Choice with multiple alternatives

Derivation of the logit model

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Introduction to choice models

ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

The error term

For all $i \in \mathcal{C}_n$

$$U_{in} = V_{in} + \varepsilon_{in}$$

- What is $\mathcal{C}_n$?
- What is ε_{in}?
- What is V_{in}?

Error terms

Logit: same assumptions as for binary logit

ε_{in} are

- independent and
- identically distributed,
- extreme value EV(0,μ).

Comments

- Independence: across i and n.
- Identical distribution: same scale parameter μ across i and n.
- For estimation, scale is normalized: $\mu = 1$.