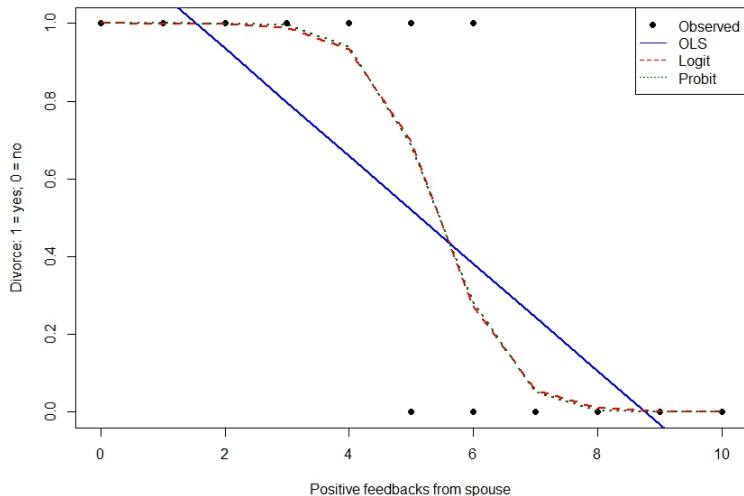


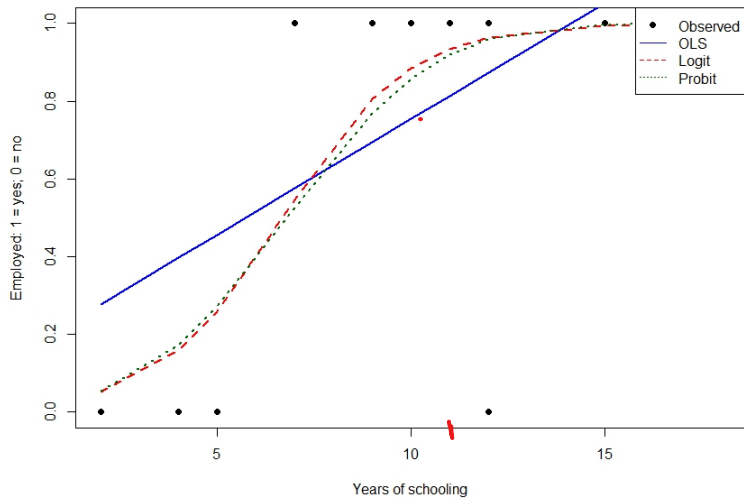
Binary Dependent Variables

- 1 Examples
- 2 Latent variable framework
- 3 Probit
- 4 Logit
- 5 Maximum likelihood estimation
- 6 Interpretation

Examples



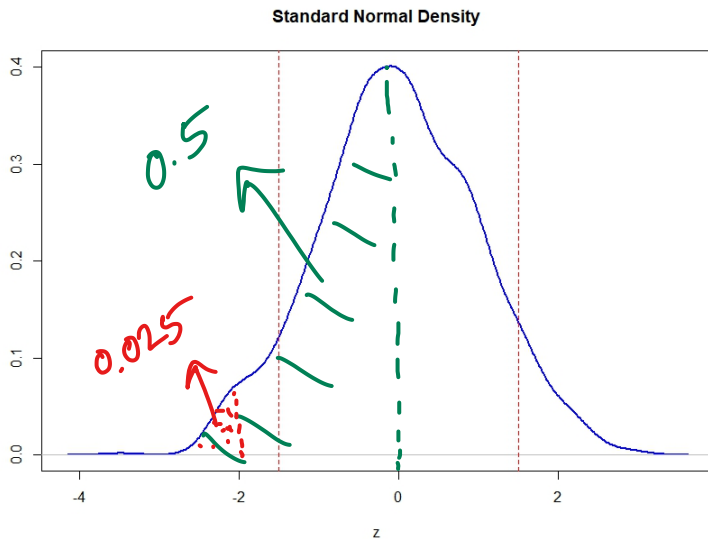
Examples (cont.)



Latent Variable Framework

Probit

u follows $N(0, 1)$

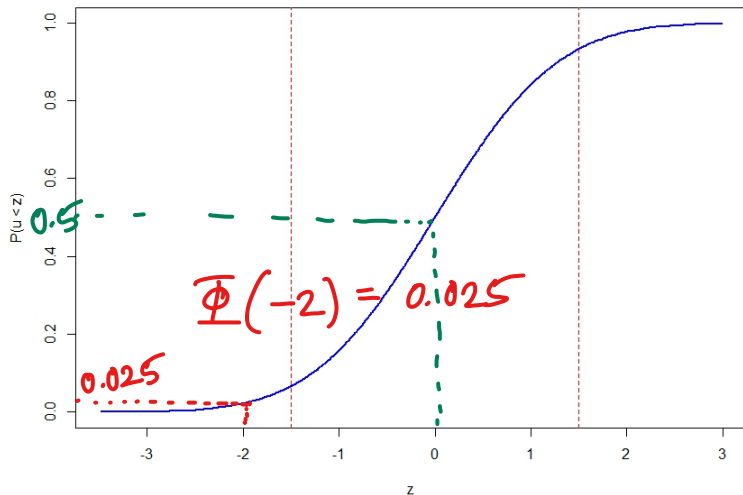


Probit (cont.)

$$P(z \leq 0) = 0.5$$

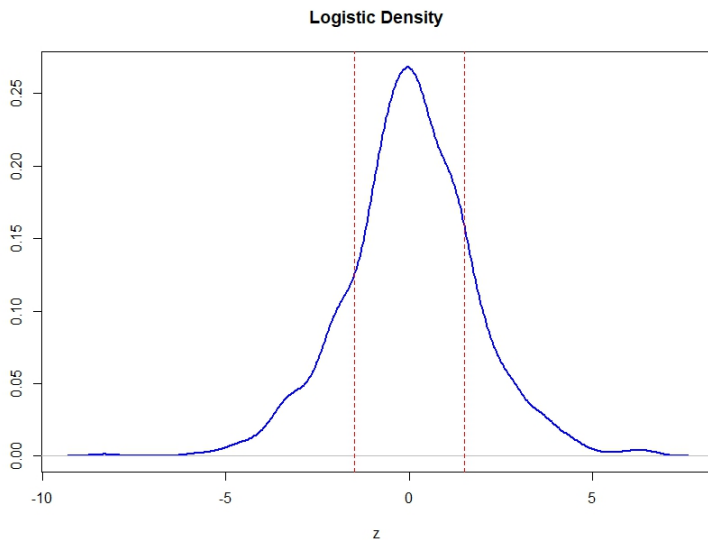
Standard Normal CDF

$$\Phi(0) = 0.5$$

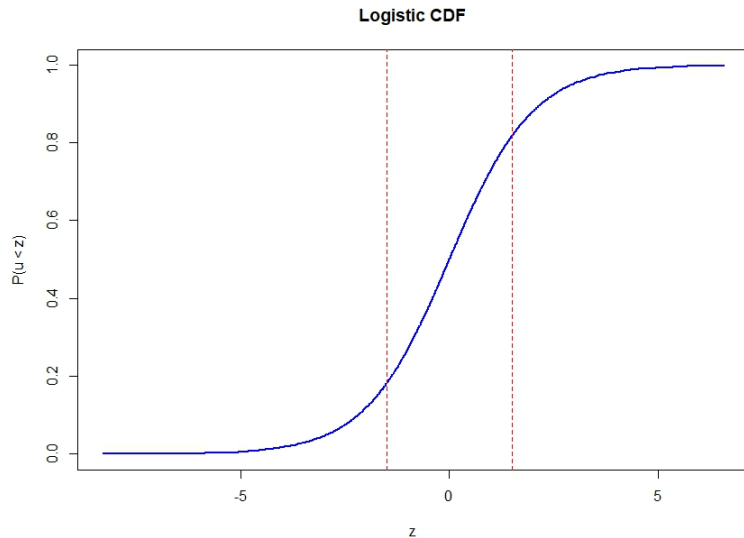


Logit

u follows logistic distribution



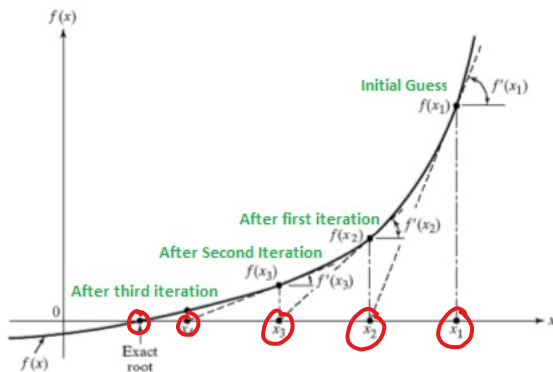
Logit (cont.)



Maximum Likelihood Estimation

Maximum Likelihood Estimation (cont.)

Nonlinear optimization



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Interpretation