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Chapter 8.1

Financial analyst access to company information

Companies prefer positive coverage

- Financial analysts should provide the best forecast possible, given their information
- Companies provide access to additional information to financial analysts
- Companies have an interest in positive coverage
- If financial analysts provide more positive coverage, companies provide more information

Information and forecast

- Financial analysts obtain a signal of the current value $s = P + \varepsilon$
- The signal is imperfect
- The published forecast is $\hat{P}$
- Objective forecast is $E\left[P|s\right]$

Forecast error

- Financial analyst would minimize the forecast error $\Pi_B = E\left[\left(\hat{P} - P\right)^2 \middle| s\right]$
- $\Pi_B = E\left[\left(\hat{P} - E\left[P|s\right]\right)^2\right] + Var\left[P|s\right]$
- Bayesian learning gives $Var\left[P|s\right] = \frac{1}{\frac{1}{\sigma_P^2} + \frac{1}{\sigma_\varepsilon^2}}$
- $\Pi_B = b^2 + \frac{1}{\frac{1}{\sigma_P^2} + \frac{1}{\sigma_\varepsilon^2}}$

Minimal forecast error

- Forecast error is minimal if $\frac{\partial \Pi_B}{\partial b} = 0$, or $b = -\frac{1}{2}\frac{\partial \sigma_\varepsilon^2}{\partial b}\left(\frac{\sigma_P^2}{\sigma_P^2+\sigma_\varepsilon^2}\right)^2 > 0$
- If companies give better access for positive coverage $\frac{\partial \sigma_\varepsilon^2}{\partial b} < 0$
- The bias will be positive
- The positive bias trades off the positive bias against the more precise information

Properties of the bias

- The more sensitive companies are to the bias $\frac{\partial \sigma_\varepsilon^2}{\partial b}$, the higher the bias is
- The more precise the signal is σ_ε, the lower the bias
- The more uncertainty in the market σ_P, the lower the bias

Summary

- Companies prefer positive analyst coverage and can encourage that by granting more access to information in return for more positive coverage
- Minimizing their forecast error trades off the biased prediction against access to better information
- This will result in a positive bias of the analyst forecast
- Such a bias is optimally minimizing forecast errors

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