

# Measurement and Sampling

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Concept	Measurement
Economic Performance	<ul style="list-style-type: none"><li>- Average household income</li><li>- Unemployment rate</li></ul>
Support for Democracy	<ul style="list-style-type: none"><li>- Electoral participation rates</li><li>- Survey responses</li></ul>

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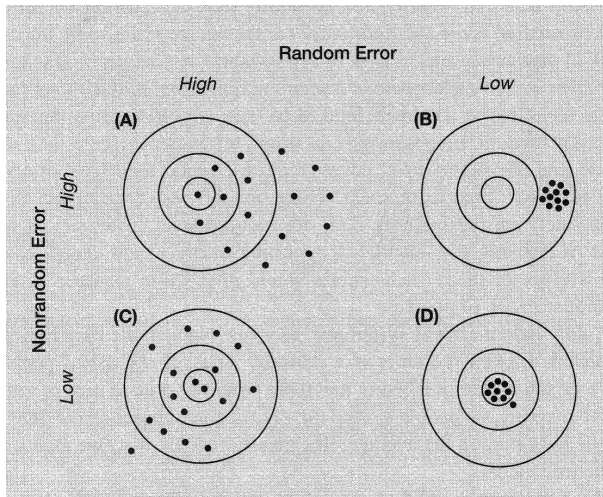
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# Measurement and Error



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How do we measure most of these things? Surveys!

## Survey sampling

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- ▶ Assuming the subset is representative



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Two common methods:

- ▶ Probability sampling: every unit of a target population has a known AND non-zero probability of being selected
- ▶ Simple *random sampling* (SRS): selects a pre-determined number of respondents from a target population with each potential respondent having an equal chance of being selected

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- ▶ Health
- ▶ TV and movie preferences

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A more complex process

- ▶ *Multi-stage cluster sampling*: proceeds in multiple stages by sampling larger units first and then randomly selecting smaller units within each of the selected larger units.
  - ▶ A random selection from a random subset is just as random as an initial random selection

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Things that can go wrong:

- ▶ *Unit non-response*: the failure to reach selected units
- ▶ *Item non-response*: respondents refuse to answer certain survey questions.
- ▶ *Social desirability bias*: the problem where respondents choose an answer that is seen as socially desirable regardless of what their truthful answer is