i state

t year   eg unem

$$\text{Investment}_{it} = \beta_0 + \beta_1 \text{regulations}_{it} + a_i + u_{it}$$

$$\text{corr}\left(\text{regulations}_{it}, \text{unem}_{it-1}\right) < 0 \quad \begin{array}{l}\text{violates strict}\\ \text{exog but not}\\ \text{contemp exog}\end{array}$$

$$\text{corr}\left(\text{regulations}_{it}, \text{unem}_{it}\right) > 0 \quad \begin{array}{l}\text{violates}\\ \text{contemp}\\ \text{exog &}\\ \text{strict exog}\end{array}$$

$$wage_{it} = \beta_0 + \delta_0 d2_t + \beta_1 educ_{it} + a_i + u_{it}$$

$$wage_{i2} = (\beta_0 + \delta_0) + \beta_1 educ_{i2} + a_i + u_{i2}$$

$$wage_{i1} = \beta_0 + \beta_1 educ_{i1} + a_i + \overset{+\beta_2 race_i}{u_{i1}}$$

$$wage_{i2} = \beta_0 + \delta_0 + \beta_1 educ_{i2} + \overset{\beta_2 race_i}{a_i} + u_{i2}$$

$$\Delta wage_i = \delta_0 + \beta_1 \Delta educ_i + \Delta u_i$$

$$Race_i \quad const \ over \ time$$