Simulating MA(2) process

PRACTICAL TIME SERIES ANALYSIS

THISTLETON AND SADIGOV

Objectives

- Simulate a moving average process
- Interpret correlogram of a Moving average process

MA(2) process

$$X_t = Z_t + \theta_1 Z_{t-1} + \theta_2 Z_{t-2}$$

Simulation - MA(2) model

$$X_t = Z_t + 0.7\, Z_{t-1} + 0.2\, Z_{t-2}$$

$$Z_t \sim Normal\,(0, 1)$$

What We've Learned

- How to simulate MA processes in R
- That ACF of MA(q) cuts off at lag q