Lexington Occupational Statistics: Preliminary Findings

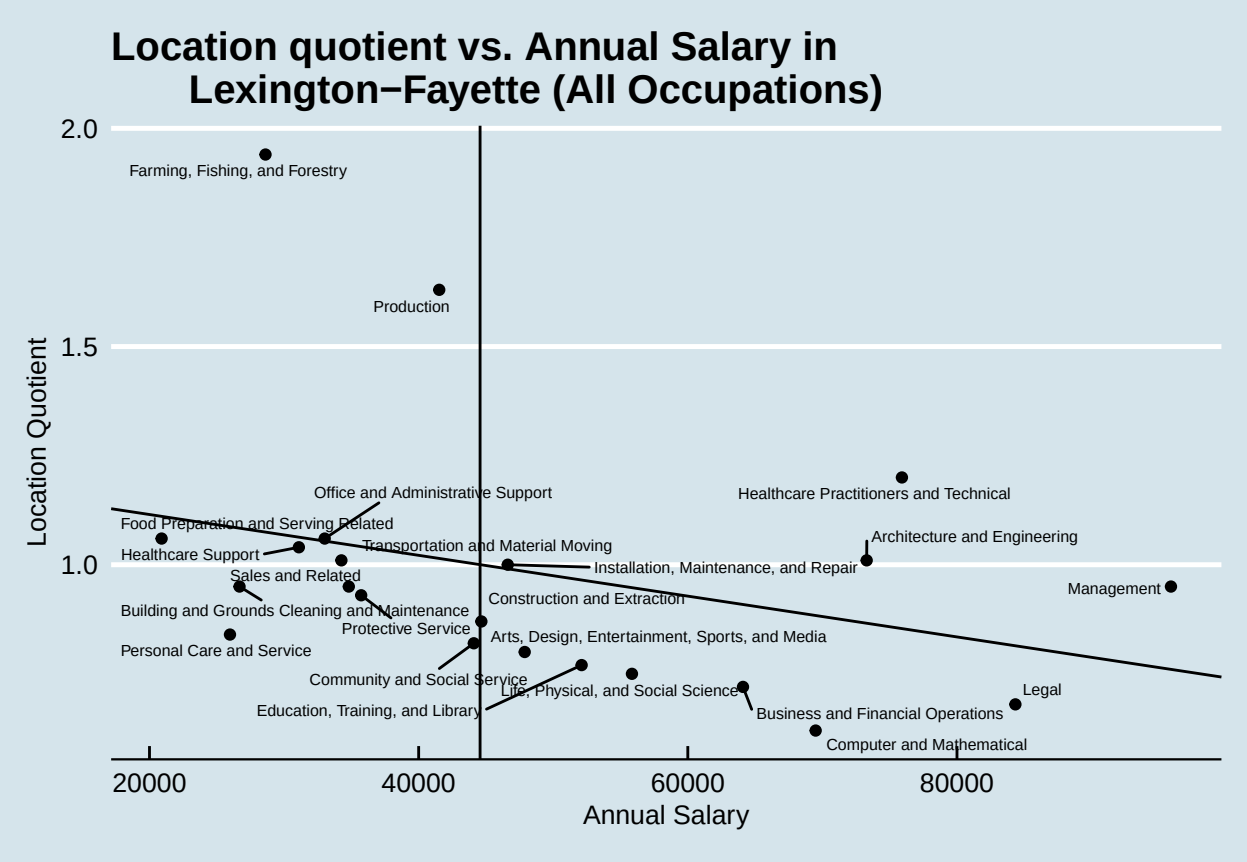
Clearbrook Associates

October 11, 2018

First: What's a Location Quotient (LQ)?

The location quotient for occupations are calculated by dividing the regional concentration of a particular occupation by the national average concentration of that occupation. Thus, an occupation with an LQ of less than one for a given metropolitan region is less concentrated than the national average, and an occupation withan LQ of greater than one is more concentrated than the national average.

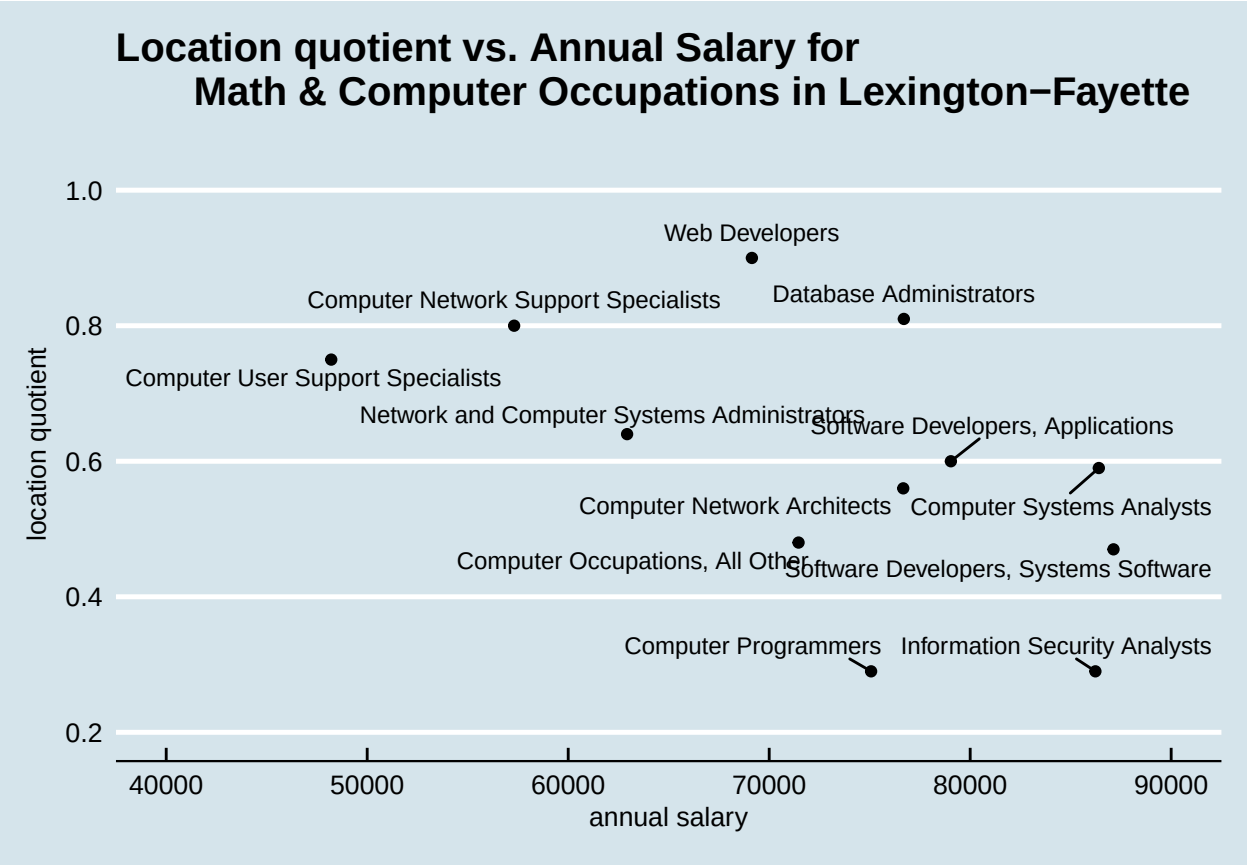
Comparing LQs and Salaries Across Lexington-Fayette Occupation Groups



This first scatterplot depicts the relationship between the location quotients and annual salaries across all major occupation groups in Lexington-Fayette metropolitan area. The vertical line represents the median annual salary in the U.S., and the diagonal line represents the linear model fitting this data. Farming, Forestry, and Fishing occupations have been removed from the visualization (LQ = 1.94).

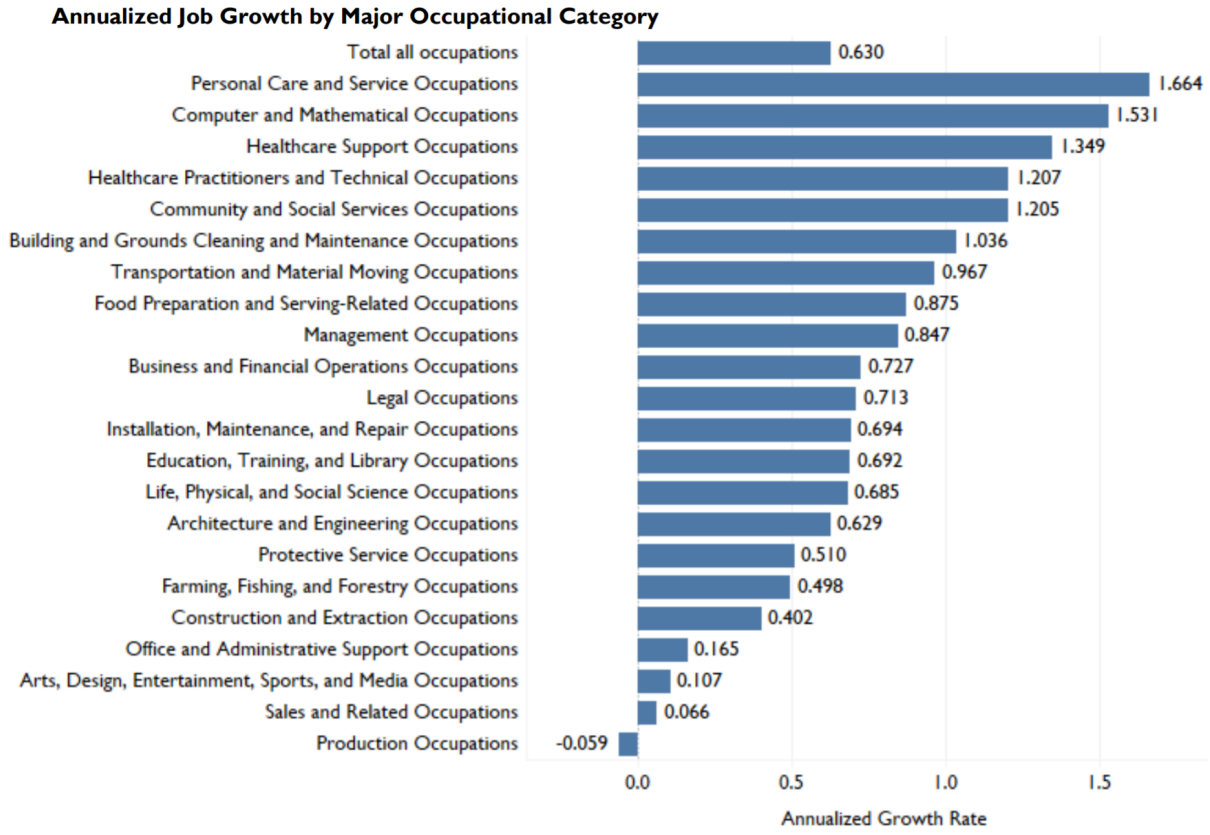
As you can see, there appears to be a negative trend between LQs and annual salaries in Lexington-Fayette, with Healthcare occupations being a notable exception (LQ = 1.20).

Comparing LQs and salaries Across Lexington-Fayette Math & Computer Occupations



We see location quotients of almost exclusively less than one for math and computer occupations. Also, as in the first scatterplot, we again observe a slightly negative trend between LQs and salaries. Operations Research Analysts, not depicted above, are a significant upper outlier with a LQ indicating an occupational concentration of nearly two times the national average (LQ = 1.91).

Annualized Job Growth Estimates by Occupation Group



Interestingly, we see here that Math & Computer Occupations are projected to outpace average job growth in other Kentucky occupations by 243% (1.531/0.630 * 100) year-over-year. So although Math and Computer Occupations are currently underconcentrated in Lexington-Fayette, they are expected to experience much faster than average growth.

Sources

The data visualized in the first two scatterplots this document are as retrieved from the U.S. Bureau of Labor Statistics Occupation Employment Statistics dataset (May 2017). The third visualization was extracted from the Kentucky Center for Statistics "2016-2026 Occupational Outlook" report (September 2018).