Information Disclosure and Corporate Governance

Benjamin E. Hermalin[1]   Michael S. Weisbach[2]

[1]University of California, Berkeley

[2]Ohio State University, Columbus

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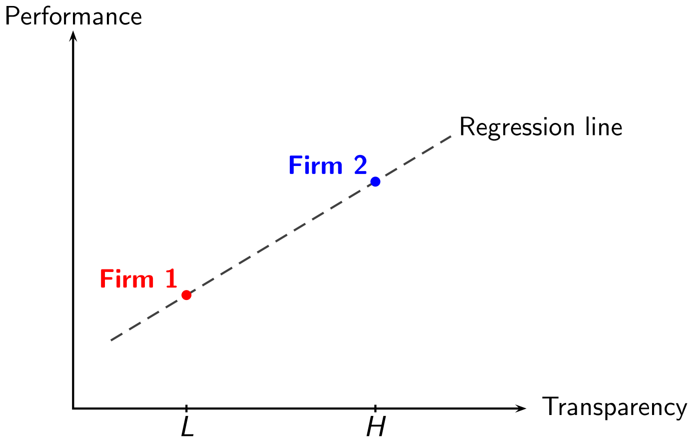
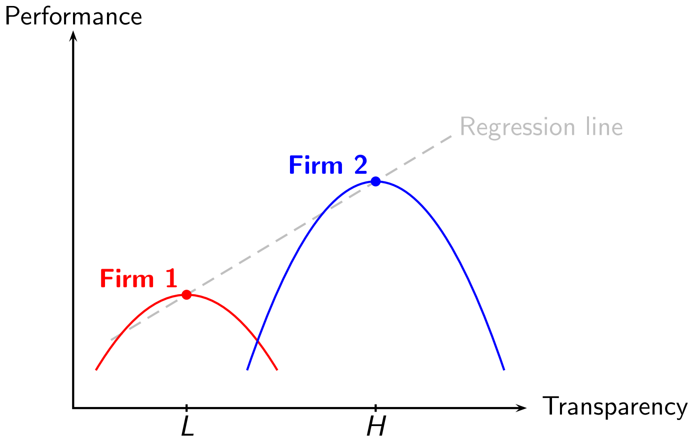
Corporate Governance Reform
All the Rage Past Fifteen Years

- UK: Cadbury Report, 1992.
- Japan: major reforms in 2002.
- US: Sarbanes-Oxley, 2002.
- Australia: CLERP 9, 2004.
- Other reforms in Europe and Asia.

- Big impetus and goal of these reforms is improved disclosure and transparency (consider, *e.g.*, Title IV of Sarbanes-Oxley)


Performance
Regression line
Firm 2
Firm 1
Transparency
L
H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What This Paper's About

- Why could there be a tradeoff between a firm's transparency or disclosure and its performance?
- Can it be explained within the context of corporate governance?
- What factors influences this tradeoff?
- What should we think of governance reform?

Outline of Talk

The Model
Basic Timing

Owners fix reporting quality (degree of transparency/ disclosure). Owners hire CEO.

Public signal pertaining to CEO's ability realized.

Owners take decisions the quality of which are better the form informative the signal.

Based on signal, actions taken that affect CEO.

Payoffs realized.

The Model
Assumptions on CEO Ability

- CEO's ability is a random variable (normally distributed).
- No one knows CEO's ability *ex ante*.

The Model

Assumptions on Signal

- The signal is a normally distributed random variable.
- Its mean equals the CEO's ability.
- The precision of the signal (inverse of its variance) is the reporting quality chosen by the owners at stage 1 of the game.

Analysis
Updating Beliefs and Consequent Actions

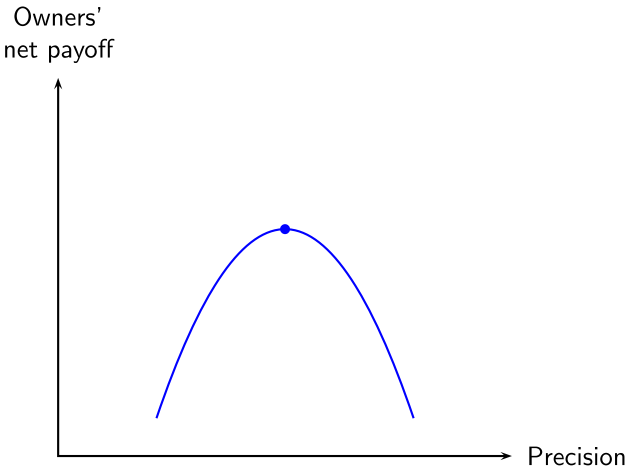
- Based on signal, all parties update their beliefs about CEO's ability; that is, form posterior estimate of ability.
- *Ex ante*, posterior estimate is a random variable.
- Because owners take an action based on posterior estimate, they hold an option. Hence, they are *risk loving* in the posterior estimate (prefer greater variance).
- Under number of alternative assumptions, CEO is *risk averse* in the posterior estimate (prefer less variance).
- *Critically,* the more informative (precise) the signal will be, the greater will be the variance of the posterior estimate.
- **Conclusion:** *The owners' expected payoff increases with the precision of the signal and the CEO's decreases with the precision of the signal.*

Analysis
The Owners' Tradeoff

- Raising signal precision (improving disclosure/transparency) directly benefits owners.
- But directly harms the CEO.
- Hence, CEO will require greater compensation the more precise the signal.
- **Conclusion:** *The owners also bear a cost when they increase signal precision.*

Owners' Tradeoff

An Equilibrium Phenomenon



Policy Implications

Regulations that force firms to adopt signal precision (disclosure/transparency) above their maximizing level will

(i) reduce expected profits;

(ii) raise CEO compensation; and

(iii) if the owners' decision (action) is whether to keep or dismiss the incumbent CEO, increase the probability of CEO dismissal

relative to what they would have been at the maximizing level.

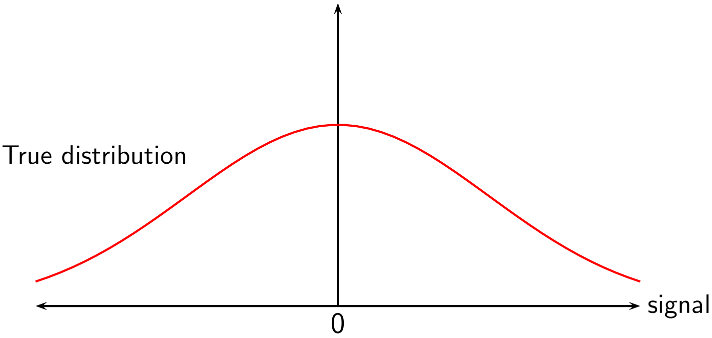
Efforts by the CEO to Affect Signals

- CEO takes actions that raise the value of the signal.
  - timing earnings announcements
  - aggressive accounting
  - "cooking the books"

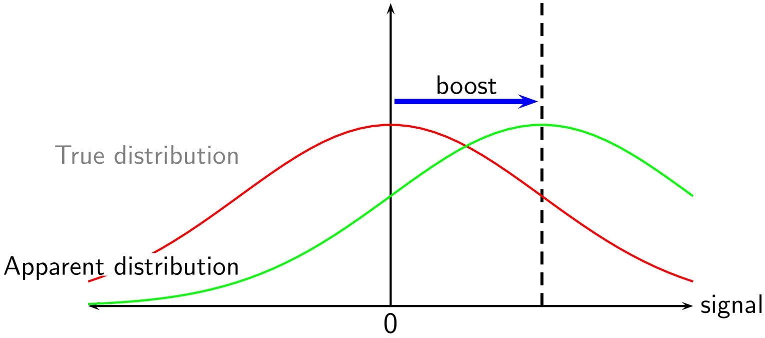
Assumptions

- CEO expends effort to boost (distort) signal before signal is realized.
- What is observed is signal plus distortion.
- Effort at distortion personally costly to CEO.

Signal Distortion
Graphical Interpretation

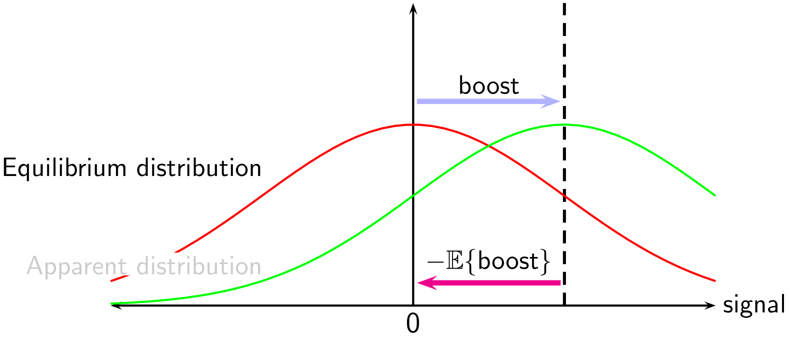


Signal Distortion
Graphical Interpretation



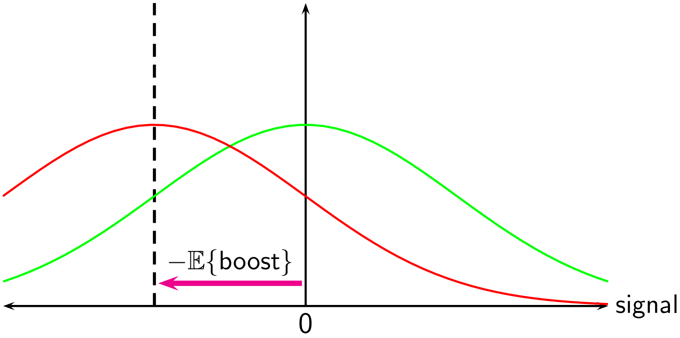
Signal Distortion

Graphical Interpretation: In equilibrium no one fooled



Signal Distortion

Graphical Interpretation: Red Queen problem

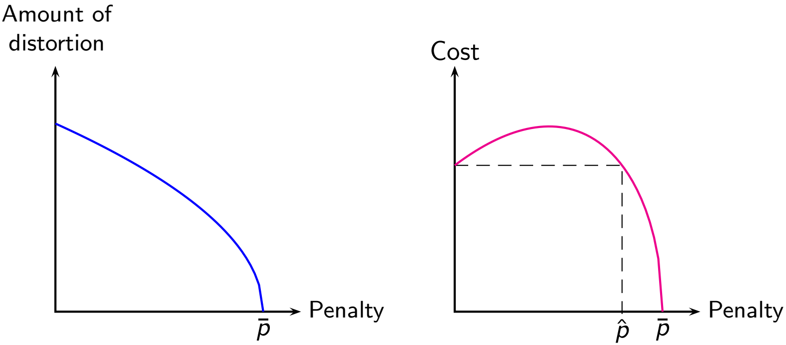


Consequences of Distortion

- CEO must be compensated for disutility of effort spent on exaggeration.
- Equilibrium efforts at exaggeration are, under certain conditions, *increasing* in transparency.
- Yet another source of increased costs due to increased disclosure/transparency.

Direct Penalization of Distortion

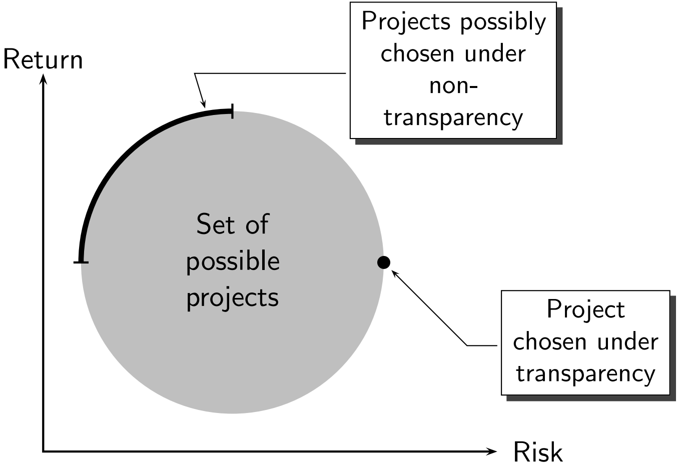
Sometimes its Draconian or Nothing



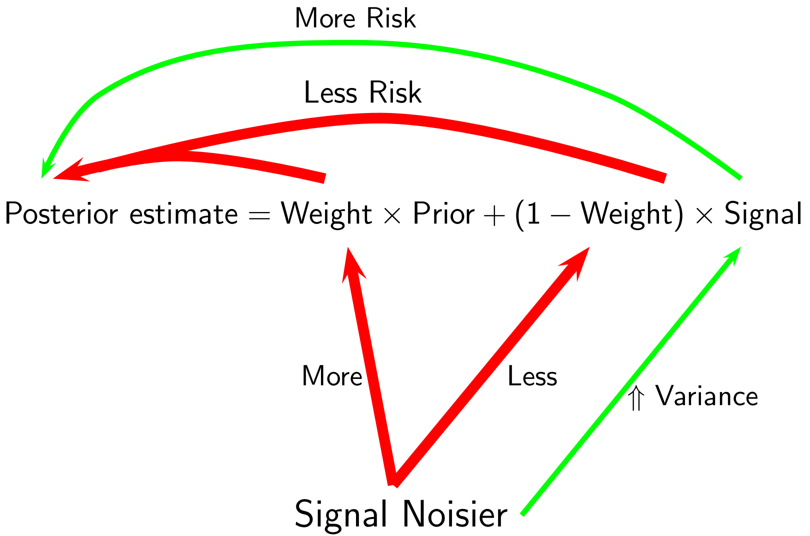
Transparency about Managerial Actions
Project Selection

- Transparency could refer to actions.
- Consider one such action, choice of project.
- Assume CEO chooses a project from a set of potential projects.
- Two regimes:
  (i) Transparent: mean and variance of chosen project observable.
  (ii) Non-transparent: mean and variance of chose project hidden.

The Issue:
Transparency can lead to too much risk & low returns



Explanation
Under Transparency



Explanation
Under Non-Transparency

More Risk

Less Risk

$$\text{Posterior estimate} = \text{Weight} \times \text{Prior} + (1 - \text{Weight}) \times \text{Signal}$$

Unaffected by CEO's choice

$\Uparrow$ Variance

Affected by CEO's choice

Signal Noisier

Conclusions

- Greater transparency or disclosure is not unambiguously desirable from the perspective of good governance.
- In a model of optimizing behavior, external efforts to enhance transparency or disclosure can be welfare reducing.
- If CEO can distort information, then may not wish to penalize that behavior.
- Transparency over CEO actions can have undesired consequences *vis-à-vis* non-transparency.

Conclusions
Lessons for Regulation

- Have to understand why observed, unconstrained outcomes are suboptimal (if they are).
- Regulatory actions can have undesired activities:
  - Reduce profits
  - Raise executive compensation
  - Encourage efforts at information distortion
  - Adversely affect choice of projects