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The Effects of Information Transparency on Suppliers, Manufacturers and Consumers in Online Markets

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Abstract

This paper looks into the effects of information transparency on market participants in an online trading environment. We study these effects in business-to-business (B2B) electronic markets with firms competing in both upstream and downstream industries. The prior literature generally assumes that either the downstream firm (buyer) or the upstream firm (seller) is a monopoly. It is not clear whether information transparency would still create value if both buyers and sellers face oligopolistic competition where the benefits of information transparency could be competed away. To answer this question, we first develop a simple two-echelon e-market model, and then extend the model to more general settings. We find that information transparency can create value for the overall e-market, yet it affects buyers and sellers very differently: one side will be hurt, depending on the competition mode (Cournot or Bertrand) in the downstream. This suggests that a manufacturer-owned, a supplier-owned, and a neutral e-market will have different preferences for information transparency. Finally, we find that information transparency can hurt consumers when the downstream industry engages in Bertrand competition. This is a surprising result given the expectation that online markets create substantial value for consumers.