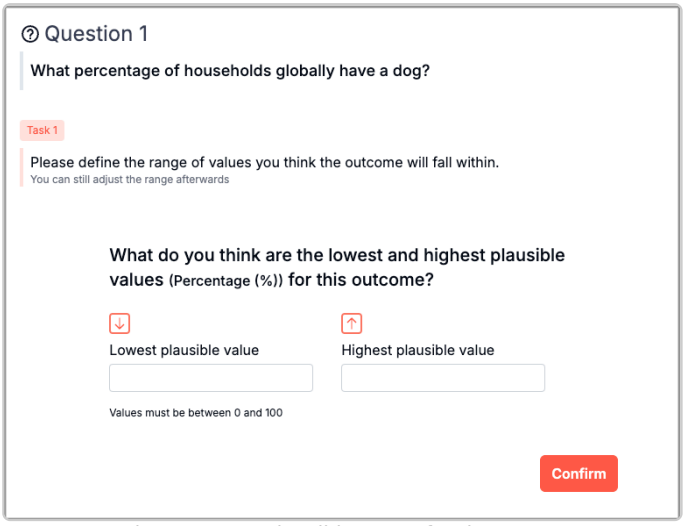
Roulette / Chips-and-bins Questions

Roulette or Chips-and-Bins is a method used for eliciting probability distributions from experts regarding specific outcomes or variables. It is implemented as a two-step procedure outlined below. Screenshots are provided to illustrate the interface.

Step 1: Experts are asked to provide a range in which the outcome plausibly falls. If there are natural limits to the outcome of interest (e.g. 0-100 for Percentages), those are displayed and enforced.

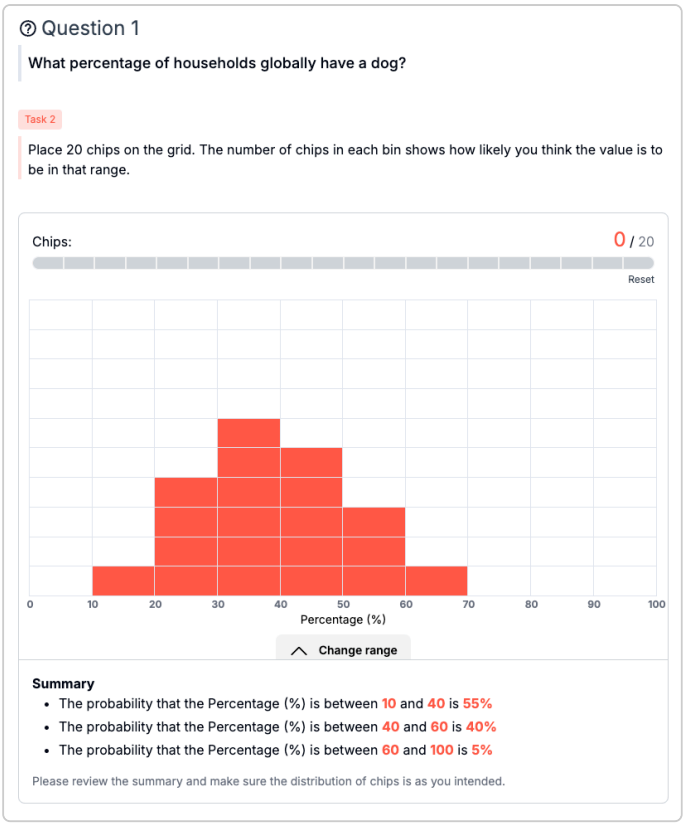


Roulette Step 1: Plausible range for the outcome

Step 2: Experts are then given 20 “chips" to distribute across a set of “bins” within the estimated range. Each bin represents a possible value for the outcome in question. The distribution of chips reflects the expert's belief about the likelihood of each value. The more chips placed in a bin, the higher the probability the expert assigns to that value occurring.

Roulette Step 2: Distribution of chips across bins

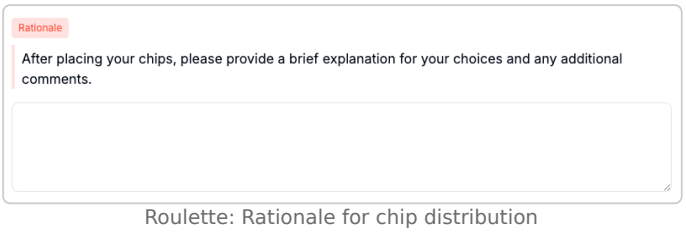
A summary below the bins-grid gives feedback to the expert and about how their distribution of chips translates into a probability distribution for the outcome in question – see 'Summary' panel in the screenshot below.



Roulette Step 2: Summary of probability distribution

Experts can adjust and change the plausible range they provided in step 1 by clicking on 'Change range'.

After all chips have been allocated, experts are usually asked to provide some rationale for their chip distribution, which helps in understanding the reasoning behind their probability assessments. This feature can be turned off.



Roulette: Rationale for chip distribution