

The Evolution of Brand Preference

Evidence from Consumer Migration

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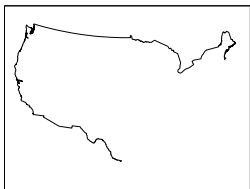
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Motivation

- *Where do brand reference come from?*

This Paper

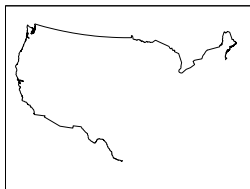
- Starting point



(*source: Bronnenberg, Dhar & Dubé 2009, JPE*)

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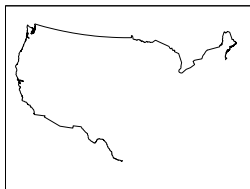


(source: Bronnenberg, Dhar & Dubé 2009, *JPE*)

- New data: History of migration for 48k households in the 2007-8 Nielsen Homescan panel matched to purchases in 260 categories

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- New data: History of migration for 48k households in the 2007-8 Nielsen Homescan panel matched to purchases in 260 categories
- Identification: Holding constant where you live now, how does consumption depend on where you lived in the past?
- Model: Current preferences depend on stock of past consumption

Data

Deceptiv Evidence

Relative Share (y_{ij})

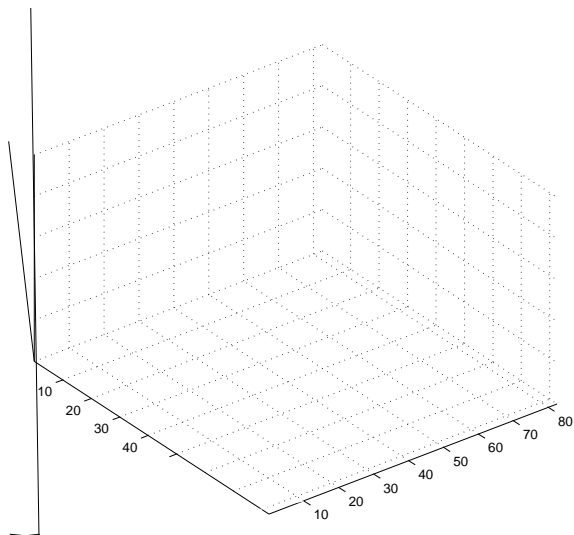
- Let y_{jr} be average y_{ij} among non-migrant consumers in state r
- For migrant i born in r now living in r^0 ...
- *Relative share:*

$$y_{ij} = \frac{y_{ij} - y_{jr}}{y_{r^0} - y_{jr}}$$

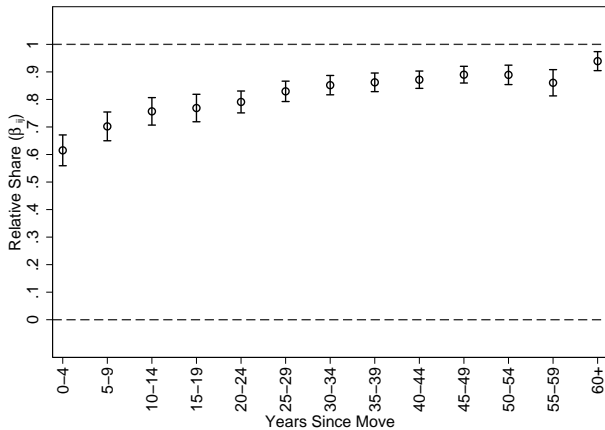
Prediction

- If that matters is contemporaneous supply-side variables: $\beta_{ij} = 1$ everywhere
- If that matters is what your parents did: $\beta_{ij} = 0$ everywhere
- Brand capital model: β_{ij} depends on years lived & age when moved

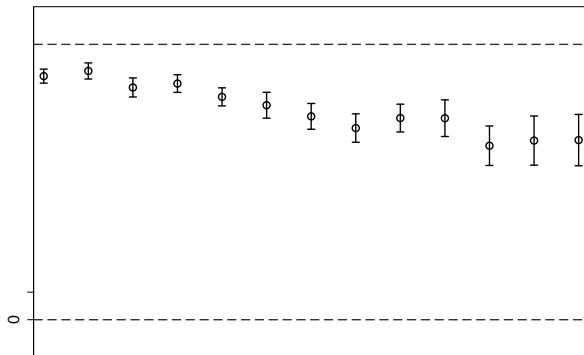
Cross-sectional Evidence



Slic by Year



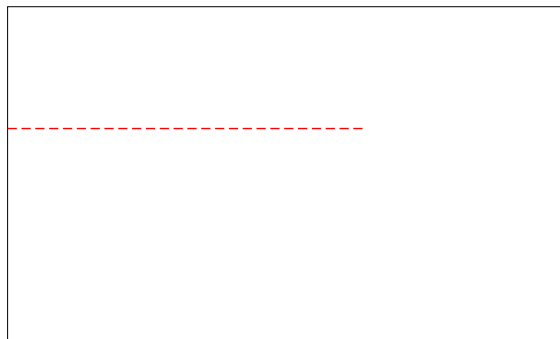
Slic by Ag



Pan | Evidence

- 221 HHs report moving to their current state during the two years of our sample
- Cross sectional data predicts β_{ij} should jump from zero to .6 at move
- Coarse data on timing
 - Lived <1 year
 - Lived 1- years

Liv d in Curr nt Stat 1- Y ar

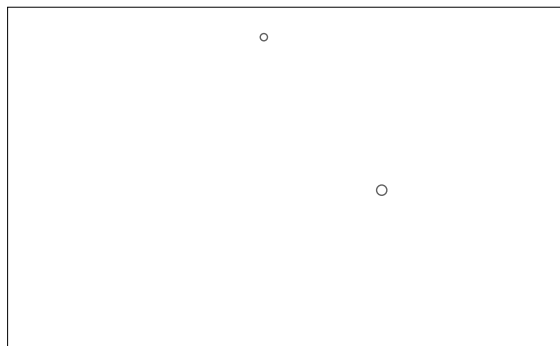


Summary

- Jump to $y_j = .6$ immediately on moving
- Remaining gap in consumption closes slowly
 - 0+ years to reach $y_j = .8$
 - After 50+ years, y_j still significantly < 1
- Older migrants experience the same jump, but remaining gap closes more slowly
- Migrants look similar to non-migrants before they move (no evidence of selection)



Assumption 1



- coefficient = 1.04 (.15)
- constant = -0.11 (.10)

Assumption

- Unobservable preferences uncorrelated with migration status
- Evidence
 - Match between panel and cross-section
 - ϵ_{ij} pre-move uncorrelated with age at move
 - preliminary results on recently-launched brands

D mand

$$y_{ij} = \beta_{jr} + (1 - \beta_{jr}) k_{ij}$$

where

- y_{ij} is probability of purchasing brand 1 (conditional on purchasing 1 or 2)

th r ult

- Brand capital relatively more important in high-advertising categories
- Brand capital relatively more important in socially visible categories
- Implies significant first mover advantage
 - If A has 1 year head start, B would need to discount price by 60% for 5 years or by 0% for 15 years
 - If A has 10 year head start, B would need to discount price by 40% for 5 years

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 - If A has 10 year head start, B would need to discount price by 40% for 5 years
- Long-term persistence even in the face of shocks

Conclusion

Conclusion

- Past experience significant driver of current preferences (40% of cross-state variation)
- Highly persistent ($\rho = .975$)
- Implies large barriers to entry / first-mover advantage
- Brand capital more important in categories with high advertising / social visibility