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*Attenuation Bias in Measuring the
Wage Impact of Immigration*

Discussion

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What the paper does

- Applies the Borjas (2003) methodology to large and small samples of Canadian and US Census data
 - Large samples: larger wage effect of immigration
 - Large sample immigrant share in small sample: larger wage effect of immigration
 - Conclusion: measurement error in immigrant share results in significant downward bias
- Calculates corrected coefficients
 - Back-of-envelope, 'BBE' and 'USSIV'

Findings

- Striking results
 - Measurement error biases the coefficients by at least 20 to 30 percent in national level analysis
 - Even larger bias in area specifications (sample sizes smaller)
 - Area estimates one-tenth the size of national-level estimates
 - Labor-capital flows arbitrage geographic wage differences
 - Several estimates not statistically significant

Where to improve the paper

- More intuition
 - What is the source of sampling error?
 - What do the point estimates mean?
 - Why are point estimates so different in national vs. area specifications?
 - Statistical significance in large vs small samples
- Robustness checks
 - Some corrections are unstable, nonsensical
 - How sensitive are the effects of measurement error to the estimation methodology?
 - IVs other than lagged shares; natural experiments

Conclusion

- Reflects an important step in this literature
 - Reconciles disparate estimates
 - Considers a new challenge: measurement error
- Next step
 - What are the implications for other data sets, such as ACS or CPS? Other methods? Other regressors?
 - What are the implications of measurement error in other labor studies?

Measurement error

- Standard measurement error
 - Inflates variance (X), biasing coefficient Beta down

$$p \lim \hat{\beta}^{OLS} = \left(\Sigma_{XX}^* + \Sigma \right)^{-1} \Sigma_{XX}^* \beta$$

- B&A argue bias can be quite large, small samples especially bad
- Lagged share IV especially bad