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- A valid model:
  - Reproduces patterns in a “holdout sample” excluded from estimation
  - Or matches moments of estimation sample not explicitly targeted



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- Cross-validation enables automated specification search
- Structural estimation rarely uses automated specification search

Lang & Palacios (2018, NBER WP)

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- Use 20% holdout sample for out-of-sample assessment
- Formally compare model fit between estimation and holdout data
- Take-away: Visual model fit often insufficient

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- Compare model predictions across states of the world
- New state: Schooling without costs
- Elicited preferences under both cost regimes
- Estimated model using only one regime
- Tests whether model predicts behavior in counterfactual regime

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- Final policy experiments use enriched model