

Specification

$$Y_{it} = \beta_1 + \beta_2 Post_t \times Treat_i \times CF_i + \beta_3 Post_t \times Treat_i + \beta_4 Post_t \times CF_i + \beta_5 X_i + \eta_t + \epsilon_{it}$$

where

- Y_{it} = Delay on project i in quarter t
- $Treat_i = 1$ if the project is classified as “small business”
- $Post_t = 1$ if the quarter is after QuickPay was implemented
- $CF_i = 1$ if the project receives contract financing
- X_i are project level controls
- η_t are year-quarter fixed effects

Interpretation

Projects receiving contract financing

- Small Business + After QP + Receives CF = $\beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5$
- Large Business + After QP + Receives CF = $\beta_1 + \beta_4 + \beta_5$
- Small Business + Before QP + Receives CF = $\beta_1 + \beta_5$
- Large Business + Before QP + Receives CF = $\beta_1 + \beta_5$

Effect on projects that receive CF =

$$\begin{aligned} & [(SmallBusiness + AfterQP + ReceivesCF) - (LargeBusiness + AfterQP + ReceivesCF)] \\ & - [(SmallBusiness + BeforeQP + ReceivesCF) - (LargeBusiness + BeforeQP + ReceivesCF)] \\ & = [(\beta_1 + \beta_2 + \beta_3 + \beta_4 + \beta_5) - (\beta_1 + \beta_4 + \beta_5)] - [(\beta_1 + \beta_5) - (\beta_1 + \beta_5)] \\ & = \beta_2 + \beta_3 \end{aligned}$$

Projects that do not receive contract financing

- Small Business + After QP + No CF = $\beta_1 + \beta_3 + \beta_5$
- Large Business + After QP + No CF = $\beta_1 + \beta_5$
- Small Business + Before QP + No CF = $\beta_1 + \beta_5$
- Large Business + Before QP + No CF = $\beta_1 + \beta_5$

Effect on projects that do not receive CF

$$\begin{aligned} & = [(\beta_1 + \beta_3 + \beta_5) - (\beta_1 + \beta_5)] - [(\beta_1 + \beta_5) - (\beta_1 + \beta_5)] \\ & = \beta_3 \end{aligned}$$