

MCMC M1.Z

This model could be applied to studies of market share and consumer choice. I envision the following application of each parameter.

Y - Number of people who bought cars of brands 1,...,N

P_{i1}, \dots, P_{iN} - Probabilities of a person buying a car from each brand.

Z - Indicator of whether someone is a "mainstream" brand buyer, or an "eccentric" brand buyer.

Q - Market shares among "mainstream" brands.

R - Market shares among "eccentric" brands.

A1 - Set of "mainstream" brands.

A0 - Set of "eccentric" brands.

M1 - Number of "mainstream" brands.

M0 - Number of "eccentric" brands.

Pistar - Market type scalar, that amplifies market share of "mainstream" brands (the Qs), and dampens market share of "eccentric" brands (the Rs), especially given the right-weighted Beta(0.1, 0.9).