Do Agents Need Discretion?
The Business Judgment Rule
as Optimal Standard of Care

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Motivation

Should managers be liable for

- bad negotiations in a merger or a takeover?
- investing in new machines shortly before an economic downturn?
- not sueing former managers for negligence?

The business judgment rule

Fiduciary duties

- duty of loyalty
- duty of care

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Delaware Supreme Court: "Courts do not measure, weigh or quantify directors' judgments. We do not even decide if they are reasonable in this context. Due care in the decisionmaking process is process due care only."

Shlensky v. Wrigley, 1968

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Court said: "courts of equity will not undertake to control the policy or business methods of a corporation although it may be seen that a wiser policy might be adopted and the business more successful if other methods were pursued."

Gagliardi vs Trifoods International

- Plaintiff Gagliardi, the founder of Trifoods International, claimed that after his dismissal the board made some negligent decisions that destroyed the firm:
  - to manufacture its own products instead of buying them,
  - to invest in a new and duplicative production facility,
  - and to acquire a licence at an excessive price.

Gagliardi vs Trifoods International

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  - and to acquire a licence at an excessive price.

Court dismissed the case because the board's decisions fell "within ordinary business judgment" even if they could be considered "unwise, foolish, or even stupid in the circumstances".

Reasons for the business judgment rule

- ► Directors and officers are not insurers of corporations.
- ► Liability penalizes risk taking.
- ► Courts are worse businessmen and may suffer from hindsight bias.
- ► There are more powerful instruments to motivate managers than liability, e.g. threat of firing and bonus payments.

Our paper

Research questions

- Should agents be liable for wrong decisions?
- How does the liability rule interact with incentive pay?
- How does the optimal standard of care depend on how well the court understands business matters?

Model

- We study these questions in a model of delegated expertise (as in Lambert 1986).

Preview of results

With linear contracts:

- ▶ Courts should not review business judgments.

With more general contracts:

- ▶ If the court's information is precise: There should be some liability for "too risky" choices.
- ▶ If the court makes large mistakes: Courts should not review business judgments.

The basic model (1)

- Principal is risk-neutral, has delegated decision-making to the agent.
- Agent chooses effort $e \in \{0, 1\}$ and one of two projects.
- Risky project: return R with probability q, return L with probability $1 - q$.
- Safe project: return 0, with $R > 0 > L$.
- From an uninformed perspective $q \sim F$.

The basic model (2)

- ▶ Agent is risk-averse, with money utility function *u*.
- ▶ At effort cost κ, agent can learn the probability q.
- ▶ Effort cost and money utility are additively separable.
- ▶ Agent's reservation utility is $\bar{u}$.
- ▶ Limited liability: $u(w) \geq u(A)$ in all contingencies.

Contracts

- Contracts just specify w_R, w_0, w_L (no menu contracts).
- Let u_R, u_0, u_L be the corresponding utilities.
- Contracts are either (affine-) linear or nondecreasing.

Legal environment

- The agent is sued after a failure of the risky project.
- If the agent is liable, the wealth constraint is binding and his utility is u_A.
- Effort and risk are not observable, but (imperfectly) verifiable:
  - Court receives a perfect signal $e^c = e$ about e.
  - Court receives a noisy signal $q^c = q + \epsilon$ about q, with $\epsilon \sim \Phi$, e.g. $\epsilon \sim N(0, \sigma^2)$.
  - Court compares the signals to the legal standards: $\bar{e}^c$ for procedural care and $\bar{q}^c$ for substantive care.

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  - ▶ Court compares the signals to the legal standards: $\bar{e}^c$ for procedural care and $\bar{q}^c$ for substantive care.
- ▶ Standards are set optimally:
  - ▶ The perfect signal of effort directly implies $\bar{e}^c = e^{SB}$.
  - ▶ Optimal standard of substantive care $\bar{q}^c$ will be derived.

Decision incentives

- Let $\lambda(q) = Prob[q^c < \bar{q}^c | q]$ denote the probability of being liable for a loss of an agent who has learned the probability q.
- He chooses the risky project if

$$qu_R + (1 - q)(u_L - \lambda(q)(u_L - u_A)) > u_0.$$

Remark
There is a threshold $\bar{q}(w)$ such that the agent chooses the safe project for all $q \leq \bar{q}(w)$ and the risky project for all $q > \bar{q}(w)$.

- If $e^{SB} = 0$ the optimal contract is a fixed wage with $u(\bar{w}) = \bar{w}$ and the optimal standard is equal to zero.
- Agent is indifferent and chooses the project with the larger return.

Effort incentives: e=1

Contract $w_R, w_0, w_L, \bar{q}, e = 1$ is incentive compatible if

$$\bar{q}u_R + (1 - \bar{q})(u_L - \lambda(\bar{q})(u_L - u_A)) = u_0 \quad (D)$$

and

$$
\begin{aligned}
U(\bar{q}, w) &\geq u_0 & (SIC) \\
U(\bar{q}, w) &\geq E[q]u_R + (1 - E[q])u_A & (RIC) \\
U(\bar{q}, w) &\geq \bar{u}, & (PC)
\end{aligned}
$$

where

$$U(\bar{q}, w) = \int \max\left\{ u_0, qu_R + (1 - q)(u_L - \lambda(q)(u_L - u_A)) \right\} dF - \kappa.$$

Linear contracts

The principal maximizes the difference between expected return

$$\int_{\bar{q}}^{1} qR + (1 - q)L \, dF$$

and expected wage payment

$$\int_{\bar{q}}^{1} qw_R + (1 - q)\big(w_L - \lambda(q)(w_L - A)\big) \, dF + \int_{0}^{\bar{q}} w_0 \, dF$$

subject to $(D), (SIC), (RIC), (PC)$ and

$$w_x = \alpha x + \beta \quad (LIN)$$

Linear contracts

Result

With linear contracts, the optimal standard is equal to zero.

Intuition:

- With linear contracts, agent underinvests in risky project.
- Less liability leads to more risk-taking.

Nondecreasing contracts

The principal maximizes the difference between expected
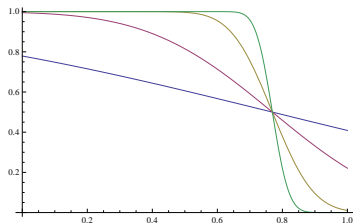return and expected wage payment subject to
$(D), (SIC), (RIC), (PC)$ and

$$w_R \geq w_0 \geq w_L \quad (MON)$$

Result
Let w be the optimal contract to implement a given $\bar{q}$, and let
w^{nl} be the optimal contract for a standard of zero. Then it must
hold that $w_R^{nl} \geq w_R$ and $w_L \geq w_L^{nl}$.

Signal precision

- What happens as the signal q^c becomes more precise?
- Let $q^c = q + \epsilon$ with $\epsilon \sim N(0, \sigma^2)$.
- Define precision $\Delta = 1/\sigma^2$.

The function $\lambda(q)$ for different values of Δ.

Monotonic contracts

Result

There exists $\bar{\Delta}$ such that the optimal standard is zero for all $\Delta \leq \bar{\Delta}$ and positive for all $\Delta > \bar{\Delta}$.

- ▶ Principal's payoff is weakly increasing in Δ.
- ▶ Trade-off between insurance for agents who learn a large q and those who learn a lower q.

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  - ▶ Indeed, if courts are bad businesspeople, the business judgment rule should apply. The larger the hindsight bias is, the lower should be the optimal standard for risk-taking.
- ▶ There are more powerful instruments to motivate managers than liability.
  - ▶ Liability for bad business decisions can have a value only if bonus contracts are used.

Conclusion

- ▶ Have shown that the business judgment rule should apply except if courts are experts in business matters and managers' compensation is flexible.
- ▶ Incentive pay is necessary for liability to be beneficial!
- ▶ To the extent that directors' compensation is less convex than officers', the case for the business judgment rule is stronger for outside directors.
- ▶ With specialized expert courts, higher standards can be imposed.