Are Mixed Neighborhoods Always Unstable?  
Two-Sided and One-Sided Tipping

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Racial segregation in the United States

- Black children raised in more segregated areas have lower levels of completed education, lower test scores, lower marriage rates, lower employment and earnings, and higher crime rates.

- A major goal of public policy over the past four decades has been to reduce racial segregation in neighborhoods, schools, and workplaces.

- What are the underlying forces that have led to and sustained segregation?

- Is there scope for public policy?
Schelling’s tipping model

- In a highly influential contribution Schelling (1971) showed that even when most whites have relatively weak preferences for lower minority shares, social interactions in preferences are likely to lead to a fully segregated equilibrium.
Card, Mas, and Rothstein (2008)

- Study neighborhoods (Census Tracts) 1970-2000
- Look at initial minority share in tract \(m_{t-10}\)
- Existence of tipping =>
  - there must be some point \(m^*\) such that when \(m_{t-10}\) is just above \(m^*\), white share falls fast
  - We assume a tipping point is city and decade specific, but can vary over time and across cities.
Neighborhood change in Chicago, 1970 - 1980

Change in white population, 1970-1980

Percent minority in tract in 1970
Los Angeles in 1970 - 1980

Los Angeles-Long Beach, CA PMSA, 1970-1980

Change in white population, 1970-1980

Percent minority in tract in 1970
Nashville, 1990-2000

Change in white population, 1990-2000

Percent minority in tract in 1990
Overview of tipping points

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<td>(1)</td>
<td>(3)</td>
<td>(5)</td>
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<td>Mean city tipping point</td>
<td>11.87</td>
<td>13.53</td>
<td>14.46</td>
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<td>Standard deviation</td>
<td>9.51</td>
<td>10.19</td>
<td>9.00</td>
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Tipping points depend on:

- Race attitudes of whites (more tolerance=>higher tipping point)
- Crime rates (-)
- History of riots (-)
- Population density (-)
Unstable versus semi-stable model of tipping

Unstable

Semi-stable
Tipping points in Chicago, Cleveland, and Detroit over time

Evolution of tipping points over time, three cities

Note: Tipping points are unavailable in 1960.
Pooled histogram of tract minority shares in Chicago, Cleveland, and Detroit, 1950-1990.

Distribution of tract minority shares in Chicago, Cleveland, and Detroit

Note: Vertical lines indicate the three cities' tipping points in the relevant years.
Distinguishing between stable versus semi-stable tipping

- Only a very small fraction of tracts below the 1970 tipping point lose minority residents on net in the years after 1970.

- Of those that do lose minority residents, most lose only a fairly small portion of their initial populations; essentially none lose more than half of their 1970 minority populations.

- The evidence suggests that tipping behavior is one-sided.
Conclusion

- We find strong evidence of tipping.
  - Although the extent of tipping declined between the 1970s and 1990s, it remains statistically and practically significant.

- Neighborhoods appear to retain an integrated character so long as they remain below the tipping point.

- Policies that are oriented toward maintaining stable neighborhoods can derive some justification from this result.