

The title is "**Optimal allotment design**" joint with Olivier Compte (PSE)

Abstract

A seller has an homogenous good for sale that he may divide into shares of heterogenous size before selling it. He is assumed to face exogenous constraints on the set of feasible/admissible sharing rules, for example constraints derived from limitations on market concentration. We consider (generalized) Vickrey auctions and solve for the optimal allotment under such constraints. We find that while it is always preferable to increase as much as possible the size of the largest lot, feasibility constraints may not bind for the other lots, and leading to partial homogenization of lot sizes.

We also extend our analysis to cases where there are multiple heterogenous goods for sale. The general insight is that full homogenization is always detrimental to the seller, and that partial homogenization may be beneficial.

Keywords: procurements, allotment, dual sourcing, homogenization, multi-object auctions, generalized Vickrey auctions, VCG mechanisms.