

A Brief Analysis of Academic Salaries 2003-2007

The annual ASA survey of Academic Salaries has divided the faculty at research universities into 21 groups, based on academic rank and time in that rank. The information released in the reports are the first quartile, median, third quartile, 90th percentile, and (when there is sufficient data) the 95th percentile.

This report provides an analysis of the median salaries reported for the years 2003-2007, by comparing them to the annual consumer price index (CPI). This is done by setting the 2003 CPI salary equal to the 2003 median salary for each of the 21 groups. For years 2004-2007, the CPI salary is calculated as the previous year's CPI salary times the CPI for the current year divided by the CPI for the previous year. For each of the 21 groups a graph is plotted. The graph contains the median, first and third quartiles, and the CPI salary. These graphs are provided as separate documents.

The CPI values used are:

YEAR	2003	2004	2005	2006	2007
CPI	184	188.9	195.3	201.6	207.3

Assistant Professors (Groups 1-5):

Assistant professor salaries for statisticians tend to match or beat the corresponding CPI salary, at least for the first five years. On the other hand assistant professors with 6 or more years of experience in 2007 and earning the median salary are not doing as well as their counterparts from 2003.

Associate Professors (Groups 6-11):

The results for associate professors are not so good, at least prior to 2007. For most associate professors the median salaries are below the corresponding CPI salary for 2004-2006, but by 2007 almost all are at or above the CPI value.

Full Professors (Groups 12-21):

For full professors the results are mixed. For about half of the groups, the results are similar to those for Associate Professors. For the other half the results are very good. While there does not appear to be any general pattern, the best groups to be in are those that cover 4-9 years in rank.

Additional Comments:

Making sense of these graphs is not simple. For groups 16-21, which cover at least five years, one can think of a faculty member starting in that group in 2003 at the median salary. If that faculty member stayed at the median salary for each successive year, the plot would show how (s)he did versus the CPI.

But most of the groups cover fewer than five years. For these groups it makes more sense to think about a how a person moving into this group one year compares to someone moving into it in a different year. For example, group 1 is assistant professors who have been assistant professors for fewer than 2 years. If a new Ph.D. became an assistant professor in 2007 at the median salary for group 1, (s)he would be better off (by about 5.5%) than a person in the same position in 2003, based on the CPI.