

# Informational versus Monetary Incentives in Learning\*

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## Abstract

To influence learning by an agent, a principal can provide both informational incentive (designing a signal) and monetary incentive (offering transfers to induce the agent to gather information). This involves an interplay of information design by the principal and standard information gathering by the agent. Consider a trade between a seller (principal) and a buyer (agent): the buyer gains in a good state and loses in a bad state, while the seller always benefits from the trade regardless of the state. Starting from a common prior about whether a trade is good or bad for the agent, the principal can design a signal to generate public information, but the agent can also privately gather costly information himself. We show that for extreme priors, trade occurs with certainty without information gathering: at one extreme, when the agent is convinced about being in a bad state, the principal only offers monetary incentives to ensure trade; at the other extreme, nothing has to be done and the trade always occurs. For intermediate priors, the principal uses information design to induce information gathering and the agent accepts the contract only if he gathers good information, generating a non-monotonic probability of trade on the equilibrium path. Moreover, the principal's monetary incentive to induce information gathering decreases with the accuracy of the (designed) signal. Compared to the case when only a signal design is possible, the principal discloses less information (in Blackwell sense) when she can make use of both signal and transfer.

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