

Report on WKU Faculty Salaries 1995-96 and Benchmark Comparisons

Introduction

Discussions of faculty salaries and comparisons to benchmark institutions frequently can be volatile and emotional. Descriptive statistics especially lend themselves to a variety of interpretations, with different "spins" placed on certain data depending on the objectives to be achieved. President Meredith's January 26, 1996, report that WKU faculty average salaries are now "over 99 percent of the average salary of our benchmark institutions" raised a number of questions about how meaningful the underlying data are and about how these data are interpreted. Questions also have been raised about the detailed data underlying the summary statistics. Western's Faculty Regent has reviewed these data and argues for a different interpretation of the statistics.

There is no easy solution to the different interpretations placed on these underlying data. However, a brief examination of these data may help Western's faculty to understand more clearly the various statistics and percentages about salaries presented to them in recent months. The task of the Fiscal Affairs Committee of the Faculty Senate in this instance has been to review both sets of data independently (data compiled by the Office of Institutional Research and data presented in the February 1996 issue of the Faculty Senate Newsletter) and to offer some suggestions for reaching common ground on the issue of interpreting faculty salaries and benchmark comparisons.

The Benchmark Institutions

Twenty-five institutions from neighboring states comprise the benchmark pool. These institutions range from large urban universities (Memphis) to smaller regional universities (Miami of Ohio). Many offer Master's Degree programs and two or three offer doctoral programs (Ohio University, for example). Much debate has occurred in recent years about changing the makeup of the benchmark pool, as several institutions no longer are strictly comparable with WKU. Questions also have been raised about the absence of other Kentucky regional institutions from the benchmark pool. Would it be a more productive exercise to compare WKU's salaries by rank only against our state peers?

When comparing average salaries at benchmark institutions, one also must consider the relative cost of living in each institution's urban area. What is the purchasing power of \$40,000 at Radford or Ball State compared to the purchasing power of \$40,000 at Western? Some may argue that such considerations are irrelevant to salary comparisons, whereas others suggest that weighted salaries based on relative purchasing powers provide a better comparative statistic. Another more useful comparison of benchmark statistics may be the actual percentage of the institutional budget allocated to base faculty salaries. Who receives what share of the institutional salary pie? Moreover,

should we consider the statistical mix of faculty ranks at benchmark institutions relative to the total average salary figure?

For example, approximately 40 percent of Western's full-time faculty holds Professor rank. At Northeast Missouri State, 16 percent of the full-time faculty holds Professor rank, 33 percent holds this rank at Southeast Missouri, and 44 percent holds Professor rank at Appalachian State. At Ball State, 37 percent of the full-time faculty hold Assistant Professor status, compared to 25 percent at Western. If we agree that higher ranked professors overall earn higher salaries, then meaningful comparisons of means and medians should take into account the relative distribution of faculty by ranks. At Ball State, for example, Assistant Professors comprise 37 percent of the total number of faculty, yet share only 31 percent of the total value of salaries for the institution. At Western, Assistant Professors comprise 25 percent of the total full-time faculty, yet share only 20 percent of the total base salary pool for the institution. How do we account for these differences when comparing ranks and salaries with benchmark institutions? Another important comparison would be the relative salaries of women and minorities within the different ranks and their share of the total salary pool.

A final note about benchmark institution data. WKU's Office of Institutional Research (OIR) obtained salary data for the 1995-96 comparison directly from the benchmark institutions. The Faculty Regent obtained salary data directly from the AAUP offices. Eventually, average salary data are reported annually by the Chronicle of Higher Education. Some inconsistencies have been found between the data obtained by the OIR and by the Faculty Regent. A random check of data reported by the benchmark institutions revealed slight variations in the total dollars reported. These variations occur because of last-minute adjustments to reported figures by the institutions. However, after conducting a difference of means statistical test between the two sets of data, we concluded that the differences exerted no significant impact on the summary statistics reported by either the OIR or by the Faculty Regent.

Medians, Means, and Summary Statistics

President Meredith's contention that WKU faculty average salaries are now "over 99 percent of the average salary of our benchmark institutions" is technically correct, as long as one understands how this figure is generated. WKU's average salary for all faculty last year came to \$44,636 (\$47,492 for men and \$39,034 for women). The MEDIAN average salary for all benchmark institutions for 1995/96 came to \$44,659. Using this comparison, WKU is at 99.9 percent of benchmark.

However, the AVERAGE salary for all benchmark institutions for 1995/96 (calculated by summing each institution's total salary amount and dividing by the total number of faculty) is \$46,168. Using this comparison, WKU is only at 96.68 percent of benchmark. If we disaggregate the male and female components of the total salaries, then further differences are found. Compared

to the average female salary for benchmark institutions at \$39,854, the average female salary at WKU is \$39,034 or 97.94 percent of benchmark. Western's average male salary is \$47,492, compared to the average benchmark male salary of \$49,315. WKU males are at 96.3 percent of benchmark institutions. Women comprise 33.76 percent of the total full-time faculty at WKU and 33.26 percent of the total full-time faculty at benchmark institutions. When we compare the total share of female salaries against all salaries, females at Western are slightly better off, than females at the benchmark institutions. At Western, 33.76 percent of the total faculty (females) receive 29.53 percent of total salaries, compared to 28.71 percent of total salaries for all females at the benchmark institutions.

Another interpretation difference in the material presented by the Office of Institutional Research (OIR) is the calculation of benchmark MEDIAN salary as a measure. OIR calculated the average salary for each benchmark institution and then calculated the MEDIAN of the average salary. This revealed a MEDIAN average benchmark salary of \$44,659. This is the number relied upon by the administration for comparison purposes. However, if we rank order the total faculty salaries and the total number of faculty for the benchmark institutions, the MEDIAN value is represented by Appalachian State, with 572 faculty and a total salary of \$25,928,282. This reveals a MEDIAN average salary of \$45,329 compared to Western's average of \$44,636. Using this figure, Western is at 98.47 percent of the true MEDIAN salary not the MEDIAN average salary.

Further analysis could be conducted on all of the ranks within the benchmark institutions, with comparisons to Western. For example, the true average salary of Assistant Professors at benchmark institutions is \$38,256. At Western, the average Assistant Professor salary is \$36,141, approximately 94.47 percent of the benchmark true mean. For female assistant professors, the average Western salary is \$35,275, only 90.89 percent of the female assistant professor benchmark salary of \$38,810.

Summary

Caution must be used when analyzing any set of data. Salary data are important to faculty, especially comparisons against benchmark institutions and Kentucky institutions. Subjective analyses, such as "are we better or worse off than our counterparts," are fraught with difficulty. Quantitative analyses present their own sets of problems, especially in terms of how data are used and interpreted, who is doing the interpretation, and for what purpose. Both the administration at Western and the faculty's Regent representative have made valid points about the way we interpret salary data. Faculty should be aware that summary data can be misleading, especially if these data mask inherent problems within the data set. The Fiscal Affairs Committee recommends that faculty become more involved in the investigation process and become more familiar with the underlying data that drive such analyses.