## Decompose the gender wage gap

What part of the gender wage gap is due to differences in productivity? Defendants argue that billable hours explain the gap. You will make this statement more precise by *evaluating* the regression of salaries on billable hours and departments.

Your task is to estimate how much female associates would have earned, had they been paid the same way as male associates.

## **Task: Create counterfactual predictions**

- 1. Estimate the regression of salaries on billable hours and departments *on the sample of male associates*. This model captures the pay practices for male associates.
- 2. Use the resulting MODEL card on the data *for female associates*. You will get a prediction exhibit. For example, if your model is 1X, and in the hole you see 5, take the card 1X5 as the result.
- 3. Note the difference between the actual and predicted salaries ("bias"), both in dollars and in percentage terms. How do you interpret the difference?
- 4. Subtract the bias from the raw wage difference. What is the remaining difference? How do you interpret it?
- 5. (Optional) Do the reverse prediction: estimate how much male attorneys would have earned, had they been paid according to female pay practices. Compare the results.

## **Presentation and discussion**

What fraction of the pay gap can be explained by differences in pay practices rather than differences in job characteristics and performance? You may want to offer a settlement to plaintiffs.