

# 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  $\theta$  **above**  $\omega$   
**rejects**  $\theta$  **below**  $\omega$
- **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  $\pi^*$  is a **binary certification**: pass/fail test.



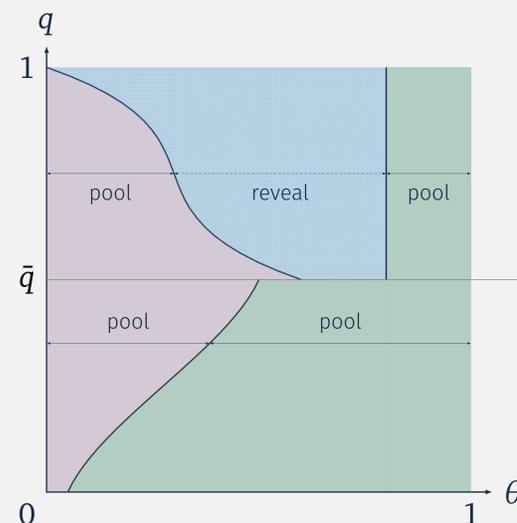
Result 2:

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.