Discussion of: D. Indra, "Choice of residence location and mode…" Riverside, CA Jan. 17, 2015

> Kenneth Small UC Irvine

What the paper does:

- Adds to a valuable topic
- Brings excellent data: mostly US Census
- Cross-section of aggregates: Chosen well, good combination of: (i) Data completeness (minimizes censoring); (ii) Ample observations (all relevant ODs in 275 MSAs)
- Functional forms: conventional, well suited

Innovations:

- Residential location is conditioned on work location
- Many MSAs can pool, or estimate separately

## Main findings:

- Accessibility to consumption opportunities: has U-shaped effect on utility
- Distance to water, road network: sensible effects
- Differences across income groups:
  Esp. impact of average tract income on choice:

  (i) positive to most groups (as expected);
  (ii) negative to lowest group (interpreted as prejudice)

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   (i) positive to most groups (as expected);
   (ii) negative to lowest group (interpreted as prejudice) Another possible interpretation: reflects unobserved amenities specific to income group, e.g. suitable retail

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Mostly as expected, consistent with previous studies. One result: mode choice elasticity lower than previous. Interpreted as: decline over time Alternative possibility: due to improvements in methodology in this study

## Limitations:

• User cost of owner-occupied housing: Measure used here (implicit rent):

 $R = 0.1 \cdot V$ 

More sophisticated measure (e.g. Mills & Hamilton):

$$R = [(r+T)(1-t) - \pi \cdot t - g^{r} + c] \cdot V$$

where r = real interest rate;

- T = property tax rate
- *t* = marginal income tax rate
- $\pi$  = inflation rate
- $g^r$  = real housing appreciation
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c = maintenance cost as fraction of value These parameters are likely to vary across MSAs & income groups Limitations (continued):

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Implication here: perhaps endogeneity of work location varies by MSA and by income; could proxy by measure of average job turnover. Limitations (continued):

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- Final calculation: effect of housing price elasticity on urban form:
  - Which way is the causality?
  - I could imagine:
    - Pop density -> unobserved tastes -> resid. location
- Minor point: Is there truncation bias from omitting ODs with zero flows?

Possible extensions:

- Do pooled sample with MSA characteristics e.g. climate, average education See if can account for some of the variation seen across MSAs without losing so much precision
- Random coefficients could it be that some parameters vary randomly across OD pairs in a way that is useful to know?
- Time variation obviously this would be a new project