# MSc Statistical Programming 2023 Assessed Practical Assignment

### P151

## November 19, 2023

### **British House Prices**

Figure 1 below displays the evolution of House Prices in England over time.

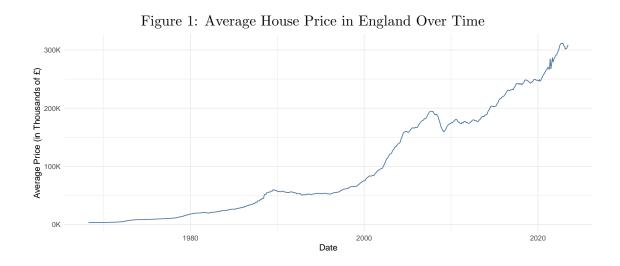


Figure 2 below additionally displays the evolution of House Prices in the Oxford Regions as well as England as a whole over time.

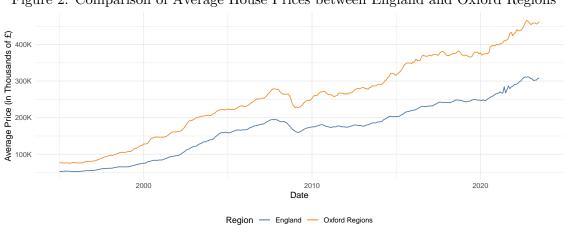


Figure 2: Comparison of Average House Prices between England and Oxford Regions

Table 1 below shows that of the ten regions with the highest median of the ratio <u>regional average house price</u> average house price in England. Perhaps unsurprisingly, we can see that the ten most expensive regions by this metric are geographically concentrated in London and its suburbs, and that no Oxford Regions are included.

Table 1: Ten Highest Median Ratios of Average House Prices

	Region Name	Median Ratio	Initial Price	Final Price	% Increase	Oxford?
1	Kensington and Chelsea	4.59	182694.83	1344669.00	636.02	FALSE
2	City of Westminster	3.24	133025.28	954356.00	617.42	FALSE
3	Camden	2.92	120932.89	828389.00	585.00	FALSE
4	Hammersmith and Fulham	2.79	124902.86	798537.00	539.33	FALSE
5	City of London	2.56	91448.98	905489.00	890.16	FALSE
6	Richmond upon Thames	2.51	109326.12	770107.00	604.41	FALSE
7	Elmbridge	2.34	106524.00	678279.00	536.74	FALSE
8	Islington	2.32	92516.49	710181.00	667.63	FALSE
9	Wandsworth	2.15	88559.04	632895.00	614.66	FALSE
10	Mole Valley	1.98	101899.76	563083.00	452.59	FALSE

Figure 3 below compares the month-on-month percentage increase in House Prices in England to monthly inflation, defined as the percentage increase in the monthly Consumer Price Index over the period in which data for both is available. We can see that like in most countries, the increase in the average price of a house has drastically outpaced the general cost-of-living increase since the year 2000.

600% % Wonth-to-Month Change in % 200% 200% 2010 2000 Date Metric -- House Prices in England

Figure 3: Percentage Increase in House Prices compared to Inflation Rate

# Chromosome Painting