

MNL in *Apollo*



Key concepts
& study plan



Experimental
design



Data collection
& processing



**Model specification
& estimation**



Interpretation
& application

MNL in *Apollo*

Data in package: *apollo_swissRouteChoiceData*

- ❑ Public transport stated choice survey from Switzerland
- ❑ Two unlabelled alternatives, 9 choices per person
- ❑ Attributes: travel time (tt), travel cost (tc), headway (hw) and changes (ch)
- ❑ Covariates: household income, car availability, season ticket ownership and journey purpose

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ID , choice , tt1 , tc1 , hw1 , ch1 , tt2 , tc2 , hw2 , ch2 , hh , inc_abs , car_availability ,  
      ↪ half_discount_ticket , full_discount_ticket , commute , shopping , business , leisure  
2439 , 2 , 58 , 7 , 30 , 1 , 50 , 8 , 30 , 0 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
2439 , 1 , 30 , 8 , 60 , 0 , 41 , 7 , 15 , 2 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
2439 , 1 , 41 , 7 , 30 , 0 , 34 , 8 , 15 , 2 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
2439 , 1 , 44 , 10 , 60 , 1 , 52 , 9 , 60 , 2 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
2439 , 2 , 43 , 9 , 60 , 0 , 34 , 10 , 30 , 0 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
2439 , 2 , 36 , 8 , 60 , 1 , 43 , 7 , 15 , 1 , 50000 , 1 , 0 , 0 , 1 , 0 , 0 , 0  
...
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Analysis plan

- ❑ MMNL with negative lognormal distributions
- ❑ LC with three classes