

Important issues in auction design

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Collusion

- In dynamic auctions agents may use early stages of bidding as signals. Think of spectrum auctions.

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- A similar phenomenon can arise in uniform-price auctions. Think of electricity auctions.
Agents can punish one another if they deviate from **“the agreed price and share”**.
Example: auction for gas and electricity in UK. (Office of Gas and Electricity Markets, 1999, pp. 173-174)

Lack of participation

- This can happen especially when there is a presumption that there is a strong bidder or if there are tight regulation about entrance.

An example of the latter is CDS auctions.

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- Lack of participation results in low revenue for the auctioneer and inefficiency.

Winner's curse

- This happened if they have the same or close valuation for the object but have different information about the value of the object.

Example: Treasury bills, bonds, and shares.

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- Almost all financial auction suffers from this issue.
Failure of IPOs in USA.

Solutions

- Robust design by forcing them to bid whole numbers.
- Using sealed bid auctions.
- Antitrust.
- Impossibility theorems.

References

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