

Case Study: Severance Pay

When one company buys another company, it is not unusual that some workers are terminated. The severance benefits offered to the laid-off workers are often the subject of dispute. Suppose that the Laurier Company recently bought the Western Company and subsequently terminated 20 of Western's employees. As part of the buyout agreement, it was promised that the severance package offered to the former Western employees would be equivalent to those offered to Laurier employees who had been terminated in the past year. Thirty-six-year-old Bill Smith, a Western employee for the past 10 years, was one of those let go. His severance package included an offer of 5 weeks' severance pay. Bill complained that this offer was less than that offered to Laurier's employees when they were laid off, in contravention of the buyout agreement. A statistician was called in to settle the dispute. The statistician was told that severance is determined by length of service with the company. To determine how generous the severance package had been, a random sample of 50 Laurier ex-employees was taken. For each, the following variables were recorded:

Number of weeks of severance pay

Number of years with the company

The statistician would like to use the above sample information and the appropriate statistical method to determine whether Bill is correct in his assessment of the severance package. *Your report should have the following qualities:*

- Your report must be in a genuine report format with problem definition, analysis and final conclusion.
- All important analysis steps needs to be followed to arrive at the model to be used for prediction. Attach the details of your analysis at the end of your report. Very simplistic analysis with no sufficient details is assigned a near zero credit. Just running excel does not guarantee any credit.
- Your final conclusion should use both versions of 95% confidence intervals. Improper use of these and corresponding wrong/sloppy interpretations is highly penalized.