Sampling

Data Analysis for Journalism and Political Communication (Spring 2026)

Prof. Bell

1970 Vietnam War Draft

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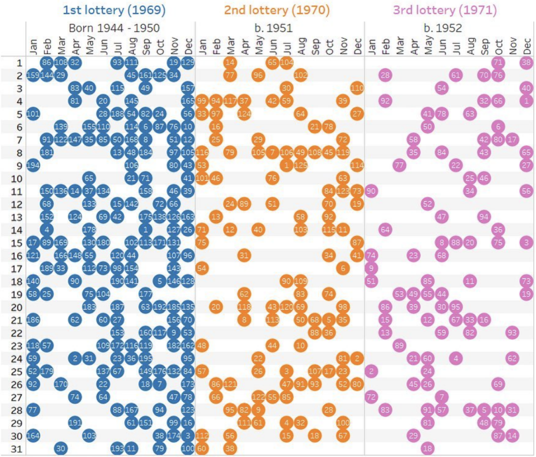

Birthdates of US servicemen drafted into the Vietnam War as a result of birthdate lotteries held in 1969, 1970 and 1971

Source: @visyuval

Note: The numbers denote the order that the birthdates were drawn, as this determined the order of call. The highest lottery number called for duty in the 1st, 2nd and 3rd lotteries was 195, 125 and 95, respectively.

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- Often, we are not able to count every unit in the population, so we take a **sample**
- Our best guess about the population based on our sample is the **estimate**
- The key to a good estimate is a quality sample, which is determined by two elements:
  1. A **random sample** of the population
  2. The **sample size** is sufficiently large

In-class exercise

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- In other words, there is a 5% chance that the true population value is outside of the **confidence interval**
- If we re-sampled the population 100 times, 95 of our estimates would fall within the confidence interval (let's see this in action!)

Google Colab Example

Margin of Error

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- We report the estimate with the MOE, e.g., 45 +/- 3.1%.

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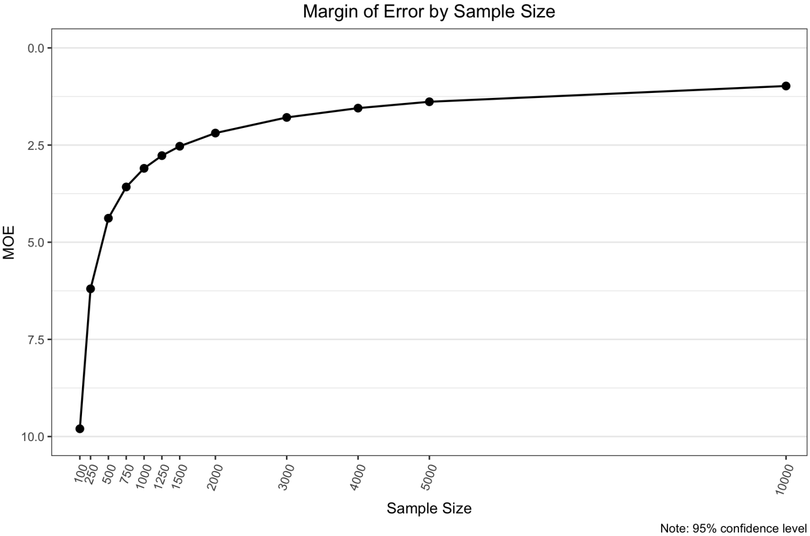

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- Remember that the MOE only takes into account the sample size, not the potential for selection bias

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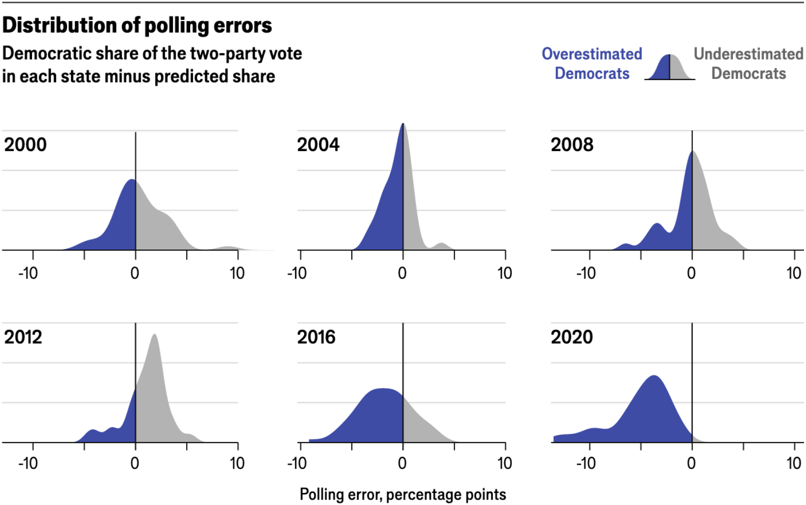

Source: The Economist