

Oral Presentation 3

Estimation Results and Interpretation

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Economic Question

In what extent happiness is linked to GDP per capita?

Variables	Description
RLadder	Level of Happiness: between 4 and 7 in our data
GDP	The log of GDP per capita
GINI	The GINI Index
CO2 emissions	CO2 emissions
Continent	5 groups: Europe,
CPW	Numb. of children per woman

A simple model

$$\text{RLadder} = \beta_0 + \beta_1 \cdot \log \text{GDP}$$

	(Intercept)	GDP
5	-9.95	1.26
6	-18.88	2.20
7	-41.54	4.45

$$\ln \frac{P(\text{RLadder}=5)}{P(\text{RLadder}=4)} = b_{10} + b_{11} \text{GDP}$$

$$\ln \frac{P(\text{RLadder}=6)}{P(\text{RLadder}=4)} = b_{20} + b_{21} \text{GDP}$$

$$\ln \frac{P(\text{RLadder}=7)}{P(\text{RLadder}=4)} = b_{30} + b_{31} \text{GDP}$$

Multinomial Logit Model

$$\text{RLadder} = \beta_0 + \beta_1 \cdot \text{GDP} + \beta_2 \cdot \text{GINI} + \beta_3 \cdot \text{CO2} + \beta_4 \cdot \text{Continent} \\ + \beta_5 \cdot \text{CPW}$$

	(Intercept)	GDP	GINI	CO2	Continent2	Continent4	Cont
5	-5.25	0.73	-5.02	0.36	1.71	5.01	
6	-18.57	2.40	-13.24	0.34	-5.66	8.62	
7	-101.17	9.97	-7.71	0.33	2.45	13.24	

$$\ln \frac{P(\text{RLadder}=5)}{P(\text{RLadder}=4)} = b_{10} + b_{11} \text{GDP} + b_{21} \text{GINI} + b_{31} \text{CO2} + \\ b_{41} (\text{Continent} = 1) + \dots + b_{71} \text{CPW}$$

Donner les interprétations (effet marginal, élasticités, etc.)

Relier les conclusions à la problématique

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