

# Department of Marketing



Research Seminars Series | October 10th, 1-3 pm | AD 0.090

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### Display Advertising Pricing in Exchange Markets

**Abstract:** This paper considers how a publisher should set reserve prices for real-time bidding (RTB) auctions when selling display advertising impressions through ad exchanges, a \$40 billion market and growing. Through a series of field experiments, we find that setting the reserve price increases publisher's revenues by 32%, thereby affirming the importance of reserve price in maximizing publisher's revenues from auctions. Further, we find that advertisers increase their bids in response to an experimental increase in reserve price and show this behavior is consistent with the use of a minimum impression constraint to ensure advertising reach.

Based on this insight, we construct an advertiser bidding model and use it to infer the overall demand curve for advertising as a function of reserve prices. Using this demand model, we solve the publisher's pricing problem. Incorporating the minimum impression constraint into the reserve price-setting process yields a 50% increase over a solution that does not incorporate the constraint and an additional increase in profits of nine percentage points.