

Choice with multiple alternatives

Specification of the deterministic part

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Introduction to choice models



ÉCOLE POLYTECHNIQUE
FÉDÉRALE DE LAUSANNE

Systematic part of the utility function

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} ?

Systematic part of the utility function

$$V_{in} = V(z_{in}, S_n)$$

- ▶ z_{in} is a vector of attributes of alternative i for individual n
- ▶ S_n is a vector of socio-economic characteristics of n

Functional form: linear utility

Notation

$$x_{in} = (z_{in}, S_n)$$

Linear-in-parameters utility functions

$$V_{in} = V(z_{in}, S_n) = V(x_{in}) = \sum_k \beta_k (x_{in})_k$$

Not as restrictive as it may seem