SUBURBANISATION AND GENTRIFICATION

Urban Economics

GABRIEL M AHLFELDT

I COURSE COMPONENTS
the idea

- Block I

  - Introduction to Urban and Regional Economics and Course Overview
  - Topic I: Regional and urban concentration forces
  - Topic II: The empirics of agglomeration
  - Topic III: Costs and benefits of agglomeration

- Block 2

  - Topic IV: Monocentric city I (household location choice)
  - Topic V: Monocentric city II (household location choice)
  - Topic VI: Firm location choice
  - Topic VII: The urban economy in general equilibrium

- Block 3

  - Topic VIII: The vertical dimension of cities
  - **Topic IX: Suburbanization and gentrification**
  - Topic X: Spatial inequalities

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I INTRODUCTION
roadmap

- **Last time: *The vertical dimension of cities***

  - **1) Vertical rent gradients**

    - **A vertical bid-rent model**

    - **Evidence on price gradients**

  - **3) Profit-maximizing building heights**

    - **A theoretical model**

    - **The height elasticity of construction cost**

  - **4) Land prices and building height**

    - **The land price elasticity of height**

    - **Building height in regulated environments**

    - **Height competition**

I INTRODUCTION
roadmap

- **This time:** *Suburbanization and gentrification*

  - **1) Determinants of long-run trends**

    - **Relative transport cost by income groups**

    - **The lifecycle of buildings**

    - **Amenities**

    - **Endogenous gentrification**

  - **2) Welfare dimension**

    - **Winners and losers**

    - **Role of mobility costs**

  - **3) Consequences of Gentrification**

    - **Recent evidence**

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II SUBURBANIZATION
in the MCM

- **20th centruy saw „decentralization"**

  - **Population movements from central cities to suburbs**

- **MCM offers two explanations**

  - **Increase in <u>income</u>** (if commuting costs do not depend on income)

  - **Decrease in <u>transport cost</u> due to better transport technology**

$$\frac{\partial\left(\frac{\partial p_q}{\partial x}\right)}{\partial y} = \frac{t}{q^2} > 0 \qquad \frac{d\left(\frac{\partial p_q}{\partial x}\right)}{dt} = -\frac{1}{q} < 0$$
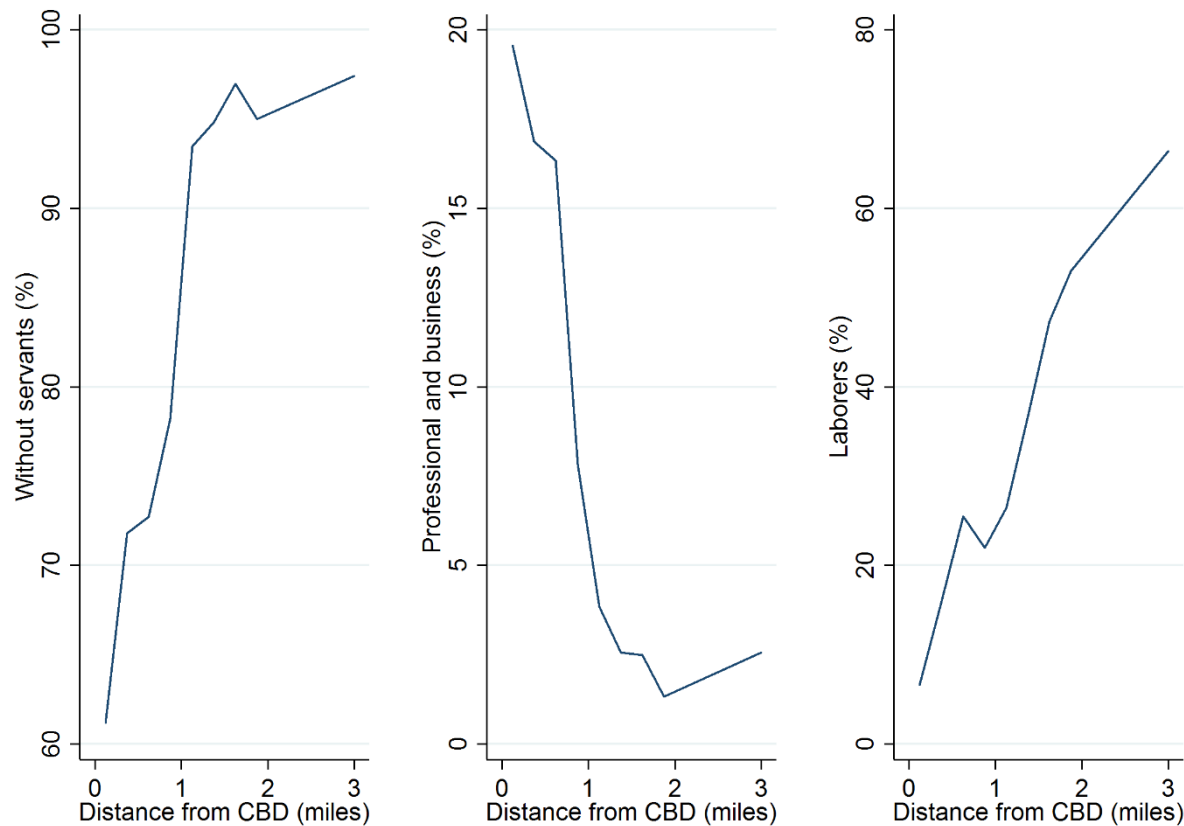
See Topic V

But suburbanization also associated with "white flight"

II CENTRAL CITIES USED TO BE RICH
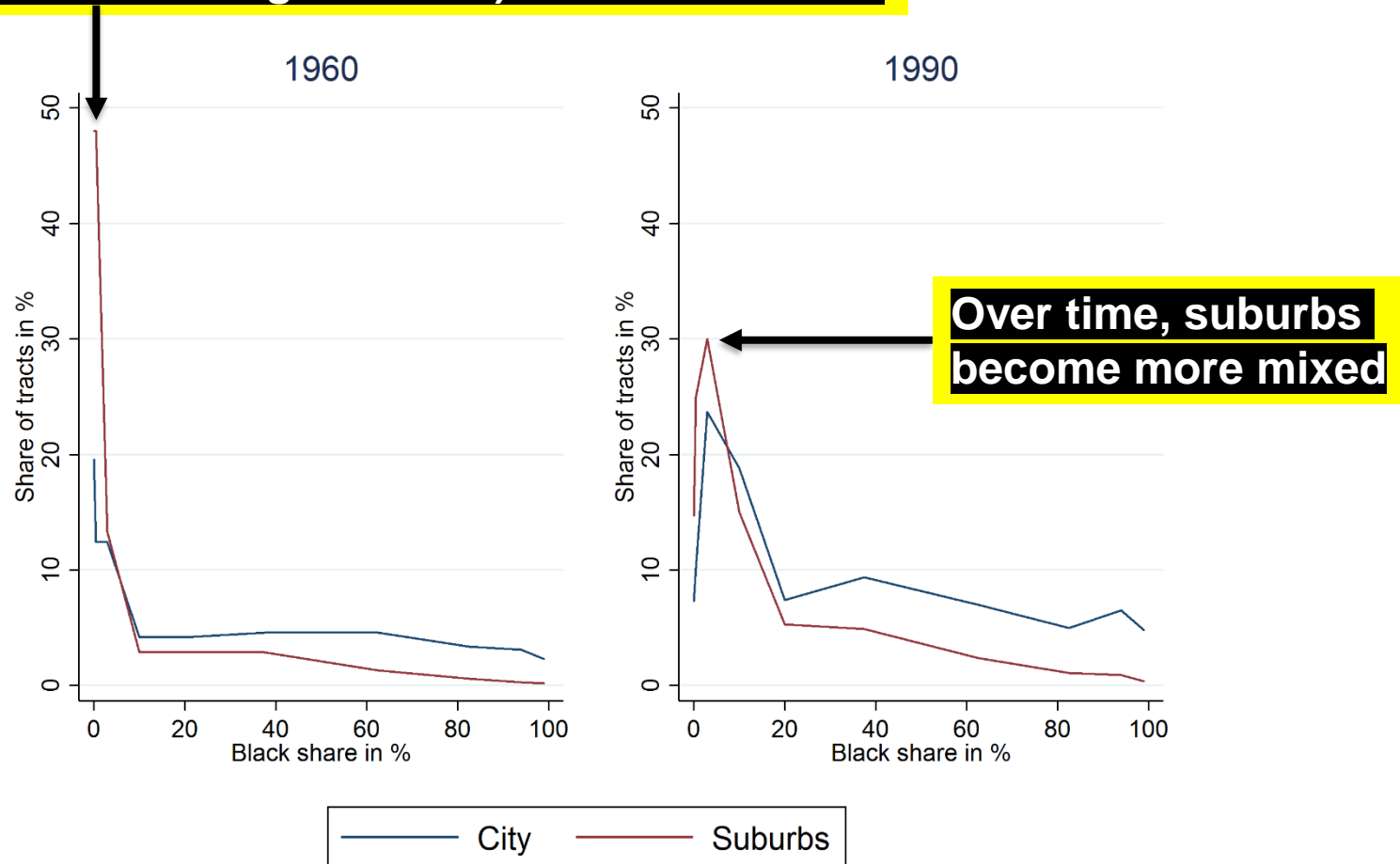
cities

Socioeconomic status in Milwaukee in 1860

(c) Ahlfeldt (2019) based on data reported in LeRoy and Sonstelie (1981), JUE, Table 1

LSE © Gabriel M Ahlfeldt
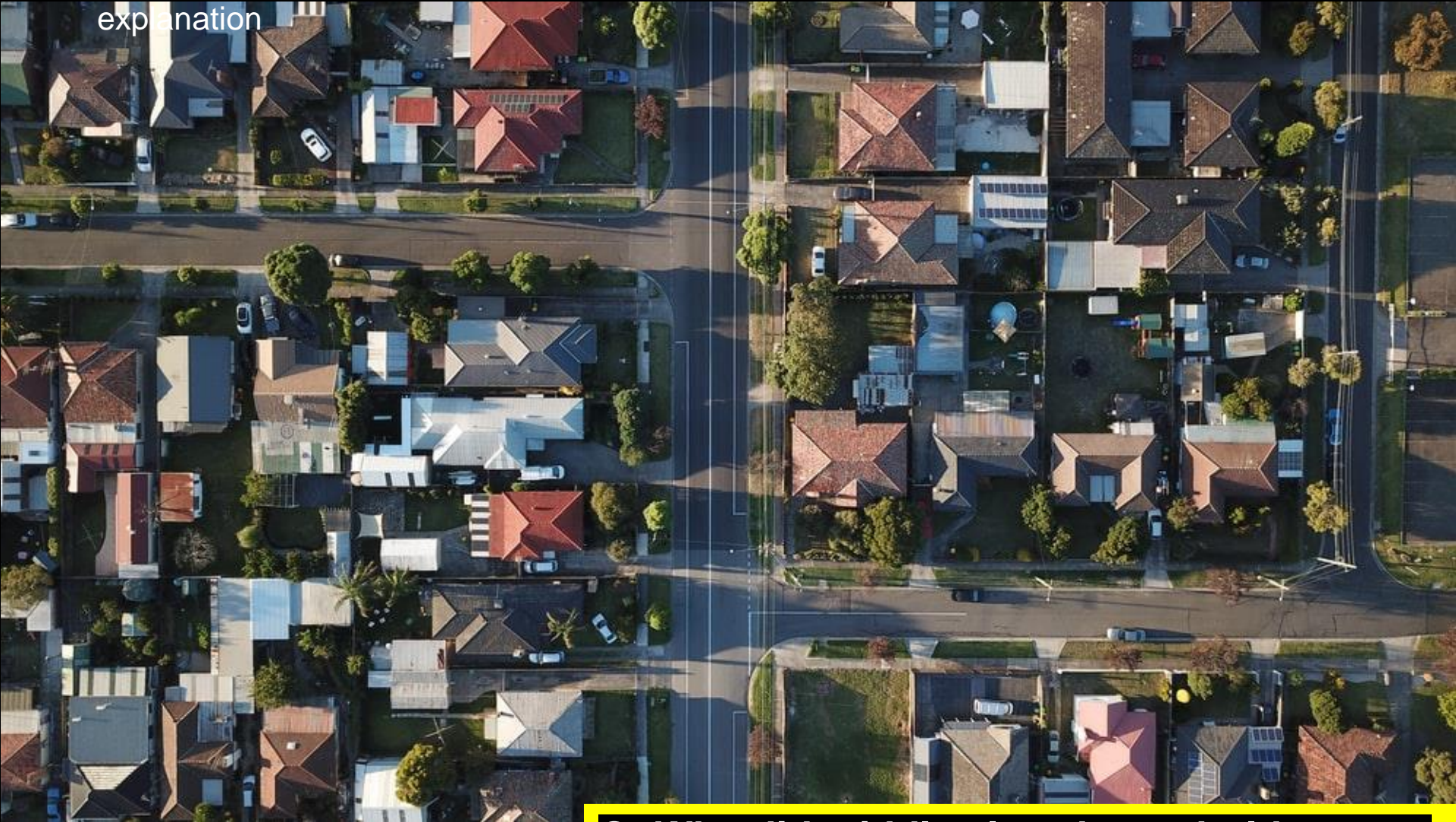
II WHITE FLIGHT
surburbs

"White" (proxy for middle/high-income) move to suburbs

Over time, suburbs become more mixed

(c) Ahlfeldt (2019) based on data reported in Cutler et al. (1999), JPE, Table 4

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II SUBURBANIZATION

explanation

Q: Why did middle class households move to suburbs over the 20th century?

II GENTRIFICATION IN US CITIES 1990-2010

Su 2022

High-skilled are moving to city centres since 1990s
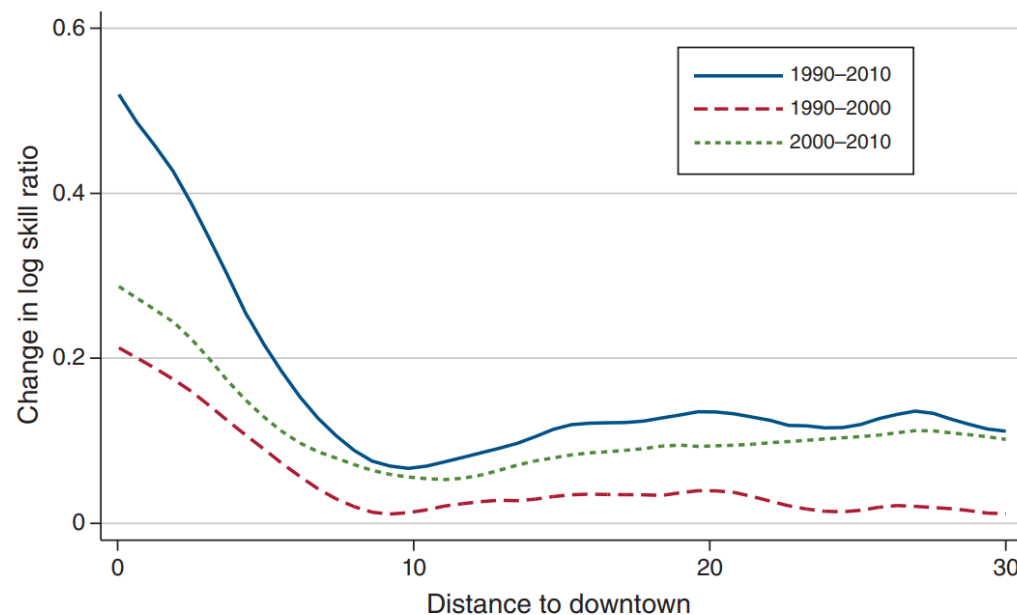

FIGURE 2. CHANGE IN SKILL RATIO BY DISTANCE TO DOWNTOWN

Notes: The graph shows a nonparametric plot between the change in log skill ratio and census tracts' distances to downtowns in the top 25 most populous MSAs (defined by population ranking in 1990). The solid line represents the change in log skill ratios from 1990 to 2010. The long-dashed line represents the change in log skill ratios from 1990 to 2000, and the short-dashed line represents the change from 2000 to 2010.
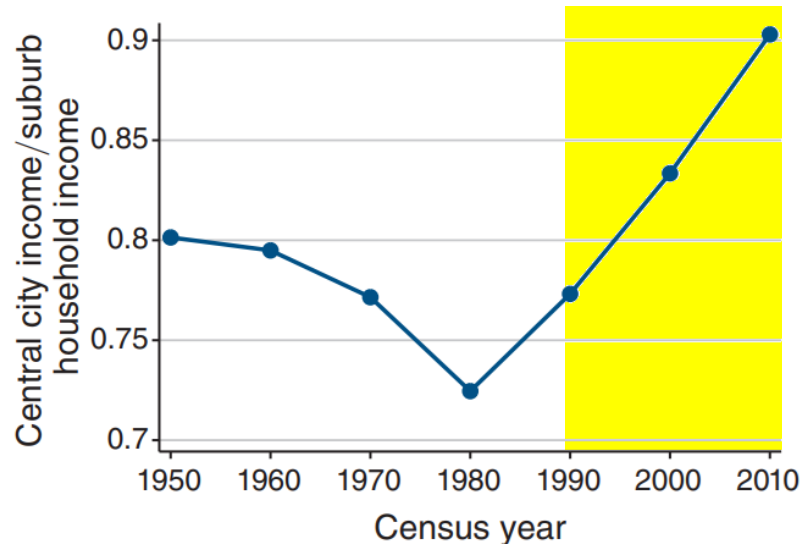
Source: The source of the data is the decennial census and ACS provided by NHGIS.

II CORE VS SUBURBS IN US CITIES 1950-2010
Su 2022

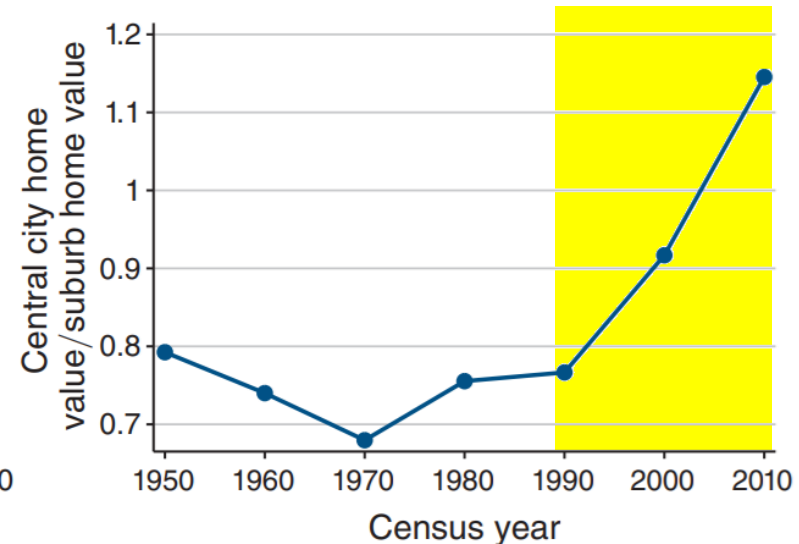**Gentrification associated with rising income and property prices**

FIGURE 1. INCOME AND HOME VALUE RATIO BETWEEN CENTRAL CITY AND SUBURBAN NEIGHBORHOODS

Notes: Central cities in these figures are census tracts that are located within five miles of the downtown in the respective MSAs defined in Holian and Kahn (2015). The values plotted are the mean income and home value of the census tracts located in the central cities and the mean income and home value of noncentral city census tracts in the top 25 MSAs (defined by population ranking in 1990).

Sources: The source of the data is the decennial census and ACS provided by NHGIS.

LSE © Gabriel M Ahlfeldt

II GENTRIFICATION
explanation

Q: Why have many central cities recently become more attractive to middle-to-high income households?
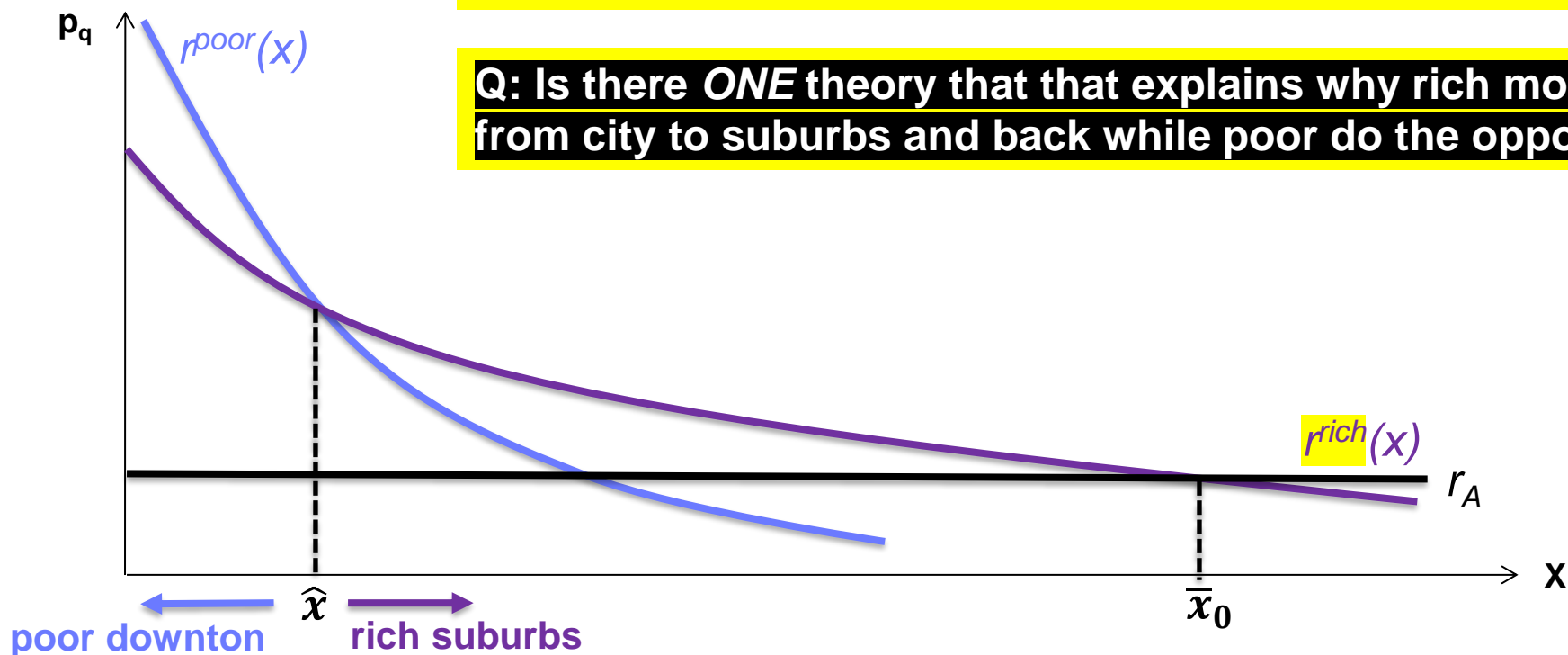
III INCOME SEGREGATION (RECALL TOPIC V)

comparative statics

▪ **Being able to <u>predict</u> the <u>lifecycle of cities</u> can be very <u>profitable</u>**

MCM (under some assumptions) can explain why rich live in suburbs, and poor live in centre. But static prediction

Q: Is there *ONE* theory that that explains why rich move from city to suburbs and back while poor do the opposite

p_q

$r^{poor}(x)$

$r^{rich}(x)$

r_A

$\widehat{x}$

$\overline{x}_0$

X

poor downton   **rich suburbs**

LSE © Gabriel M Ahlfeldt

III THE TRANSPORT COST CYCLE
commuting modes by income

- **LeRoy and Sonstilie (1981)** extend the standard MCM

  - Allow for **different transport modes**

- **New modes are usually faster, but also more expensive**

  - First adopted by the rich since they value time highly

  - Later adopted by others as the decreases and incomes rise over time

    - Subways
    - Cars
    - Helicopters and drones?

- LeRoy and Sonstilie (1981) **focus on cars**

  - **Affordable to the rich** at the beginning of the 20th century

  - **Affordable to (almost)** all at the end of the 20th century (in the US)

LSE © Gabriel M Ahlfeldt

III THE TRANSPORT COST CYCLE
commuting modes by income

- **Assumptions**

  - Two transport modes, **one fast and expensive, one slow and cheap**

  - Income elasticity of housing demand < marginal commuting cost

$$\frac{\partial q(y)}{\partial y} < \frac{\partial t(y)}{\partial y}$$ ← **See Topic V for background**

- **Implications**

  - <u>Rich</u> live in <u>centre</u> if rich and poor use the <u>same</u> <u>mode</u>

    - Fast mode unaffordable to both
    - Fast mode affordable to both

    Standard setting

  - <u>Rich</u> live in <u>suburbs</u> IFF fast mode is <u>affordable</u> to <u>rich</u>, exclusively

    Novel scenario

LSE © Gabriel M Ahlfeldt

III FOUR PERIODS
commuting modes by income

- **1) Paradise**   **Rich live in centre**

  - Fast mode is so expensive that <u>all</u> commuters use <u>slow</u> mode

- **2) Paradise lost**   **Rich move to suburbs**

  - Fast mode affordable to rich, unaffordable to poor

  - Downtown deteriorates

- **3) (Re)gentrification**   **Poor move to suburbs**

  - Fast mode affordable to rich and poor

- **4) Paradise regained**   **Poor live in suburbs**

  - All poor commute by fast mode

  - Downtown completely restored, but deterioration in suburbs

III CAR OWNERSHIP OVER TIME
commuting modes by income

■ **Car ownership has steadily been reaching lower income groups**

Percentage of Households Owning Cars, by Income Quintile

| Year | Quintile | | | | |
	Lowest	Second	Third	Fourth	Highest
1952	26	44	64	79	89
1957	33	62	82	89	95
1962	32	65	76	91	94
1969	45	79	93	95	97
1977	61	89	95	97	97

Paradise lost?

Regentrification?

Sources. 1962 Survey of Consumer Finances [12], 1970 Survey of Consumer Finances [13], Federal Reserve Board, 1977 [4].

In 2017, 92 % of the US households had access to a vehicle according to census

"Cylce" can come to an end and repeat itself with a new transport mode
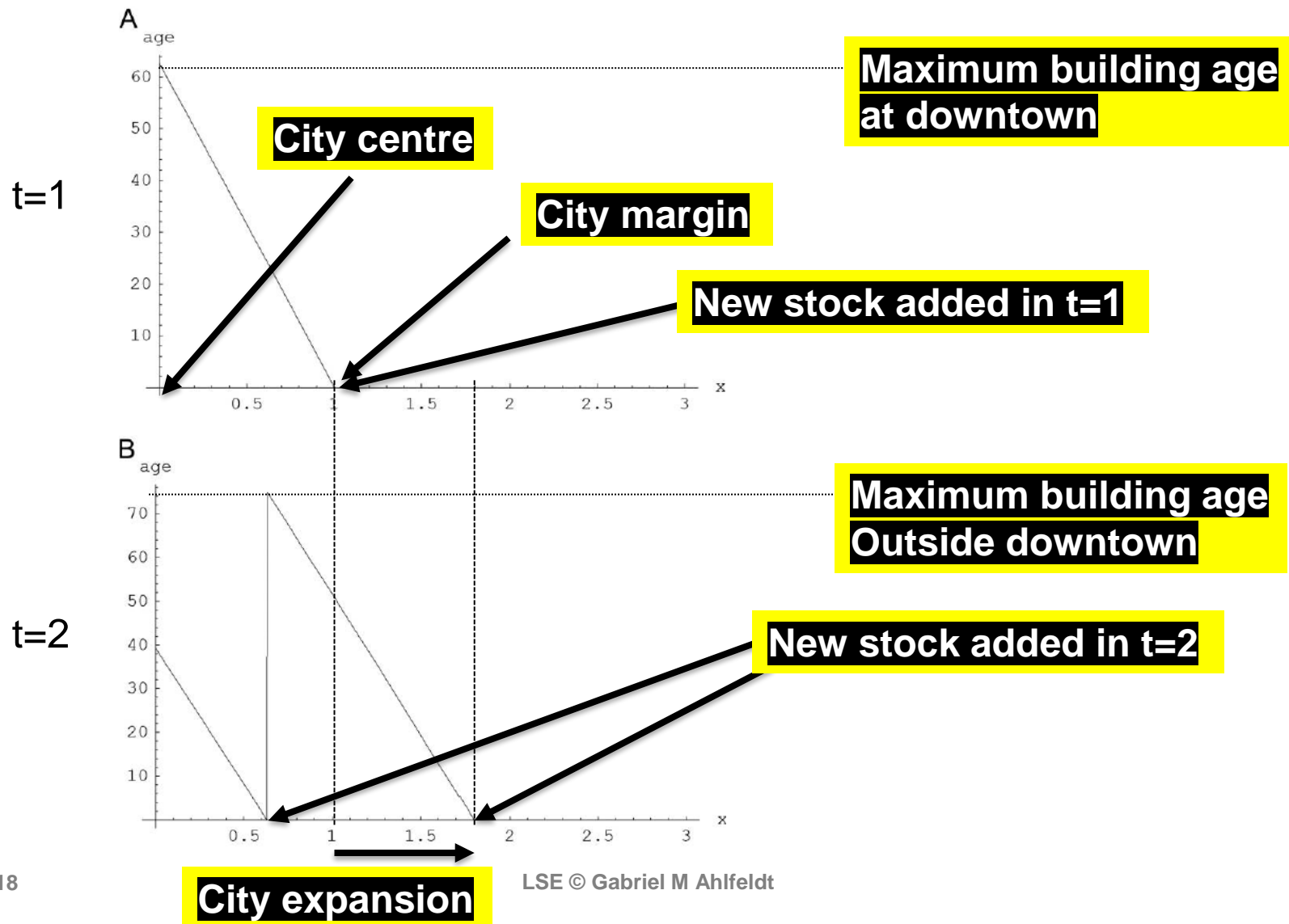
III THE ROLE OF HOUSING AGE

Brueckner and Rosenthal (2010)

- Relative **housing age changes over time (Brueckner and Rosenthal, 2010)**

  - City expands

  - New housing stock is added at the margin

  - Once housing reaches end of the lifetime, new stock replaces old

- **High-income households have strong preference for housing services**

  - High-income household "follow" new housing stock

- **Lifecycle of buildings generates cycle of downtown income**

  - Suburbanization when housing stock in downtown ages

  - Gentrification when downtown housing stock is renewed

LSE © Gabriel M Ahlfeldt

III THE LIFECYCLE OF BUILDINGS

Brueckner and Rosenthal (2010)

t=1

Maximum building age at downtown

City centre

City margin

New stock added in t=1

t=2

Maximum building age Outside downtown

New stock added in t=2

City expansion

LSE © Gabriel M Ahlfeldt

III HOUSING PREFERENCES

Brueckner and Rosenthal (2010)

- **Bid rent functions for rich *r* and poor *p***

h'(a)<0: housing services deteriorate in age

$∂a/ ∂x<0$: Age decreases in *distance* between jumps

$$\frac{\partial R_r}{\partial x} = -\tau y_r(t) + \left(\frac{v_h}{v_c}\right)_r h'(a)\frac{\partial a}{\partial x}$$

$$\frac{\partial R_p}{\partial x} = -\tau y_p(t) + \left(\frac{v_h}{v_c}\right)_p h'(a)\frac{\partial a}{\partial x}$$

- **Marginal utility from housing services increases faster in income than marginal commuting cost**

Marginal utility from housing services: Rich
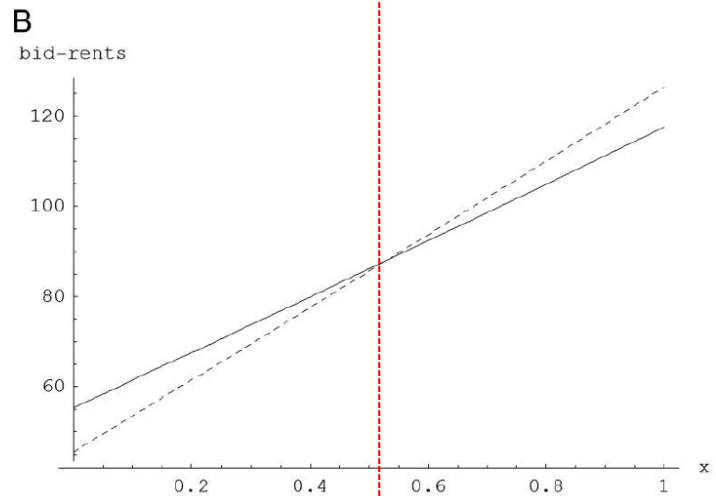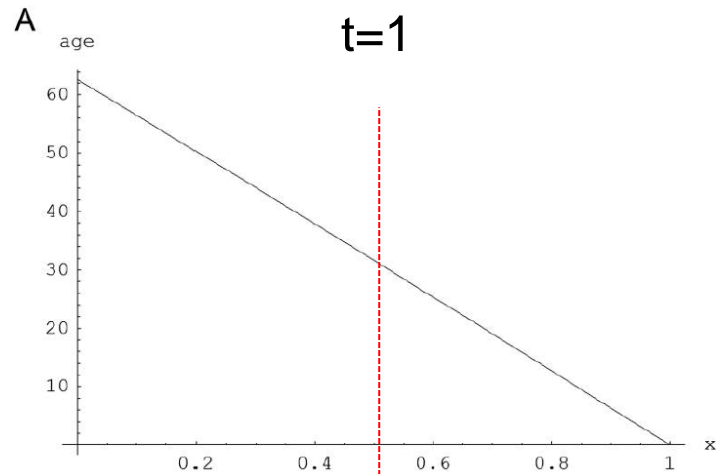
Marginal utility from housing services: Poor

Marginal commuting cost: Rich

Marginal commuting cost: Poor

$$\frac{v_h^r}{v_h^p} > \frac{c_h^r}{c_h^p}$$

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III INCOME SORTING

Brueckner and Rosenthal (2010)

t=1

t=2
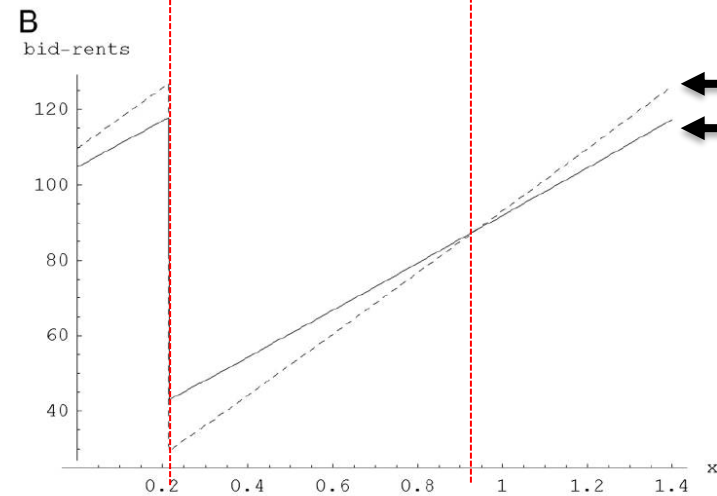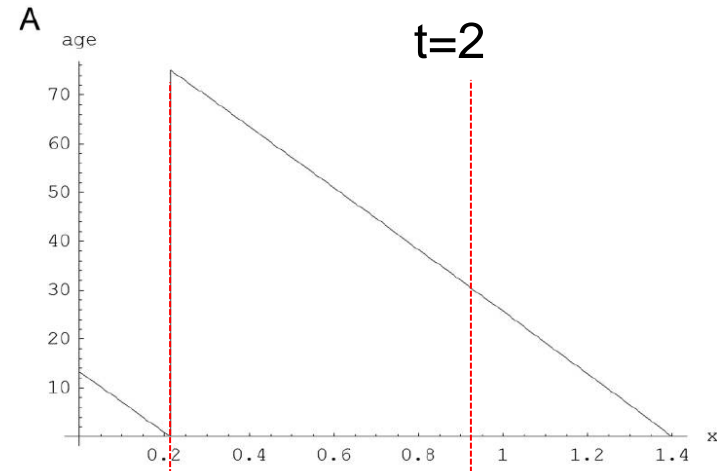
Bid rent: rich

Bid rent: poor

Poor **Rich** **Rich** **Poor** **Rich**

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III EVIDENCE

Brueckner and Rosenthal (2010)

- **Tract-level incomes relative to MSA average in US in 2000**

  - Increase in distance from the CBD

  - Decrease in distance from the CBD when controlling for housing age

- **Conclusion**

  - Housing age matters for income distribution

- **Prediction**

  - Over the next two decades, housing stock will

    - age in many suburban tracts

    - be replaced/renovated in many downtown tracts

  - **Downtowns will gentrify, downtown-suburb income gap will shrink**

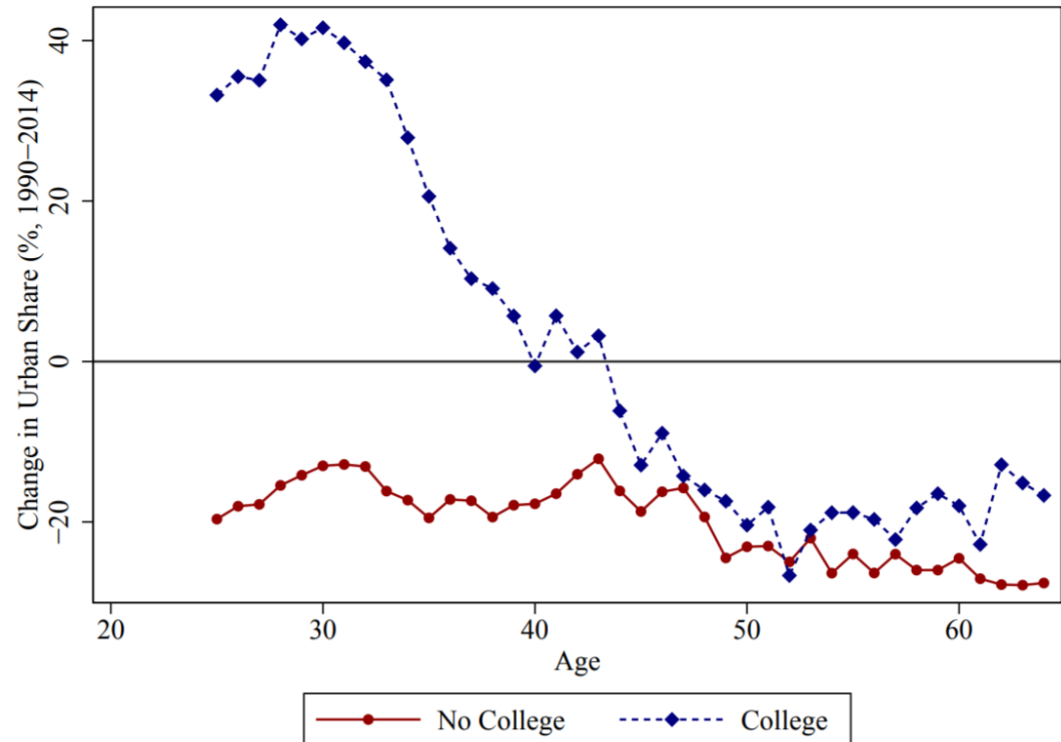   **Supply side contributes to income segregation cycle**

LSE © Gabriel M Ahlfeldt

III WHICH GROUP DRIVES GENTRIFICATION?

Couture and Handbury (2019)

Downtown gentrification driven by young college-educated workers

Q: What drives these workers into downtown?

Figure 2: Percent Change in Urban Share by Age and Education (1990-2014)


Notes: The figure shows the percent change between 1990 and 2014 (2012-2016 ACS) of the average urban share of college and non-college educated individuals by age. The data comes from the IPUMS Public Use Microdata Sample and is restricted to the set of 25-64 year-olds in the 27 CBSAs where we can define constant geography urban areas in 1990 and 2012-2016. The urban area of each CBSA is the set of tracts closest to city center that constitute 10% of the total CBSA population in 2000. See refap:data for further description of methodology.
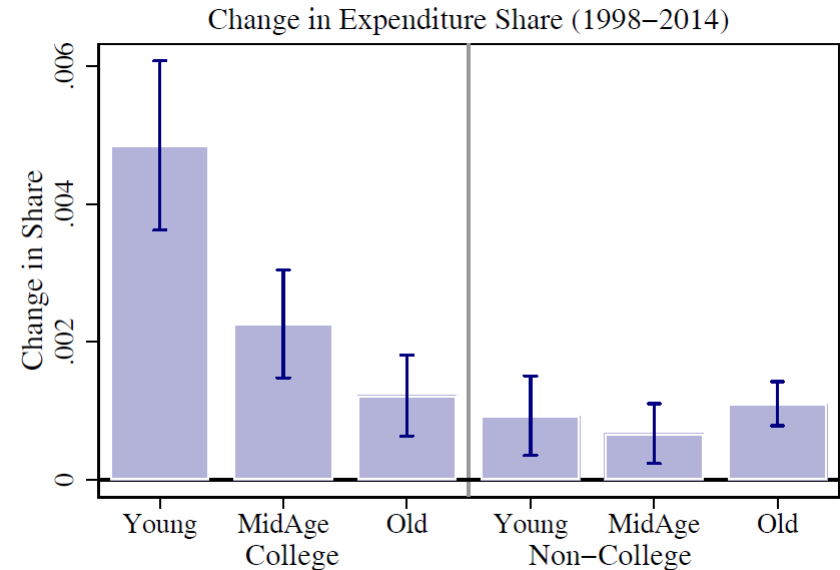
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Couture and Handbury (2019)

III EXPENDITURES OF YOUNG HIGH-SKILLED
Couture and Handbury (2019)
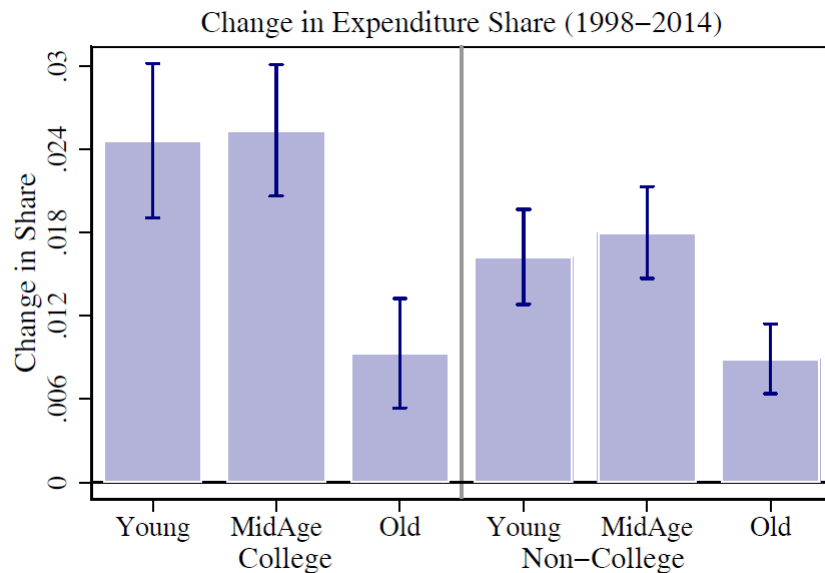
Restaurants **Nightlife establishments**

Notes: The left-hand chart in each panel shows mean CEX expenditure shares for each age-education group and the right-hand chart shows mean NHTS trip shares. In the CEX, restaurants expendidture is "food away from home" (UCC Codes 190111-190926), and nightlife is "alcohol away from home" (UCC Codes 200511-200536). In the NHTS, restaurant trips are to get a meal (not grocery). Nightlife trips are all trips categorized as "Go out/hang out". The bands around the end of each bar depict 95% confidence intervals.

**Young high-skilled increasingly spend their money on urban non-tradable goods**

LSE © Gabriel M Ahlfeldt

Couture and Handbury (2019)

III LOCATION OF URBAN AMENITIES
Couture and Handbury (2019)

Urban non-tradable goods are available downtown

Increasing demand for consumption pulls young, high-skilled into downtowns

Panel A: Initial Levels in Restaurants (dashed) and Food Stores (solid)
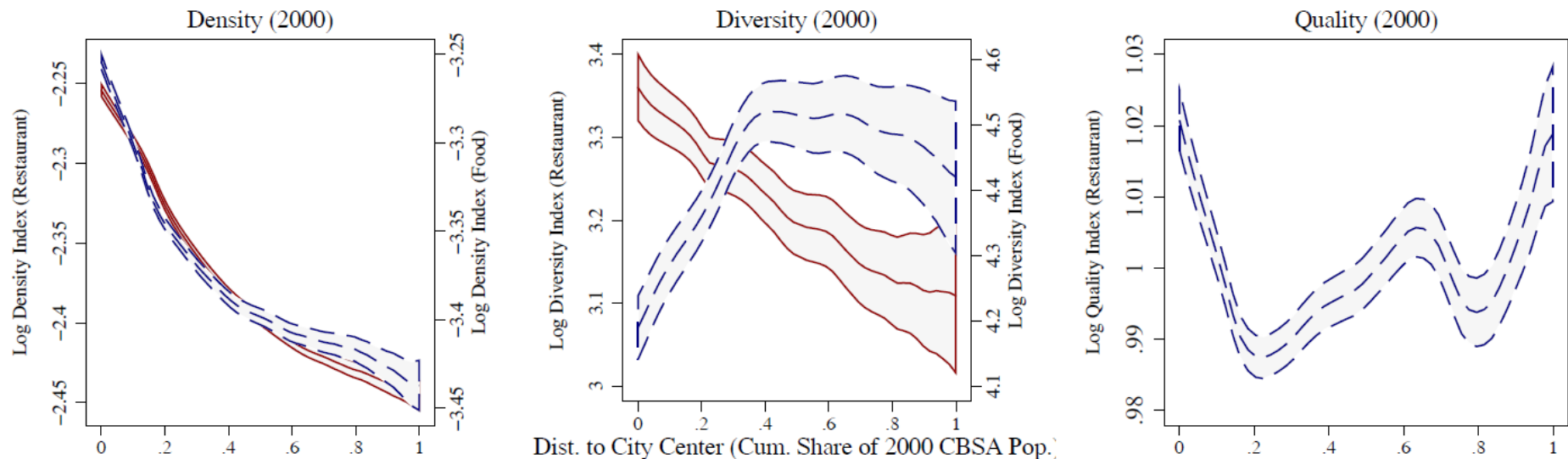
Notes: Panel A shows a non-parametric kernel fit of the log of amenity density and diversity indexes in 2000 for restaurants and food stores and the amenity quality index in 2000 for restaurants, plotted against the young-college population-weighted distance from the city center for all tracts in our estimation sample. Panel B shows a kernel of the 2000 to 2010 percent change in these indexes. The shaded region around kernel fit depicts the 95% confidence interval. Amenity establishment location is from the NETS data. See Appendix B for details on consumption amenity index construction.

Couture and Handbury (2019)

III AMENITY DISTRICTS
Carlino and Saiz (2019)

Beautiful neighbourhoods attract rich and high-skilled and experience rent growth

TABLE 11 Evolution of "beautiful" neighborhoods: 1990–2000

	ΔLog population (1)	ΔLog housing units (2)	ΔShare with BA (3)	ΔLog income (4)	ΔShare non-Hispanic white (5)	ΔLog rent (6)	ΔLog rent (7)	ΔLog population (8)	ΔLog rent (9)
Top 5% historic gravity	−0.007	−0.008	0.014	0.044	0.024	0.022	0.017	0.021	0.012
	(0.006)	(0.006)	(0.002)***	(0.005)***	(0.002)***	(0.007)***	(0.007)**	(0.006)***	(0.007)
Top 5% recreational gravity	0.002	−0.009	0.021	0.068	0.038	0.032	0.027	0.022	0.037
	(0.006)	(0.006)	(0.002)***	(0.005)***	(0.002)***	(0.007)***	(0.008)***	(0.006)***	(0.008)***
Top 5% photo number	0.058	0.069	0.008	0.029	0.012	0.007	0.007	0.055	0.025
	(0.005)***	(0.005)***	(0.001)***	(0.004)***	(0.002)***	(0.006)	(0.006)	(0.005)***	(0.006)***
Central city	−0.112	−0.103	−0.006	−0.041	0.004	0.025	0.021	−0.05	0.003
	(0.002)***	(0.002)***	(0.001)***	(0.002)***	(0.001)***	(0.003)***	(0.003)***	(0.003)***	(0.003)
Log distance to CBD							−0.005		
							(0.002)***		
MSA fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Other 2000 census tract controls	No	No	No	No	No	No	No	Yes	Yes
R^2	0.14	0.14	0.07	0.12	0.11	0.07	0.08	0.19	0.1
Observations (census tracts)	51,192	51,072	51,189	50,899	51,192	50,432	48,358	51,001	50,386

Historic gravity and recreational gravity are distance-weighted sums of nearby historic landmarks or amenities museums, local attractions, zoological and botanical gardens, golf clubs, major theatrical and opera venues, parks, and other centres itemized by TeleAtlas. Geotagged photos can be theoretically linked to amenity value via a social media production function (Ahlfeldt (2013).

Carlino and Saiz (2019)

III THE ROLE OF URBAN CONSUMPTION

gentrification and consumer city

- **Young and high-skilled** attracted to distinctively **urban consumption goods**
  - E.g. restaurants, museum, (movie) theatres, nightlife amenities, etc.
  - "Endogenous amenities" require a large consumer base (density)
  - **Small direct effect of increase in value of time by high-skilled is amplified by endogenous amenities (residential spillovers) (Su 2022)**
- **Other factors**
  - **Expansion of working hours** may also play a role (Edlund et al. 2019)
  - **Reduction in crime** also helps (O'Sullivan 2004, Ellen et al 2019)
- **Centrality is necessary, but not a sufficient condition**
  - Gentrification happens in areas with high amenity value
    - **Recreational gravity**: Proximity to historic fabric
    - **Historic gravity**: Proximity to points of interest
    - Places of "**human interest**": Captured by photos in social media

III GENTRIFICATION
explanation

Q: Can gentrification be "contagious"?

III APPRECIATION DURING REAL ESTATE BOOMS

Guerrieri et al. (2013)

Housing Price Growth versus
Initial Housing Price 2000-2006: New York MSA

During booms, low-house-price areas appreciate much faster than the average
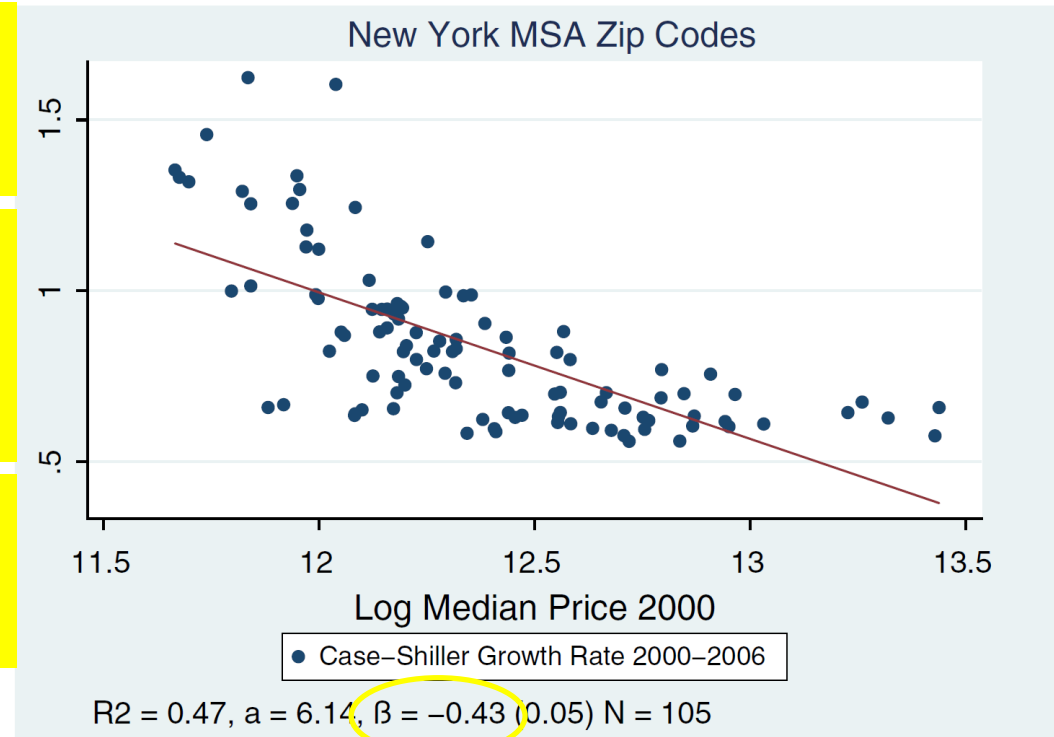
Appreciation 2000-2006:
NYC: 80%
Harlem: 130%
Midtown: 45%

Mean-reversion tendency generalizes to broad set of cities
β=-0.24

New York MSA Zip Codes

Log Median Price 2000

● Case−Shiller Growth Rate 2000−2006

R2 = 0.47, a = 6.14, ß = −0.43 (0.05) N = 105

Guerrieri et al. (2013)

"Prime areas" are less dynamic in boom, but more resilient during downturns
See for complementary evidence on "anchoring effect" (Lee and Lin, 2017)

III APPRECIATION DURING REAL ESTATE BOOMS
Guerrieri et al. (2013)

Places near high-price neighbourhoods appreciate faster

Regression of neighborhood house price appreciation on distance to nearest high-price neighborhood and other controls, across different samples with different house price measures.

Time period	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Log distance to nearest high-price Neighborhood	−0.061 (0.021)	−0.062 (0.019)	−0.044 (0.029)	−0.067 (0.037)	−0.231 (0.042)	−0.136 (0.032)	−0.140 (0.029)
Log distance to nearest high-price Neighborhood*city wide bust indicator	–	–	–	0.070 (0.044)	0.068 (0.051)	0.077 (0.029)	0.083 (0.032)
House price measure/ Neighborhood aggregation	C–S Zip Code	C–S Zip Code	C–S Zip Code	C–S Zip Code	Census Census Tract	Census Census Tract	Census Census Tract
Time period	00–06	00–06	90–00	90–00	90–00	90–00	80–90
Vector of Z controls included	No	Yes	Yes	Yes	Yes	Yes	Yes
Number of observations	236	236	223	223	3099	7955	4253
Mean log distance to nearest High-price neighborhood	1.23	1.23	1.22	1.22	0.401	0.499	0.322
Std. dev. log distance to nearest High-price neighborhood	0.524	0.524	0.488	0.488	0.778	0.719	0.716

Note: Table shows regression of neighborhood house price appreciation between period t and $t+k$ on log distance to nearest high price neighborhood within the neighborhood's city, city fixed effects, and a vector of neighborhood controls. High price neighborhoods are those neighborhoods that are within the top quartile of average neighborhood house prices in year t. We restrict our analysis in this table to those neighborhoods within the city which were in the bottom half of the house price distribution in period t. See text for additional sample descriptions and discussion of the controls included. Robust standard errors, clustered by city, are shown in parentheses. All regressions are weighted by the number of owner occupied housing units in the neighborhood in the initial year.

Guerrieri et al. (2013)

III A MODEL OF ENDOGENOUS GENTRIFICATION
Guerrieri et al. (2013)

- **Assumptions**
  - Linear city, each point on a real line is an fundamentally identical location
  - Agents are fully mobile
  - Developer builds housing at a constant marginal cost; constant density
  - Agents are heterogenous in income
  - All agents prefer to live close to richer neighbours
  - **Poorer pay a lower premium** for being close to rich
    - (spillover enters multiplicatively in utility function)

- **Static predictions**
  - **Rich live closely together**
  - **Poorer live further away** from rich neighbourhoods ← **Spatial equilibrium**
  - **House prices offset** for neighbourhood externality
    - Are highest in the rich neighbourhood
    - Decline in distance from rich neighbourhood
    - Fall to the level of marginal hosing cost where spillover fades out

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III EQUILIBRIUM
Guerrieri et al. (2013)

Rich   **Poor**

Income segregation
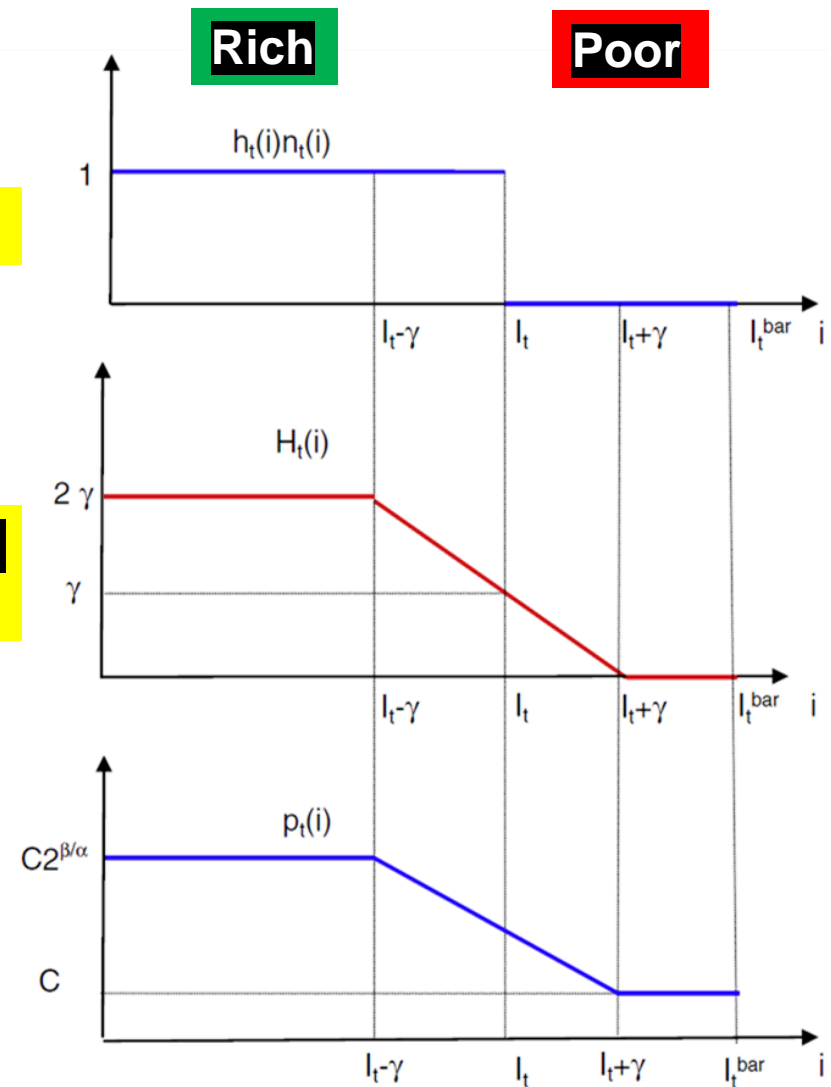
Neighbourhood externality

Price gradient

Fig. 2. Figure shows the model predicted relationship between the size of the rich neighborhood (top panel), the value of the neighborhood externality (middle panel), and the house price in the neighborhood (bottom panel). For this figure, we assume $C^P = C^R$. This is done for illustrative purposes.

III EQUILIBRIUM
Guerrieri et al. (2013)

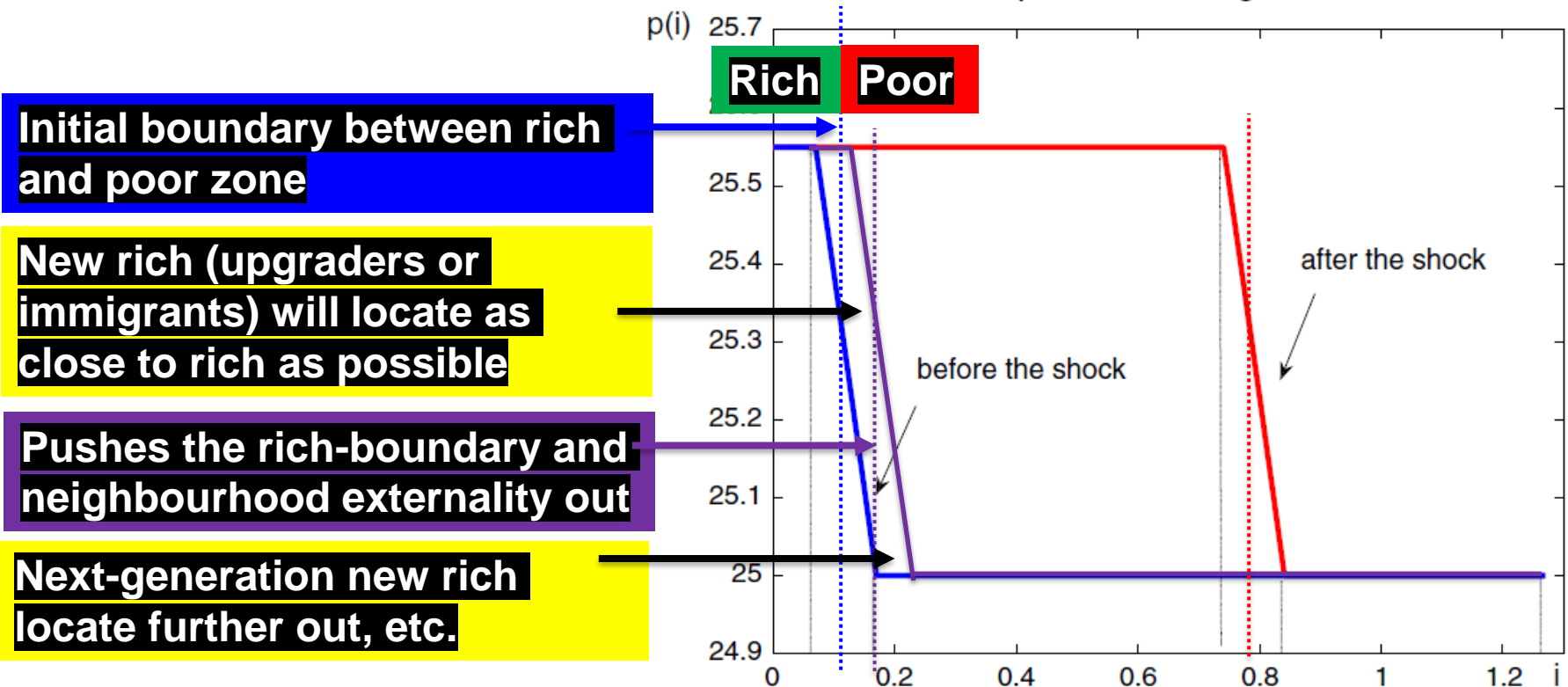## House Price Response across Space to a Migration Shock

Rich **Poor**

Initial boundary between rich and poor zone

New rich (upgraders or immigrants) will locate as close to rich as possible

Pushes the rich-boundary and neighbourhood externality out

Next-generation new rich locate further out, etc.

after the shock

before the shock

Fig. 3. We set $\alpha = .8$, $\beta = .8$, $\delta^R = .2$, $\delta^P = 0$, $A = 1$, $\gamma = .1$, $r = .03$, $y^R = 1$, $y^P = .5$, $C^R = C^P = 25$, $N^R = N^P = .5$. The shock is an unexpected and permanent increase in ϕ from $\phi = 1$ to $\phi = 5$.

LSE © Gabriel M Ahlfeldt

III ENDOGENOUS GENTRIFICATION
Guerrieri et al. (2013)

- **Guerrieri et al. (2013)** develop a model with a **<u>neighbourhood externality</u>**

    - People like to **live next to rich** neighbours
    - Equilibrium is characterised by income segregation

- **"New rich"** (migrants or upgraders)

    - Move to places that are closest to the, but not already rich

    - Neighbourhood appreciates

    - Poor being are being displaced to cheaper places with lower spillovers

    - Cycle continuous
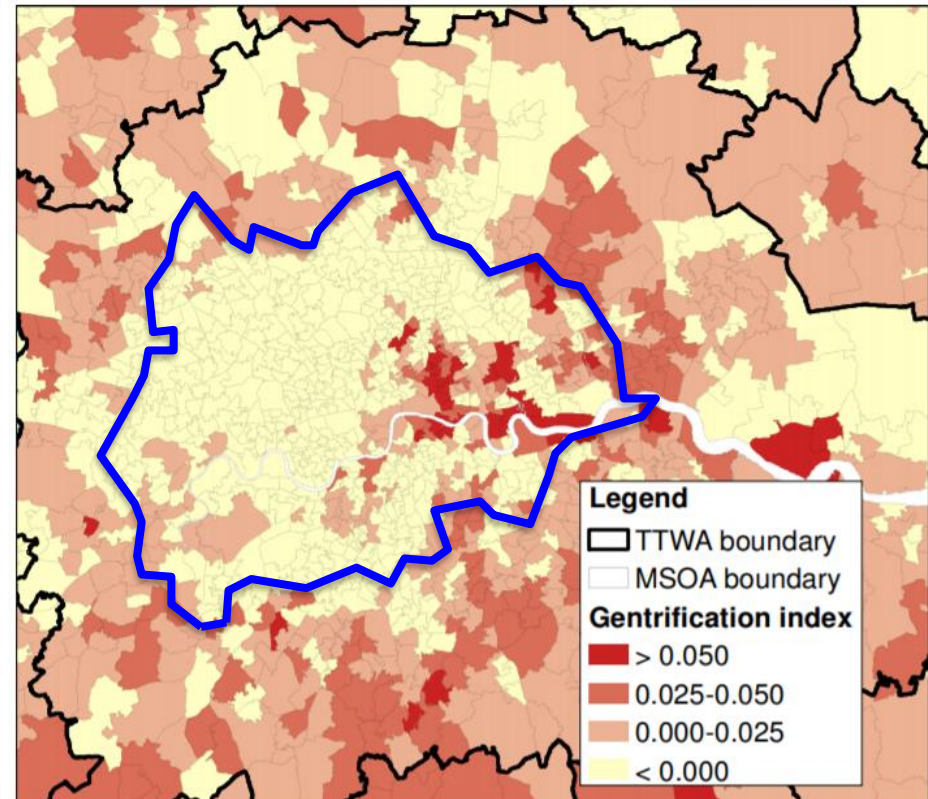
<mark>**Gentrification is spatially "contagious"**</mark>

LSE © Gabriel M Ahlfeldt

III ORIGIN OF NEIGHBOURHOOD EXTERNALITY

role of neighbourhood externalities

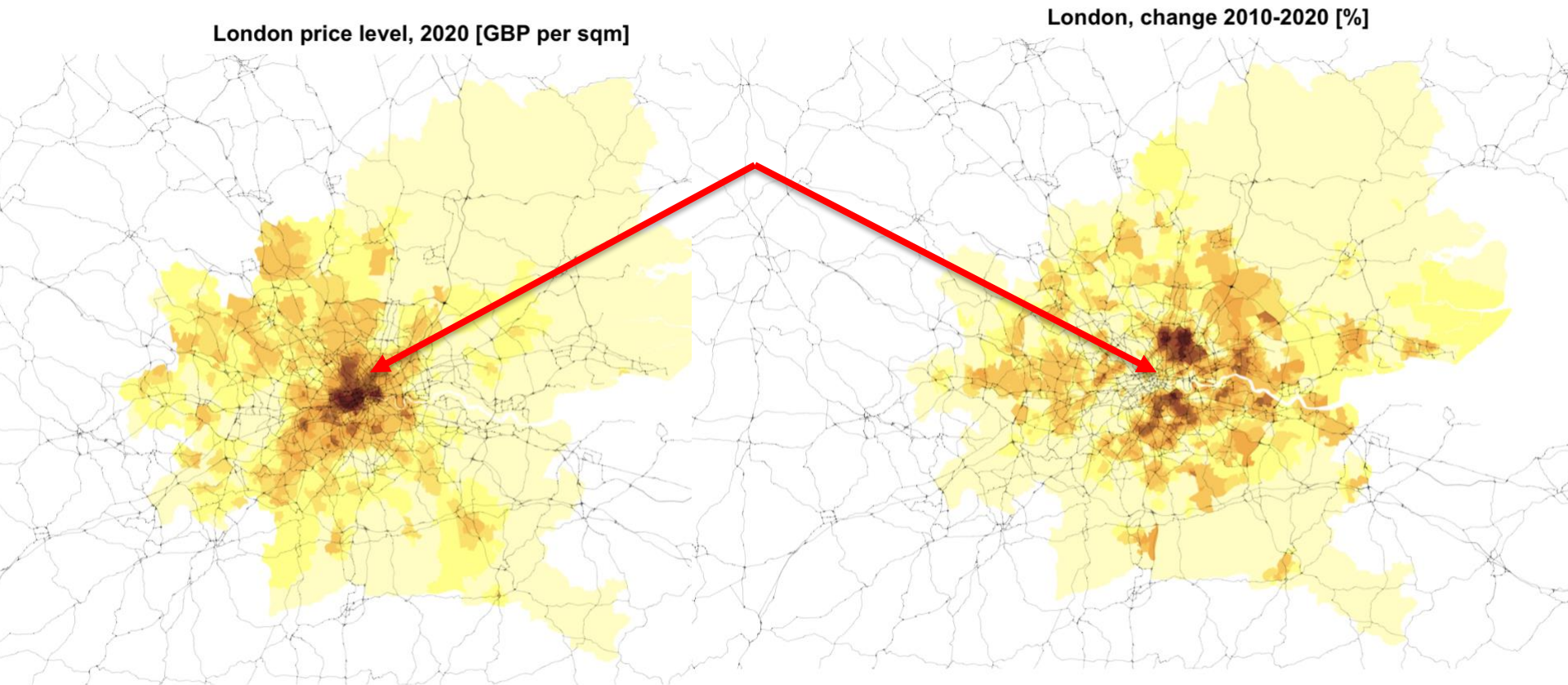**Gentrification index 1990s**
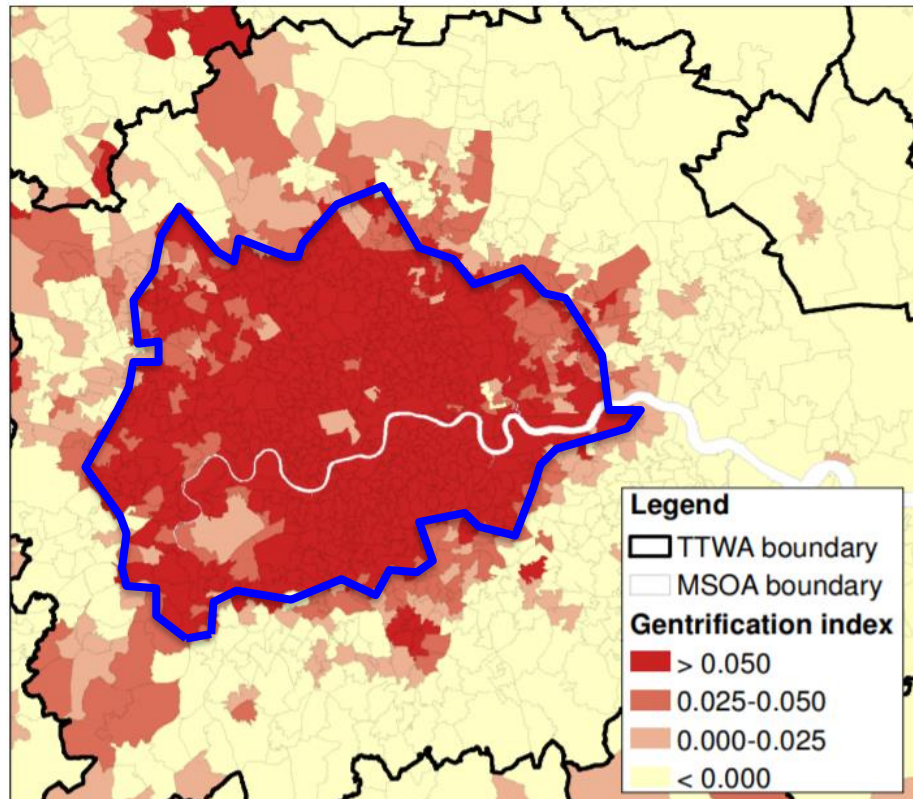
Gentrification index 2000s

Areas that gentrified in the 1990s were (mostly) no longer gentrifying in 2020s

Gentrification moved to adjacent areas

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III ORIGIN OF NEIGHBOURHOOD EXTERNALITY

role of neighbourhood externalities

London price level, 2020 [GBP per sqm]

London, change 2010-2020 [%]

Ahlfeldt, Carozzi, Makovsky (2021)

Gentrification moved to adjacent areas

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III AN IVESTOR'S GUIDE
enjoy returns to gentrification

- Correctly **predicting gentrification** helps generating **returns to investment**

- **Target areas**

    - To-be-gentrified areas must be ***below-average income areas***

    - With (some) ***buildings*** appraoching the ***end of their lifecycle***

    - With fundamental amenities such as ***historic character***

    - In close ***proximity to richer areas***

    - Ideally, some ***urban consumption amenities*** are already there

    - Aras that will benefit from the ***next transport revolution***

Risk-return trade-off
Marginal areas (gentrifying or close to gentrifying) offer greatest potential
Established areas (high-income, high-price) are „save havens"

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IV WELFARE DIMENSION
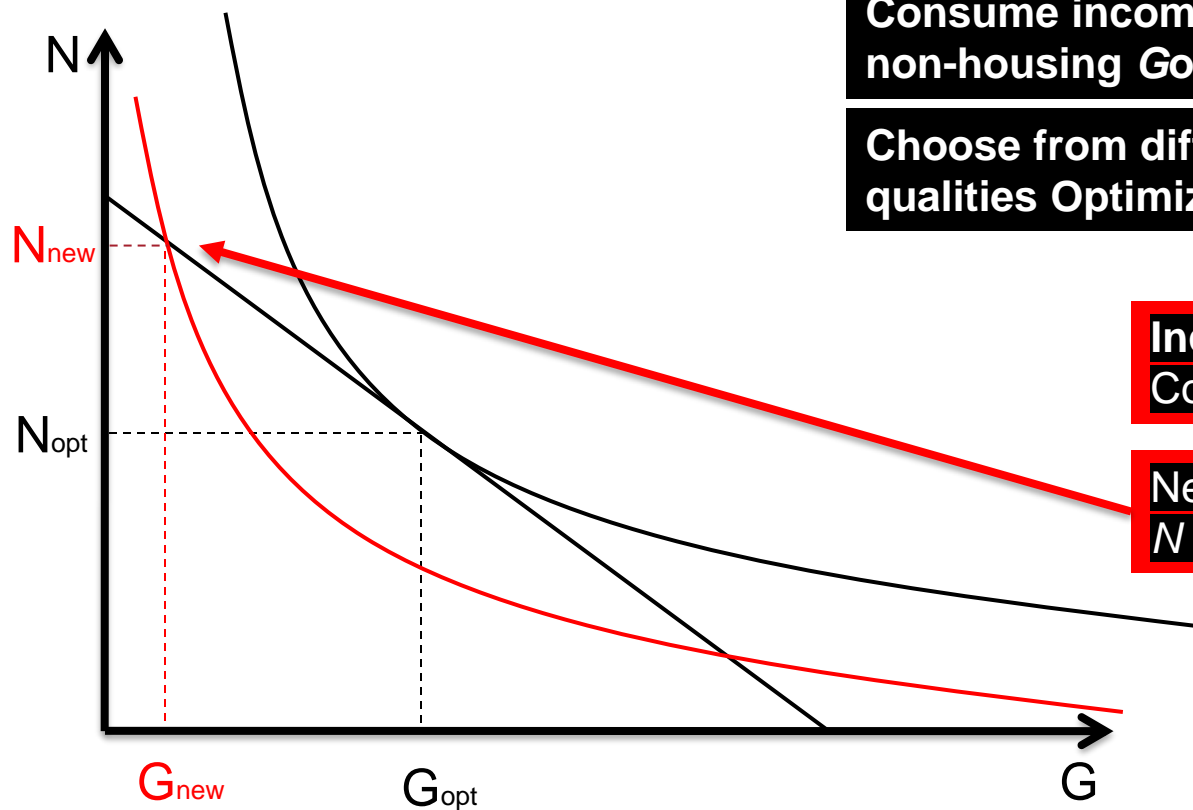role of neighbourhood externalities

Q: Is gentrification good or bad? And for whom?

IV UTILITY MAXIMIZATION

from renters' perspective – neighborhood perspective

Renter

Consume income on *N*eigh. Quality and non-housing *G*oods $Y = n \times N + G$ ($p_G = 1$)

Choose from different neighborhood qualities Optimization: $dU_N/dU_G = 1/n$
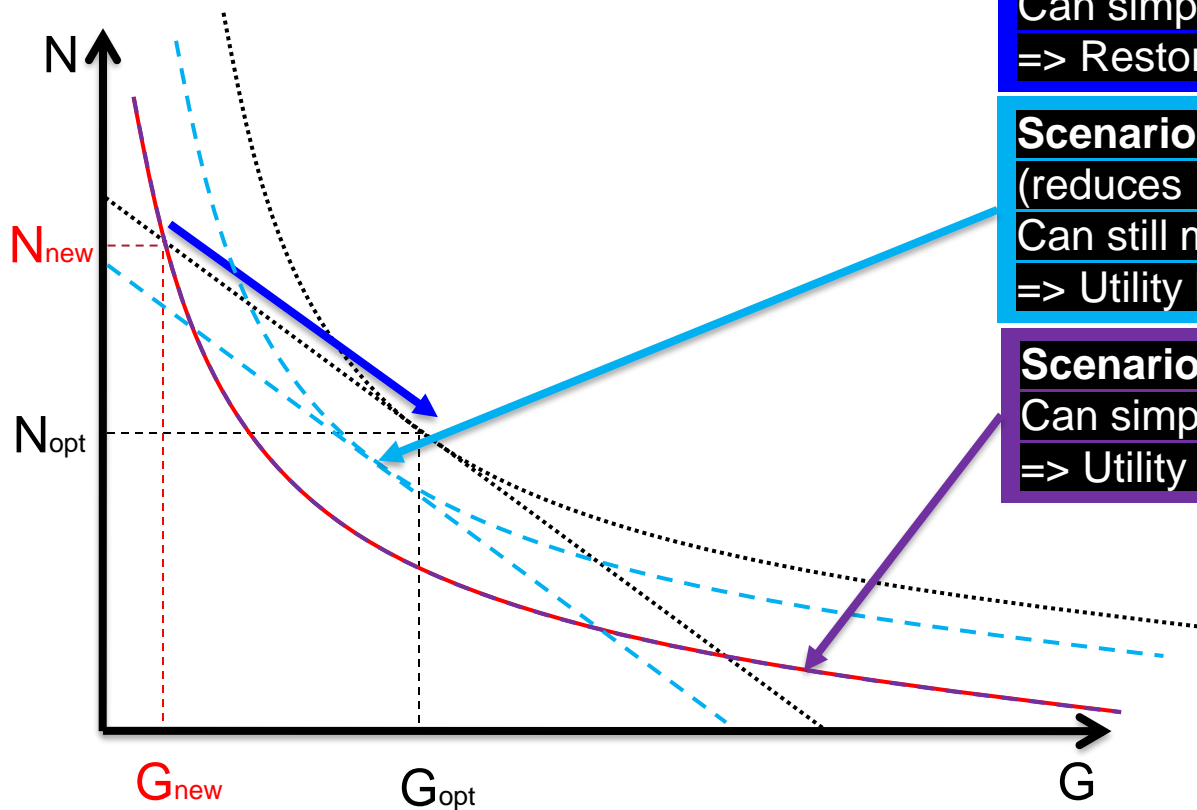
Increase in N "Gentrification" Consume too much N

Neighbourhood quality level N no longer optimal

IV UTILITY MAXIMIZATION
from renters' perspective – neighborhood perspective

Renter

Scenario 1: Mobility is costless: Can simply move to neighbourhood => Restore initial utility level
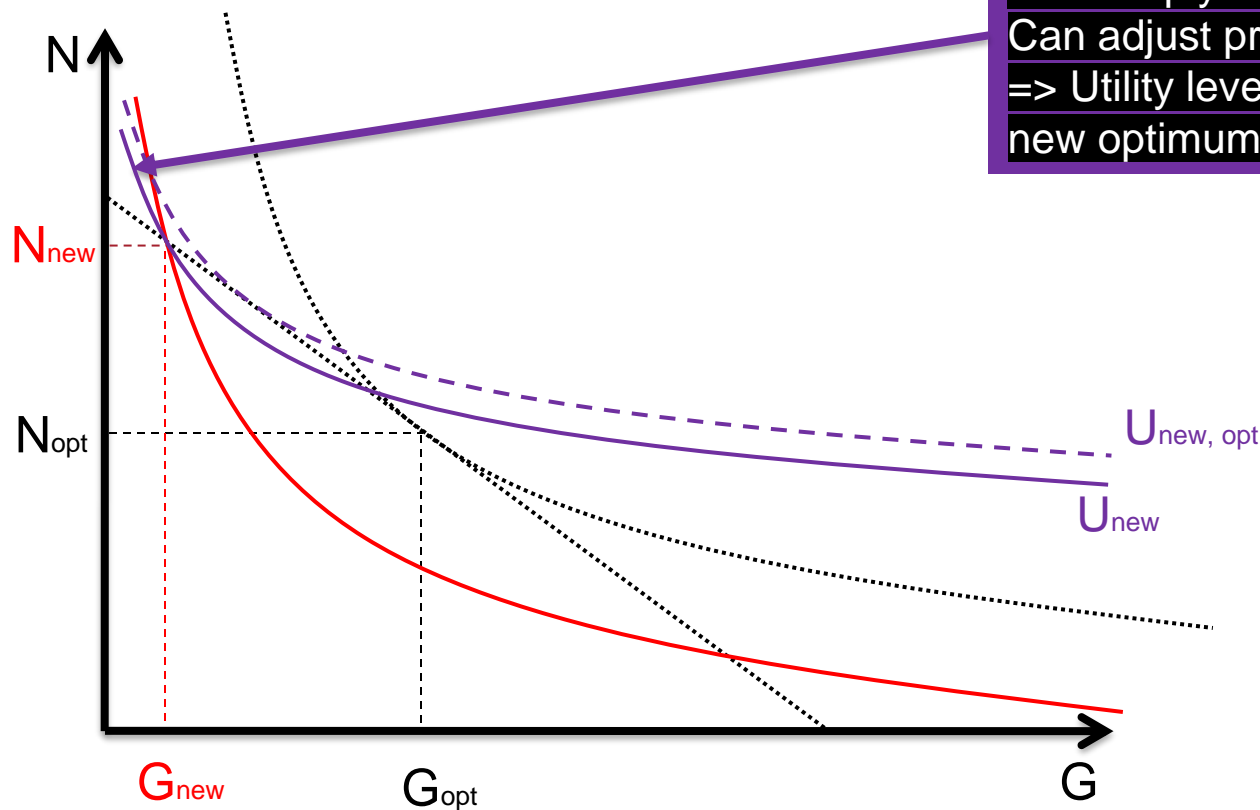
Scenario 2a: Mobility is costly (reduces remaining lifetime budget): Can still move => Utility level will be lower

Scenario 2b: Mobility is costly: Can simply stay put => Utility level will be lower

LSE © Gabriel M Ahlfeldt

IV UTILITY MAXIMIZATION
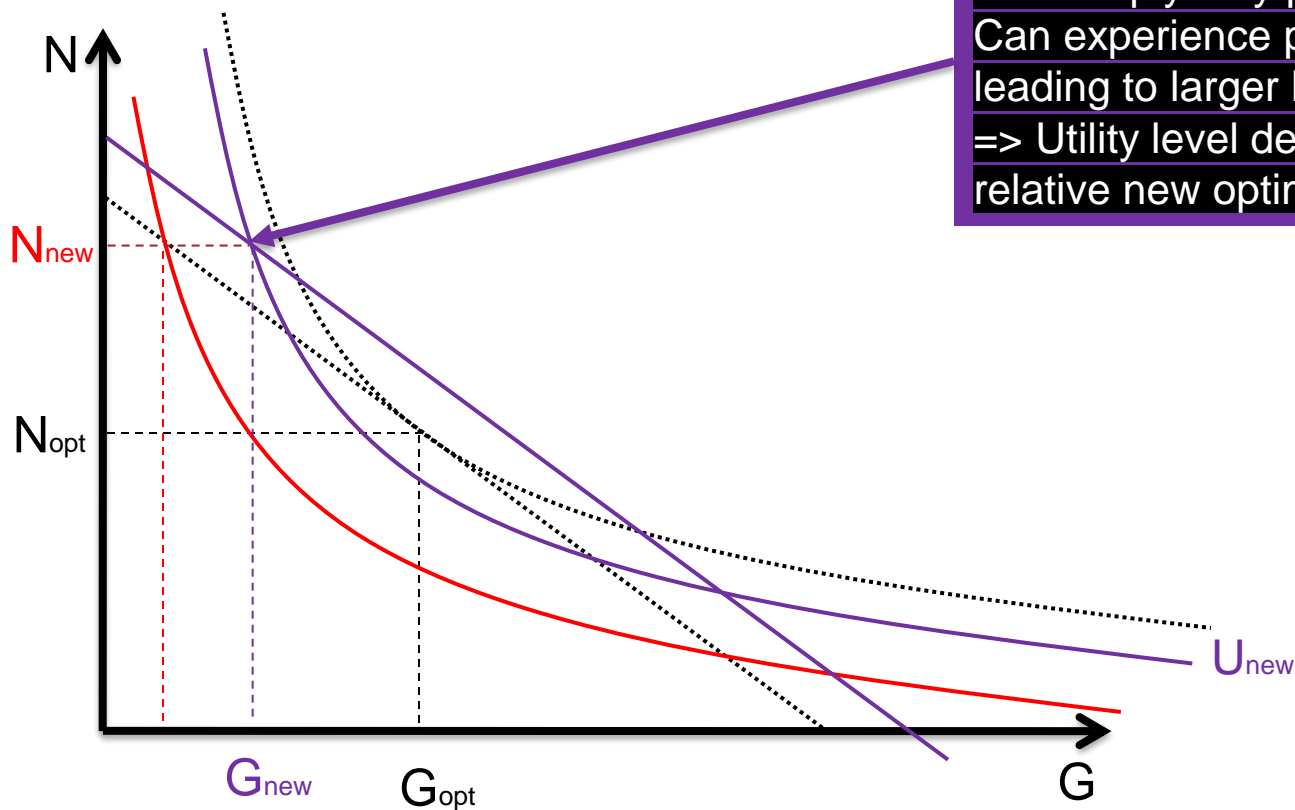from renters' perspective – neighborhood perspective

Renter

Scenario 2bI: Mobility is costly:
Can simply stay put
Can adjust preferences
=> Utility level decrease relative to
new optimum <u>lower</u> (could be higher)

N_{new}

N_{opt}

$U_{new, opt}$

U_{new}

G_{new}

G_{opt}

G

N

IV UTILITY MAXIMIZATION
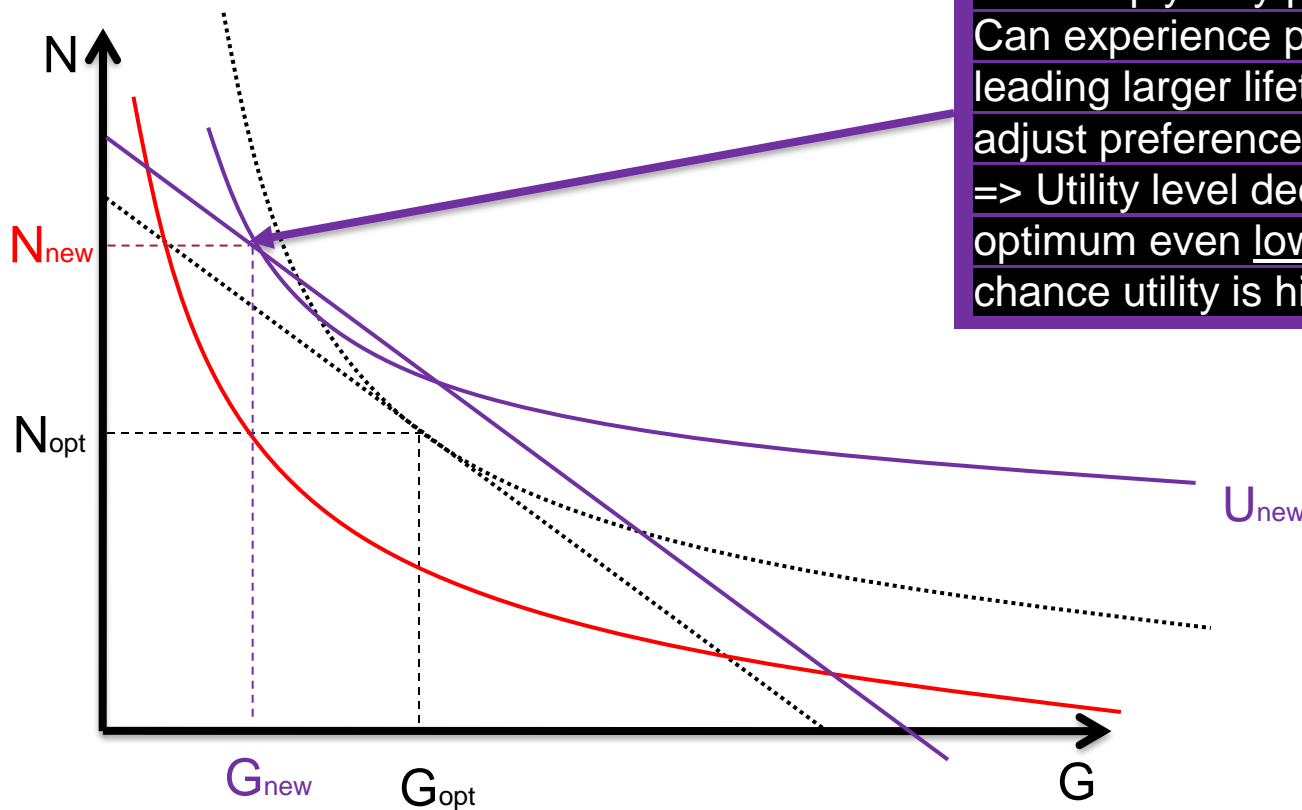from renters' perspective – neighborhood perspective

Renter

Scenario 2bII: Mobility is costly:
Can simply stay put
Can experience positive externalities,
leading to larger lifetime income
=> Utility level decrease smaller
relative new optimum (could be higher)

IV UTILITY MAXIMIZATION
from renters' perspective – neighborhood perspective

Renter

Scenario 2bIII: Mobility is costly:
Can simply stay put
Can experience positive externalities, leading larger lifetime income and adjust preference
=> Utility level decrease relative new optimum even <u>lower</u> or with some chance utility is higher

N

N_{new}

N_{opt}

U_{new}

G_{new} G_{opt} G

IV UTILITY MAXIMIZATION

from owners' perspective – neighborhood perspective

Homeowner
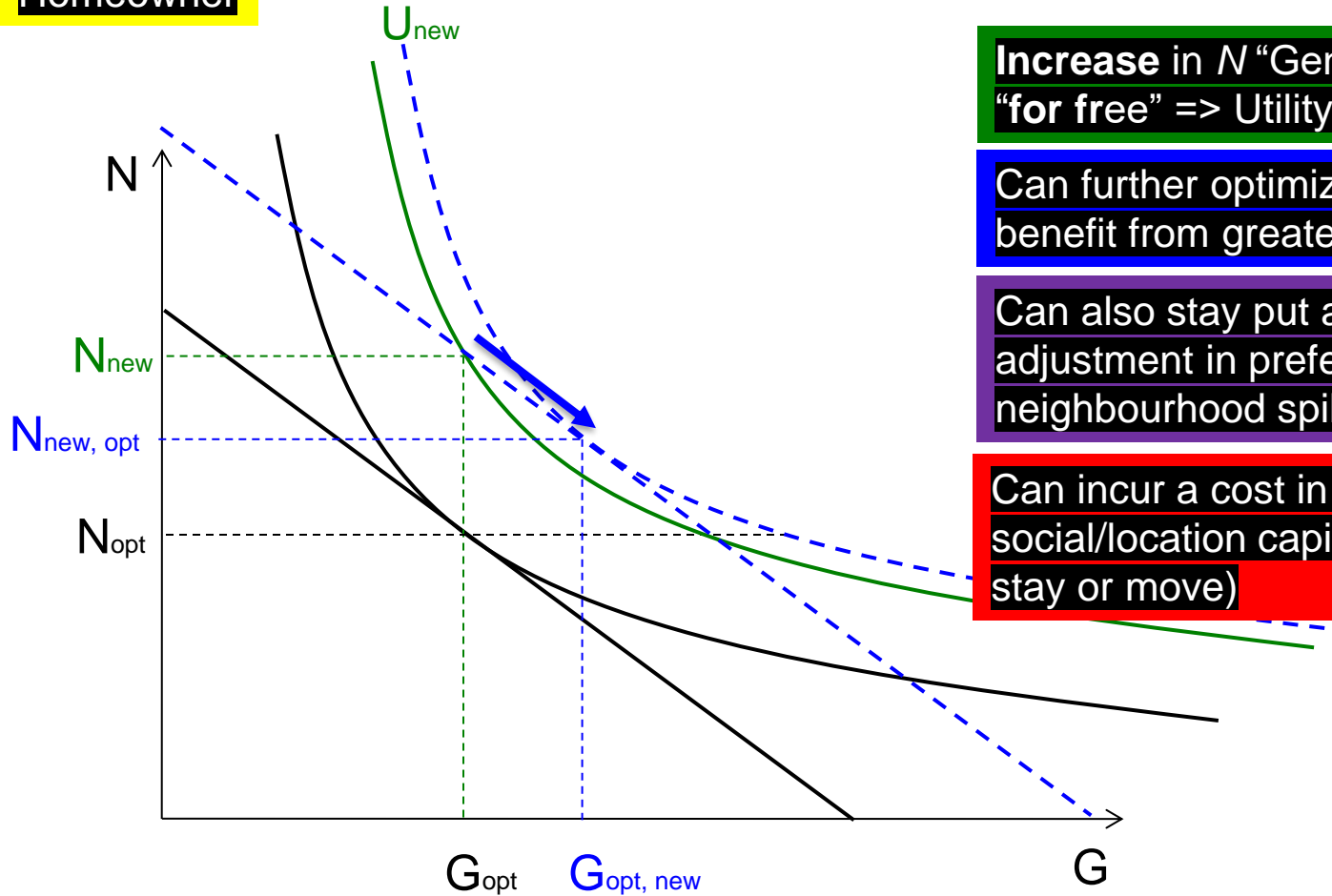
Increase in *N* "Gentrification" comes "**for fr**ee" => Utility is higher

Can further optimize by moving and benefit from greater wealth

Can also stay put and benefit from adjustment in preferences and/or neighbourhood spillovers

Can incur a cost in the form of loss of social/location capital (whether they stay or move)

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IV SUPPORT AND RESISTANCE TO IMPROVEMENTS
attitudes towards gentrification

- **Homeowners** should support initiatives that **increase property value**

  - Homevoter hypothesis (Fischel, 2005)

  - In a **high homeownership** environment, voters **supported** statium development where **prices** are expected to **increase** (Dehring et al. 2008)

- **Renters** have more reason to **oppose urban renewal**

  - In a **low-homeownership** environment, voters **opposed** a major urban renewal project that was expected to lead to **gentrification** (Ahlfeldt, 2011)

- The same **positive price signal** should be **supported by homeowners** (homevoters) and **opposed by renters** (leasevoters) and vice versa

  - Evidence from aircraft noise (Ahlfeldt & Maennig, 2015)

Expected negative effects from gentrification seem to dominate for renters

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V EVIDENCE: DISPLACEMENT
evidence

- **US**

  - Gentrification has **moderate or no effects on out-migration**

  - Neighbourhood change driven by in-migration

    - (Brummet and Reed 2019, Ding et al. 2019, Ellen and O´Reagan 2011, Freeman 2005)

  - Gentrification **reduces white flight** (Ellen and O´Reagan 2011)

  - Gentrification of poor black neighbourhoods **creates neighbourhoods that are attractive to middle class black households**

    - (McKinnish et al 2010)

- **UK**

  - **Gentrification leads to significant displacement**

    - (Waights, 2018)

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V EVIDENCE: EFFECTS ON STAYERS

evidence

- Stayers experience **positive spillovers** from gentrification

  - Experience greater **gains in income** (Ellen and O´Regan 2011)

  - Greater **neighbourhood satisfaction** (Ellen and O´Regan 2011)

  - **Children** are more likely to **attend and complete college**
    (Brummet and Reed, 2019)

- **Employment grows faster** than average in gentrifying neighbourhoods

  - Increases jobs in restaurants and services sectors and reduces jobs in manufacturing and wholesale sectors (Lester et al 2014)

  - Local residents lose jobs but gain jobs further away
    (Meltzer and Ghorbani 2017)

- Gentrification **reduces crime** (Autor et al. 2017)

Net effects depends on housing costs => May or may not be positive for renters

SUMMARY
conclusion

- **Determinants of dynamic spatial income pattern**
  - New expensive transport mode temporarily push rich to suburbs
  - Lifecycle of buildings supply-side cyclicality in attractiveness to rich
  - Consumption amenities attract young college-educated workers
  - Gentrifiers are attracted to rich neighbourhoods due to spillover effects
- **Welfare effects of gentrification**
  - Renters lose unless they benefit from spillovers or adjust preferences
  - Homeowners benefit from gentrification, except for loss of social capital
- **Evidence points to limited displacement effects and benefits to stayers**
  - Stayers may still be net losers if they rent
- **Next: Spatial inequalities**
  - More on role of mobility cost

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THANKS

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