The Quoted Spread of a Monopolist Informed Intermediary

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Abstract: This paper develops a simple, rational model to examine the quoted bid-ask spread of a monopolist informed intermediary. In this model, one risky asset is exchanged for a riskless asset between the intermediary and its customers. The intermediary's objective is to maximize profits. The intermediary strategically posts an ask and a bid quote, and executes customers' upcoming orders to buy or sell the risky asset at these quotes. Customers' preferences are heterogeneous. Specifically, the intermediary expects that half of the customers derive a non-monetary benefit from buying and the other half from selling the risky asset. All customers take their own non-monetary benefit into consideration, along with the posted ask and bid quotes, in order to determine whether to buy, remain inactive, or sell. Customers are less informed than the intermediary about the true value of the risky asset, and hold heterogeneous beliefs about this value, meaning that on the basis of the same bid-ask quotes, customers may arrive at different subjective probability assessments regarding the true value of the risky asset. Among the market-clearing results of the model are the two following: First, bid-ask quotes may be completely uncorrelated with the true value of the risky asset. Second, the width of the spread between the bid and ask quotes depends on the smallness of the support of the risky-asset distribution, which often goes together with how small the volatility of the risky asset is. In detail, for a sufficiently small support of the risky-asset distribution, the spread between the bid and ask quotes is always wide, whereas for larger distribution supports, the spread may partly shrink. This second result contrasts with the view that greater volatility of the risky asset triggers wider bid-ask spreads.

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