

Analysis of distributions of salary changes in ten-year period 1997 to 2007

Gary S. Collins, April 2, 2008

Information is based on table “Infac ExtArc Lib comparison 97 07 sent.xls” prepared by Coleen McCracken in Institutional Research. Coleen deserves great praise for completing the difficult research needed to obtain valid comparisons of 1997 and 2007 salaries. The table from IR lists ratios of salaries 2007/1997. I divided those ratios by the cumulative change in the CPI-U index over the ten-year period, which according to Coleen was 1.28489. The resulting ratios are called “Ratio of real 2007 to 1997 salary”.

Graphs are provided for four groups of faculty:

1. Those who were full professors both in 1997 and 2007 (sheet Profs in both 97 07)
2. Those who were associate professors both in 1997 and 2007 (sheet Assoc profs in both 97 07).
3. Those who received one promotion between 1997 and 2007 (sheet List of faculty).
4. Those who received two promotions between 1997 and 2007 (sheet List of faculty).

In (3) and (4), I excluded those for whom there was a change in term (e.g., from 9-month to 12-month appointment) or who were a director in 1997 or 2007 because the results might have been anomalous.

Results are shown in four column bar charts on the following two pages. The bars have been color coded to differentiate between professors whose cumulative salary allocations over ten years have exceeded or fallen behind inflation (respectively shown by line pattern or solid red).

To estimate salary increases independent of promotions, I arbitrarily assumed promotional increases of 10%. Therefore, a faculty member promoted once has a deficient change in merit based salary increase if his/her overall increase is below 1.10 (color coded red). Similarly, a faculty member promoted twice and having an overall salary increase below 1.20 is regarded as having had a deficient merit-based salary increase (color coded red).

Numbers of faculty members with deficient merit based increases in the four categories are given in the following table.

	Number with deficient merit-based increases	Number with excess merit-based increases
Full professors in 1997 and 2007	29	113
Associate professors in 1997 and 2007	26	63
Professors promoted once in 1997-2007	21	161
Professors promoted twice in 1997-2007	1	31
Totals	71	368

- 16% of all faculty received deficient salary increases (that is, at less than the cost of inflation).
- 20% of full professors received deficient salary increases.
- 29% of those who were associate professors received deficient salary increases.



