Multiple Blockholders, Price Informativeness, and Firm Value

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Introduction

What is the optimal blockholder structure that maximizes the effectiveness of corporate governance?

Traditional view: blockholders govern through intervention ("voice")

- Few, concentrated stakes are optimal to minimize free-rider problems and maximize intervention incentives
- But most firms have multiple small blockholders (Zwiebel (1995), Barca and Becht (2001), Faccio and Lang (2002), Maury and Pajuste (2005), Holderness (2007))

This paper provides a potential justification for multiple blockholder structures
MBs increase the effectiveness of a second governance mechanism: trading ("exit")
- Managerial effort improves fundamental value, but manager is paid according to stock price
- Trading causes prices to reflect fundamental value, rewarding effort ex post

Dynamic consistency issues: once effort has been exerted, blockholders are only concerned with maximizing trading profits
- A single blockholder will strategically limit her order, reducing price informativeness
- Multiple blockholders trade competitively, as in a Cournot oligopoly

* Here, co-ordination problems help, by serving as a commitment device to reward the manager ex post

Differences with Edmans (2007):
- Considers both “voice” and “exit”, and the trade-offs between them
- Fundamental agency problem is shirking, not myopia
- Derives multiple blockholders as an optimal structure, and analyzes the determinants of the efficient number
The Model

- Manager owns $\alpha$, $l$ blockholders collectively own $\beta$ (i.e. $\beta/l$ each)
- $t = 1$: manager exerts effort $a$, each blockholder exerts effort $b_i$ (all at unit cost)
  - Firm value: $\widetilde{v} = \phi_a \log a + \phi_b \log \sum_i b_i + \tilde{\eta}$
  - $a$ is private (critical), $b_i$ is public (non-critical)
- $t = 2$: trading by blockholders and liquidity investors
  - Each blockholder observes $\widetilde{v}$ perfectly and demands $x_i(\widetilde{v})$
  - Noise traders demand $\tilde{e} \sim N(0, \sigma_{\tilde{e}}^2)$
  - Market maker observes order flow $\tilde{y} = \sum_i \tilde{x}_i + \tilde{e}$ and sets $\tilde{p} = E[\tilde{v}|\tilde{y}]$
- Manager maximizes $\alpha \tilde{p} - a$
- Blockholder maximizes individual trading profit + value of shares - cost of effort
The Trading Stage

- Proceed by backward induction: take $a$ and $b_i$ as given
- Unique linear equilibrium is symmetric:

$$x_i(\tilde{v}) = \gamma(\tilde{v} - \phi_a \log a - \phi_b \log \sum_i b_i) \quad \forall i$$

$$p(\tilde{y}) = \phi_a \log a + \phi_b \log \sum_i b_i + \lambda \tilde{y},$$

- Each blockholder’s trading profits are

$$\frac{1}{\sqrt{l(l+1)}} \sigma_\eta \sigma_\epsilon$$

- Price informativeness is negatively related to

$$\sigma_1 \equiv \text{Var}(\tilde{v}|\tilde{p}) = \frac{1}{l+1} \sigma_\eta$$
The Action Stage

- Optimal actions:

\[ a = \phi_a \alpha \left( \frac{l}{l+1} \right) \]

\[ b_i = \phi_b \beta \left( \frac{1}{l} \right)^2 \]

\[ \sum_i b_i = \phi_b \beta \left( \frac{1}{l} \right) \cdot \sum_i b_i \]

- \( \sum_i b_i \) is decreasing in \( l \)
  - Blockholders exert positive externalities *on the firm*, which they do not consider
  - “Too little” intervention: standard free-rider problem
a is increasing in \( I \)

- Blockholders exert negative externalities on each other, which they do not consider
- “Too much” trading
  * Reduces informed trading profits, hurting blockholders in aggregate
  * Increases price informativeness
- But firm value does not depend on informed trading profits, but instead price informativeness
  * Co-ordination problems commit to “too much” trading, creating a dynamically consistent reward mechanism for managerial effort
Optimum for firm value: \( I^* = \max \left[ 1, \frac{\phi_a - \phi_b}{\phi_b} \right] \)

\( I^* \) depends on trade-off between effect on blockholder effort ("voice") and managerial effort (via "exit")

- \( \phi_b \) depends on nature of blockholders' expertise
  - High if forward-looking ("prospective") information, e.g. venture capital
  - Low if backward-looking ("retrospective") information, e.g. rentier capital
  - High if strong control rights (holding \( \beta \) constant), e.g. foreign blockholders

- \( \phi_a \) depends on manager's scope to improve firm value
  - High in growth industries, low in regulated industries

Weak governance increases both \( \phi_a \) and \( \phi_b \) and thus has ambiguous effects.
Social optimum considers:
- Cost of managerial effort (reducing $I_{soc}^*$ relative to $I^*$)
- Cost of blockholder effort (increasing $I_{soc}^*$ relative to $I^*$)

Private optimum considers:
- $\beta\%$ of increase in firm value
- Cost of blockholder effort (increasing $I_{priv}^*$ relative to $I^*$)
- Informed trading profits (reducing $I_{priv}^*$ relative to $I^*$)
Effect of information asymmetry
  – Likely to reduce potency of exit and thus $I^*$

Effect of liquidity
  – Currently, $\sigma_{\epsilon}$ is irrelevant, but may become significant if costly information acquisition
  – Likely to increase potency of exit and thus $I^*$

Asymmetric blockholders

Further suggestions?