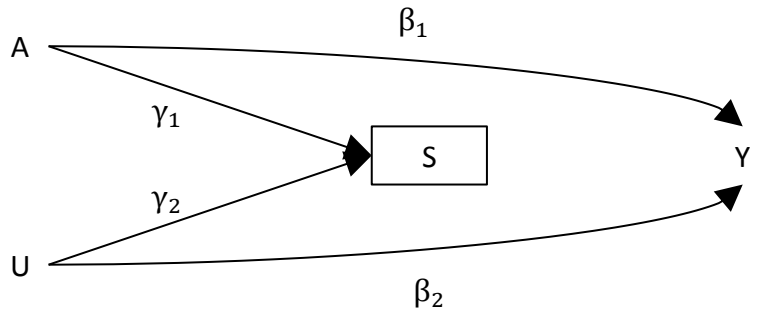
Causal diagram for data-generating process



Data-generating rules

- $A \sim \text{Bernoulli}(0.2)$
- $U \sim N(0,1)$
- $P(S) = \frac{\exp(\gamma_0+\gamma_1 A+\gamma_2 U+\gamma_3 U*A)}{1+\exp(\gamma_0+\gamma_1 A+\gamma_2 U+\gamma_3 U*A)}$
  - $\gamma_0 = \ln(0.10/0.10)$
  - $\gamma_1 = \ln(5.0)$
  - $\gamma_2 = \ln(5.0)$
  - $\gamma_3 = \ln(1.0)$
- $P(Y) = \frac{\exp(\beta_0+\beta_1 A+\beta_2 U)}{1+\exp(\beta_0+\beta_1 A+\beta_2 U)}$
  - $\beta_0 = \ln(0.05/0.05)$
  - $\beta_1 = \ln(1.0)$
  - $\beta_2 = \ln(5.0)$