



# Summarizing Findings

Becca Traber, Dec 19 2020



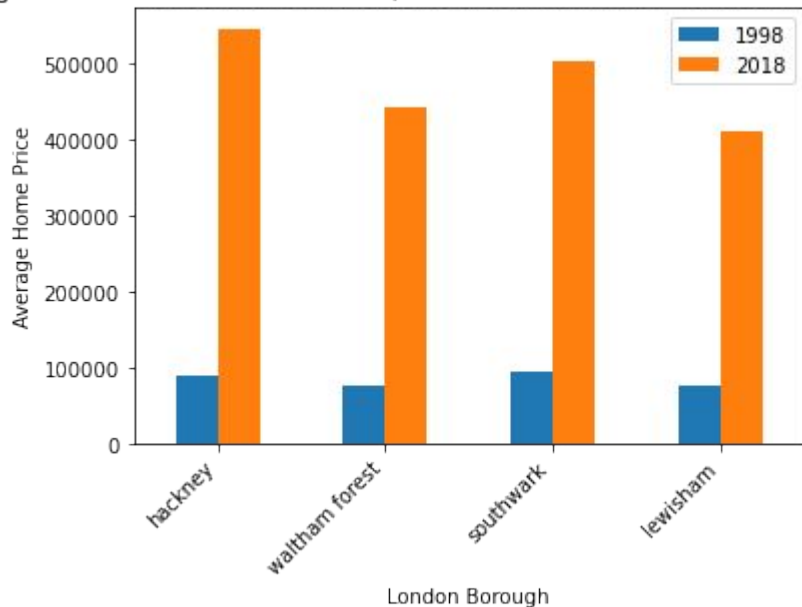
## The Most Expensive Boroughs:

	Price Ratio Between Average Home Price in 1998 and 2018
Hackney	0.161335
Waltham Forest	0.171387
Southwark	0.181275
Lewisham	0.183512

These are the boroughs in the 10th percentile, making them the most expensive 10% of London boroughs.



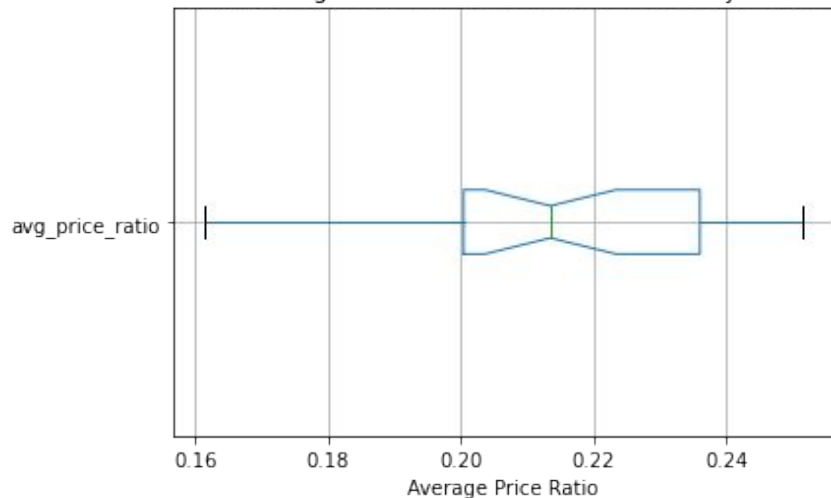
Average Home Price Difference for 90Q of Ratio of Price Increase Between 1998 and 2018



An average home in Hackney, the most expensive borough, costs over 6 times what it used to

# All of London is expensive, but some of it is very expensive.

Ratio between Average Home Price in 1998 and 2018 by London Borough



The least expensive boroughs (Hounslow) still has homes that cost on average 4 times what they did in 1995.

The average home increase across London is around 500%.

The data is skewed with a longer tail of more expensive boroughs.

# Main Challenges

- Unfamiliarity with the plotting tools.
  - The segment that took me the longest was trying to determine the most useful way to visualize the data.
  - Some options that were intuitive to me (heatmaps, for instance) were too difficult to execute.
  - In an ideal world, I would be able to display this data geographically.
- Keeping track of slicing MultiIndexed DataFrames was tricky
- Error reporting in functions
  - I struggled significantly with the combination of trying to catch errors and passing arguments into the function.
  - I wanted to make some of the arguments optional so that you could get the price ratio of the whole dataset, but I had difficulty creating boolean statements with defaults of None to facilitate slicing.
- Difficulty with git and github
  - Possible due to an OS update or some other issue between now and when I made the Springboard git repo, I lost the repo and had to make a new one.
  - This caused a variety of errors: I had to figure out how to change the default branch and change my username/key. Vim and the git commands were unfamiliar.
  - At one point, a forced merge to fix the branching issues corrupted the jupyter notebook file entirely, so I had to learn to revert the directory



## Further Investigation

- This data would be more useful and easy to interpret when compared against other costs of living, inflation, average wage, and other metrics.
- It would be useful to have this data in a geographically framed heatmap.
- It would be interesting to see the relationship between rent and property values.