The (Mis)use of Information in Decentralised Markets

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Abstract

A seller offers an asset in a decentralised market. Buyers have private signals about their common value. I study whether the market becomes allocatively more efficient with (i) more buyers, (ii) better-informed buyers. Both increase the information available about buyers' common value, but also the adverse selection each buyer faces. With more buyers, trade surplus eventually increases and converges to the full-information upper bound if and only if the likelihood ratios of buyers' signals are unbounded from above. Otherwise, it eventually decreases and converges to the no-information lower bound. With better information about trades buyers would have accepted, trade surplus increases. With better information about trades they would have rejected, trade surplus decreases—unless adverse selection is irrelevant. For binary signals, a sharper characterisation emerges: stronger good news increase total surplus, but stronger bad news eventually decrease it.

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