Residential Location Patterns by Race (cont.) Urban Economics

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Residential Location Patterns

- ▶ Recent research has shown that the neighborhood where people live has important implications for short-run, long-run and even intergenerational outcomes.
- ▶ Residential choice can be driven by multiple factors:
 - ► Neighborhood/Housing preferences
 - Racial discrimination
 - Amenities preferences
 - Disparities in income
 - Labor market opportunities
 - ► Taxes/subsidies
 - etc...

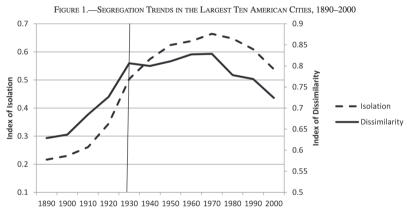


Residential Location Patterns by Race: Chicago

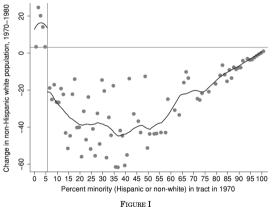


https://www.washingtonpost.com/graphics/2018/national/segregation-us-cities/

Dynamics of Segregation



Source: Shertzer and Walsh (2019) Racial Sorting And The Emergence Of Segregation In American Cities



Neighborhood Change in Chicago, 1970–1980

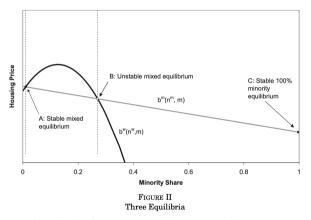
Source: Card et al. (2016) Tipping And The Dynamics Of Segregation

- ► Two groups of buyers: $g \in w$, m
- ► These are willing to pay at least:

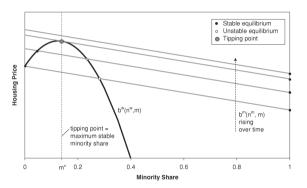
$$b^{g}(n^{g},m) \tag{1}$$

- $ightharpoonup \frac{\partial b^w}{\partial n^w}$ and $\frac{\partial b^m}{\partial n^m}$ weakly negative
- $ightharpoonup \frac{\partial b^w}{\partial m}$ and $\frac{\partial b^m}{\partial m}$ social interaction effects.
- ▶ Beyond a point (m^*) is negative $\frac{\partial b^w}{\partial m}$ < 0 (key assumption)





Source: Card et al. (2016) Tipping And The Dynamics Of Segregation



Source: Card et al. (2016) Tipping And The Dynamics Of Segregation

- ▶ An interesting feature of this model is that prices do not need to fall discontinuously as a neighborhood tips.
- ▶ This is because B demand takes over smoothly from W demand at the discontinuity.
- ► However, the model does not deal with the question of expectations and anticipatory behavior. (One suspects that these expectations would reinforce the tipping process.)

Estimation

Estimation

- ▶ Identication of this model is subtle (and perhaps not entirely kosher). The objective is to perform a regression discontinuity analysis at an unknown discontinuity.
- ▶ So, in reality, the exercise is to estimate whether or not a discontinuity exists at an estimated location.
- ► The main dependent variable is the change in the share of white population over a ten year period expressed as a share of initial population

$$D_{wic,t} = \frac{(W_{ic,t} - W_{ic,t-10})}{P_{ic,t-10}} \tag{2}$$

where i is a neighborhood and c is a city.

► The main explanatory variable is the initial minority share:

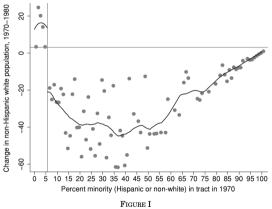
$$m_{ic,t-10} = \frac{M_{ic,t-10}}{P_{ic,t-10}} \tag{3}$$

► Then by city they estimate:

Estimation

$$D_{wic,t} = \alpha + d1[m_{ic,t-10} > m_{ic,t-10}^*] + \epsilon_{ic,t}$$
(4)

▶ This equation is only estimated for $m_{ic,t-10} \in [0,60\%]$, and the statistical approach selects the value of $m_{ic,t-10}^* \in [0,50\%]$ that maximizes the R-squared of the equation.



Neighborhood Change in Chicago, 1970–1980

Source: Card et al. (2016) Tipping And The Dynamics Of Segregation

- ► The above model omits discrimination
- "Housing discrimination is the illegal practice of discriminating against buyers or renters of dwellings based on race, color, religion, national origin, sex, family status or disability."

Housing Discrimination is Illegal

"We are here today because we are tired. We are tired of paying more for less. We are tired of living in rat-infested slums... We are tired of having to pay a median rent of \$97 a month in Lawndale for four rooms while whites living in South Deering pay \$73 a month for five rooms. Now is the time to make real the promises of democracy. Now is the time to open the doors of opportunity to all of God's children."

(Dr. King, 1966, Chicago Soldier Field Stadium as part of the Chicago Open Housing Movement)



Housing discrimination was made illegal under the Fair Housing Act (part of Civil Rights Act of 1968 and 1988 Amendments)

Table 6: Restrictive Deed Covenants

	Dissimilarity Index,	Number of Deeds				
City	1940	In Sample	With Race Restrictions	Comments		
	Mo	st segregated cit	ies: 25 deeds, 68% have rest	trictive covenants		
Chicago	.944	15	10 (67%)	Technically, restrictions are "conditions," not covenants.		
Cleveland	.871	2	0 (0%)			
Los Angeles	.838	4	4 (100%)	"Caucasian only" restrictions directed primarily at Asians.		
Detroit	.834	4	3 (75%)			
	Les	s segregated citi	es: 26 deeds, 50% have rest	rictive covenants		
Boston	.814	3	0 (0%)			
Baltimore	.789	3	3 (100%)	"Seller approval" restrictions in two cases.		
New York	.766	2	0 (0%)			
Minneapolis	.760	2	2 (100%)			
Lansing MI	.739*	1	1 (100%)	Alienation restricted, but not occupancy.		
Kansas City MO	.734	2	2 (100%)			
Springfield MA	.719*	1	0 (0%)			
Seattle	.709	4	2 (50%)	"Caucasian only" restrictions directed primarily at Asians.		
San Francisco	.693	1	1 (100%)	"Caucasian only" restrictions directed primarily at Asians.		
Louisville	.689	2	0 (0%)			
Birmingham	.686	1	1 (100%)	Occupancy restricted, but not alienation.		
Providence	.653	2	0 (0%)			
South Bend	.582*	1	1 (100%)	"Caucasians only, except business"		
Little Rock	.536*	1	0 (0%)			

Note: Dissimilarity is based on tract data. Ward-based indices, corrected for mean differences between ward and tract indices, are used where noted by '. T-statistic of mean difference is 2.57. Source: Monchow (1928) pp. 47-50.

Source: Cutler (1999) The Rise and Decline of the American Ghetto

Model

- Decentralized homophily raises the price of the white location
- Institutionalized racism raises the price of the black location
- ▶ Price gradients only distinguish between modes of white racism: Black homophily is a confound for institutionalized white racism

Table 9: Segregation and Housing Rents

	Dependent Variable: In(Annual Rental Payment) in year:							
Independent Variable	1940	1940	1970	1970	1990	1990		
Black Head of HH	-1.437** (0.451)	-1.415** (0.662)	-0.556** (0.233)	-0.626** (0.233)	-0.235** (0.078)	-0.233** (0.079)		
Dissimilarity Index	0.152 (0.257)	0.359 (0.261)	0.318* (0.175)	0.317* (0.169)	-0.109 (0.158)	-0.020 (0.164)		
Dissimilarity*Black Head of HH	1.470** (0.575)	1.199 (0.911)	0.463 (0.288)	0.584** (0.284)	0.131 (0.116)	0.129 (0.117)		
Born in Different State		0.348*	***					
Born in Diff. State* Dissimilarity		-0.391 (0.234)						
Born in Diff. State* Black		0.323 (0.652)		•••				
Born in Diff. State* Black* Dissimilarity		-0.078 (0.883)						
R ²	0.239	0.247	0.182	0.310	0.197	0.233		

Source: Cutler (1999) The Rise and Decline of the American Ghetto