What I learned

I focus on the impact of patent ownership change on employee stock option compensation. I use a Court of Appeals Federal Circuit ruling in 2008 as a quasi-natural experiment to examine the effects of a shift in patent ownership from inventor-employee to employer on employee stock option compensation and its consequences for a firm’s innovation activities. I find that treated firms, located in formerly pro-employee invention assignment states, increase employee stock option compensation and innovation activities following the CAFC ruling. Main results are not driven by the global financial crisis or firm financial constraints.

Motivation

Conclusions

Use the CAFC ruling in 2008 as a quasi-natural experiment that reduces employees’ incentives to innovate. Firms from treatment states grant more employee stock options compared to control states after the CAFC ruling in 2008. Employee stock option grants have a significant positive impact on corporate innovation.

Research Questions & predictions

H1: The 2008 CAFC ruling leads to an increase in employee stock option grants for firms headquartered in treatment states

H2: Granting employee stock options mitigates the negative impact of the CAFC ruling on corporate innovation in treatment states

Research Design

\[ OPT_{it} = \beta_0 + \beta_1 POST_{it} + \beta_2 TREAT_{it} + \beta_3 POST_{it} \times TREAT_{it} + \beta_4 SIZE_{it} + \beta_5 ROA_{it} + \beta_6 SG_{it} + \beta_7 PPE_{it} + \beta_8 MEB_{it} + \beta_9 LYT_{it} + \beta_{10} R&D_{it} + \beta_{11} RET_{it} + \beta_{12} FAS123R_{it} + \text{year fixed effects} + \text{industry fixed effects} + \epsilon_{it}. \]