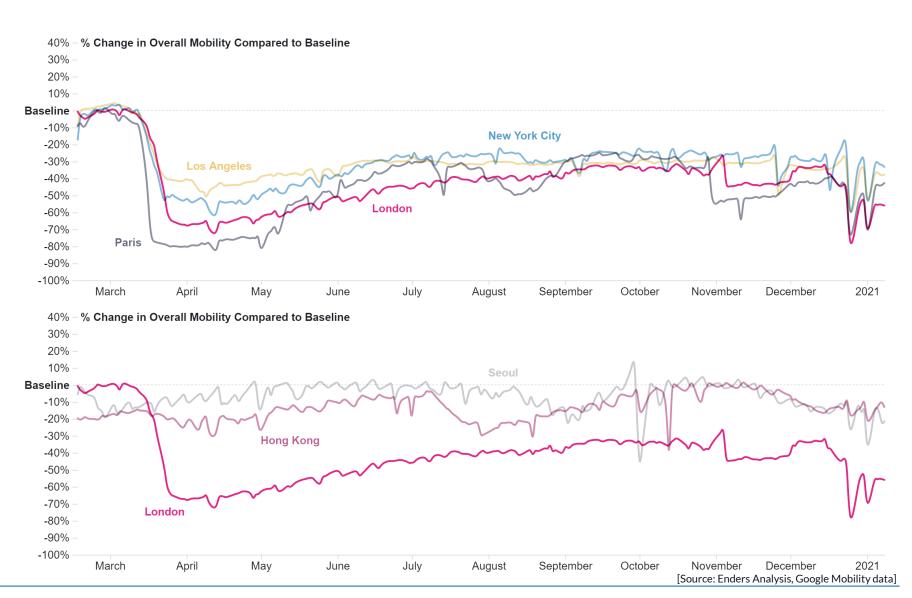
London tracks broadly with the rest of the UK, but a return to 'normal' remains distant

- In England, where tiers applied after Lockdown 1.0 and until Lockdown 3.0, peaks and troughs in Birmingham and London have closely tracked
- Major cities in other nations of the UK—Cardiff in Wales and Glasgow in Scotland—closely tracked the mobility trends in Greater London until the autumn when public health policies in the nations diverged from those in place in England, notably in Wales, which applied a circuit breaker lockdown in October to combat a rising case load
- The emergence of the UK variant in December 2020 and its higher transmissibility has pushed all nations to adopt Tier 4 levels and higher, including restriction on shops and schools, converging mobility trends across the UK to deeply depressed levels



The pandemic devastated cities in the West more than those in the East

- Comparing London with another large metropolis reliant on public transport, such as Paris, reveals the latter's more draconian approach to their first and second national lockdowns, in the spring and autumn respectively, impairing mobility more than in London
- Los Angeles and New York City have a higher reliance on the car as a mode of transport for commuting, residents exhibit lower compliance and mayors act without the public health responsibilities applicable in the UK and France respectively
- Eastern cities that are champions at combatting the virus with some success (due to their prior experience of SARS-COV-1), such as Hong Kong and Seoul, have retained mobility to a much higher degree than London
- Hong Kong mobility indicators also track the popular protests and state of emergency called to halt the unrest



Appendix: Methodology

Data sources

- Daily confirmed COVID-19 cases: Public Health England (PHE)
- Mobility Google COVID-19 Community Mobility Reports. Tracks how visitors to places changed compared the baseline days across: Retail & Recreation; Supermarkets and Pharmacies (essential services); Workplaces; Public Transportation, Parks. Residential mobility is based on changes in the amount of time spent at home

Notes on the Methodology

- Weekends are removed from analysis (i.e. Saturday, Sunday)
- The City of London is considered to be its own "borough" for better transparency as to how COVID-19 has impacted London's economic driver
- Data shows how visitation to different categories of place have changed when compared to the "baseline" days. The baseline is calculated by Google: it is a median value from the 5-week period (3 January 6 February 2020), based on each weekday, representing a normal value for that day of the week. The baseline days never change and do not account for seasonality
- Overall mobility is an aggregated mean based on the following mobility categories: Retail & Recreation; Essential Services; Workplaces;
 Public Transportation
 - Residential mobility is based on a change in *duration* and is therefore excluded from overall mobility due to different units of measurement

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