Pro-competitive rationing in multi-unit auctions

EPRG Working Paper 1414
Cambridge Working Paper in Economics 1435

Pär Holmberg

Abstract
In multi-unit auctions, such as auctions of commodities and securities, and financial exchanges, it is necessary to specify rationing rules to break ties between multiple marginal bids. The standard approach in the literature and in practice is to ration marginal bids proportionally. This paper shows how bidding can be made more competitive if the rationing rule instead gives increasing priority to bidders with a small volume of marginal bids at clearing prices closer to the reservation price. In comparison to standard rationing, such a rule can have almost the same effect on the competitiveness of bids as a doubling of the number of bidders.

Keywords
Divisible-good auctions, multi-unit auctions, rationing rules, bidding format

JEL Classification
C72, D44, D45

Contact
par.holmberg@ifn.se

Publication
Sep, 2014

Financial Support
Torsten Söderberg Foundation and IFN’s The Economics of Electricity Markets Program

www.eprg.group.cam.ac.uk