$$\overline{y_i} = \overline{X_i}\beta + \mu_i + \overline{v_i}$$

$$\overline{z_i} = \frac{1}{T}\sum_{t=1}^{T} z_{i,t}$$

$$Var\left(\mu_i + \overline{v_i}\right) = Var(\mu_i) + \frac{1}{T}Var\left(\sum_{t=1}^{T} z_{i,t}\right)$$

$$= \sigma_\mu^2 + \frac{1}{T}\sigma_v^2$$

$$fe = \underline{\sigma_v^2}$$

σ_μ^2

$$\text{pooled} = \underline{fe}$$

$$\text{bet} - fe/T$$