Communication and Decision-Making in Corporate Boards

Nadya Malenko

Boston College

European Finance Association
August 18, 2011

Motivation

- Directors have diverse expertise and backgrounds

  "The key ... is to have folks on the board with expertise in different areas, whether it be finance, marketing, general management, retailing, international, [or] accounting." (Charles Elson, director of Sunbeam)

  ⇒ communication among directors is important

- Impediments to communication in boards:
  - communicating outside the boardroom takes time
  - reputational concerns (incompetence, troublemaker)
  - need to communicate credibly if there are agency conflicts

  ⇒ effective communication is costly for directors

  "If we could offer only one piece of advice, it would be to strive for open communication among board members..." (Carter and Lorsch, 2004)

This Paper

Objective

- How efficiently do board decisions incorporate directors'
  information when communication entails personal costs?

- How can board policies improve communication and increase
  shareholder value?
    - open vs. secret ballot voting
    - board structure: diversity of preferences
    - executive sessions: mandatory vs. voluntary; optimal frequency
    - establishment and composition of committees

Frictions in Directors' Preferences

1. **Biases**

   - private benefits from certain board decisions

2. **Concern for conformity** (reluctance to take a minority stand)

   - Directors who oppose the CEO without support from other directors may face retaliation and pressure to resign

     "*Don't raise questions with the president unless you can, for sure, count on the support of others on the board.*"

These frictions introduce inefficiencies into decision-making:

- biases $\Rightarrow$ directors skew their actions
- concern for conformity $\Rightarrow$ directors underweight their information

Main Results

Frictions may encourage costly communication:

1. Stronger concern for conformity at the decision-making stage gives stronger incentives to incur communication costs

2. Stronger bias may give stronger incentives to incur communication costs

$\Rightarrow$ more information is revealed during communication

$\Rightarrow$ board decisions may be improved despite the negative effect of frictions on decision-making

Related Literature

- **Theoretical literature on boards**
    - *Board as a single decision-maker:* e.g., Hermalin and Weisbach (1998), Song and Thakor (2006), Adams and Ferreira (2007), Kumar and Sivaramakrishnan (2008), and others
    - *Multiple directors, no communication:* Warther (1998), Chemmanur and Fedaseyeu (2011)
    - *Communication between insiders and outsiders:* Harris and Raviv (2008)

- **Decision-making in committees**
  Coughlan (2000), Austen-Smith and Feddersen (2005), Doraszelski et al. (2001): *pre-vote cheap talk communication, limited to 2 or 3 members*

- **Costly communication literature**
  Verrecchia (1983), Bolton and Dewatripont (1994), Garicano (2000), Dewatripont and Tirole (2005), Dessein and Santos (2006)

Model Setup - Information Structure

- The board contemplates a decision whose value is uncertain
- State of the world: sum of independent signals $x_i \sim f_i$

$$\theta = \sum_{i=1}^{L} x_i$$

- N directors ($N \leq L$), director i observes signal x_i

Model Setup - Decision-Making Process

1. **Communication stage**: directors simultaneously decide whether to incur a cost c_i to communicate x_i to others

   - information is verifiable

2. **Decision-making stage**:

   - directors simultaneously take actions a_i (e.g., vote)
   - individual actions $a_i \xrightarrow{h}$ board's decision a
   - $a = h(a_1, ..., a_N)$ - probabilistic linear function

- If the board makes decision a and state is θ, firm value is

$$V = V_0 - (a - \theta)^2$$

Model Setup - Preferences

- Firm value:

$$V = V_0 - (a - \theta)^2$$

- Utility of director i:

$$U_i = -(a - \theta)^2$$

Model Setup - Preferences

- Firm value:

$$V = V_0 - (a - \theta)^2$$

- Utility of director i:

$$U_i = -\left(a - (b_i + \theta)\right)^2$$

  - b_i - **bias** regarding the decision

- Preferences are common knowledge

Model Setup - Preferences

- Firm value:

$$V = V_0 - (a - \theta)^2$$

- Utility of director i:

$$U_i = -\left(a - (b_i + \theta)\right)^2 - r_i\left(a_i - \bar{a}_{-i}\right)^2$$

where $\bar{a}_{-i} = \frac{1}{N-1}\sum_{k \neq i} a_k$ - average action of other directors

- b_i - bias regarding the decision

- r_i - **concern for conformity**

- Preferences are common knowledge

Equilibrium

- Decision-making stage: unique linear equilibrium

- Effect of frictions at the decision-making stage:

- Bias: director skews the board's decision in the direction of his bias

- Conformity: director puts less than optimal weight on his information if he did not communicate it to others

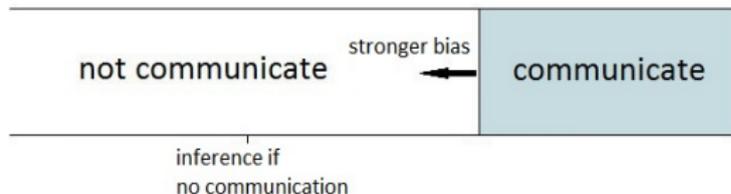# Effect of Biases on Communication

Biases may encourage communication:

- Director is biased in favor $\Rightarrow$ reveals only positive information

not communicate	communicate

inference if
no communication

Effect of Biases on Communication
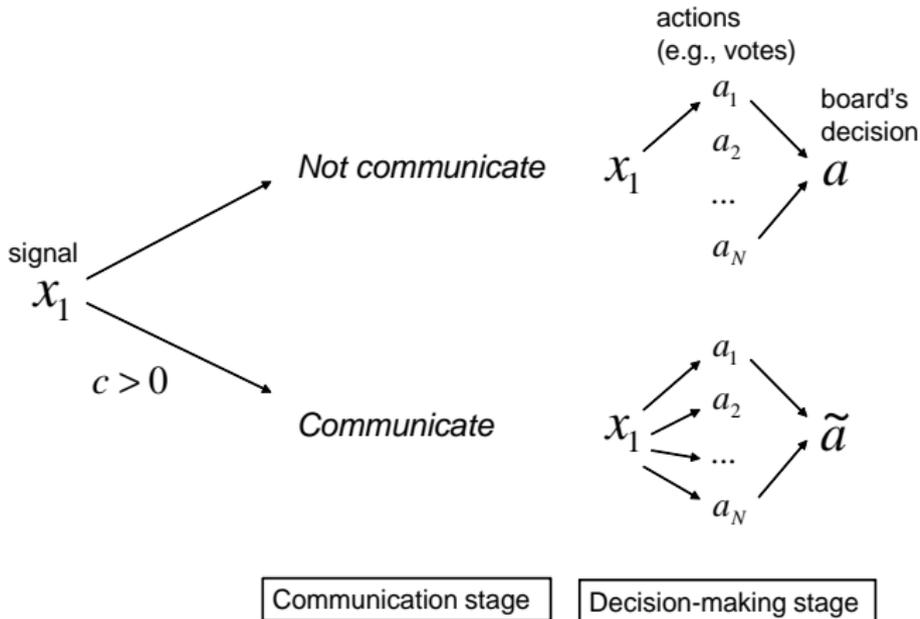
Biases may encourage communication:

- Director is biased in favor $\Rightarrow$ reveals only positive information

- Stronger bias in favor $\Rightarrow$ negative inference is more harmful
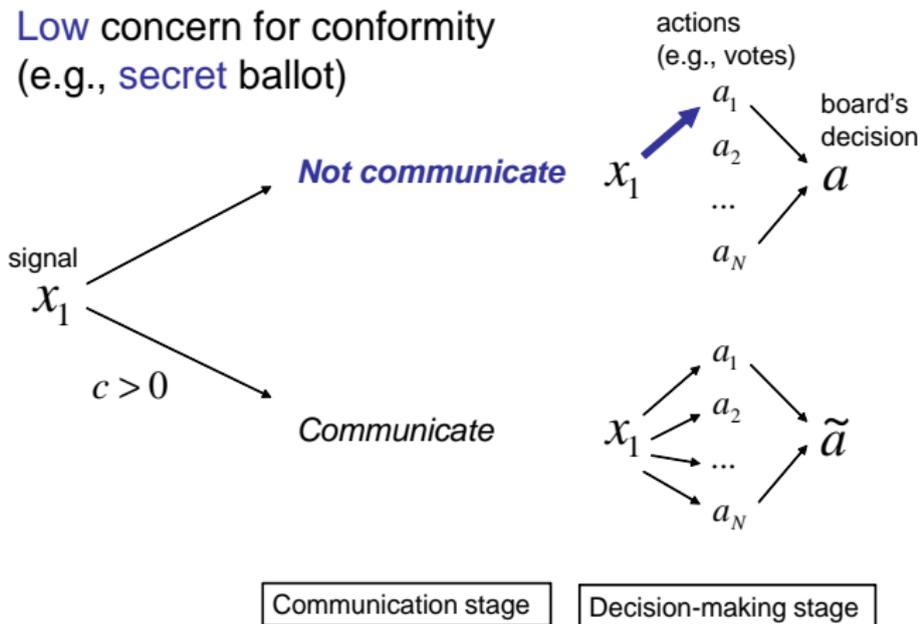 $\Rightarrow$ stronger incentive to incur the costs of communication

Effect of Conformity on Communication
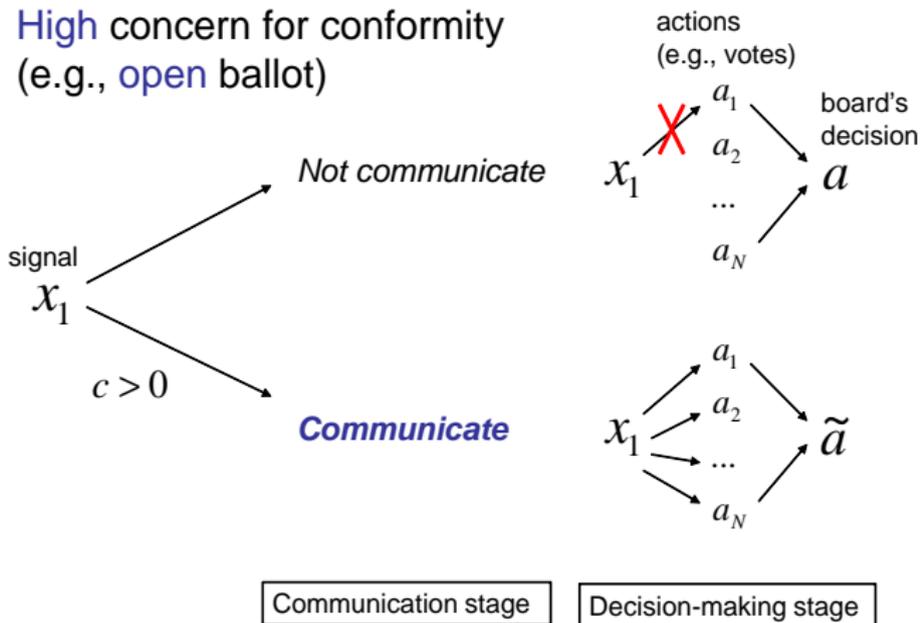
Conformity encourages communication:

Effect of Conformity on Communication

Conformity encourages communication:

Effect of Conformity on Communication

Conformity encourages communication:

High concern for conformity (e.g., open ballot)

actions (e.g., votes)

board's decision

signal x_1

$c > 0$

Not communicate

x_1 ... a_1 a_2 ... a_N a

Communicate

x_1 ... a_1 a_2 ... a_N $\tilde{a}$

| Communication stage | Decision-making stage |

Implications

- Choice between open and secret ballot voting
  (i.e., high vs. low pressure for conformity)
    - difference of opinion, supervisory decisions $\Rightarrow$ secret ballot
    - objective evidence, executive decisions $\Rightarrow$ open ballot

- A board where directors are biased but have small opposite biases can be more effective than a fully unbiased board
    - diversity in preferences

- Optimal frequency of "executive sessions"
- Role and composition of committees (in an extension)
    - allocating control to one director may be optimal

Conclusion

- When communication is costly, biases and conformity may have two opposite effects:
  - distortions in decision-making
  - more efficient communication
  - the positive effect can dominate

  $\Rightarrow$ implications for board structure and decision-making rules