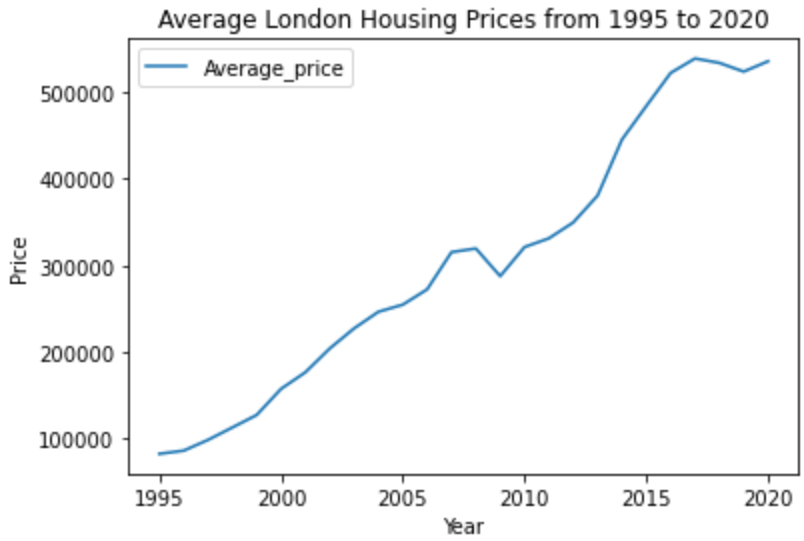
This analysis investigated the housing prices of the 32 Boroughs of London as well as the housing prices of the city of London itself. Prices were tracked from a time span of 1995 to 2020. As expected, overall housing prices drastically increased over time, with just a few minor exceptions to this trend. There was a dip in prices around 2008 and 2009 and a plateauing of prices from around 2017 and beyond.




Not surprisingly, the dip in housing prices in 2008 and 2009 is most likely due to the Great Recession, a period of global decline in economic activity beginning from December 2007 and lasting until June 2009.

After this period, housing prices begin to quickly rise once again. Figure 1 and Figure 2 summarize the average prices for the top 10 most expensive bureaus in 1995 and 2020 respectively.

| London Boroughs | Year | Average_price |
|---|---|---|
| Kensington & Chelsea | 1995 | 192857.260633 |
| Westminster | 1995 | 133689.233033 |
| Hammersmith & Fulham | 1995 | 123238.002608 |
| Camden | 1995 | 120367.431783 |
| Richmond upon Thames | 1995 | 109892.274008 |
| City of London | 1995 | 99085.008156 |
| Islington | 1995 | 95555.069312 |
| Barnet | 1995 | 91792.537433 |
| Wandsworth | 1995 | 88829.083075 |
| Harrow | 1995 | 83519.486319 |

**Figure 1.** The Average housing price of the top 10 London Boroughs in 1995.

| London Boroughs | Year | Average_price |
|---|---|---|
| Kensington & Chelsea | 2020 | 1.314391e+06 |
| Westminster | 2020 | 1.019173e+06 |
| Camden | 2020 | 8.453739e+05 |
| City of London | 2020 | 8.095200e+05 |
| Hammersmith & Fulham | 2020 | 7.379094e+05 |
| Islington | 2020 | 6.798602e+05 |
| Richmond upon Thames | 2020 | 6.659383e+05 |
| Wandsworth | 2020 | 6.093348e+05 |
| Hackney | 2020 | 5.693913e+05 |
| Haringey | 2020 | 5.523058e+05 |

**Figure 2.** The Average housing price of the top 10 London Boroughs in 2020.

The most expensive bureaus remained generally the same, with Kensington & Chelsea, Westminster, and Hammersmith & Fulham as the top 3 most expensive in 1995, and Kensington & Chelsea, Westminster, and Camden as the top 3 most expensive in 2020.

However, the most expensive bureaus were not the ones which saw the greatest changes in price. As evident from Figure 3 below, the Boroughs of Hackney, Waltham Forest, Southwark, and Lewisham have the fastest increasing housing prices, even though they are not among the most expensive of Boroughs. It is also noteworthy that even the Borough with the smallest increase in price, is nearly 4 times as expensive as it was 20 years ago!

| London Borough | Ratio of Average Housing Price between 2018 and 1998 |
|---|---|
| Hackney | 6.198286 |
| Waltham Forest | 5.834756 |
| Southwark | 5.516485 |
| Lewisham | 5.449221 |
| Westminster | 5.353565 |
| Newham | 5.305390 |
| City of London | 5.301620 |
| Haringey | 5.134625 |
| Kensington & Chelsea | 5.082465 |
| Lambeth | 4.957751 |
| Camden | 4.935353 |
| Barking & Dagenham | 4.896619 |
| Brent | 4.894554 |
| Islington | 4.844048 |
| Greenwich | 4.763036 |
| Wandsworth | 4.757709 |
| Merton | 4.741273 |
| Tower Hamlets | 4.626701 |
| Redbridge | 4.471182 |
| Barnet | 4.358196 |
| Havering | 4.325230 |
| Ealing | 4.311451 |
| Kingston upon Thames | 4.270550 |
| Enfield | 4.263472 |
| Bexley | 4.248977 |
| Croydon | 4.201100 |
| Hillingdon | 4.200273 |
| Hammersmith & Fulham | 4.137798 |
| Sutton | 4.118523 |
| Bromley | 4.094785 |
| Harrow | 4.059196 |
| Richmond upon Thames | 4.005162 |
| Hounslow | 3.976409 |

**Figure 3.** The increase in housing prices of each London Borough over a 20 year period.

The main challenges I encountered with this task were pertaining to data wrangling. There was a large amount of unnecessary data and the data was initially formatted in a way that was

difficult to read. After transforming the data into a readable format, the next challenge was to arrange it in a way from which trends could easily be read from. Resolving these issues came mostly through trial and error, and testing out different compositions and combinations of the data to see which yielded the results I wanted.

As a further investigation, it would be interesting to find and analyze which factors led to the increase in housing prices, especially since the increase was greater in some areas than in others. Was there a population increase in some areas? Was there another external event which could have led to this increase in housing prices? Depending on what factors that are retrieved, data sets that are related to those factors can be gathered and further analyzed.

Additionally, I would like additional data to address why the housing prices overall seemed to have plateaued after 2017.