

Listing attributes and seller competition in internet auctions

Gabriella A. Bucci and Rafael Tenorio
Department of Economics
DePaul University
1 East Jackson Blvd. - Suite 6200
Chicago, IL 60525

Abstract

This paper analyzes the effect of market conditions, trader types, and product types on listing strategies and outcomes in Internet auctions. A routine visit to online auction giant eBay reveals that the way in which sellers list their products varies widely, not only across product categories, but also within individual categories. At one extreme, some sellers build elaborate pages with multiple pictures, animations, colorful fonts, and detailed explanations of the characteristics and condition of their product. At the other extreme are sellers build very simple pages, with minimal explanation and no picture of the object. In between, there is a wide spectrum of intermediate cases where the page listing is neither very elaborate nor very simple, with some dimensions of heterogeneity figuring out more prominently than others. There are several potential reasons for this variation in the attributes of internet auction listings, i. e.,

(a) The type of product offered. A standard or commodity-like product (e.g., a mass released book or new DVD), for which consumers do not need a large amount of information, may not require a very detailed explanation from a seller, whereas an antique or collectible (e.g., a rare coin or a vintage out of print book), for which consumers need more information on quality, condition, etc., usually warrants a detail description and visual aids;

(b) The average value of the good. Small items, or items of low monetary value, may not give the seller much incentive to expend time, effort, and resources constructing sophisticated pages; whereas large or valuable items may warrant the expenditure involved in constructing a detailed page;

(c) The seller size/scale and reputation may affect both her ability to absorb the fixed cost associated with setting up nice pages, as well as her marginal listing costs due to scale economies;

(d) The extent of buyer sophistication or expertise across different product categories may also affect the amount of information a seller feels she should provide on the listing page; and

(e) The different types of costs involved in setting up auction pages may impact listing effort for all seller types.

Our paper consists of both a theoretical and an empirical section. In the theoretical section we build a model of the equilibrium level of effort that monopolistically competitive sellers will devote towards listing their products in the auction site. The model establishes predictions on the relationship between listing effort and primitive parameters such as product type, seller type, buyer type, item value, and listing technology. We then statistically test these analytical predictions using a sample of thousands of eBay auctions of a variety of products. Our empirical results show that all of the above primitives have a significant effect on listing effort, but the impact of each factor often times varies across products. We also find evidence that sellers use page attributes as a means of differentiating their products, even when the products themselves are commodities.