Table 1

Number of employees and assistant professors in each university systems. Only the data on assistant professors was used in this study.

Table 2

A complete list of the aggregated disciplines and their mean employment month for controlling the disciplinary effects. Because the names of departments at different universities are different, a new label was created grouping departments together based on both the mean salary and the name of the department. This was stored in a variable called discipline. For example, electrical and computer engineering, information systems, and computer science all belong to computer science, so they were combined. The average employment month was computed for each discipline based on the UNC data and was used for the computation of monthly salary for all the other schools.

Table 3

P-values testing for existence of gender wage gaps accounting for discipline difference by university systems. The p-values used are the permutation p-values devised in the method section specifically for this model.

Figure 1

Empirical cumulative distribution functions contrasting the distribution of male and female salaries for combined data. On the x-axis is of monthly salary. On the y-axis is the proportion of people in each group making less than the corresponding salary on x-axis.

Figure 2

The difference of male and female empirical distribution functions (black line) for combined data compared to a thousand of differences with randomly assigned gender (blue lines). On the x-axis is of monthly salary. On the y-axis is the proportion of males minus the proportion of females making less than the corresponding salary on x-axis.

Figure 3

The difference of male and female empirical distributions for combined data (black line) compared to a thousand of permuted differences with randomly assign gender within discipline (blue lines). On the x-axis is of monthly salary. On the y-axis is the proportion of males minus the proportion of females making less than the corresponding salary on x-axis.

Figure 4

The difference of male and female empirical distribution functions (black line) compared to a thousand of permuted differences with randomly assign gender within discipline (blue lines) for each of the four university systems separately. On the x-axis is of monthly salary. On the y-axis is the proportion of males minus the proportion of females making less than the corresponding salary on x-axis.