MACROECONOMICS

Repeated Auctions With Endogenous Selling

February 1, 2003

NBER Working Paper

Classic auction theory studies the expected revenue to an owner who is committed to selling — as when a government sells an oil field, where the sale decision is unrelated to the quality of the field. This paper addresses questions raised by auctions where owners choose to sell, as when the owner of a private company decides to sell.

Such exogenous auctions are affected by factors missing from (or minimized in) the endogenous auctions of classic auction theory. The decision to sell, for example, depends on a trade-off between the owner's benefits from running the company and the revenue raised by the sale. Potential buyers, meanwhile, may consider the (adverse) information revealed by the decision to sell. These considerations are also relevant for the sale of a block of shares in a public company, the sale of a house, the resale of an oil field and many others.

Endogenous sales raise several new questions: How does the auction mechanism affect the owner's expected revenue? How does the auction mechanism affect the volume of trade? Finally, what is the effect on welfare as captured by the allocational efficiency of the sale decision?

This paper addresses these questions. We show that English auctions (classic open-outcry sales) have larger expected price, volume and welfare than second-price auctions (in which the buyer submitting the highest sealed bid pays the next-highest offer), which in turn have larger expected price, volume, and welfare than first-price auctions (in which the buyer submitting the highest sealed bid pays that amount).

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