

Estimate a simple learning model
Assume no censoring or truncation

• Estimate a simple learning model
Assume no censoring or truncation

• Signals are log wage residuals

- Estimate a simple learning model
- Assume no censoring or truncation
- Signals are log wage residuals
- Individuals infer their ability from these residuals

- Estimate a simple learning model
- Assume no censoring or truncation
- Signals are log wage residuals
- Individuals infer their ability from these residuals

$$\log w_{it} = X_{it}\beta + a_i + \varepsilon_{it}$$

• Place distributional assumptions on a_i and ε_{it}

- Place distributional assumptions on a_i and ε_{it}
- Estimate $(\beta, \sigma_a^2, \sigma_\varepsilon^2)$ by maximum likelihood

- Place distributional assumptions on a_i and ε_{it}
- Estimate $(\beta, \sigma_a^2, \sigma_\varepsilon^2)$ by maximum likelihood
- Recover each person's beliefs at each point in time

- Place distributional assumptions on a_i and ε_{it}
- Estimate $(\beta, \sigma_a^2, \sigma_\varepsilon^2)$ by maximum likelihood
- Recover each person's beliefs at each point in time
- Compare results with other panel data estimators (FE, RE)

- Place distributional assumptions on a_i and ε_{it}
- Estimate $(\beta, \sigma_a^2, \sigma_\varepsilon^2)$ by maximum likelihood
- Recover each person's beliefs at each point in time
- Compare results with other panel data estimators (FE, RE)
- Note: our learning model assumes $a_i \perp X_{it}$ so RE estimator can be used