How informed do you want your principal to be?

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Abstract:

A buyer's value for a good depends on his private type and the quality that is unknown to him. The seller of the good learns about the quality via a signal; the signal realization is the seller's private information. We pose and answer the following question: how much (if any) private information would the buyer want the seller to have? Formally, we characterize the buyer-optimal outcome: this is the signal and the corresponding seller-optimal equilibrium of the informed principal game that yield the highest consumer surplus. We show that there are conditions under which private information for the seller can lead both to greater profits and higher consumer surplus; that is, compared to being uninformed, seller private information can lead to Pareto gains. The seller's signal in the buyer optimal outcome is typically not fully informative.