Tipping Point and Heterogeneous Preference for Exclusion
-- Insights from A Random Coefficient Discrete Choice Model

Shuhua He, PhD Candidate
University at Buffalo, Economics Department

Abstract

Massive wishful intervention to promoting racial integration would tip off white flight and, consequently, exacerbate residential segregation rather than foster racial integration in the long run. Yet, there is little large-scale empirical evidence of tipping. This paper synthesizes the strength of BLP and RD to explore the breadth and the nature of neighborhood tipping.

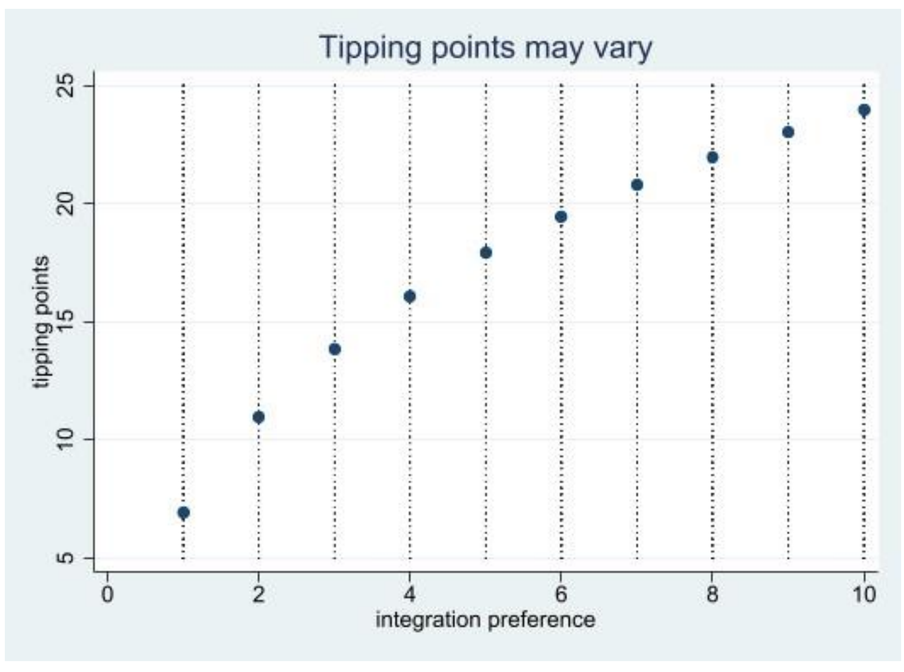
There are two major innovations in this identification scheme. First, the revealed integration preferences are traced out from a random coefficient discrete choice model, which explicitly accounts for heterogeneity preference without compromising the identification power. Second, the restrictive assumption of a common tipping point is relaxed, which allows an in-depth investigation of tipping among neighborhoods under different preferences.

Introduction

- **What's neighborhood tipping?**
- Neighborhood tipping, also known as "white flight", refers to the phenomena that, as the minority share in the neighborhood exceeds a critical value, white households flee a neighborhood in droves, causing a previously white-dominated neighborhood to quickly tip into a non-white one. This critical value is often referred to as the "tipping point".

- **What's the big deal?**
- The tipping hypothesis paints a rather discouraging outlook on desegregation policies in housing markets: Large-scale construction of affordable houses in high-income white neighborhoods may trigger white flight, which could further exacerbate residential segregation rather than foster integration. The government simply cannot impose its will on the general public.
- tipping points are of crucial reference value to policy design. To truly promote racial integration, policy intervention must proceed with caution. Desegregation policies must be attentive to the tipping points.

- **Why does hetergogenous preference matter?**
- Tipping points may vary across neighborhood of different integration preferences. It can be consequential, if policy design fails to attend to the hidden tipping points.



Identification Scheme

The estimation is carried out in three steps:

1) use a random coefficient discrete choice model to estimate the parameters that govern the distribution of the preference for integration for the entire white population.

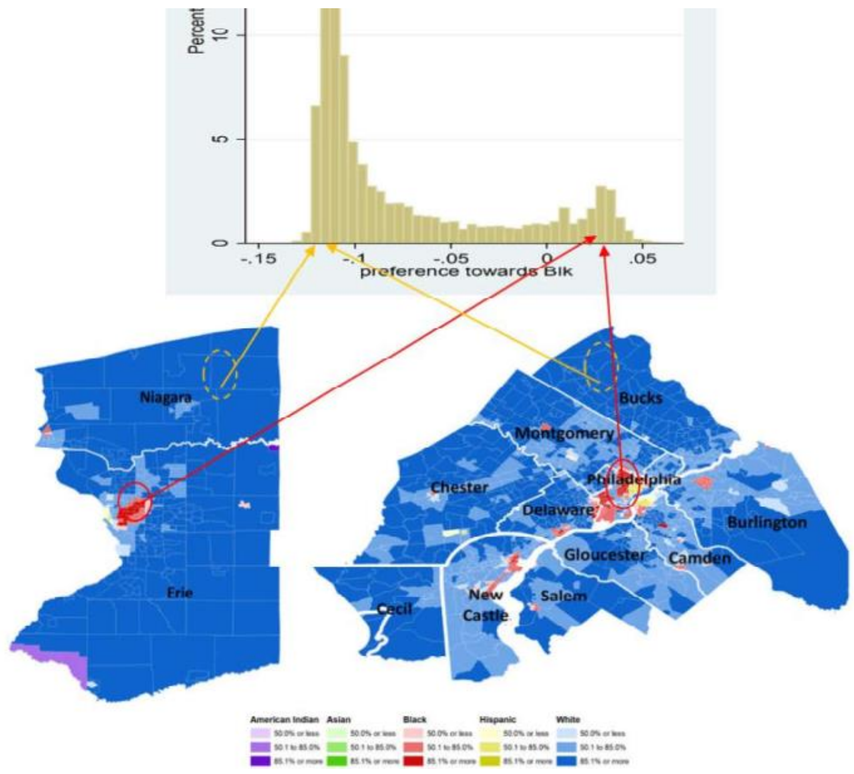
$$U_{ijm}=\alpha_{ijm}BLK_{jm}+\eta P_{jm}+X_{jm}\beta+\xi_{jm}+\varepsilon_{ijm},\ \text{where}\ \alpha_{ijm}\sim(\alpha,\theta)$$
$$\text{Bartik-type of IV}: Z_{jm}=\frac{1}{M-1}\sum_{k\neq m} P_{jm}$$

2) apply Bayes's rule and obtain the posterior distribution.

$$\Pr(EC_j)\times g(\beta|EC_j)=f(\beta)\times\Pr(EC_j|\beta)$$

3) perform Regression Discontinuity to detect tipping among neighborhoods with similar integration preferences.

$$\Delta w_{jm,t}=dD+\alpha BLK_{jm,t-10}*D+h(BLK_{jm,t-10})+X_{jm,t-10}\beta+e_{jm,t}$$
$$\text{where } D=1(BLK_{jm,t-10}-\text{BreakPoint}>0)$$



Findings

1) substantial evidence of tipping around minority ratios of 12% and 29%. The former is also documented in [Card2008]. My finding suggests that integration interventions in housing markets should proceed with caution. Otherwise, they could exacerbate segregation, rather than promoting racial integration.

2) Contrary to expectation, no evidence of "white flight" is found among neighborhoods that exhibit strong exclusionary desire. It is likely because white households actively deter the minorities from moving into a white neighborhood in the first place, as documented in [CutlerGlaeser1999]. This finding attests to the importance of accounting for preference heterogeneity when investigating the neighborhood tipping phenomenon. Dismissing the heterogeneity may misinform policies and cause unintended consequences.

3) At last, more than 80% of the white population incurs disutility from the presence of minorities in their neighborhoods.

Contact

Shuhua He
University at Buffalo, State University of New York
Email: shuhuahe@buffalo.edu
Website: https://www.acsu.buffalo.edu/~shuhuahe/
Phone: 716-361-1822

References

1.
2.
3.
4.
5.
6.
7.
8.
9.
10.