## Efficient Simulation for Choice and Market Share of Ranked Policy Providers

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Regulators of the financial services oversee whether various general and life insurance companies remain committed to their promises. To allow the market to make a correct evaluation, the regulatory authorities usually come up with a performance based ranking which is publicly available. It is conceivable that besides price and demographic influences, these rankings play an important role in market share of the competing service provider(SP).

Stated or revealed comparative judgement in paired or multiple design by the beneficiaries, regarding choice of policy are analogous to game between service providers. Choices made by each consumer is seen as an outcome of the tournament and the winner of such a tournament contributes to the market share of a service provider.

In this study, we devise a simple stochastic structure to simulate decision making of consumer in presence of a performance or quality ranking. The randomness in the choice is attributed to other covariates like price, demography etc. Various elimination tournament are simulated to arrive at the market share and 'market-efficiency' of SPs. The aim of the study is to arrive at a sensitivity report of the prior ranking and thus the efficiency of the service providers on the market share of various service providers. Assumption on the probability of the movement of a SP across rank orders can potentially help industry to evaluate strategies regarding investment for building better performance ranking.

Keywords: Comparative Judgement, Paired Comparison, Multiple Comparison, Tournament.

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