

COVID-19: Data sources to inform local economic recovery

Introduction

Good data can help inform decisions about policies to support economic recovery from the COVID-19 pandemic. As discussed in our briefing on [Developing an Effective Local Industrial Strategy](#) (LIS), understanding the local economy helps decision-makers identify issues and focus on those interventions which will have the most impact.

This briefing offers an overview of available data sources and considers their advantages and limitations.

We focus on early and leading indicators. There are now several indicators available (official or otherwise) to help understand what is going on in the local economy. Most of the unofficial sources raise concerns about completeness and biases and will need to be interpreted carefully alongside other indicators. Even well understood official statistics may also be affected by the COVID-19 crisis.

Despite these challenges, data used appropriately can provide timely and granular insights that can guide policy development and help target interventions. Our [LIS data work](#) provides further discussion of the issues with using more experimental indicators.

Broadly, the indicators fall into three types — labour market, movement and spending. This briefing looks at each in turn.

Labour market

This set of indicators can help understand what is going on in the local job market now and in the near future. These can be broadly categorised into three groups:

1. Indicators about how many people do not have jobs e.g. Claimant Counts, Job Seekers Allowance (JSA) counts, etc.
2. Indicators about people whose jobs are currently directly affected by lockdown e.g. people on the Coronavirus Job Retention Scheme (CJRS) or the Self-employment Income Support Scheme (SEISS)
3. Indicators about the current or future state of the labour market e.g. Adzuna and Indeed UK vacancy level data

Official labour market statistics in the regions of the UK

The Office for National Statistics (ONS) [UK statistical bulletins](#) provide regional, local authority and Parliamentary constituency breakdowns of changes to UK (un)employment, economic inactivity, and other labour market outcomes. A new release is published monthly, with data lags varying across indicators — Labour Force Survey indicators have approximately a one-month lag, while others are closer to four months.

The bulletin presents 37 datasets and tables ([May 2020, for example](#)), including claimant counts, Jobseekers' Allowance counts, and Labour Force Survey indicators.

The ONS has provided [updates on how COVID-19 is affecting UK labour market statistics](#) outlining the practical challenges the ONS currently faces. Here are the points relevant to the data we are interested in:

- Employees who are furloughed are classified as employed, but temporarily away from work (with zero worked hours), thus affecting the statistics of number of hours worked in the Labour Force Survey. This effect may be offset if furloughed workers with zero working hours take other employment. Numbers doing this may be partially identified from data on people with second jobs.
- Self-employed persons claiming SEISS will remain classified as self-employed in all ONS labour market statistics, but may class themselves as temporarily away from work and record no hours of employment, thus affecting the statistics of worked hours in the Labour Force Survey.

Claimant Count

Data type: Labour market

Lowest geographic unit: Local Authority

Time period covered: Since 1971, with estimates since 1881

Update frequency: Monthly

Source: ONS

[Link](#)

Even more localised data can be accessed via [Nomis](#) at the local authority level

The Claimant Count is administrative data that measures the number of people claiming benefits because they are unemployed and seeking work. It is a composite of the number of people

claiming Jobseeker's Allowance (JSA) and those on Universal Credit (UC) who are required to seek work to qualify for their benefits. The Claimant Count can be queried via Nomis at the local authority level and is updated monthly.

As the Universal Credit count includes any UC recipient who is required to look for work (a broader definition of 'unemployed' than under JSA), the Claimant Count has increased since UC was included. The Department for Work and Pensions publishes the [Alternative Claimant Count](#) statistics, which retrospectively adjust the Claimant Count to include these additional claimants since January 2013.

The UK government introduced several enhancements to UC in response to the coronavirus crisis. These measures may have increased the number of employed people eligible for UC because their earnings fall below income thresholds.

Area variation in the Claimant Count may also be affected by variation in the uptake of the CJRS, which covers 80 per cent of furloughed employees' wages up to £2,500 per month. Workers who would otherwise have been laid off and claim benefits, but whose jobs have been protected by CJRS, will also not show up in the Claimant Count.

In addition, in some cases, the salary of employees supported by CJRS may be reduced making them eligible for UC although still employed. This means that some of the increase in the latest Claimant Count could be due to people furloughed on reduced income falling below certain income thresholds. ONS currently has no way of knowing how much of the current caseload is due to employed or unemployed claimants.

Jobseekers' Allowance Counts

Data type: Labour market

Lowest geographic unit: Local Authority, Parliamentary constituency

Time period covered: Since 2004

Update frequency: Monthly

Source: ONS

[Local Authority](#)

[Parliamentary constituency](#)

ONS data providing a count of JSA claimants, updated monthly since 2004. Data is available at the local authority and Parliamentary constituency level. Note that this data is not designated as National Statistics. Also note that the CJRS may interact with JSA counts, as furloughed employees who usually work less than 16 hours a week and meet the other JSA eligibility requirements are eligible for the allowance.

Labour Force Survey indicators

Data type: Labour market

Lowest geographic unit: Regional

Time period covered: Since 1992

Update frequency: Monthly

Source: ONS

[Link](#)

ONS dataset containing labour market indicators for UK regions, drawn from the Labour Force Survey. Data is available from 1992 and is updated monthly. The sample is made up of approximately 40,000 responding UK households. In response to the coronavirus, the ONS suspended face-to-face interviews in March 2020 and moved these to telephone interviews where possible. However, telephone matching is imperfect and this has led to a [reduced response rate](#) for some weeks in March, resulting in a number of [data challenges](#) relating to weighting, imputation for non-response, seasonal adjustment, and the quality of the survey estimates. The ONS has also added new questions to the Survey, which focus on looking at whether particular labour market outcomes were linked to the coronavirus.

Coronavirus Job Retention Scheme (CJRS)

Data type: Labour market

Geographic units: Regions and Countries, NUTS1, and by Local Authority

Time period covered: CJRS was launched on 20 April 2020

Update frequency: Weekly

Source: UK Government

[Link](#)

The Coronavirus Job Retention Scheme (CJRS) was launched on 20 April this year as UK government response to the pandemic. It covers 80 per cent of furloughed employees' wages up to £2,500 per month. Recently, the UK government has realised the statistics of the CJRS by employer size (number of employees in the establishment, by different intervals), sector of the economy (the main sectors using the SIC 2007), and geography (Regions and Countries, NUTS1, and by Local Authority). There are plans to include breakdowns by age and gender but these are not yet available.

This dataset is the result of the combination of HM Revenue and Customs' (HMRC's) Real Time Information with information on CJRS claimants. This data is classified as providing [Experimental Statistics](#), which means that the data are not yet fully developed and subject to change in the coming months. Since the benefit system and the CJRS interact in quite complex ways (see above), it may be more useful to look at both indicators together to get a more accurate picture of the local economic impacts.

Self-employment Income Support Scheme (SEISS)

Data type: Labour market

Geographic units: Regions and Countries, NUTS1, and by Local Authority

Time period covered: SEISS began on 13 May 2020

Update frequency: Weekly

Source: UK Government

[Link](#)

SEISS was launched on 13 May this year with the aim of supporting self-employed workers in the current crisis. The scheme provides support in the form of a cash grant of 80 per cent of profits, up to £2,500 per month for three months, and with a cap of £7,500 in total. Only workers registered self-employed for at least three years and with earnings below £50,000 are eligible. The Government has released data for the SEISS by age and gender of claimants, sector of self-employment activity (the main sectors using the SIC 2007) and geography (i.e. Regions and Countries, NUTS1, and by Local Authority).

This dataset is the result of the combination of HMRC's Real Time Information with information on SEISS claimants. As with data on the CJRS, this data source is also classified as experimental. One caveat in using this data to measure local impacts is that the percentage of eligible self-employed varies across areas, and the data on total numbers of self-employed from the Annual Population Survey are not directly comparable to those used for the SEISS making it hard to address this problem.

Adzuna UK Labour Market Statistics

Data type: Labour market

Lowest geographic unit: UK regions/cities.

Update frequency: Real time

Source: Adzuna

[Link](#)

Adzuna's UK Labour Market Statistics provide data on average salaries and vacancies over time for user-specified locations. The statistics are available at a vast range of aggregations, with the user able to specify countries and regions, right down to cities, towns and individual companies and job titles. Adzuna claims to scrape job adverts from thousands of recruitment sites across the internet. This source faces the usual challenges of other commercial secondary datasets. For example, there may be data quality issues depending on how the data is cross-checked by the company. The data may not be representative as it will reflect the underlying user base. For example, it may be biased towards more digital and new economy jobs. See our [LIS data work](#) for more discussion of these issues.

Indeed UK Labour Market Statistics

Data type: Labour market

Lowest geographic unit: UK regions/cities.

Update frequency: Real time

Source: Indeed UK

[Link](#)

Indeed UK, a popular UK recruitment website, provides data on job postings over time for user-specified locations. The statistics are available at a range of aggregations, with the user able to specify countries and UK regions, cities/towns, individual companies, and job titles. Indeed UK monitors its traffic, collecting data on job adverts and job searches, clicks and CVs uploaded. The Indeed hiring lab publishes trends in total job posting calculated using a seven-day moving average of the number of UK job postings on Indeed. These sources face the usual challenges of other commercial secondary datasets. For example, there may be data quality issues depending on the cross-checking done by the company. The data will reflect the underlying user base and may not be representative. See our [LIS data work](#) for more discussion of these issues.

Movement

Movement data is often used as a proxy for economic activity. The assumption is that the more people are moving, the more likely they are to be working or spending leisure time (and money) outside the home. Some of the available movement data looks at how much people are moving based on where their phone is located e.g. data from Google and Apple. Some is based on how they get there e.g. [TomTom's traffic index](#) and [CityMapper's mobility index](#) based on public transport. Some data is location-based as opposed to user-based – e.g. Springboard's data looks at how many people are visiting 'destinations' like high streets, shopping centres, etc.

Obviously, lockdown measures have affected mobility patterns and these data sources are likely to work well measuring how mobility has been affected by lockdown. However, issues will arise when using these as indicators of the impact on local economic activity during the recovery phase and as lockdown measures are gradually lifted. For instance, while some jobs cannot be done remotely (e.g. essential workers, restaurants and food services industry), others will still be done remotely, affecting the link between movement and local economic activity in a way that is hard to predict. For data sources based on specific types of transport, there will also be issues with modal shift (e.g. as people switch from using public transport to cars).

Apple Mobility Trends

Data type: Movement

Lowest geographic unit: National and cities

Update frequency: Daily

Source: Apple Maps data

[Link](#)

Apple's Mobility Trends Reports are published daily and are available at either the national level or at the major cities level (London, Manchester, Edinburgh, etc.) They can help to disentangle mobility patterns across cities and make cross-city comparisons. One data point is provided per day, per location, per transport type (walking, driving, public transport). The data is a relative volume number, with 13 January 2020 used as the baseline measurement. This should be considered when interpreting the data, as there is natural within-week variation in mobility trends. An additional limitation is that this data only covers Apple device users who also use Apple Maps, and as such represents a specific subset of the population. If used in conjunction with other similar indicators, it helps provide information on mobility but sample selection and other issues mean this is unlikely to be a good indicator of local economic activity.

Google Community Mobility Reports

Data type: Movement

Lowest geographic unit: Mixed

Update frequency: three-day 3 lag

Source: Google Maps data

[Link](#)

Google's Mobility Reports provide data on types of locations visited (residential, shopping, etc.) relative to a baseline (the median value for the corresponding day of the week, during the five-week period between 3 January 2020 and 6 February 2020). Data is available for a number of regions in the UK, with a lag of approximately three days. Note that data covers only Google users with the appropriate app, connectivity and privacy settings and as such represents a specific subset of the population. In addition to providing information on mobility related to retail, recreation, or workplaces it may also capture some aspects of economic activity (e.g. domestic tourism once that is allowed).

Springboard Daily Footfall Data

Data type: Movement

Lowest geographic unit: Aggregated to town types

Update frequency: Daily

Source: Springboard

[Link](#)

Springboard's free Daily Footfall data is presented at a 'town type' level of aggregation, categorised by:

- Central London
- Coast town
- Regional city
- UK (national)

There is also some weekly data (an example [here](#)) on footfall grouped according to the type of location (high street, shopping centre, retail park). Data is made available for the previous day. It is not clear how many data points underly the graphs presented, but Springboard claims to have over 4,500 counting points across the UK collecting nearly a billion footfall counts per month. Subscribers can access more granular data, at a local and regional level, though the exact offering is unclear.

Obviously, mobility restrictions directly affect daily footfall data and so caution is needed when using this data to measure recovery of the economic activity. For example, online shopping, remote working, diversion in public transport services, modal shifts, etc, may all be affecting daily footfall statistics.

Centre for Cities High Streets recovery tracker

Data type: Movement

Lowest geographic unit: Cities and large towns

Time period covered: since 13 February 2020

Update frequency: Monthly

Source: Locomizer

[Link](#)

The recovery tracker aims to capture how the scale and pace of city centre recovery varies across UK cities and large towns. Using mobile phone data, it measures levels of activity across cities, compared to their previous levels and also compared to other cities. They also look into how this varies by the several roles that city centres play — as places of work, leisure or night-time activity. This data provides a more user friendly way of accessing mobility data but will be constrained in some of the ways outlined above for similar data.

Spending

This type of data is helpful in understanding the impact of the crisis on spending behaviour. It can be origin-based, which shows how households in different areas have been affected, or it can be destination-based, showing how high streets have been hit and whether strategies to bring people back in and spending are working. A significant limitation of spending data as an indicator of economic activity is that it may be affected by shifts in shopping behaviour (e.g. to online in response to COVID).

Corona Shock tracker

Data type: Spending (destination based)

Lowest geographic unit: Towns and cities

Time period covered: 25 March 2020 to 31 March 2020 and 1 April 2020 to 7 April 2020

Source: Social Investment Business

[Link](#)

Tortoise Media's Corona Shock tracker provides town-level consumer spending data on how grocery and non-grocery sales have changed since the equivalent week last year.

The underlying local sales data is from Social Investment Business, which provides Tortoise with geo-tagged consumer-facing merchant IDs for active debit card customers in England and Wales, aggregated by electoral wards. This data has been supplemented with labour force data from the Annual Population Survey, student enrolments from HESA, and international tourist visits from Visit Britain.

It is not clear how frequently this data will be updated, if at all. The current data compares sales in the following weeks (as of 18 May 2020):

- Week 1: Wednesday 25 to Tuesday 31 March 2020, inclusive
- Week 2: Wednesday 1 to Tuesday 7 April 2020, inclusive

The data represents up to 27 per cent of bank account holders in any given area, and never fewer than 12 per cent.

A significant limitation of the data is that it only appears to cover debit card data. There are also issues with how it treats online spending, especially when money is spent via intermediaries (Amazon, eBay, etc.) These transactions are assigned one geotag (the headquarters), which obscures the distributed nature of the economic activity behind a purchase (production, warehousing, delivery). This may lead to some regional effects being overstated.

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