

Interim Report
UC Berkeley Faculty Salary Equity Study
September, 2014

Background: timeline

- 07/11:* The University of California completed a system-wide study of faculty salaries, with particular attention to gender and ethnicity.
- 01/12:* President Yudof determined that the study provided “insufficient basis for specific corrective action.”
- 09/12:* President Yudof directed that each campus draft a plan for a salary study and submit it for review.
- 01/13:* Berkeley submitted its plan.
- 08/13:* The UC Office of the President approved our plan; we circulated it to the faculty after the start of the semester.

Berkeley’s steering committee

The committee is a joint Administration/Senate group:

Gibor Basri (Astronomy)
Vice Chancellor for Equity and Inclusion

Janet Broughton (Philosophy)
Vice Provost for the Faculty and committee chair

David Card (Economics)

Jose Carmena (Electrical Engineering and Neuroscience)
for the Senate’s Committee on Diversity, Equity and Campus Climate

Marc Goulden, Ph.D.
Director of Data Initiatives for the Office for Faculty Equity and Welfare

Jennifer Johnson-Hanks (Demography and Sociology)

Marjorie Shapiro (Physics)
for the Senate’s Committee on Budget and Interdepartmental Relations

Angelica Stacy (Chemistry)
Associate Vice Provost for the Faculty.

Preliminary work

The steering committee began its work by studying and discussing background documents that included the UC system-wide report of 2011, along with several written responses to it; L. Haignere, *Paychecks* (AAUP, 2002); and documents concerning the campus's salary history, practices, and data.

We agreed that our early tasks were these: filling in missing degree-year data for our most recent hires; calculating off-scale increments for the period 2003-09, which were missing from our cumulative data-set; and completing descriptive data for a number of variables, including rank/step, age, salary, years since hire, and years since highest degree.

Statistical studies now in progress

Our preliminary work helped us to decide upon several kinds of statistical analyses that are designed to give us insight into salary equity at Berkeley. We are using three kinds of general regression models, following common practice in the salary-equity literature:

White male: A salary regression is fitted for white men only and then salary residuals (predicted vs. actual salary) are calculated for women and various ethnic groups.

Total population: A salary regression is fitted for all faculty and then gender and ethnicity variables are introduced in the model.

Total population with log [salary]: This model is the same as the total population model except that salary is logged so that it can be interpreted in terms of percentage differences rather than dollar differences.

Within each of these kinds of models, we are successively introducing variables or groups of variables to create a number of preliminary sub-models. We have selected these variables because there are good theoretical reasons to believe that they are associated with salary. The order of introduction follows social science convention, starting with measures of time. The groups of variables are as follows:

- years since highest degree, degree type, and years since hire,
- years since highest degree squared,
- categorical variables for department/school appointment,
- market salary ratios based on Association of American University Data Exchange (AAUDE) comparative data and a multiple appointment yes/no variable,
- faculty rank (assistant, associate, full) and years at rank,
- rank with further distinctions (assistant, associate, full below VI, full VI to IX, full Above Scale) and years in the relevant category, and
- an outside offer/retention yes/no variable.

In several selected units, we are also examining the relationship between citation rates and rank, and in several selected units we are examining retention effects in greater detail.

We have used all models and sub-models at the campus level and at the decanal level, combining several of our small professional schools in order to achieve minimum cell size. In each model and sub-model, and at each unit level, we are investigating differences by gender and ethnicity.

For each of the models, preliminary results for several of its sub-models produced high adjusted R-square values, indicating that the sub-model describes variability well. Those sub-models were among those that included rank as a variable. Because the steering committee is aware that rank may be tainted, i.e., may itself be the product of gender- or ethnicity-based bias, we are considering further studies that might help us achieve a better understanding of this issue for our campus.

We anticipate that our report will not single out one model and sub-model, or one level of unit analysis, as uniquely informative. Instead, different models and sub-models will help us understand different aspects of our salary structures and will help us define a range within which to identify any significant salary differences by gender or ethnicity.

Remaining work

We will be updating our salary data to reflect 7/1/14 actions and then running final regressions, after which we will be able to block out our final report. The final report will include visual or numerical presentations of data; a discussion of the general notion of equity insofar as it is relevant to this study; an interpretation of our data and analyses; and our recommendations concerning future programs, policies, and processes. We anticipate completing our final report no later than the end of December of 2014.