University of Virginia Faculty Salary Study Task Force Executive Summary

The University of Virginia has ethical, legal and competitive reasons to ensure that all members of its faculty are compensated equitably and fairly. This imperative led Provost John Simon to appoint a Faculty Salary Study Task Force in October 2012. He charged the Task Force to conduct a quantitative examination of faculty salaries and report its findings. The present Report describes our work—including data gathering, principal findings, and recommendations. Appendix A provides more detailed discussion of the econometric analysis and additional empirical results.

In this Executive Summary, we describe several key decisions the Task Force made in designing our quantitative study, discuss our most important empirical results, and summarize our recommendations for further action.

Available Data & Limitations

With the cooperation of the Office of Institutional Assessment & Studies at the University of Virginia, the Task Force obtained 2012 and 2013 salaries for all tenured and tenure-track faculty at the University, with the exception of those working at the School of Medicine. The Task Force was also able to collect demographic and employment history data for these faculty. Our empirical analysis examined how nine-month faculty salaries are related to factors including school, academic discipline, rank, years since highest degree, and years at the University of Virginia. The study also investigated whether faculty salary levels were associated with gender, race or citizenship after controlling for these explanatory variables.

A significant limitation of the study is that the Task Force did not have access to direct measures of individual performance such as the quality or quantity of scholarly publications, external research funding, significant service activities, teaching evaluations, or annual performance evaluations conducted by peers, department chairs, or deans. Concerns about personal privacy would have militated against releasing some of this information. Moreover, these inherently multidimensional indicators of faculty productivity do not currently exist as quantitative measures, comparable across disciplines, and susceptible to meaningful empirical

analysis. The Task Force also did not have access to other variables that might influence faculty salaries, such as the receipt of outside offers.

Because these factors often affect individual salaries, this study cannot determine the cause of any observed salary disparities between demographic groups or for specific individuals. The Task Force understood this limitation, shared by similar studies at other institutions, from the outset. Salary disparities can result from various causes, including discrimination in salary setting, differential opportunities or work assignments, variations in faculty productivity, or some combination of these factors. This study is thus descriptive and is intended to help the University review policies that may affect salary determination. The Task Force offers several specific recommendations below.

Principal Empirical Findings

With these important limitations in mind, the Task Force used multiple regression analysis to investigate any association of faculty salaries with gender, race or citizenship. The main findings of the study include the following:

- After controlling for the influence of school, field, rank, years since highest
 degree, and years at UVa, the average salary of female faculty members at the
 University of Virginia was 2.7% less than the average salary of male faculty, an
 average difference of \$3,638. Similar differences have been identified at other
 peer universities.
- There was no statistically significant gender difference in average salary for assistant professors; however, the average salary of female faculty at the associate and full professor ranks lagged the average salary of male faculty by 4.8% (p value 0.03) and 3.4% (p value 0.09), respectively.
- Additional analysis of the data suggests that these gender gaps in average salary did not result from a few "extreme" outlying individuals (meaning those women or men with either very low or very high salaries). Instead, the statistical difference arose from the many smaller differences found between the salaries of male and female faculty members once school, field, rank, years since highest degree, and years at UVa were taken into account.

After controlling for the variables mentioned above, the Task Force was unable to
detect any significant association of salaries with race or citizenship, though the
comparatively small number of faculty in these groups limited our ability to draw
meaningful statistical inferences.

Figure 1 presents our principal empirical results in graphical form. The length of each bar indicates the difference between the average salary of men and women, and the "whiskers" at the end of each bar show the width of a 95% confidence interval for each bar.

Tenured & Tenure Track Faculty

Full Professors

Associate Professors

Figure 1. Gender Differences in Salary for 2013, Overall and By Rank

Source: Faculty Salary Study Task Force, Report to the Provost at pp.15-19.

Recommendations

Acknowledging once again the significant limitations of the available data, the Task Force believes that the study results indicate the need for rigorous further investigation and possible salary adjustments in individual cases. Accordingly, the Task Force makes the following recommendations:

- 1) Equity Review and Salary Adjustments: The Provost in collaboration with deans and department chairs should ensure that a careful qualitative assessment of individual faculty salaries takes place. The process should incorporate the measures of productivity not included in this study. The goal of the review should be to ensure that individual compensation fairly reflects each faculty member's contributions to teaching, research and service.
- 2) Study of Institutional Practice: Many hypotheses could explain the identified gender differences in salaries, and the University should make serious efforts to better understand particularly those factors within its potential control. The Task Force recommends that, as soon as possible, the University conduct a review of institutional practices that could differentially affect faculty success. Specific topics that should be investigated include (a) allocation of resources complementary to research productivity such as lab space and research assistance; (b) assignment to committees and the assessment of institutional service; (c) efforts made in schools and departments, such as mentoring junior colleagues, to support untenured faculty in the promotion process; (d) assistance provided to tenured faculty seeking promotion from associate to full professor and appointment to endowed chairs; (e) the observed gender disparity in the rate and timing of progression from associate to full professor; and (f) any potential gender disparities in hiring and salary setting for senior new hires coming from other institutions.
- 3) Extending the Empirical Analysis: The Task Force has identified additional information that could improve future empirical examination of salary equity at the University of Virginia. We recommend that the University (a) improve recording of leaves, distinguishing professional, family and administrative absences from the University, (b) improve recording of outside offers and special salary adjustments, and (c) centralize and standardize recording of joint appointments and terms of compensation such as the number of summer months assumed for 12-month contracts. We also recommend that the University conduct similar empirical analyses of the salaries of both general faculty members (i.e., non-tenure-track faculty) and Medical School faculty. These analyses should be sensitive to the distinctive and diverse institutional roles and responsibilities of these groups of faculty.
- 4) <u>Periodic Review:</u> The Task Force encourages the Provost to establish a schedule for periodic review of group differences in faculty salaries. These periodic studies should incorporate the additional information discussed above when such measures become available.