

Music Rights Auction Simulation Report

This report presents simulation of a music rights auction using a double auction mechanism. The simulation is based on the provided information and historical data from Table(a table in my research paper), which includes repeated sales prices paid at Puttick and Simpson (P&S) auctions for two music works: "Four Jolly Smiths" by Henry Leslie and "Fairy Barque" by W. Smallwood. The simulation aims to analyze the auction outcomes, buyer and seller rewards, market prices, and regret values over a specified number of rounds.

Simulation Results

The simulation was run for a specified number of rounds. In each round, random bids were generated for buyers, and asking prices were generated for sellers. The simulation calculated buyer and seller rewards, market prices, and regret values for each round.

The simulation results, summarized for each round, include the following:

- Participants: Number of participating buyers and sellers.
- Buyer Rewards: Rewards earned by participating buyers.
- Seller Rewards: Rewards earned by participating sellers.
- Market Price: Calculated market price for the round.
- Regret: Regret value calculated based on buyer and seller valuations.s

This simulation incorporates historical data from Table(a table in my research paper) for two music works:

Table 2: Repeated Sales Prices Paid at Puttick and Simpson Auctions, various dates

“Four Jolly Smiths” (a 4-part song) by Henry Leslie (d. 1896)		
Date sold	Price paid £	Price in 2015 £
1868	5.25	600
1889	265	30,716
1892	261	29,910
1895	182.7	21,646
1896	156.8	18,680
“Fairy Barque” (work for piano) by W. Smallwood (1831-97)		
Date sold	Price paid £	Price in 2015 £
1891	1,008	115,524
1896	1,810.50	217,260
1904	1,424.50	156,235
1912	730	75,212
1931	494	303,054

The prices paid at P&S auctions for two works, one a popular 4 part song and the other a

