

Evidence Acquisition and Voluntary Disclosure

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Motivation

- People provide information to influence others' decisions
- In contrast to unsupported claims, *hard evidence* is more convincing
- Agents strategically seek evidence to persuade
 - entrepreneurs → investors
 - sellers → buyers
 - workers → firms
 - lawyers → arbitrators
- **But:** often no obligation to disclose evidence
- Non-disclosure of unfavorable evidence if there is *uncertainty* whether it was obtained

Question

Which evidence to seek when disclosure is voluntary?

Model

- Players: Sender (**S**) and Receiver (**R**)
- State (project quality) $\theta \in \Theta = [0, 1]$ unknown to both S and R
- **R**'s privately known outside option $\omega \sim$ single-peaked density
- **R** **approves** the project if posterior mean θ **above** ω
rejects the project if posterior mean θ **below** ω
- **S** always wants approval
- **S** chooses which hard evidence to seek and disclose
 - set $E = \{\text{pieces of evidence}\}$
 - **S** chooses evidence structure $\pi: \Theta \rightarrow \Delta E$
 - with probability $q \in (0, 1]$ obtains $e \sim \pi(\theta)$
 - decides whether to disclose e or not

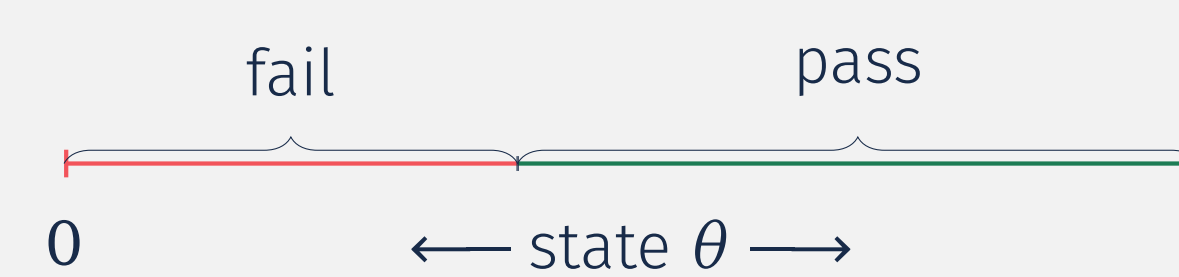
· **What is the optimal evidence structure?**

Main Results

Optimal structure depends on $q =$ probability of obtaining evidence

Result 1:

If q is low, the optimum π^* is a **binary certification**: pass/fail test.



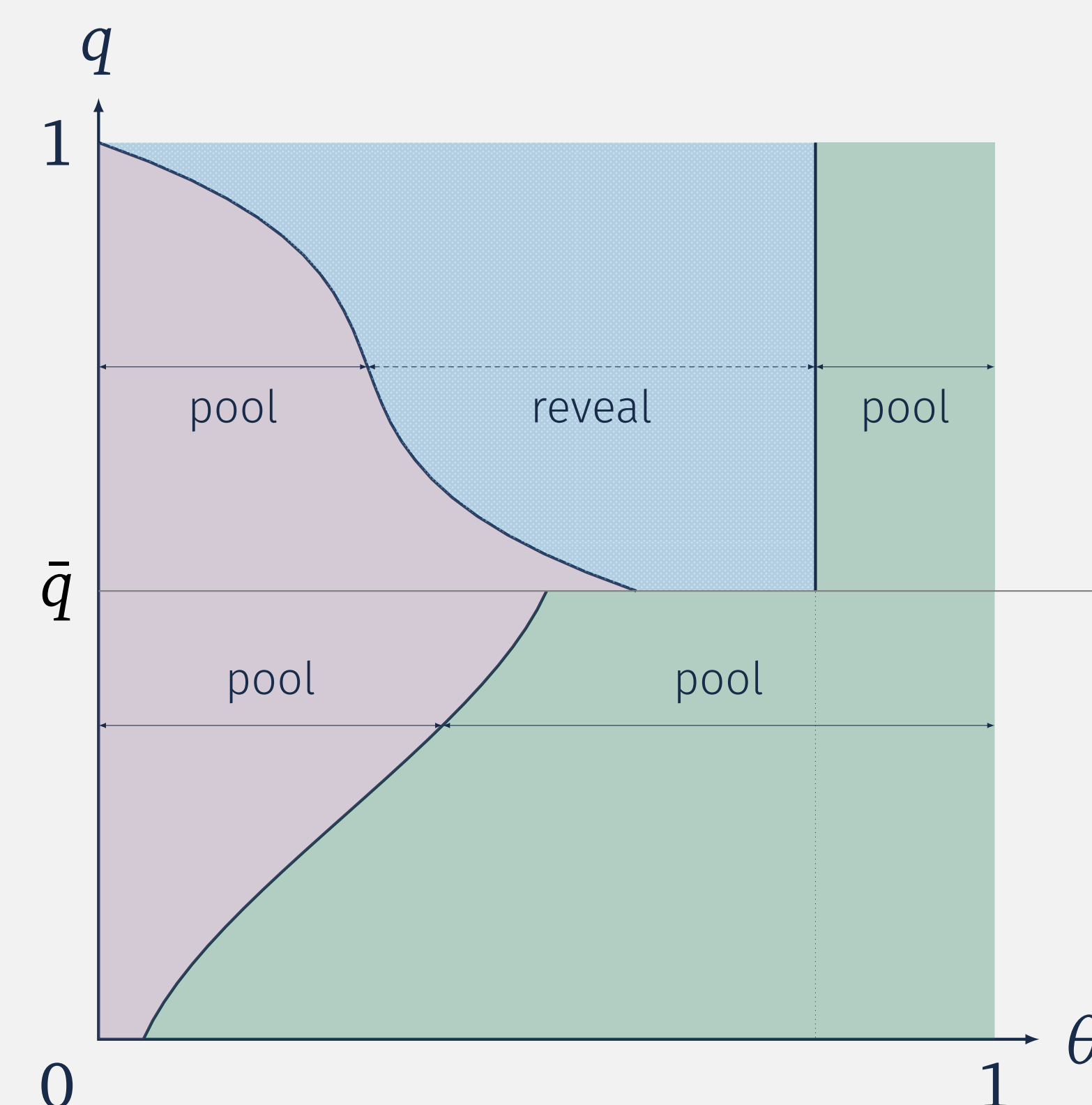
Result 2:

Evidence **more likely** to be obtained \implies **more stringent** standards under binary certification

Takeaway

The interaction between information design and voluntary disclosure can lead to *simplicity of verifiable information*.

Equilibrium Evidence Structure



If evidence is likely to be obtained:
two-sided censorship

If evidence is unlikely to be obtained:
binary certification

Intuition

Two forces affect information

1. **Information design** (*which information to seek*)
 - \implies Imprecise information about high quality projects
 - \implies *Upper pooling*
2. **Voluntary disclosure** (*what to disclose*)
 - \implies Non-disclosure of unfavorable evidence
 - \implies *Lower pooling*

Intuition for optimal evidence structure:

- Under $q = 1$: **R** fully skeptical \implies unraveling at disclosure stage \implies **S** solves pure information design problem \implies optimum has pooling (revelation) above (below) a threshold
- Under $q < 1$: lower $q \implies$ less **R**'s skepticism \implies **S** discloses less \implies more pooling at the bottom
- If $q < \bar{q}$, **S** uses binary certification to disclose more often
- Moreover, as q decreases (below \bar{q}), lower certification standard compensates for lower chance of obtaining evidence by increasing probability of favorable evidence

Conclusion

- This paper endogenizes the evidence structure in a game of voluntary disclosure
- The combination of design and disclosure incentives can lead to hard information taking a form of a pass/fail test.
- Interaction between these two forces leads to a reversal of the skepticism effect of uncertainty on the set of concealed states.
- Higher probability of obtaining evidence benefits both players, not just because it allows the sender to communicate more often, but also because she does so more efficiently.