# How to read statistics?

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## Plan

- Why, how and when are statistics useful?
- Measurement issues: How to count what counts?
- Human rights data bases
- Statistical study example

# Increased used of statistics in the HR field

- Monitoring: indicators, the MDGs, the SDGs
- Advocacy tools
- New Data sets
- Academic research

# Statistics is a powerful tool

- Sally Clark case



- D.H and others v. the Czech Republic (ECHR)

# SSB vil ikkje lage kriminalstatistikk om innvandrarar til FrP

Ingen veit kva grupper som er mest representert på kriminalstatistikken i Norge. Framstegspartiet etterlyser meir informasjon, men SSB vil ikkje lage slik statistikk. – Uheldig, meiner Norsk presseforbund.

Journalist
**Anders Magnus**
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Journalist
**Eline Buvarp Aardal**

O MER OM NORGE

O MER OM POLITI OG KRIMINALITET

O MER OM FREMSKRITTSPARTIET

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Parlamentarisk leiar Harald Tom Nesvik og stortingsgruppa til Frp vil ha meir informasjon om bakgrunnen til kriminelle.
FOTO: ROALD, BERIT / NTB SCANPIX

"Landbakgrunn er etter vår vurdering en mer relevant og presis variabel for å vurdere innvandreres representasjon i kriminalstatistikken enn statsborgerskap"

# Why statistics?

Quantitative vs. Qualitative

- Quantitative information is countable, structured, information poor
- Qualitative information is unstructured, information-rich, context-specific

# Why statistics?

- When dealing with many observations, qualitative information becomes overwhelming.

- Statistics allows us to summarise quantitative information into a more useful amount of information.

- Establish pattern and trends

- Better suited for generating universally generalisable results

- …and because it is cool!

# What is lost?

Liebowitz, Debra J. and Zwingel, Susanne (2014), 'Gender Equality Oversimplified: Using CEDAW to Counter the Measurement Obsession', *International Studies Review,* 16 (3), 362-89.

- Indicators = narrow and misleading understanding of gender equality
- Variation and different sub groups lost
- «Checking off boxes mentality»
- Avocacy and agency lost

- CEDAW committee's prodcedure as a good example of how it should be done

# On Measurement and Statistics

- Quantitative data are always:
  - Dependent on the definitions used
  - Data material available
  - Rigor of the coders
- To be useful, a particular measure must be:
  - Valid:
    - Concept validity
    - Measurement validity
    - Internal and external validity
  - Reliable
    - Coders must be competent and unbiased
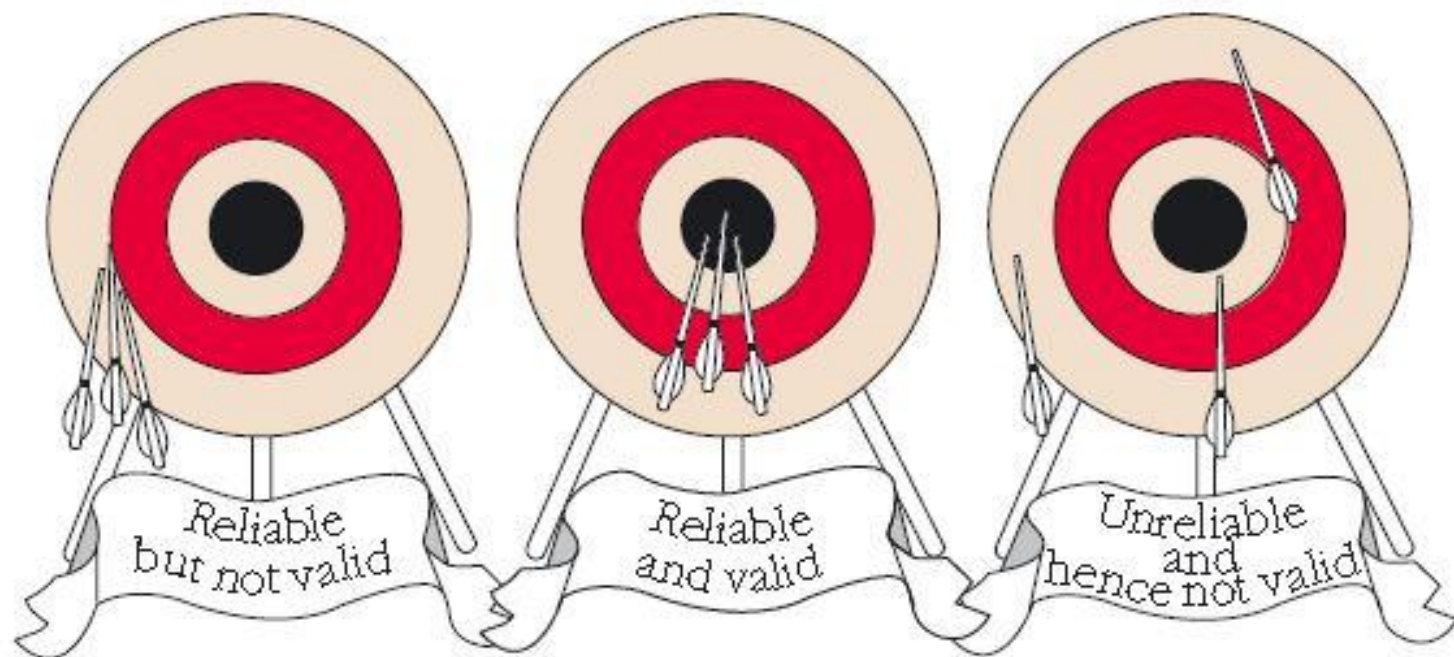    - Coding rules must be explicit

**Figure 5.1** *Reliability and validity. (Source: Open University, 1979, Classification and Measurement, DE304, Block 5, The Open University, Milton Keynes, p. 68)*
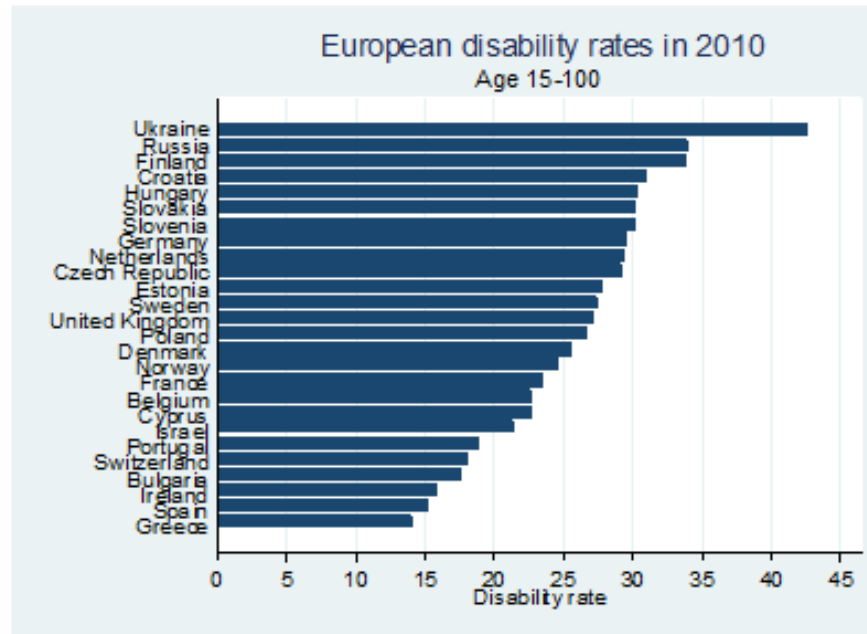
**Read**

**Measurement Validity: A Shared Standard for Qualitative and Quantitative Research**

Robert Adcock & David Collier

*The American Political Science Review, Vol. 95, No. 3. (Sep., 2001), pp. 529-546.*

# What is disability?



European disability rates in 2010
Age 15-100

# Human Rights data

**Validity**

- What are HR?

- How do we conceptualise/measure it?

# Human rights data

Freedom House

- – Free, partly free, not free (1 through 7)
- 10 political rights questions
  - – procedural and actual
- 15 civil liberties questions
  - – Expression, association, rule of law, individualism
- Particularly useful as indicator of performance
- Problem with time series: moving scale
- Policy Advocates – interested in particular outcomes…
- http://www.freedomhouse.org

# Human Rights Data

Political Terror Scale (PTS)

- Five-level index (subjective placement)
  - Based on Amnesty International and US State Department annual reports
  - 1976
  - State-sanctioned killings, torture, disappearances, political imprisonment
  - Regarded as reliable but not too informative

- http://www.politicalterrorscale.org/

# Human Rights Data

- CIRI (Cingranelli-Richards HR data)
- Measures of government respect for 15 human rights
  - Based on Amnesty International and US State Department annual reports
  - 1981
  - From killing and torture to worker's and women's rights
  - Data truncation

- http://ciri.binghamton.edu/

# Human Rights Data

- SERF - Economic and Social Rights Empowerment Initiative
  - Index on the right to work, health, food, housing and education

  - measures the protection of rights relative to the country's economic capacity by adopting an "achievement possibility frontier"

- http://www.serfindex.org

# Human Rights data

## Reliability

- number of human rights violations is extremely difficult to measure precisely

- a change in a country's value on a standardised scale only means that the number of violations *reported* have changed. It does not necessarily mean that there has been an actual change.

- Missing data

# Human Rights data

- Rough estimates rather than precise and objective facts
- Still useful and informative


- At present most focus on:
  - civil and political rights
  - negative aspects of rights

# Example:

# Do human rights violations increase the risk of civil war?

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## Håvard Strand
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"[I]t is essential, if man is not to be compelled to have recourse, as a last resort, to rebellion against tyranny and oppression, that human rights should be protected by the rule of law"

(Universal Declaration of Human Rights 1948: preamble para.3)

# Do Human Rights Violations Increase the Risk of Civil War?

# Challenges

- Enogeneity / causality

$$X \longleftrightarrow Y$$

- Dependency

- Omitted variables (explanatory factors)

- Lack of data

# Solutions

- Apply time-series cross sectional data

- Look at HRV *before* the onset

- Low threshold of civil war

- Modelation of temporal- and spatial dependence

- Include relevant control variables

- Control for unobserved time consistent variables

# Results

**Table 2: Regression results**

|  | Model 1 | Model 2 | Model 3 |
|---|---|---|---|
| Social and Economic Rights | 0.980** | | |
| | (-2.451) | | |
| Political Terror Scale | | 1.398*** | |
| | | (3.189) | |
| Social and Economic Rights Proxy | | | 1.300*** |
| | | | (2.641) |
| GDP per Capita (log) | 0.897 | 0.770*** | 0.701*** |
| | (-1.069) | (-3.270) | (-4.887) |
| Population (log) | 1.450*** | 1.276*** | 1.423*** |
| | (5.582) | (3.711) | (6.326) |
| Other ongoing conflicts | 0.659 | 0.578** | 0.725 |
| | (-1.502) | (-2.021) | (-1.356) |
| Spatial lag of conflict (50km) | 1.580 | 1.205 | 1.651 |
| | (1.109) | (0.468) | (1.465) |
| Proximity to regime change | 1.129 | 0.805 | 1.399 |
| | (0.402) | (-0.695) | (1.375) |
| Proximity to previous conflict | 2.473** | 2.567*** | 2.090** |
| | (2.445) | (2.635) | (2.308) |
| ethnicity relevant | 1.960 | 2.168 | 2.505** |
| | (1.415) | (1.635) | (2.311) |
| Constant | 0.000*** | 0.000*** | 0.000*** |
| | (-6.661) | (-5.545) | (-7.086) |
| Log Likelihood | -414.22 | -448.35 | -641.01 |
| Log Likelihood null model | -446.89 | -491.77 | -695.87 |
| N | 2544 | 3191 | 4637 |

- <u>Human rights violations increase the risk of civil war!</u>

- SERF: yearly increase of 3,2 pp

- PTS: yearly increase of 4 pp

- CP: almost no support