

## Topic 8: Instrument Variables, Basic

*by Sai Zhang*

**Key points:** This note is on the causal panel data, building upon [Arkhangelsky and Imbens \(2023\)](#).

**Disclaimer:** *This note is compiled by Sai Zhang.*

### 8.1 One-Way Clustering

## References

Dmitry Arkhangelsky and Guido Imbens. Causal models for longitudinal and panel data: A survey. Technical report, National Bureau of Economic Research, 2023.