

A Brief Guide to the AAUP Salary Data

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The American Association of University Professors (AAUP) has been collecting average faculty salary data by rank and gender for over 30 years. These institutional level data are published each year, usually in the March/April issue of *Academe: Bulletin of the American Association of University Professors*, along with an article analyzing faculty compensation issues written by the chair of the AAUP committee

that supervises the data collection. Last year's report that I wrote highlighted, among other things, the decline in the salaries of faculty at public higher education institutions relative to the salaries of faculty in private higher education institutions and the growing dispersion of average salaries across higher education institutions, both within and between the public and private sectors.¹A long string of talented economists, including William Baumol (then at Princeton), Peter Steiner (Michigan), Robert Dorfman (Harvard), W. Lee Hansen (Wisconsin), Hirschel Kasper (Oberlin), Daniel Hamermesh (Texas) and Linda Bell (Haverford) have served as chair of the committee.

The AAUP data not only document faculty salary levels, but may also play a role in determining future levels. They represent average data for all full-time faculty members at the university, excluding faculty in medical colleges and health sciences. Thus, they can not be used to compare salaries within a discipline across institutions. They have long been used, however, by faculty on budget or finance committees to inform discussions with central administrators regarding the parameters of the next year's budget (e.g. tuition increases, faculty salary increases, and endowment payout rates). Often, the faculty and administration will agree on a set of institutions that they consider their competitors for faculty and discuss where they want to rank vis a vis their competitors with respect to faculty salaries. If an institution's relative salary position declines over time, faculty try to use this to pressure the administration to raise salaries at a more rapid rate. Conversely, if the institution's relative salary position improves beyond where the institution wanted to be, the administration can use this information to suggest a moderation of faculty salary increases in the following year. Because both faculty and administrators around the nation understand the usefulness of these data, response rates to the survey have historically been very high, save for two-year colleges.

In addition to collecting average salary data by rank, the AAUP collects and publishes information on the costs to academic institutions of the legally mandated and voluntarily

provided or bargained benefits that the institutions provide to faculty (social security, health insurance, retirement contributions, housing benefits, children's tuition benefits and the like). This permits faculty and administrators to also analyze the institution's average compensation by rank and to discuss if the institution's faculty compensation packages reflects a mix of salary and benefits that is optimal from both the institutional and faculty perspective. In recent years, increases in employer health insurance costs have often caused average faculty compensation to increase by more rapid rates than average faculty salaries, to the consternation of both faculty (who see no improvements in their health benefits only cost increases) and to the institution (that has to bear a large share of the increasing costs).

The AAUP also collects information on the number of male and female faculty at each rank, the average salary by rank and gender and the proportion of faculty members with tenure by rank and gender. These data can be used in studies of how gender differences in average salaries and faculty numbers vary across institutions and ranks at a point in time and at a given institution or nationally over time. These data are insufficient for studies of gender discrimination in salaries because information is not collected on the distributions of male and female faculty members across fields of study, their seniority distributions, or their "productivity". Similarly, they can not be used for the type of cohort analyses that one is able to do with the data collected by CSWEP; for example tracing an entering cohort of new assistant professors to see how the probabilities of ultimately receiving tenure vary between male and female faculty members. However, the AAUP data do suggest a number of patterns that should be familiar to CSWEP members - small annual progress in female representation at each rank, female representation being higher at the assistant professor level than at the associate professor level and higher at the associate professor level than at the full professor level. The 2002-2003 data indicated that women earned an average of 88.8 percent of what men earned at the full professor level, 93.1 percent of what males earned at the associate professor level and 92.4 percent of what males earned at the assistant professor level. These differentials in average male and female salaries have not substantially narrowed during the last 5 to 10 years.

The AAUP also asks institutions to report the number of its faculty members at each rank who are continuing faculty members. Continuing faculty members are defined as faculty members who are present at the institution in the current year

who were also present at the institution in the previous year. So for example, an assistant professor in year t-1 that is promoted to associate professor in year t would be considered a continuing assistant professor. Institutions are then asked to report their total payroll by rank in the current year and in the previous year for these continuing faculty members. These data permit the AAUP to compute for each institution the average percentage increase in a year for its continuing faculty members at each rank.

The AAUP publishes information for each institution on the average percentage increase in continuing faculty member salaries at each rank, along with information on the average percentage increase in the salary of faculty members at each rank. The former shows how faculty members who have stayed at the institution over the two-year period have fared. Usually, the average percentage increase in salaries for continuing faculty members is higher than the increase in the average salary at each rank because some high paid people in a rank retire or voluntarily or involuntarily leave to go to other academic or nonacademic employers, and these departures are typically replaced by lower paid younger people.

The AAUP does not publish data on the number of continuing faculty members at each institution but these data are available in the institutional submissions. By dividing the number of continuing faculty members in a rank one year, by the number of faculty members in the rank the previous year, one obtains an estimate of the continuation rate, the share of faculty members in a rank that are at the institution for two consecutive years. At the assistant professor level, the continuation rate will be influenced by both voluntary and involuntary turnover. At the full professor level, it will be influenced by faculty retirements, which depend upon the age distribution of the institution's full professors. At the associate professor level, in institutions in which associate professors are a tenured rank, it will reflect primarily voluntary turnover. Research using these data has shown that an institution's associate professor continuation rate is positively related, *ceteris paribus*, to its associate professor salary level, a result that should not surprise economists.² Similarly, research has indicated that associate professor continuation rates are higher at private than at public institutions, a result that is consistent with faculty members at public higher education institutions receiving lower average salaries than faculty members at private higher education institutions.

If one is interested in how economists' salaries compare to salaries of faculty members in other disciplines, one must

turn to other salary surveys. Every few years the AAUP salary report issue contains information on salaries by discipline obtained from an annual survey of doctoral-granting institutions conducted by the Office of Institutional Research and Management at Oklahoma State University (OSU).³ Begun in 1974 by choosing among members of the National Association of State Universities and Land Grant Colleges, the participating institutions are generally among the "flagship" public doctoral-granting universities in their respective states. Several private land grant universities (Cornell and MIT) are also often survey respondents.

The average salary advantage of faculty employed in economics departments at these institutions relative to the average salary of humanists employed at these institutions grew during the last 15 years of the 20th century. For example, at the new assistant professor level the earnings advantage of economists relative to English faculty members grew from about 33 percent to 49 percent during the period.⁴ National averages may give a very misleading impression, however, of how different higher economists' salaries are as compared to another discipline's faculty salaries at any specific institution. For example, if we order institutions in the 2001-2002 OSU survey by the magnitude of the salary advantage that new assistant professors in economics have over new assistant professors in English, the advantage at the 25th percentile institution was 34 percent and the advantage at the 75th percentile institution was 65 percent, a spread of 31 percentage points.⁵ Thus, the salary advantage that economists earn relative to English professors varies widely across institutions.

Endnotes

¹ Ronald G. Ehrenberg, "Unequal Progress: The Annual Report on the Economic Status of the Profession, 2002-2003", *Academe* 89 (March/April 2003): 22-33, available at <http://www.aaup.org/surveys/zrep.htm>. See also, Ronald G. Ehrenberg, "Studying Ourselves: The Academic Labor Market", *Journal of Labor Economics* 21 (April 2003): 267-287

² Ronald G. Ehrenberg, Hirschel Kasper and Daniel I. Rees, "Faculty Turnover in American Colleges and Universities", *Economics of Education Review* 10 (1991): 99-110

³ A more complete description of the survey and information on how to purchase the annual reports that result from it can be found at <http://it.okstate.edu/irim/FacultySalary.html>

⁴ Sadly, relative to higher paying fields such as business, economics department faculty members' salaries fell during the period.

⁵ I am grateful to Lee Tarrant of the OSU Office of Institutional Research and Management for making these calculations for me.