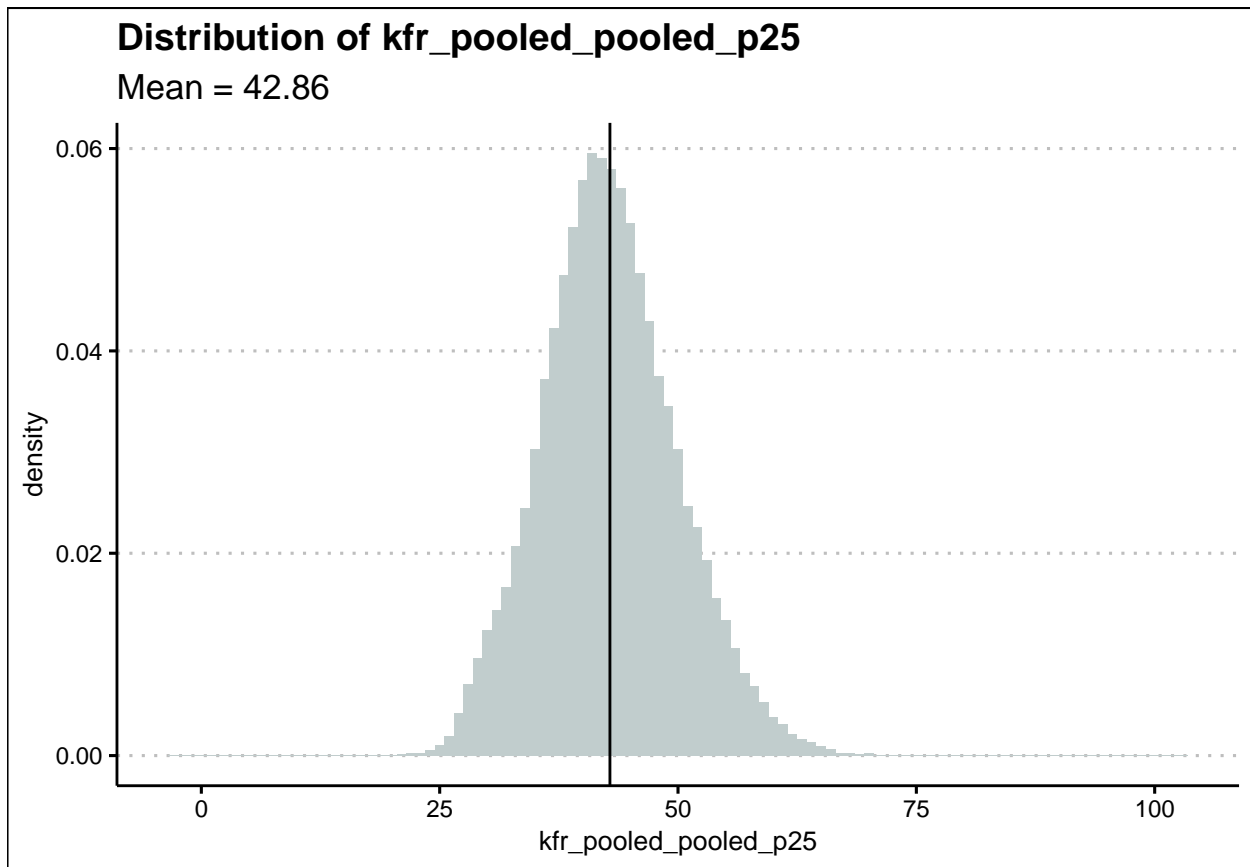# stamford_atlas

Lindsey Greenhill

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Question 2

The kfr_pooled_pooled_p25 is the absolute mobility at the 25th percentile for each census tract. In other words, this statistic measures the average income percentile rank for children whose parents were at the 25th percentile in income. In this data set, the unit is the census tract. Higher values correspond to higher upward mobility. This statistic is estimated using a linear model because the data is pretty linear when plotted child income rank vs. parent income rank. As such, a linear regression fits the data well.

Question 3

Distribution of kfr_pooled_pooled_p25
Mean = 42.86

- The mean value of kfr_pooled_pooled_p25 = 42.86. This means that on average kids with parents in the 25th percentile of income distribution have adult incomes in about the 43rd percentile of the income distribution. The data looks relatively normally distributed.

Question 4 (CHECK ANSWER)

Table 1: Summary Statistics

Variable	Mean	Sd	Min	Max
kfr_pooled_pooled_p25	42.9	7.126	-3.286	103.349

- The variable can be negative or above 100 because the linear model does not have an upper and lower bound to it. That is, it will not correct for values that are over or under the possible outcomes of 0 to 100. For this reason, another model (maybe a glm model) could be better to use to bound the values to 0 and 100.

Question 5

place	avg_kfr_pooled_pooled_p25
Belle Haven	48.50
CT	44.80
USA	42.86

My home census tract is 11200 in Fairfield county in CT. My neighborhood is called Belle haven. The value for kfr_pooled_pooled_p25 = 48.5, which is higher than the state average of 44.8 and national average of 42.86. This implies that kids in Belle Haven have a better chance than the average Connecticuton and average American of climbing the income latter.

Question 6

place	sd_kfr_pooled_pooled_p25
Fairfield County	8.15
CT	7.00
USA	7.12

The standard deviation in fairfield county = 8.15, which is higher than the CT sd of 7 and national sd of 7.12. This means that there is more variation in upward mobility in my home county than in CT as a whole and the country as a whole. Subtantively, this means that while there are areas in my county where upward mobility is quite high, there are also probably areas in my county where upward mobility is quite low. In other words, a larger sd is probbaly more indicative of more values at either end of the spectrum.

Question 7

HOLC_grade	avg_kfr_pooled_pooled_p25
A	44.01
B	42.46
C	39.87

D	36.16

The averages of the kfr_pooled_pooled_p25 for majority A, B, C, and D HOLC neighborhoods are shown in the table above. It seems that in neighborhoods where redlining was worse upward mobility is lower than in neighborhoods where redlining was not prevalent.