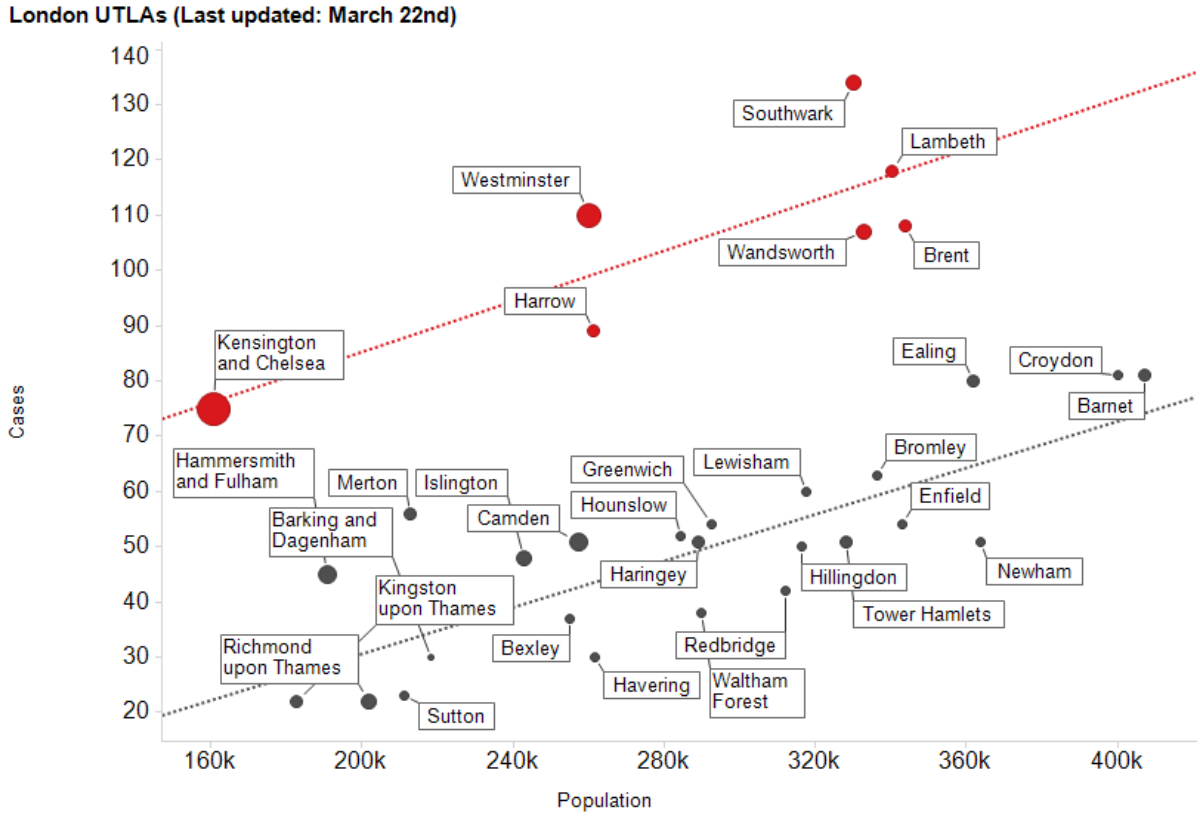
COVID-19: a Borough-by-Borough Analysis

So I live in Southwark which seems to be topping every COVID-19 ranking. However, I used to tranquillise myself thinking that Southwark is a fairly large borough and thus the number of cases per thousand people would actually be low.

But data proved me wrong.

In the figure, you can see the number of confirmed cases against the population of the borough. To be more precise, the proper term for borough here is UTLA, which stands for Upper Tier Local Authorities.



As you can see, Southwark has one of the highest number of cases per thousand inhabitants.

Interestingly, just by looking at the chart, we can see that there are two trends: most boroughs seem to have a ratio of 1-2 cases per 10,000 inhabitants. I plotted these in grey. However, there are 7 UTLAs where the ratio is much higher (more like 3-4 cases per 10,000). I plotted these in red.

Why are these UTLAs so different? Something that immediately comes to mind looking at the list is that the wealthier boroughs seems to have more cases. But is this true?

I found a data set which lists the median house price for each UTLA. The size of each point on the chart is proportional to this value - assuming that house price correlates with the wealth of the borough.

I don't feel like doing p-values or any proper correlation testing on a weekend so I'm just going by data analyst gut-feeling when I say: "it doesn't look like the median house price correlates very strongly with the number of cases".

So why are these entities behaving so differently? Is the rate of testing different? Is the average age different? At the moment, I have no answers for you - but I'll continue investigating! If you have any ideas (or London UTLA data sets!), do let me know!

Data Sources

- UTLAs Population
- Median House Prices
- Number of Confirmed Cases

Disclaimer

This disclaimer informs readers that the views, thoughts, and opinions expressed in the text belong solely to the author, and not necessarily to the author's employer, organization, committee or other group or individual.

Olimpia Onelli, March 2020