**Effect of Worker Compensation Laws on Weeks out of Work**

To study the length of time (in weeks) that an injured worker receives workers’ compensation, on July 15, 1980, Kentucky raised the cap on weekly earnings that were covered by workers’ compensation. An increase in the cap has no effect on the benefit for low-income workers, but it makes it less costly for a high-income worker to stay on workers’ compensation. Therefore, the control group is low-income workers, and the treatment group is high-income workers.

Using random samples both before and after the policy change, test whether more generous workers’ compensation causes people to stay out of work longer (everything else fixed). Start with a difference-in-differences analysis, using log(*durat*) (duration of benefits) as the dependent variable. Let *afchnge* be the dummy variable for observations after the policy change and *highearn* the dummy variable for high earners. The estimated equation, with standard errors in parentheses, is

1. Interpret the coefficient on the interaction term.
2. The coefficient on *afchnge* is small and statistically insignificant, why?
3. What do you make of the coefficient on *highearn*?
4. According to R2, the dummy variables explain only 2.1% of the variation in log(*durat*), why?

Answer:

1. , which implies that the average length of time on workers’ compensation for high earners increased by about 19% due to the increased earnings cap.
2. The coefficient on *afchnge* is small and statistically insignificant because as is expected, the increase in the earnings cap has no effect on duration for low-income workers.
3. The coefficient on *highearn* shows that, in the absence of any change in the earnings cap, high earners spend much more time – on the order of 25.6% on average – on workers’ compensation.
4. The dummy variables explain only 2.1% of the variation in log(*durat*) because there are clearly many factors, including severity of the injury, that affect how long someone receives workers’ compensation.