\[ \hat{W} = \hat{d} + \hat{e} \]

\[ \hat{d} = \beta \hat{y} + \gamma \hat{w} \] (LP's conjecture)

\[ \hat{p}_2 = \alpha \hat{y} + \lambda \hat{w} \] (LD's conjecture)

\[ \hat{p}_n = E[\hat{u}/\hat{y}, \hat{w}] \] (LP's pricing decision)
Kyle

\[ p = y \cdot \lambda + M \]
\[ y = \Delta t + \varepsilon \]

\[ x = \alpha + v \cdot \beta \]

\[ \hat{p}_2 = \alpha \hat{y} + \lambda \hat{\varepsilon} \]
\[ \hat{\omega} = \hat{\varepsilon} + \hat{\omega} \]

\[ \tilde{p} = \beta \tilde{y} + \varepsilon \]

**Informed trader's conjecture on pricing**

**MM's conjecture on informed trading**

**MM's pricing**

\[ p = E [Y (Y)] \]
\[ v = \varepsilon \]

\[ \hat{p}_2 = E [\hat{Y} / \hat{Y}, \hat{\omega}] \]

\[ \tilde{z} = \frac{\mu}{\mu + \tilde{z}} \]

\[ ERC = \frac{\text{COV}(\tilde{p}_2, \tilde{z})}{\text{VAR}(\tilde{z})} \]

\[ = \frac{2 - c(1 + \theta)}{2 - 2 \theta} \]

\[ \text{PAAD} = \frac{\text{COV}(\hat{Y} - \hat{p}_2, \hat{z})}{\text{VAR}(\hat{z})} \]

\[ = \frac{1}{-1 + \theta} \left[ \frac{1}{2} (1 - \frac{1}{\theta}) \right] \]