Labor Market Concentration, Earnings Inequality, and Earnings Mobility

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May 16, 2019

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Monopsony is a hot topic these days

- New York Times: Corporate America is Suppressing Wages for Many Workers
- Bloomberg: Dominant Employers May Be Choking Off Wages
- Vox: More and more companies have monopoly power over workers' wages. That's killing the economy.
- Slate: Why Is It So Hard for Americans to Get a Decent Raise?
- Wall Street Journal: Why Aren't Ameicans Getting Raises? Blame the Monopsony
- Deadspin: Let's Talk About MONOPSONY

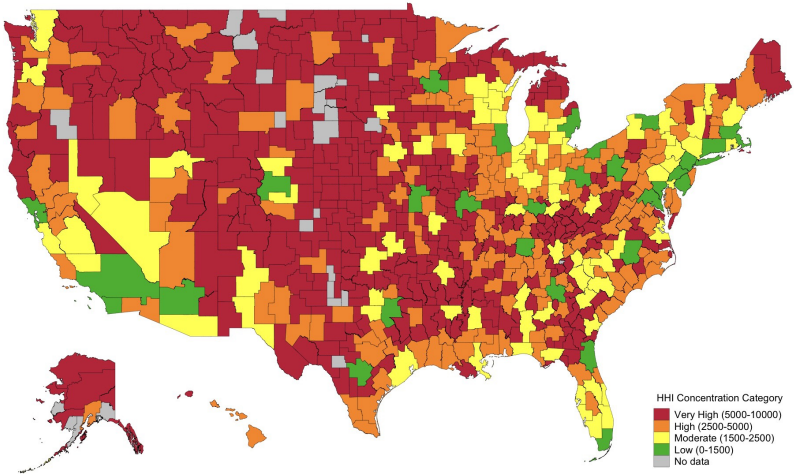
Many factors can contribute to employers' wage-setting power

- Search/information frictions
- Preference heterogeneity
- Non-compete agreements (e.g. Jimmy John's)
- "No poaching" agreements/employer collusion (e.g. Silicon Valley, franchises)
- Lack of competition/market concentration

These issues are prevalent in a wide variety of specific labor markets...

- Teachers
  - Landon and Baird 1971; Luizer and Thornton 1986; Falch 2010; Ransom and Sims 2010
- Nurses
  - Staiger, Spetz, and Phibbs 2010; Matsudaira 2014
- Retail
  - Ransom and Oaxaca 2010; Dube, Giuliano, and Leonard 2018
- Amazon Turk
  - Dube, Jacobs, et al. 2018
- Fast food and other franchises
  - Krueger and Ashenfelter 2018
- Engineers
  - Fox 2010
- Judicial clerks/medical residents
  - Naidu 2010
- Manufacturing
  - Benmelech, Bergman, and Kim 2018
- Major League Baseball
  - Humphreys and Pyun 2015
- Sharecropping
  - Naidu 2010

And in some cases are also relevant more broadly



Concentration

- Azar, Marinescu, and M. I. Steinbaum 2017
- Azar, Marinescu, M. Steinbaum, et al. 2018

Bunching

- Dube, Manning, and Naidu 2017

Also

- Webber 2015
- Tucker 2017

Source: Azar, Marinescu, and Steinbaum (2017), Figure 1

There is evidence that concentration reduces wages

- A 10% increase in local occupational concentration reduces posted wages by 1.4% (Azar, et al, 2017)

- A one standard-deviation increase in local industrial concentration reduces wages 1-2% (Benmelech, et al, 2018)

And some policymakers think monopsony could contribute to inequality

Council of Economic Advisers (2016)

There is also growing concern about an additional cause of inequity–a general reduction in competition among firms, shifting the balance of bargaining power toward employers (Furman and Orszag 2015). Such a shift could explain not only the redistribution of revenues from worker wages to managerial earnings and profits, but also the rising disparity in pay among workers with similar skills.

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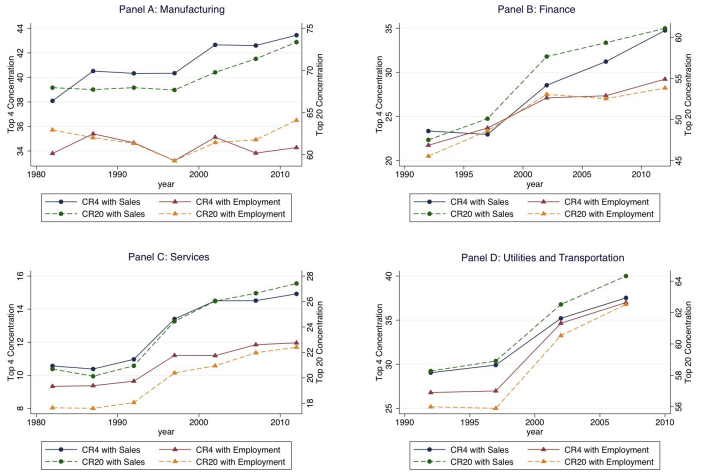
But we haven't established facts about local concentration trends...



- National industrial concentration appears to be increasing...

Source: Autor, et al (2017), Figure 4

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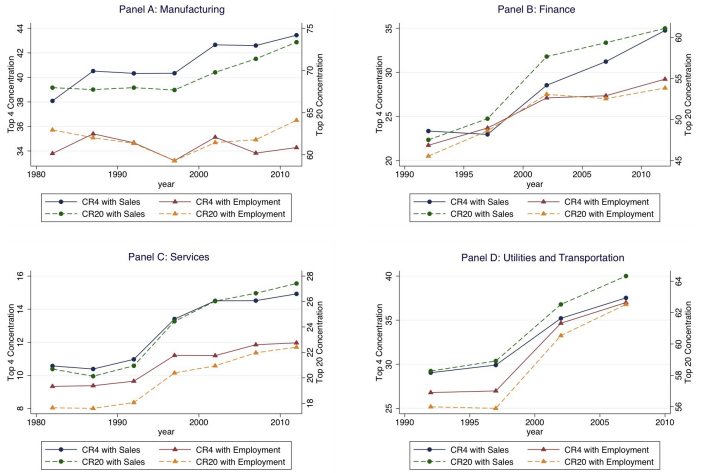

- National industrial concentration appears to be increasing...
- but what about local concentration?

Source: Autor, et al (2017), Figure 4

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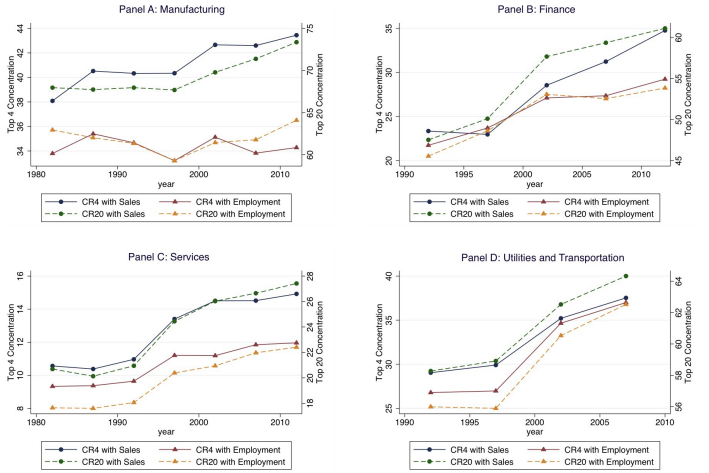


- National industrial concentration appears to be increasing...
- but what about local concentration?
- Distinction may matter for labor market implications

Source: Autor, et al (2017), Figure 4

Or addressed questions about heterogeneous effects

- Do effects differ across demographic groups?
  - Are earnings effects experienced similarly across the distribution?
  - Or are they concentrated in a way that contributes to changes in inequality?
  - Are any inequality effects driven by changes in the top or bottom of the distribution?

- Is it harder to move up the earnings distribution in more concentrated labor markets?

This paper will do both of those things

- Focus on local labor markets
  - Commuting zone $\times$ 4-digit NAICS industry
- Measure trends in labor market concentration since 1976
  - Longitudinal Business Database
- Use recent tax data to consider heterogeneous earnings effects within and across demographic groups
  - W-2s, available since 2005

Here are some things I'm NOT saying

- Industries are the only/best way to identify labor markets
- Occupations are irrelevant
- People only look for jobs within their own commuting zones
- Monopsony power only arises from industrial concentration
- Earnings are the only type of income that could be affected by industrial concentration

Preview of Results - Concentration Trends

- Mean national concentration initially declined, increased sharply since ≈1990
- Mean local concentration has generally declined since 1976
- Divergence is driven by differential changes in concentration within industry when measured nationally vs. locally
- Magnitude of changes in concentration varies substantially across markets

Preview of Results - Earnings Effects

- Estimates indicate that increasing local industrial concentration
  - Reduces earnings
  - Increases inequality
  - Effects on earnings mobility are unclear

- Earnings effects differ somewhat across groups, but inequality increases are experienced broadly

- Earnings estimates + concentration trends $\Rightarrow$ changes in local concentration are not a major cause of increases in inequality over recent decades

Measurement challenges have limited research on labor market concentration

- Data challenges
  - Public data sources do not permit construction of highly localized measures of concentration
- Conceptual challenges
  - What is the right unit of analysis?
  - If data were available, how should they be applied to this question?

Background question: What constitutes a local labor market?

Decisions to make on many dimensions

- Industry?
- Occupation?
- Level of aggregation?
- Standardized over time?
- Geography?

Baseline: Commuting Zone by standardized 4-digit NAICS, but other variations are similar

The Longitudinal Business Database can measure industrial concentration

- LBD is compiled from the Business Register (BR), Economic Census, other surveys
- Establishment-level data, covers all employer establishments
- Key elements for this study:
  - Employment
  - Payroll
  - Location (county)
  - Industry (standardized via Fort & Klimek)
  - Firm identifier
- Covers 1976–2015
- Permits construction of firm-based measures of employment concentration within geography-by-industry cells
- Can also use Payroll / Employment as a rough measure of mean earnings

Inequality measures can be constructed from W-2s

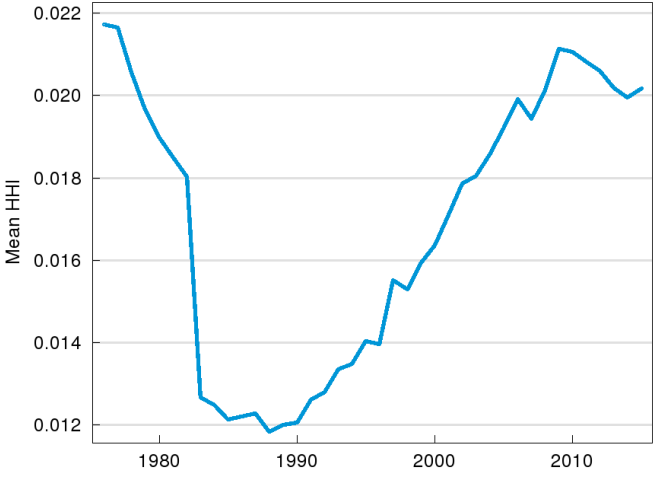
- Wage and salary earnings for all employees, filed by employers
  - Available 2005–2015
  - Includes deferred compensation
  - Does not include employer-sponsored health insurance
- Available at the person-employer level
- Key elements for this study:
  - Protected Identification Key (PIK) - fixed person identifier
  - Employer Identification Number (EIN)
  - Earnings
- Missing:
  - Geography
  - Industry

Geography and industry are assigned to W-2s via links to other data

- PIKs allow linkage to 1040s/1099s, which have address information
- EINs allow linkage to the BR/LBD, which have industry for each establishment
- W-2s don't identify which establishment people work in, but can assign industry based on location, relative employment
- For people working in multiple industries, use industry from highest-earning W-2

Trends in Industrial Concentration

Nationally, concentration fell initially, has increased since about 1990



Employment weighted

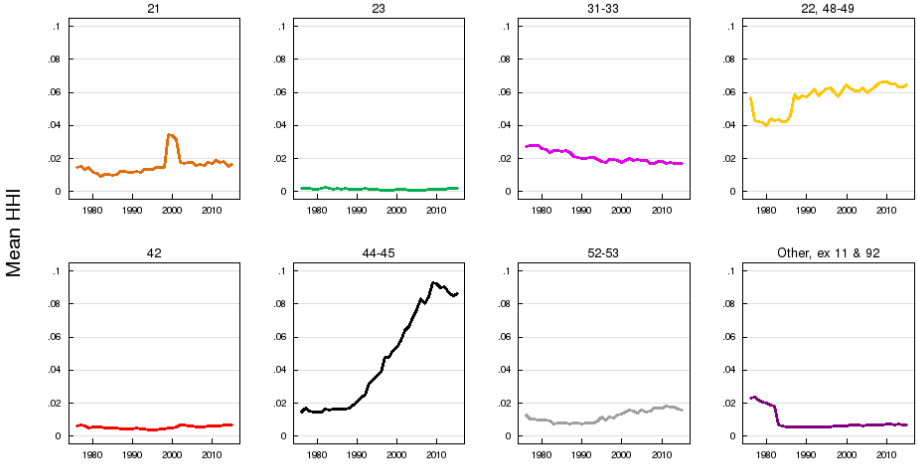
Consistent with other previous estimates of national industrial concentration trends since early 1980s

▸ With Employment Concentration Ratios

▸ National Variations

Source: Longitudinal Business Database, 1976–2015

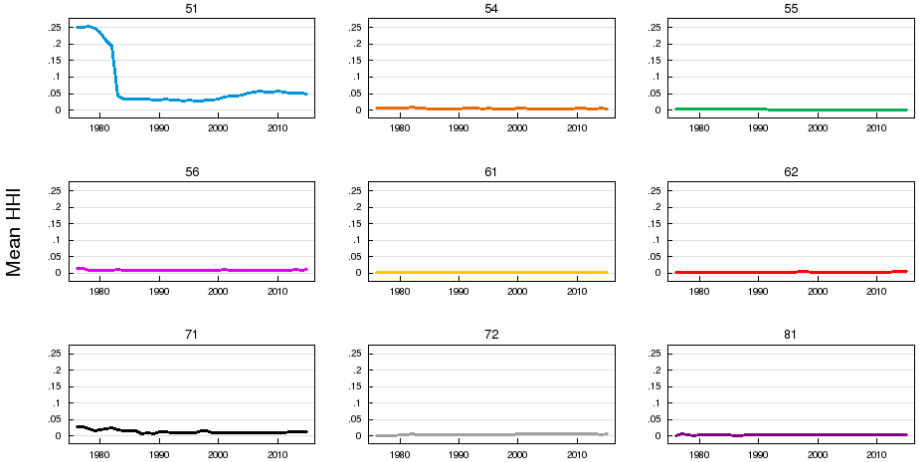
National concentration trends vary across sectors



Note: Panels are labelled with two-digit NAICS codes

Source: Longitudinal Business Database, 1976–2015

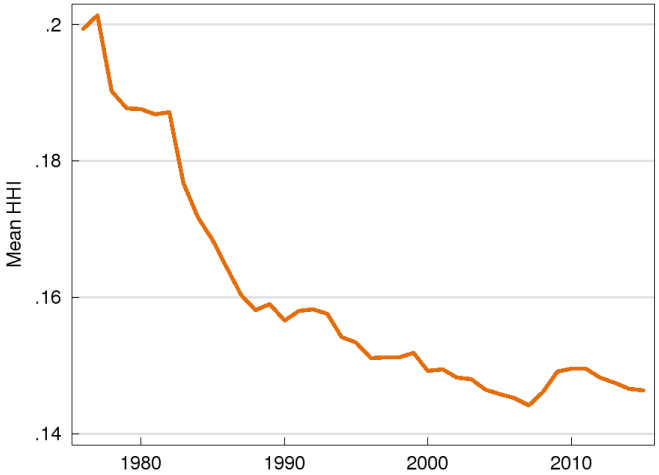
Early 1980s concentration decline was driven by telecommunications



Note: Panels are labelled with two-digit NAICS codes

Source: Longitudinal Business Database, 1976–2015

Locally, mean industrial concentration continued to decline



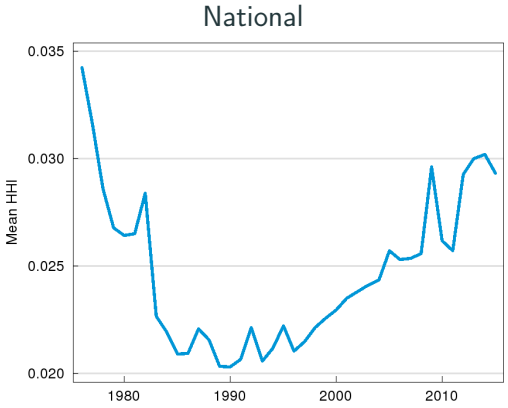
Divergence from national trend is not sensitive to concentration measure

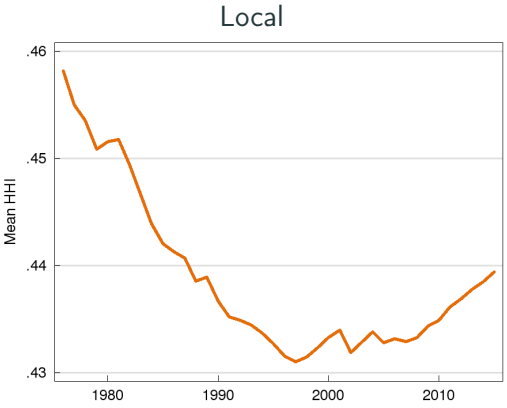
▸ With Employment Concentration Ratios

▸ CZ Variations

Source: Longitudinal Business Database, 1976–2015

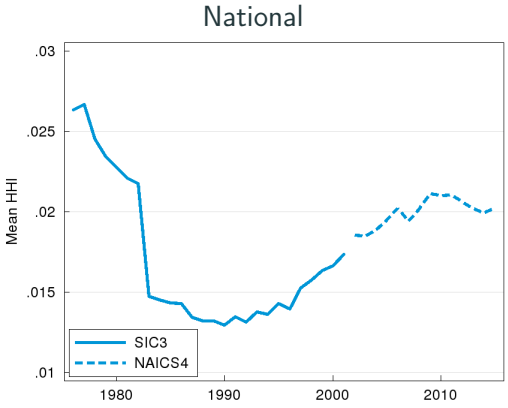
This pattern largely holds when means are not employment weighted

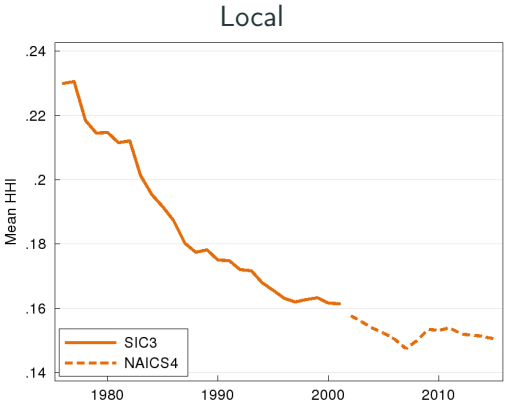




Source: Longitudinal Business Database, 1976–2015

Using contemporaneous industry classifications produces the same pattern

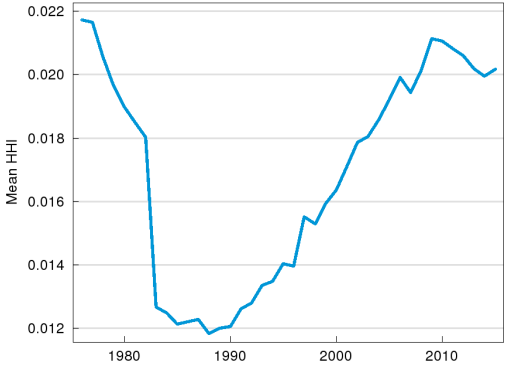




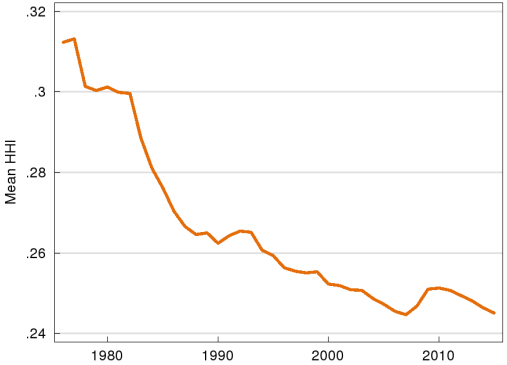
Source: Longitudinal Business Database, 1976–2015

As do defining local labor markets using counties...

National



Local (County)

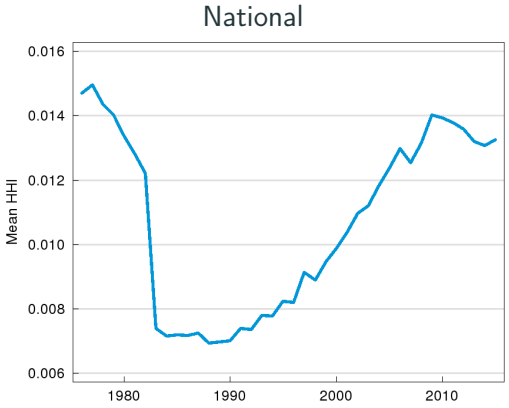


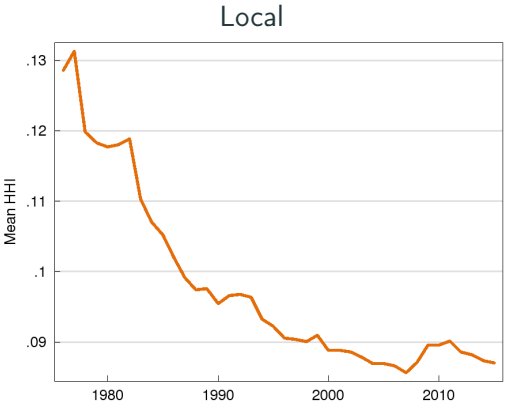
▸ With County Employment Concentration Ratios

▸ County Variations

Source: Longitudinal Business Database, 1976–2015

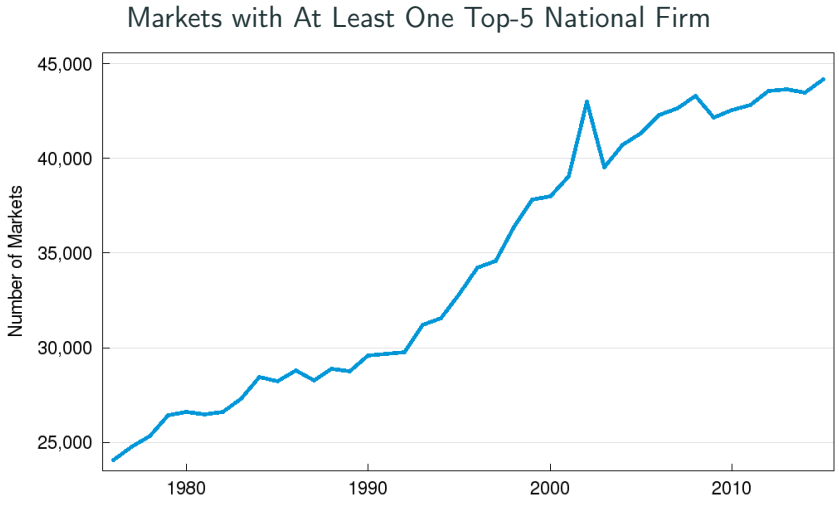
And using 3-digit NAICS industries





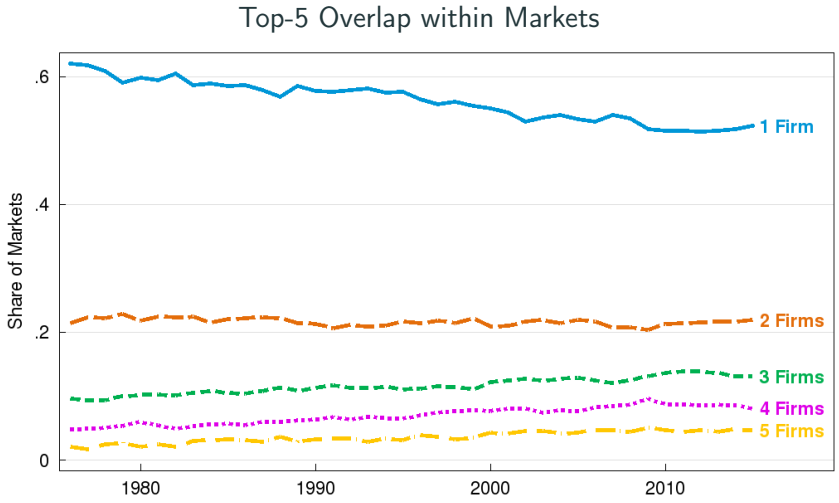
Source: Longitudinal Business Database, 1976–2015

Top national firms are operating in more markets



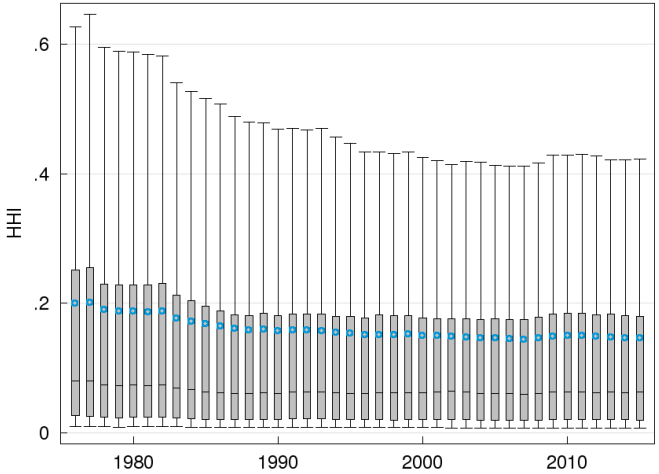
Source: Longitudinal Business Database, 1976–2015

Top national firms are increasingly competing in the same local markets



Source: Longitudinal Business Database, 1976–2015

Local concentration distribution has tightened over time

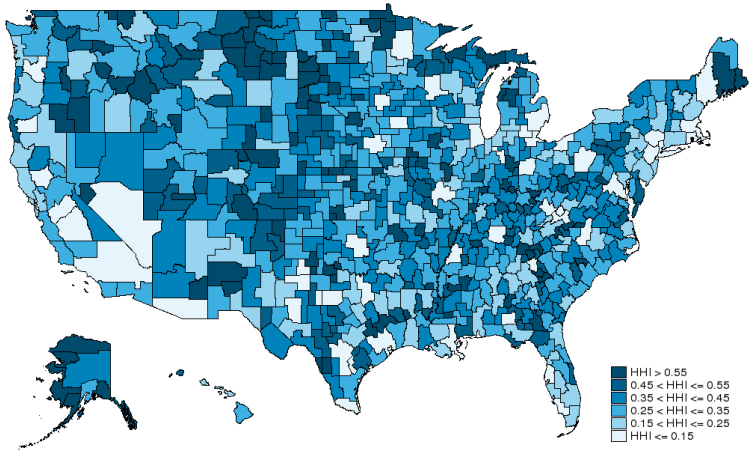


Driven by declining values of high percentiles

Source: Longitudinal Business Database, 1976–2015

In general, rural areas have been and are more concentrated than urban areas

1976



Source: Longitudinal Business Database, 1976 and 2015

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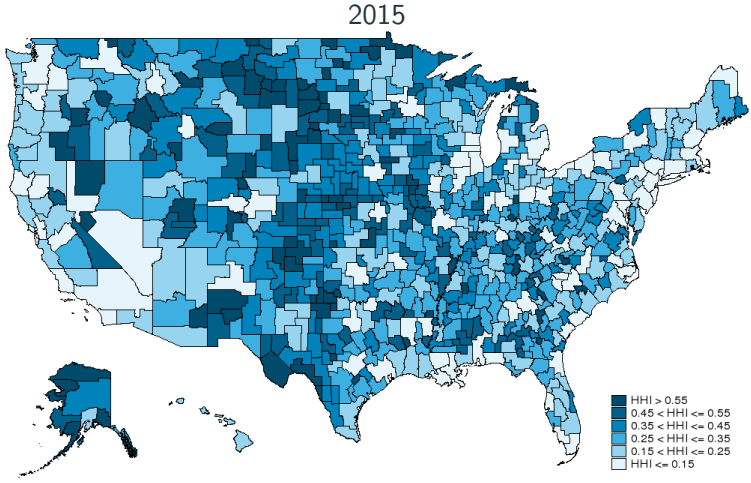
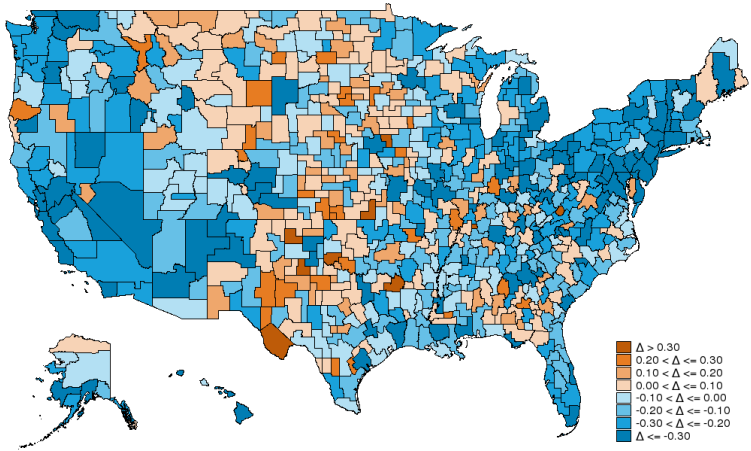


Source: Longitudinal Business Database, 1976 and 2015

Early declines in concentration were widespread, larger than recent increases

Change in log(HHI), 1976-1990



Source: Longitudinal Business Database, 1976, 1990, 2005, and 2015

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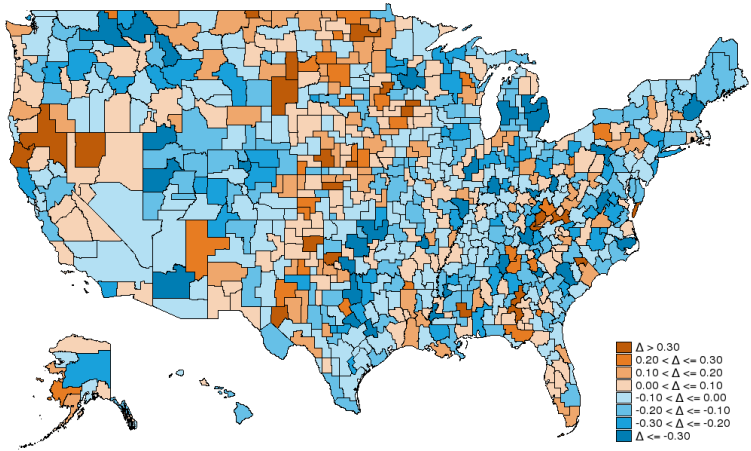
Change in log(HHI), 1990-2005



Source: Longitudinal Business Database, 1976, 1990, 2005, and 2015

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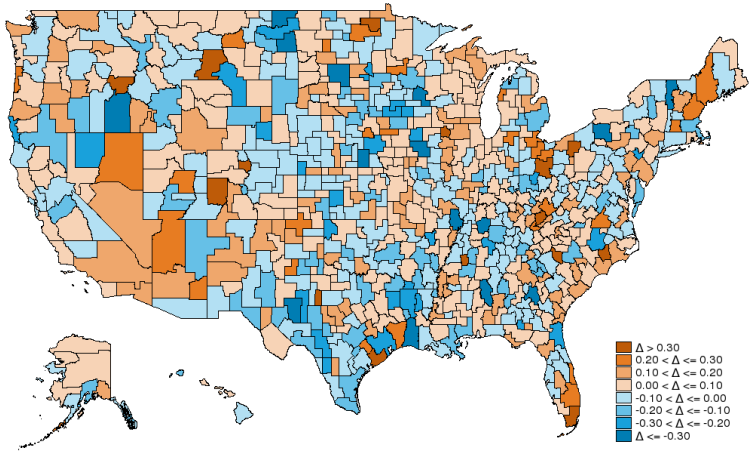

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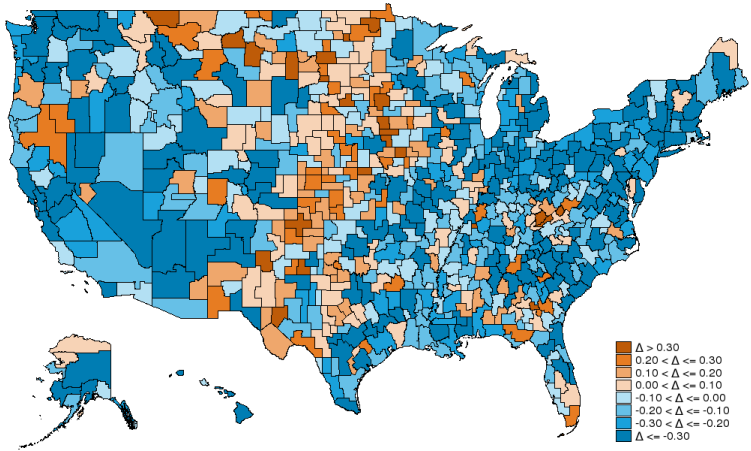
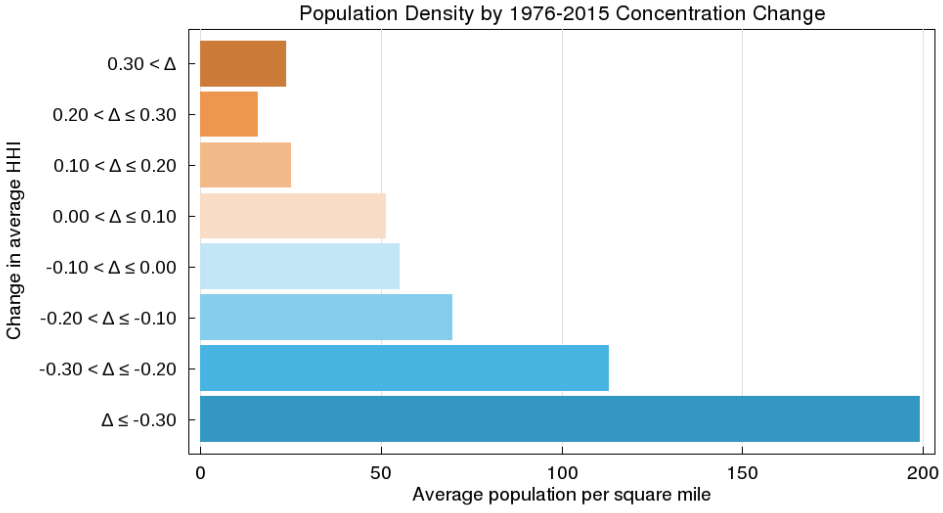


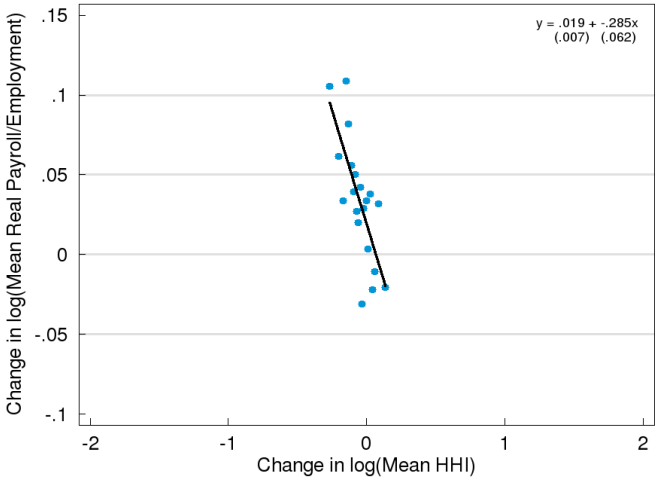
Source: Longitudinal Business Database, 1976, 1990, 2005, and 2015

Areas that saw concentration increases tended to be less densely populated



Source: Longitudinal Business Database, 1976 and 2015;
Census National Counties Gazetteer File, 1990

Does concentration matter for earnings?



- Scatter plots are suggestive...

Source: LBD, 1976, 2005, and 2015; Form W-2, 2005 and 2015

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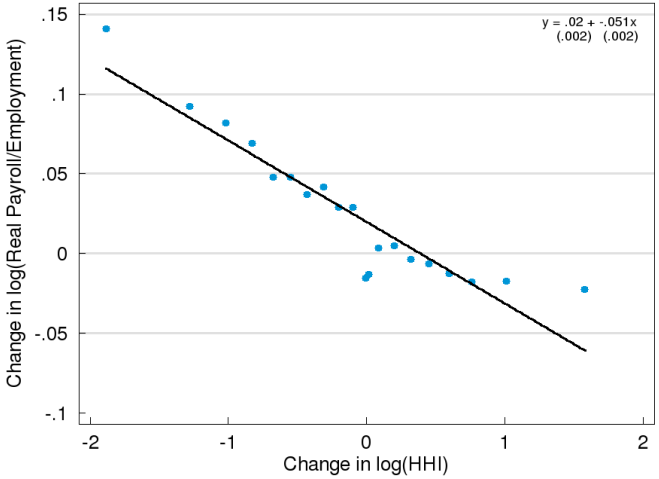

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- but sensitive to unit of analysis...

Source: LBD, 1976, 2005, and 2015; Form W-2, 2005 and 2015

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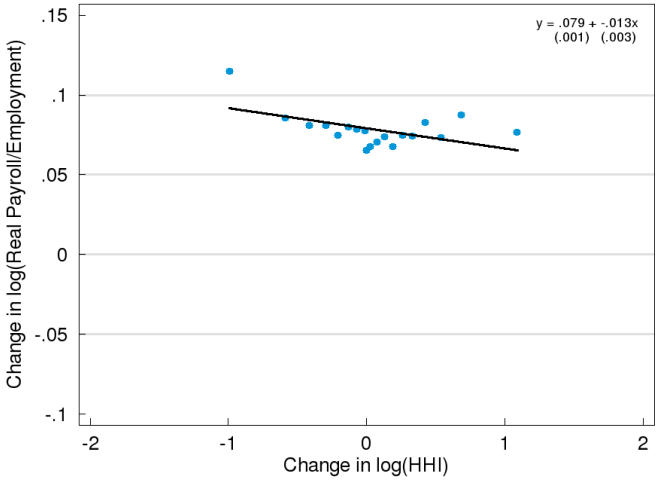

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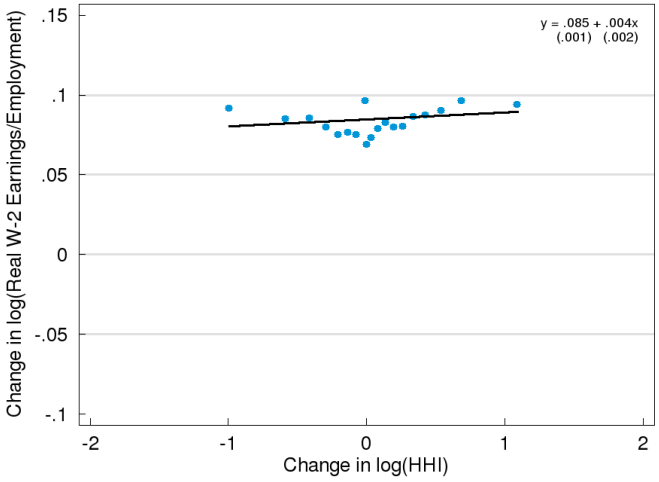


- Scatter plots are suggestive...
- but sensitive to unit of analysis...
- timeframe...
- and earnings measure

Source: LBD, 1976, 2005, and 2015; Form W-2, 2005 and 2015

Same pattern emerges from OLS regressions with lots of fixed effects

log(mean earnings)

VARIABLES	(1)	(2)	(3)	(4)
log(HHI)	-0.108***	-0.0561***	0.00645***	0.00742***
	(0.00660)	(0.00368)	(0.00211)	(0.00117)
Observations	5,446,000	1,527,000	1,519,000	1,519,000
R-squared	0.658	0.972	0.983	0.872
Years	76-15	05-15	05-15	05-15
Earnings Measure	LBD	LBD	W-2	W-2
Weighted	Yes	Yes	Yes	No
Market FEs	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes

Source: LBD, 1976, 2005, and 2015; Form W-2, 2005 and 2015

Use IV regressions to identify impact of concentration

$$\text{Instrument: } \overline{HHI}_{it}^{-c} = \frac{\sum_{z \neq c} HHI_{zit} \cdot Emp_{zit}}{\sum_{z \neq c} Emp_{zit}}$$

$$\text{First stage: } log\left(HHI_{cit}\right) = log\left(\overline{HHI}_{it}^{-c}\right)\gamma + \delta(c,i,t) + \eta_{cit}$$

$$\text{Second stage: } log\left(y_{cit}\right) = log\left(\widehat{HHI}_{cit}\right)\beta + \delta(c,i,t) + \varepsilon_{cit}$$

- y: earnings outcome
- $\delta\left(c,i,t\right)$: commuting zone (c), industry (i), and time (t) fixed effects
- β: elasticity of outcome with respect to concentration

First stage is strong across specifications including sensible controls

log(HHI), 1976-2015

VARIABLES	(1)	(2)	(3)	(4)	(5)
$log(HHI^{-m})$	1.064***	0.748***	0.829***	0.827***	0.466***
	(0.0120)	(0.0201)	(0.0174)	(0.0173)	(0.0166)
Observations	5,450,000	5,450,000	5,446,000	5,446,000	5,446,000
R-squared	0.504	0.773	0.930	0.932	0.956
Year FEs	No	Yes	Yes	No	No
CZ FEs	No	Yes	No	No	No
Industry FEs	No	Yes	No	No	No
Market FEs	No	No	Yes	Yes	Yes
CZ by Year FEs	No	No	No	Yes	Yes
Market Trends	No	No	No	No	Yes
F-stat	7824	1389	2265	2284	791

Source: Longitudinal Business Database, 1976–2015

First stage is strong across specifications including sensible controls

log(HHI), 2005-2015, LBD Sample

VARIABLES	(1)	(2)	(3)	(4)	(5)
$log(HHI^{-m})$	1.062***	-0.328***	0.503***	0.505***	0.192***
	(0.0130)	(0.0786)	(0.0303)	(0.0300)	(0.0226)
Observations	1,531,000	1,531,000	1,527,000	1,527,000	1,527,000
R-squared	0.537	0.792	0.974	0.974	0.985
Year FEs	No	Yes	Yes	No	No
CZ FEs	No	Yes	No	No	No
Industry FEs	No	Yes	No	No	No
Market FEs	No	No	Yes	Yes	Yes
CZ by Year FEs	No	No	No	Yes	Yes
Market Trends	No	No	No	No	Yes
F-stat	6667	17	276	284	73

Source: Longitudinal Business Database, 1976–2015

First stage is strong across specifications including sensible controls

log(HHI),
2005-2015,
W-2 Sample

VARIABLES	(1)	(2)	(3)	(4)	(5)
$log(HHI^{-m})$	1.053***	-0.131**	0.505***	0.505***	0.187***
	(0.0128)	(0.0640)	(0.0280)	(0.0274)	(0.0204)
Observations	1,522,000	1,522,000	1,519,000	1,519,000	1,519,000
R-squared	0.540	0.801	0.975	0.975	0.986
Year FEs	No	Yes	Yes	No	No
CZ FEs	No	Yes	No	No	No
Industry FEs	No	Yes	No	No	No
Market FEs	No	No	Yes	Yes	Yes
CZ by Year FEs	No	No	No	Yes	Yes
Market Trends	No	No	No	No	Yes
F-stat	6747	4	326	339	84

Source: Longitudinal Business Database, 1976–2015

Higher concentration reduces earnings

IV estimates

Some sensitivity to period, measure

VARIABLES	(1)	(2)	(3)	(4)
log(HHI)	-0.0512**	-0.00857	-0.0324***	-0.109***
	(0.0200)	(0.0122)	(0.0117)	(0.0121)
Observations	5,446,000	1,527,000	1,519,000	1,519,000
R-squared	0.657	0.972	0.983	0.871
Years	76-15	05-15	05-15	05-15
Earnings Measure	LBD	LBD	W-2	W-2
Weighted	Yes	Yes	Yes	No
Market FEs	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes

▸ Reduced Form

Source: LBD, 1976–2015; Form W-2, 2005–2015

Higher concentration increases earnings inequality

IV estimates, 2005-2015

≈ 40% top half, 60% bottom half

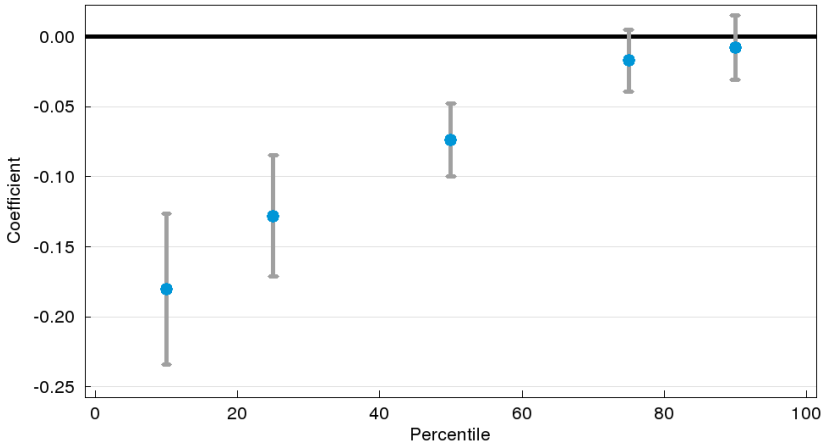
VARIABLES	(1) 90/10	(2) 50/10	(3) 90/50	(4) Gini
log(HHI)	0.173***	0.107***	0.0659***	0.0124***
	(0.0265)	(0.0210)	(0.0123)	(0.00273)
Observations	1,519,000	1,519,000	1,519,000	1,519,000
R-squared	0.895	0.841	0.880	0.940
Market FEs	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes

▸ Reduced Form

Source: Longitudinal Business Database and Form W-2, 2005–2015

Concentration has more negative effects on values of lower percentiles

IV estimates, log(n^{th} percentile, W-2 earnings), 2005-2015



▸ Tables

▸ Reduced Form

Source: Longitudinal Business Database and Form W-2, 2005–2015

Estimates are larger in construction/non-tradable sectors

VARIABLES	(1) HHI	(2) Mean Earnings	(3) 90/10	(4) 90/50	(5) 50/10	(6) Gini
$log(HHI^{-m})$	0.344***					
	(0.0285)					
log(HHI)		-0.184***	0.396***	0.0976***	0.298***	0.0148***
		(0.0278)	(0.0691)	(0.0223)	(0.0538)	(0.00506)
Observations	333,000	333,000	333,000	333,000	333,000	333,000
R-squared	0.976	0.970	0.867	0.936	0.767	0.933
Market FEs	Yes	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes	Yes
F-stat	145.0					

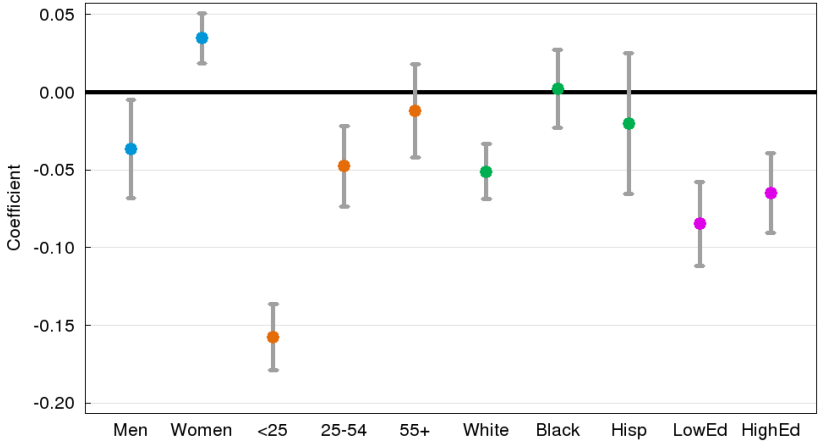
Source: Longitudinal Business Database and Form W-2, 2005–2015

Local industrial concentration is not a major driver of changes in inequality

- Estimates show concentration reduces earnings and increases inequality
- But combined with concentration trends, they indicate concentration has played a minor role in overall inequality trends
- If mean concentration were at its 1976 level in 2015
  - Earnings $\approx$ 1% lower
  - 90/10 ratio $\approx$ 6% higher
- Changes in concentration have modestly mitigated trend toward increased inequality

Earnings effects are more negative for male, younger, and white workers

IV estimates, log(mean W-2 earnings), 2005-2015



▸ Tables

▸ Reduced Form

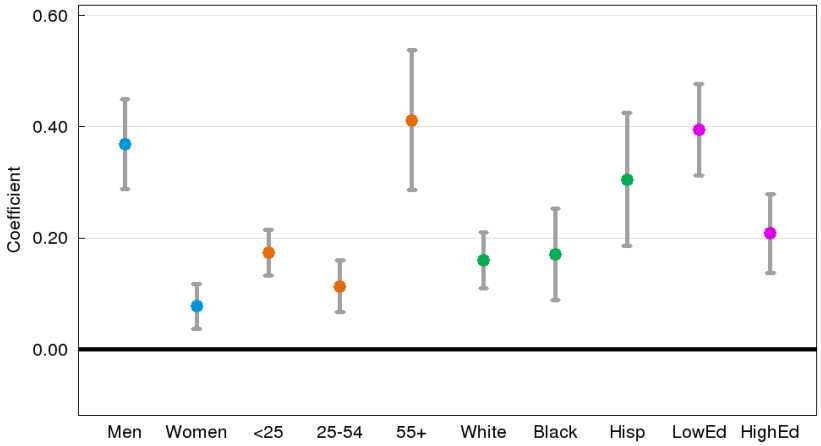
Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Composition effects may drive differences in earnings estimates across groups

- Composition of workers
  - Discrimination - who is the marginal worker?
  - Job requirements (Hershbein and Macaluso 2018)
- Composition of employers
  - Firm size premium
  - Differences in business practices
- Some possibilities may be testable; should be considered in future work

Concentration increases inequality across all demographic groups

IV estimates, log(90/10 ratio, W-2 earnings), 2005-2015



▸ Tables

▸ Reduced Form

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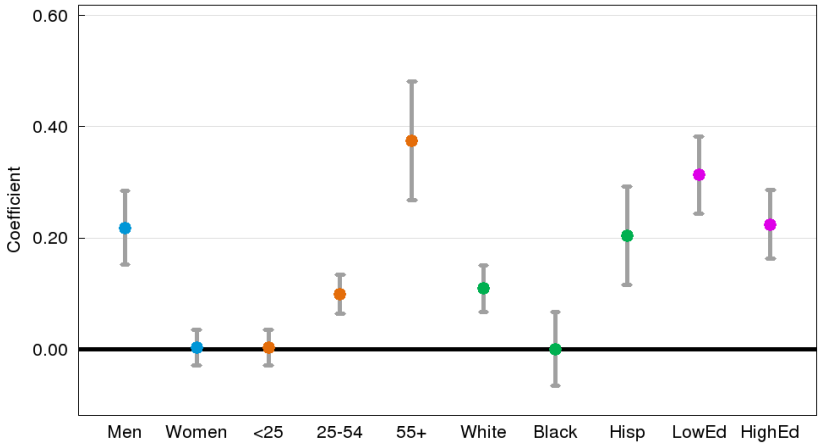
Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Bottom-half changes larger for male, older, white, and Hispanic workers

IV estimates, log(50/10 ratio, W-2 earnings), 2005-2015



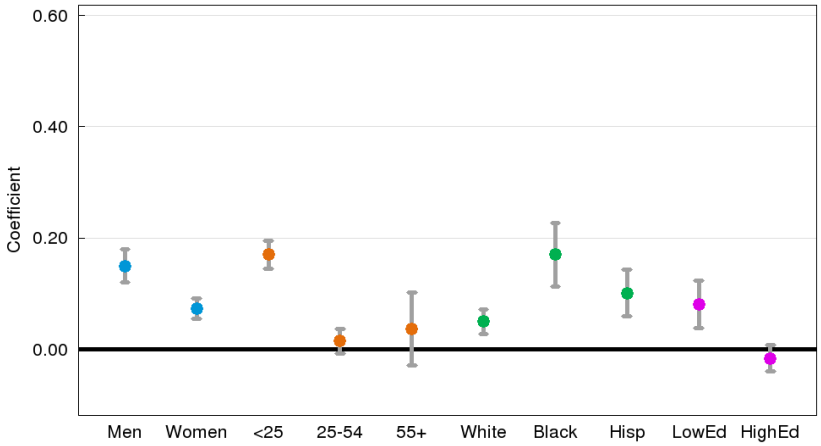
▸ Tables

▸ Reduced Form

Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Female, young, and Black workers see larger top-half inequality increases

IV estimates, log(90/50 ratio, W-2 earnings), 2005-2015



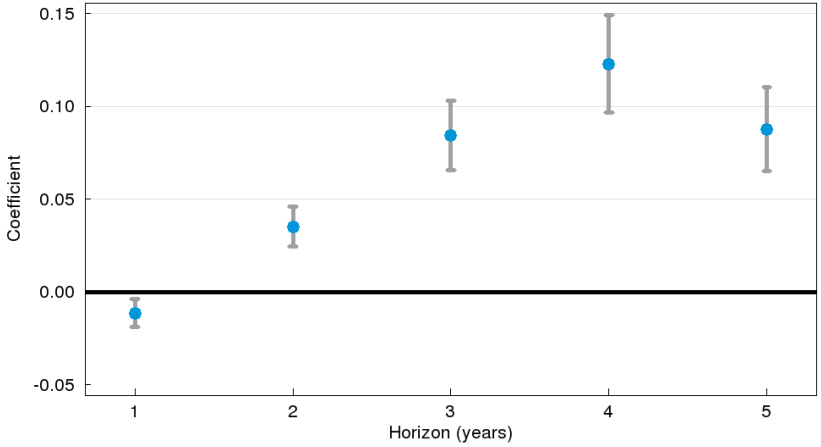
▸ Tables

▸ Reduced Form

Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Baseline analysis suggests concentration reduces relative earnings mobility

IV estimates, W-2 earnings Rank-Rank coefficient, 2005-2015



▸ Table

▸ Reduced Form

▸ Main Job

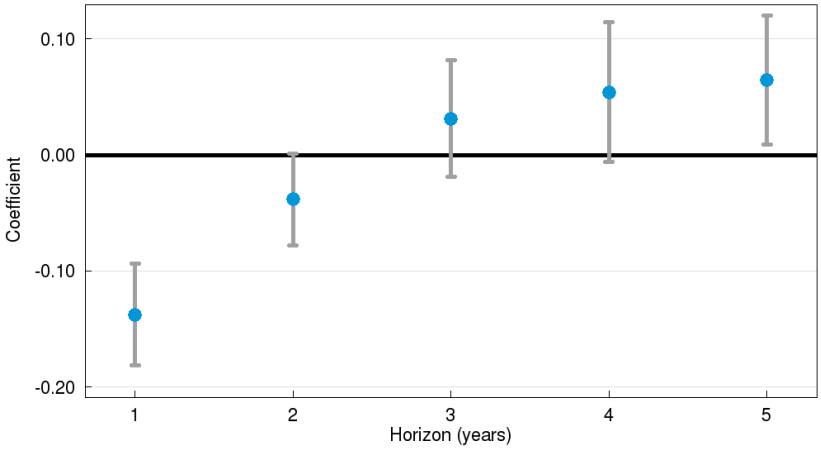
Source: Longitudinal Business Database and Form W-2, 2005–2015

But this result is sensitive to the inclusion of trends

IV estimates, W-2 earnings Rank-Rank coefficient, 2005-2015, with market trends

▸ Table

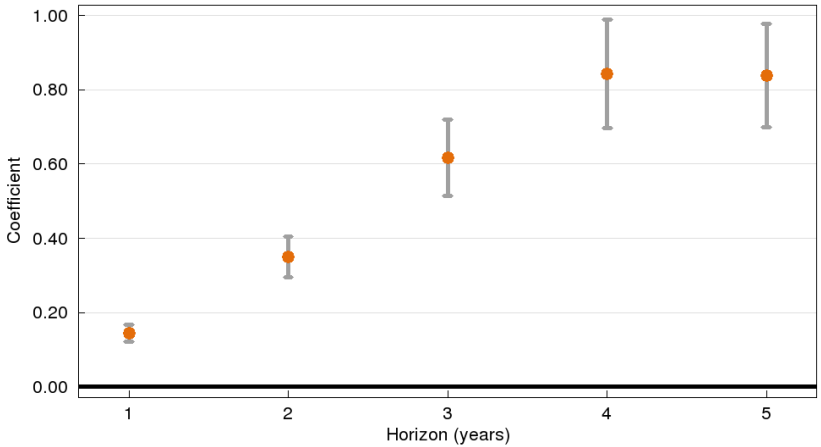
▸ Reduced Form



Source: Longitudinal Business Database and Form W-2, 2005–2015

Analysis of absolute mobility is similarly sensitive to specification

IV estimates,
log W-2 earnings
difference,
2005-2015



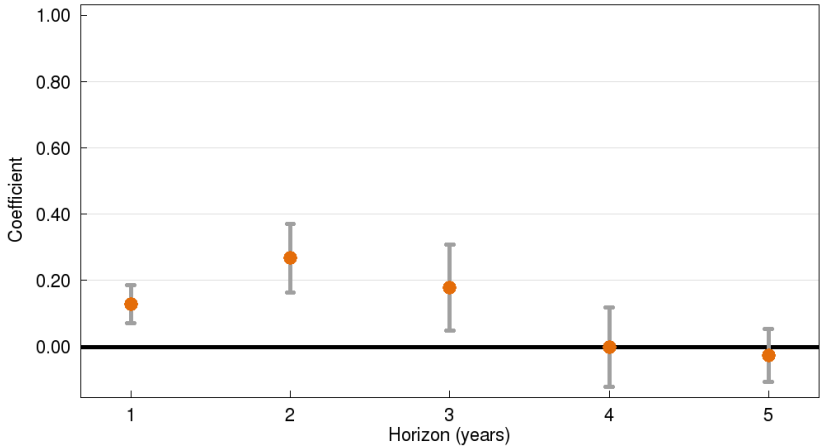
▸ Table

▸ Reduced Form

Source: Longitudinal Business Database and Form W-2, 2005–2015

Analysis of absolute mobility is similarly sensitive to specification

IV estimates,
log W-2 earnings
difference,
2005-2015,
with trends



▸ Table

▸ Reduced Form

Source: Longitudinal Business Database and Form W-2, 2005–2015

In conclusion...

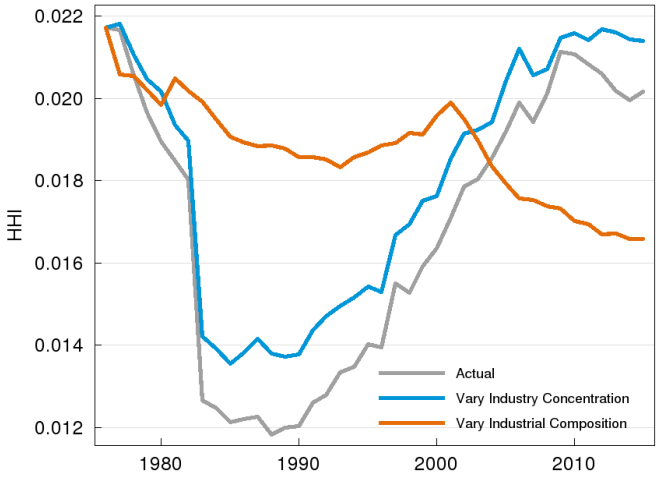
- Trends in national and local concentration differ substantially
- Increased concentration reduces earnings and increases inequality
- Estimated effects + local concentration trend $\Rightarrow$ concentration changes modestly mitigate trend toward increased inequality
- Several avenues for future research
  - Role of changing firm-size distribution
  - Worker sorting across firms
  - Focus on smaller, rural markets
  - Who collects monopsony rents?

Thanks!

kevin.rinz@census.gov

Appendix - Index

Nationally, concentration trend is driven by changes in industry HHIs



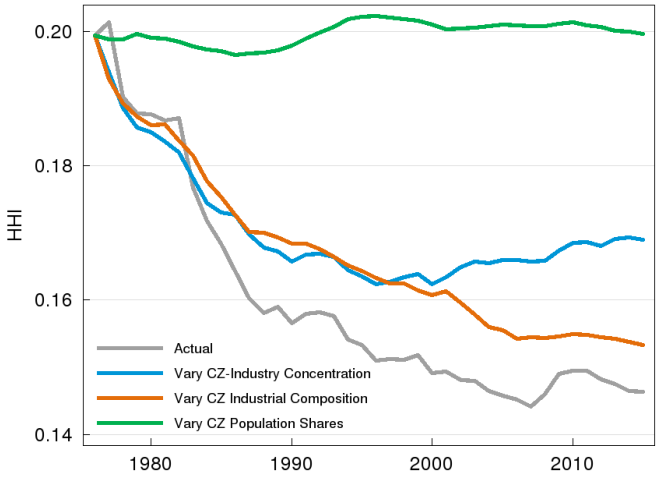
$$\overline{HHI}_t^N = \sum_i Share_{i,t} \cdot HHI_{i,t}$$

Mean national concentration can be written as the sum across industries of industry concentration times employment share (composition)

Composition also contributes pre-1990

Source: Longitudinal Business Database, 1976–2015

A similar story is true locally, but HHIs don't rebound as much



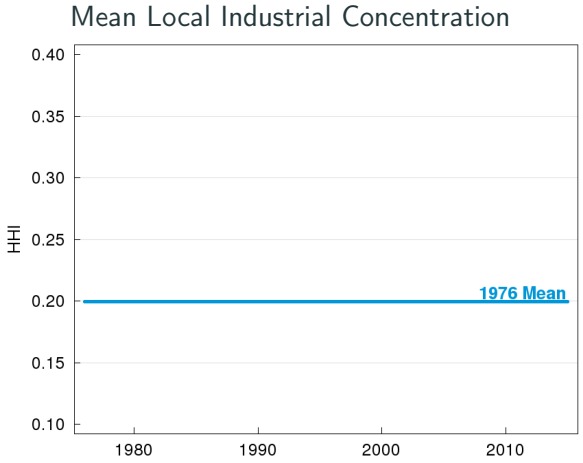
$$\overline{HHI}_t^L = \sum_c \sum_i CZShare_{c,t} \times CZIndShare_{c,i,t} \times HHI_{c,i,t}$$

Industrial composition contributes more consistently

Population shifts play little role in evolution of local concentration trend

Source: Longitudinal Business Database, 1976–2015

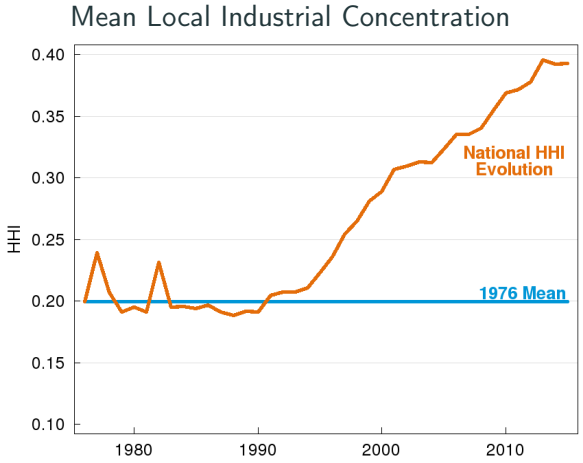
If local HHIs evolved as national HHIs did, local trend would be much different



What if only concentration were changing over time?

Source: Longitudinal Business Database, 1976–2015

If local HHIs evolved as national HHIs did, local trend would be much different

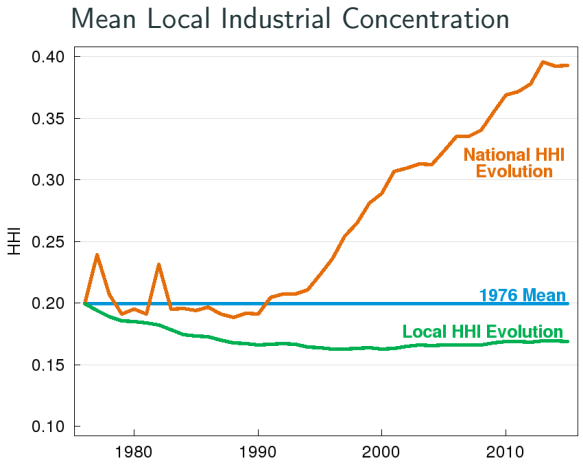


What if only concentration were changing over time?

- Using national HHIs: increasing mean concentration after 1990

Source: Longitudinal Business Database, 1976–2015

If local HHIs evolved as national HHIs did, local trend would be much different

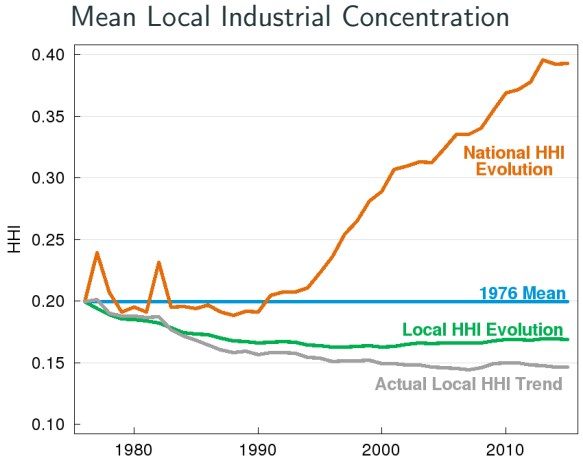


What if only concentration were changing over time?

- Using national HHIs: increasing mean concentration after 1990
- Using observed changes in local HHIs: concentration declines and remains lower

Source: Longitudinal Business Database, 1976–2015

If local HHIs evolved as national HHIs did, local trend would be much different

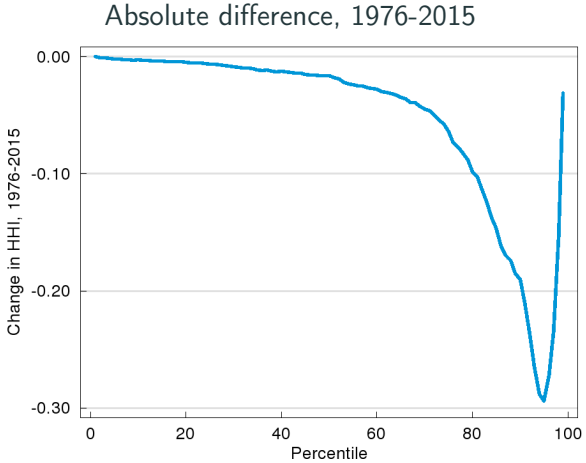


What if only concentration were changing over time?

- Using national HHIs: increasing mean concentration after 1990
- Using observed changes in local HHIs: concentration declines and remains lower
- Local is much closer to actual trend

Source: Longitudinal Business Database, 1976–2015

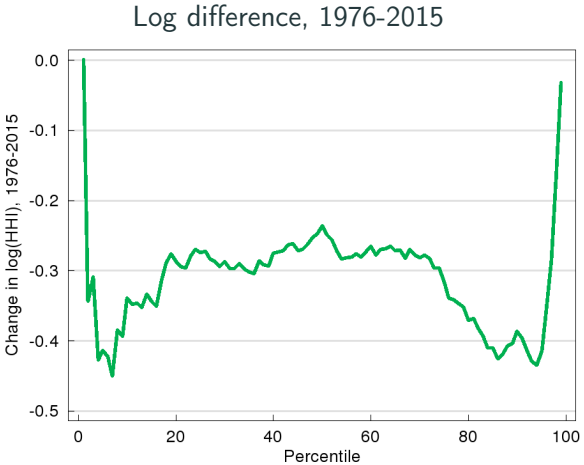
Concentration declined throughout the distribution between 1976 and 2015



Absolute changes largest at the top of the distribution

Source: Longitudinal Business Database, 1976 and 2015

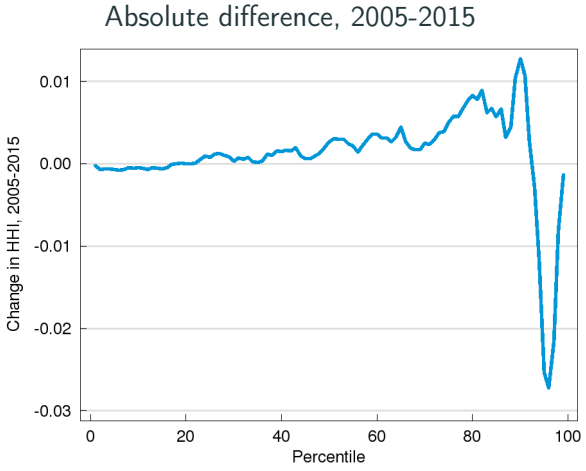
Concentration declined throughout the distribution between 1976 and 2015



Percent changes comparable at the top and bottom

Source: Longitudinal Business Database, 1976 and 2015

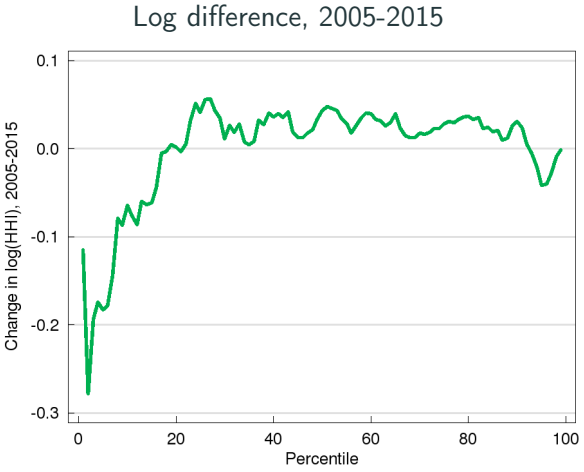
Despite recent, modest increases over much of the distribution



Much smaller in magnitude than longer-run changes

Source: Longitudinal Business Database, 2005 and 2015

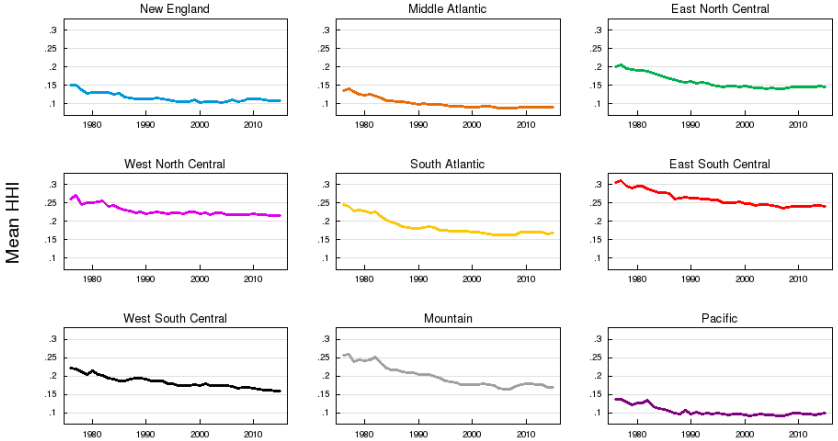
Despite recent, modest increases over much of the distribution



Largest percent changes at the bottom of the distribution

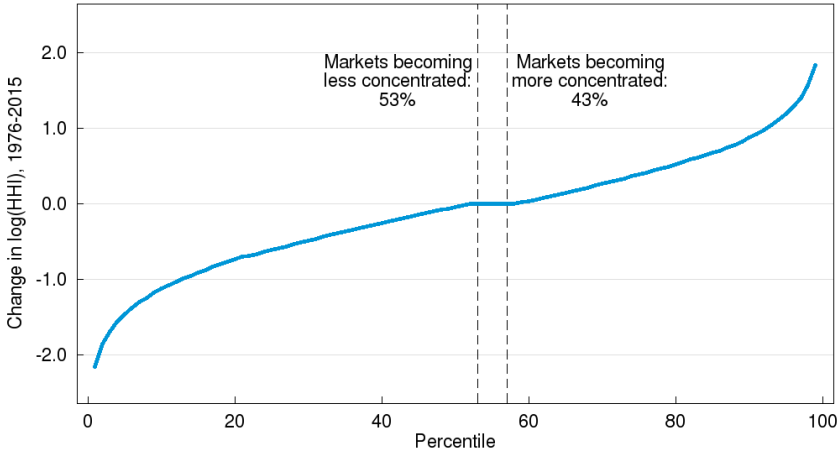
Source: Longitudinal Business Database, 2005 and 2015

Levels differ, but trends are similar across Census divisions



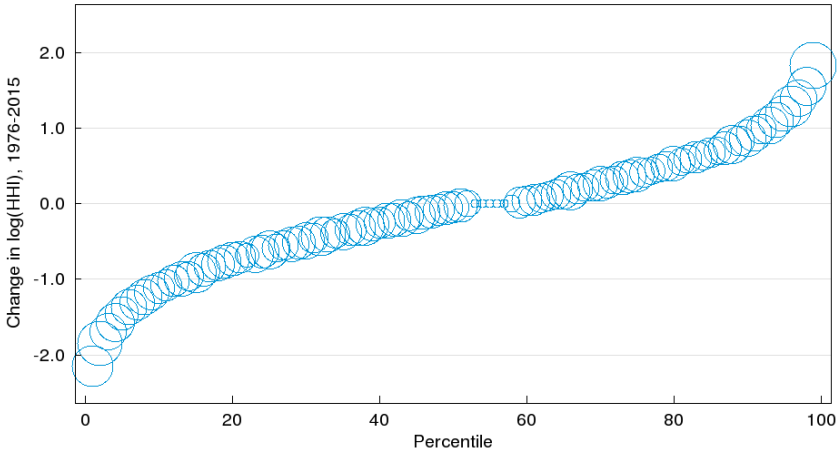
Source: Longitudinal Business Database, 1976–2015

Changes in concentration over time vary substantially across markets



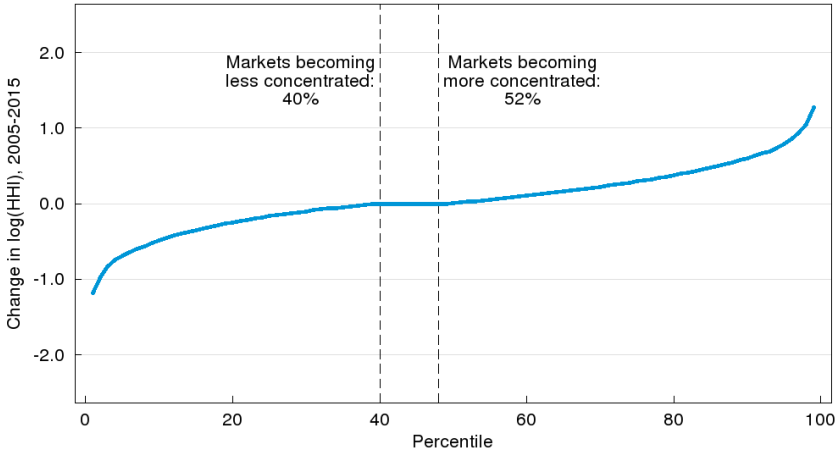
Source: Longitudinal Business Database, 1976 and 2015

Including across reasonably large markets



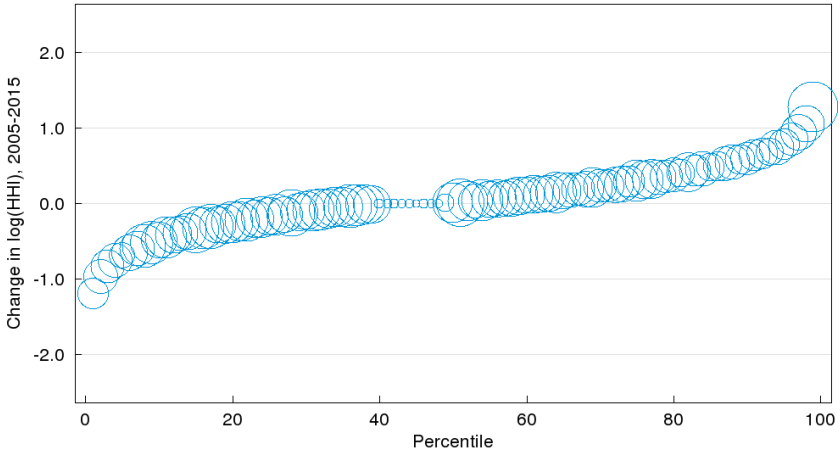
Source: Longitudinal Business Database, 1976 and 2015

This is also true since 2005 (focus of my regression analysis)



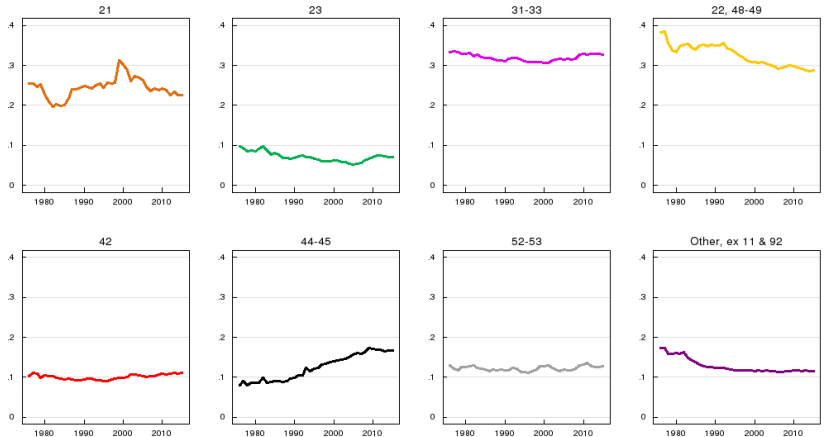
Source: Longitudinal Business Database, 2005 and 2015

This is also true since 2005 (focus of my regression analysis)



Source: Longitudinal Business Database, 2005 and 2015

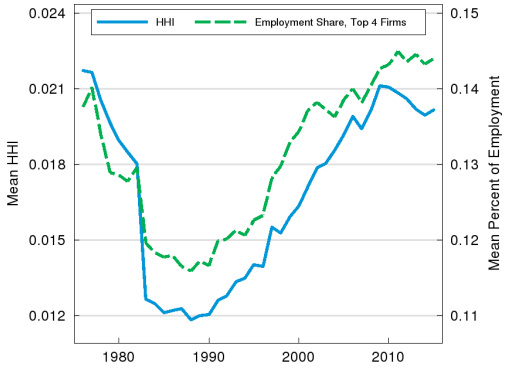
Only retail trade has clearly become more concentrated locally



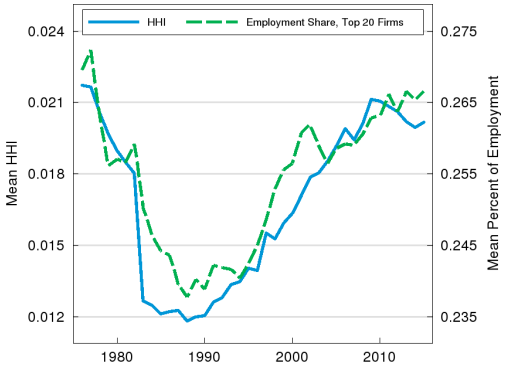
Source: Longitudinal Business Database, 1976–2015

National Concentration Ratio Trends

Top Four Firms



Top 20 Firms



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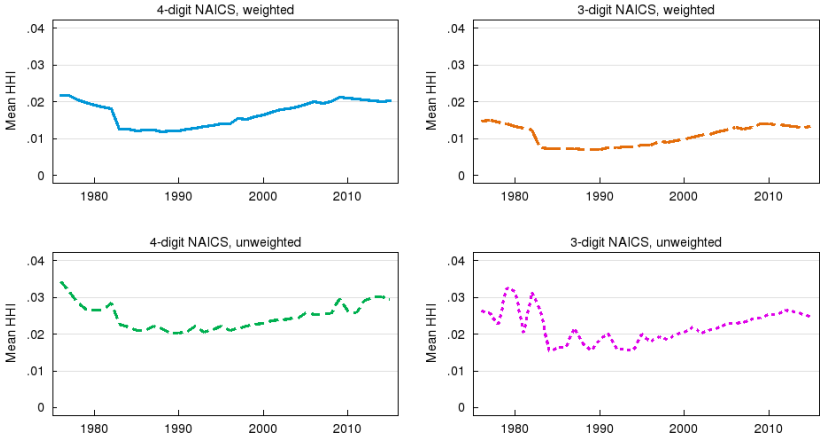
Source: Longitudinal Business Database, 1976–2015

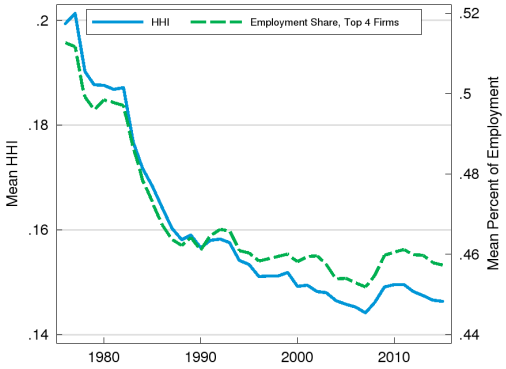
Variations on Mean National Industry HHI Trends



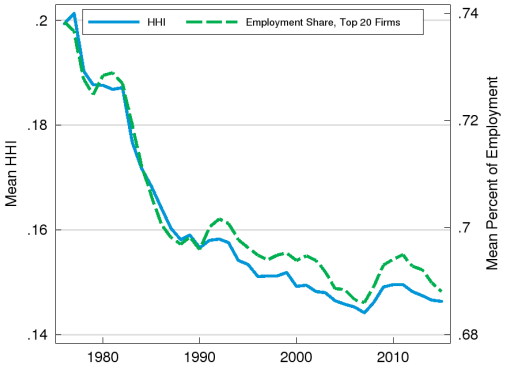
Source: Longitudinal Business Database, 1976–2015

Local Concentration Ratio Trends (CZ)

Top Four Firms



Top 20 Firms



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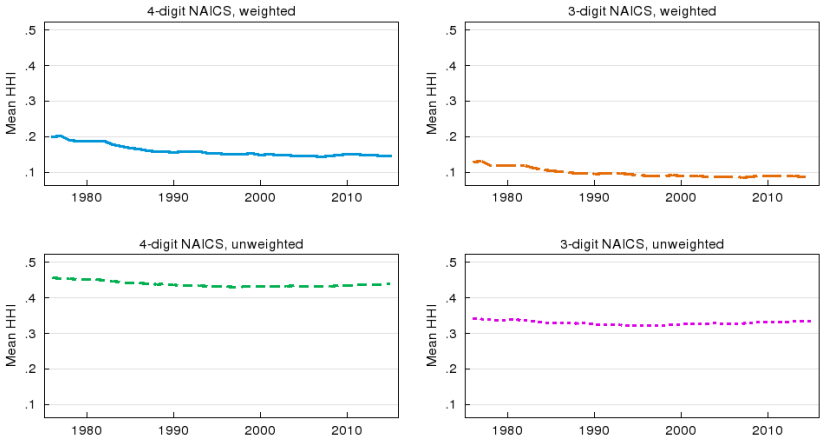
Source: Longitudinal Business Database, 1976–2015

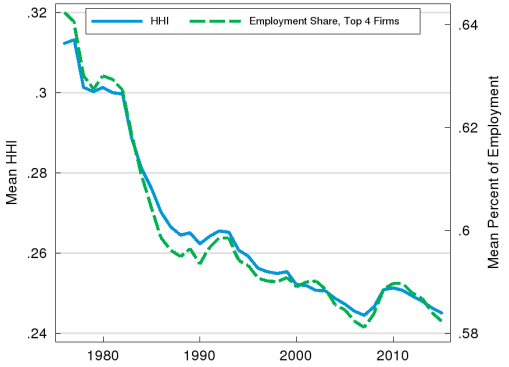
Variations on Mean CZ-Industry HHI Trends



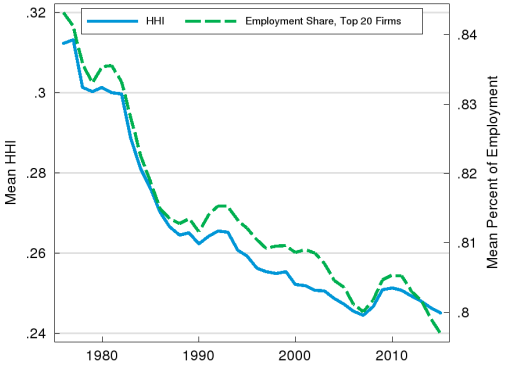
Source: Longitudinal Business Database, 1976–2015

Local Concentration Ratio Trends (County)

Top Four Firms



Top 20 Firms



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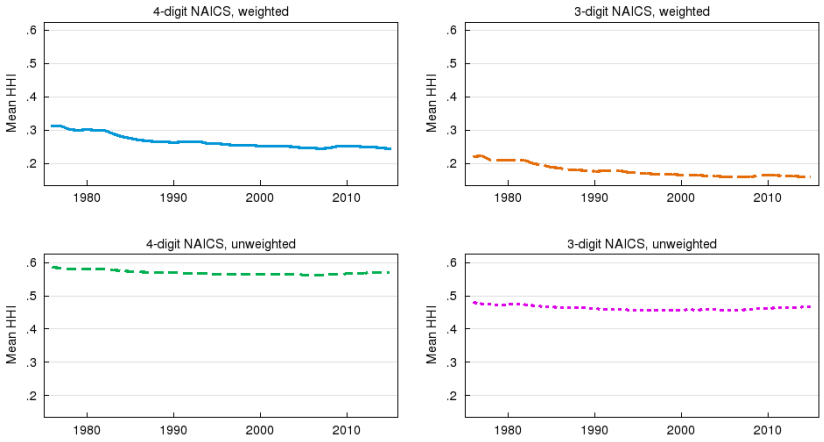
Source: Longitudinal Business Database, 1976–2015

Variations on Mean County-Industry HHI Trends



Source: Longitudinal Business Database, 1976–2015

Earnings Measures Reduced Form

Reduced Form

VARIABLES	(1)	(2)	(3)	(4)
$log(HHI^{-m})$	-0.0424**	-0.00432	-0.0163***	-0.0285***
	(0.0166)	(0.00614)	(0.00558)	(0.00312)
Observations	5,446,000	1,527,000	1,519,000	1,519,000
R-squared	0.655	0.971	0.983	0.872
Years	76-15	05-15	05-15	05-15
Earnings Measure	LBD	LBD	W-2	W-2
Weighted	Yes	Yes	Yes	No
Market FEs	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database, 1976–2015; Form W-2, 2005–2015

Inequality Measures Reduced Form

Reduced Form, 2005-2015

VARIABLES	(1) 90/10	(2) 50/10	(3) 90/50	(4) Gini
$log(HHI^{-m})$	0.0872***	0.0539***	0.0333***	0.00627***
	(0.0126)	(0.00996)	(0.00626)	(0.00141)
Observations	1,519,000	1,519,000	1,519,000	1,519,000
R-squared	0.898	0.843	0.882	0.941
Market FEs	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Key Percentiles Reduced Form

IV estimates, log(n^{th} percentile, W-2 earnings), 2005–2015

VARIABLES	(1) 10th	(2) 25th	(3) 50th	(4) 75th	(5) 90th
log(HHI)	-0.180***	-0.128***	-0.0736***	-0.0171	-0.00767
	(0.0275)	(0.0220)	(0.0132)	(0.0111)	(0.0117)
Observations	1,519,000	1,519,000	1,519,000	1,519,000	1,519,000
R-squared	0.936	0.943	0.959	0.975	0.981
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Key Percentiles Reduced Form

Reduced form, log(n^{th} percentile, W-2 earnings), 2005-2015

VARIABLES	(1) 10th	(2) 25th	(3) 50th	(4) 75th	(5) 90th
$log(HHI^{-m})$	-0.0911***	-0.0647***	-0.0372***	-0.00864	-0.00388
	(0.0125)	(0.0105)	(0.00624)	(0.00550)	(0.00584)
Observations	1,519,000	1,519,000	1,519,000	1,519,000	1,519,000
R-squared	0.938	0.944	0.960	0.975	0.981
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Earnings by Demographic Group

IV estimates, log(mean W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
log(HHI)	-0.0366**	0.0347***	-0.157***	-0.0476***	-0.0119
	(0.0162)	(0.00816)	(0.0109)	(0.0132)	(0.0154)
Observations	1,498,000	1,478,000	1,386,000	1,503,000	1,461,000
R-squared	0.978	0.983	0.950	0.980	0.951
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Earnings by Demographic Group

IV estimates, log(mean W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
log(HHI)	-0.0510***	0.00227	-0.0203	-0.0847***	-0.0648***
	(0.00909)	(0.0128)	(0.0231)	(0.0136)	(0.0132)
Observations	1,513,000	972,000	1,135,000	1,373,000	1,417,000
R-squared	0.982	0.966	0.967	0.946	0.961
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Earnings by Demographic Group

Reduced form, log(mean W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
$log(HHI^{-m})$	-0.0158**	0.0205***	-0.0934***	-0.0229***	-0.00558
	(0.00652)	(0.00493)	(0.00674)	(0.00582)	(0.00732)
Observations	1,524,000	1,500,000	1,403,000	1,529,000	1,481,000
R-squared	0.978	0.983	0.955	0.980	0.951
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Index

Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Earnings by Demographic Group

Reduced form, log(mean W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
$log(HHI^{-m})$	-0.0249***	0.00137	-0.00998	-0.0365***	-0.0315***
	(0.00421)	(0.00767)	(0.0106)	(0.00491)	(0.00606)
Observations	1,541,000	977,000	1,143,000	1,387,000	1,434,000
R-squared	0.983	0.966	0.967	0.947	0.962
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/10 by Demographic Group

IV estimates, log(90/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
log(HHI)	0.369***	0.0773***	0.174***	0.114***	0.412***
	(0.0411)	(0.0203)	(0.0208)	(0.0236)	(0.0640)
Observations	1,498,000	1,478,000	1,386,000	1,503,000	1,461,000
R-squared	0.880	0.891	0.776	0.916	0.813
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/10 by Demographic Group

IV estimates, log(90/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
log(HHI)	0.160***	0.171***	0.305***	0.394***	0.208***
	(0.0254)	(0.0419)	(0.0612)	(0.0419)	(0.0359)
Observations	1,513,000	972,000	1,135,000	1,373,000	1,417,000
R-squared	0.884	0.861	0.850	0.769	0.801
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/10 by Demographic Group

Reduced form, log(90/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
$log(HHI^{-m})$	0.160***	0.0457***	0.103***	0.0546***	0.198***
	(0.0144)	(0.0120)	(0.0125)	(0.0105)	(0.0280)
Observations	1,524,000	1,500,000	1,403,000	1,529,000	1,481,000
R-squared	0.888	0.891	0.779	0.918	0.821
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Index

Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/10 by Demographic Group

Reduced form, log(90/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
$log(HHI^{-m})$	0.0781***	0.102***	0.150***	0.170***	0.101***
	(0.0113)	(0.0248)	(0.0250)	(0.0148)	(0.0159)
Observations	1,541,000	977,000	1,143,000	1,387,000	1,434,000
R-squared	0.886	0.862	0.858	0.776	0.805
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

50/10 by Demographic Group

IV estimates, log(50/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
log(HHI)	0.218***	0.00351	0.00353	0.0988***	0.375***
	(0.0337)	(0.0163)	(0.0162)	(0.0180)	(0.0543)
Observations	1,498,000	1,478,000	1,386,000	1,503,000	1,461,000
R-squared	0.814	0.839	0.642	0.894	0.709
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

50/10 by Demographic Group

IV estimates, log(50/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
log(HHI)	0.109***	0.000628	0.204***	0.314***	0.224***
	(0.0212)	(0.0340)	(0.0451)	(0.0354)	(0.0315)
Observations	1,513,000	972,000	1,135,000	1,373,000	1,417,000
R-squared	0.823	0.776	0.792	0.662	0.740
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

50/10 by Demographic Group

Reduced form, log(50/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
$log(HHI^{-m})$	0.0946***	0.00209	0.00197	0.0475***	0.180***
	(0.0125)	(0.00963)	(0.00959)	(0.00788)	(0.0237)
Observations	1,524,000	1,500,000	1,403,000	1,529,000	1,481,000
R-squared	0.819	0.839	0.641	0.895	0.719
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

50/10 by Demographic Group

Reduced form, log(50/10 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
$log(HHI^{-m})$	0.0535***	0.000284	0.100***	0.136***	0.109***
	(0.00972)	(0.0203)	(0.0176)	(0.0129)	(0.0139)
Observations	1,541,000	977,000	1,143,000	1,387,000	1,434,000
R-squared	0.825	0.776	0.797	0.667	0.745
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/50 by Demographic Group

IV estimates, log(90/50 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
log(HHI)	0.150***	0.0738***	0.170***	0.0148	0.0371
	(0.0154)	(0.00939)	(0.0127)	(0.0110)	(0.0335)
Observations	1,498,000	1,478,000	1,386,000	1,503,000	1,461,000
R-squared	0.863	0.885	0.826	0.925	0.820
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/50 by Demographic Group

IV estimates, log(90/50 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
log(HHI)	0.0502***	0.170***	0.102***	0.0805***	-0.0160
	(0.0113)	(0.0288)	(0.0217)	(0.0219)	(0.0120)
Observations	1,513,000	972,000	1,135,000	1,373,000	1,417,000
R-squared	0.882	0.765	0.823	0.781	0.843
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/50 by Demographic Group

Reduced form, log(90/50 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
$log(HHI^{-m})$	0.0650***	0.0436***	0.101***	0.00713	0.0180
	(0.00621)	(0.00580)	(0.00768)	(0.00523)	(0.0160)
Observations	1,524,000	1,500,000	1,403,000	1,529,000	1,481,000
R-squared	0.870	0.887	0.837	0.925	0.820
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

90/50 by Demographic Group

Reduced form, log(90/50 ratio, W-2 earnings), 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
$log(HHI^{-m})$	0.0246***	0.102***	0.0500***	0.0347***	-0.00770
	(0.00535)	(0.0168)	(0.0106)	(0.00917)	(0.00590)
Observations	1,541,000	977,000	1,143,000	1,387,000	1,434,000
R-squared	0.882	0.772	0.830	0.782	0.842
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Gini by Demographic Group

IV estimates,
W-2 earnings
Gini coefficient,
2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
log(HHI)	0.0291***	0.0118***	0.0365***	0.00477*	-0.00780**
	(0.00326)	(0.00242)	(0.00281)	(0.00261)	(0.00354)
Observations	1,498,000	1,478,000	1,386,000	1,503,000	1,461,000
R-squared	0.930	0.937	0.872	0.937	0.893
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015;
Decennial census, 2000 and 2010; Census Numident, 2016

Gini by Demographic Group

IV estimates,
W-2 earnings
Gini coefficient,
2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
log(HHI)	0.00758***	0.0305***	0.0261***	0.0269***	-0.00467
	(0.00241)	(0.00496)	(0.00576)	(0.00329)	(0.00314)
Observations	1,513,000	972,000	1,135,000	1,373,000	1,417,000
R-squared	0.937	0.909	0.908	0.874	0.897
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Gini by Demographic Group

Reduced form, W-2 earnings Gini coefficient, 2005-2015

VARIABLES	(1) Men	(2) Women	(3) Age <25	(4) Age 25-54	(5) Age 55+
$log(HHI^{-m})$	0.0126***	0.00697***	0.0216***	0.00229*	-0.00368**
	(0.00139)	(0.00146)	(0.00190)	(0.00125)	(0.00170)
Observations	1,524,000	1,500,000	1,403,000	1,529,000	1,481,000
R-squared	0.934	0.938	0.882	0.937	0.893
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Gini by Demographic Group

Reduced form, W-2 earnings Gini coefficient, 2005-2015

VARIABLES	(1) White	(2) Black	(3) Hispanic	(4) LTHS/HS	(5) Some College+
$log(HHI^{-m})$	0.00372***	0.0182***	0.0129***	0.0116***	-0.00225
	(0.00116)	(0.00291)	(0.00281)	(0.00126)	(0.00154)
Observations	1,541,000	977,000	1,143,000	1,387,000	1,434,000
R-squared	0.937	0.913	0.913	0.878	0.897
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: LBD, Form W-2, and ACS, 2005–2015; Decennial census, 2000 and 2010; Census Numident, 2016

Rank-Rank Coefficient

IV estimates, W-2 earnings Rank-Rank coefficient, 2005-2015

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
log(HHI)	-0.0115***	0.0351***	0.0843***	0.123***	0.0877***
	(0.00387)	(0.00545)	(0.00953)	(0.0134)	(0.0116)
Observations	1,366,000	1,229,000	1,092,000	954,000	817,000
R-squared	0.113	0.194	0.195	0.212	0.245
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Rank-Rank Coefficient

Reduced form, W-2 earnings Rank-Rank coefficient, 2005-2015

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
$log(HHI^{-m})$	-0.00487***	0.0138***	0.0303***	0.0403***	0.0298***
	(0.00162)	(0.00198)	(0.00260)	(0.00296)	(0.00335)
Observations	1,366,000	1,229,000	1,092,000	954,000	817,000
R-squared	0.113	0.194	0.196	0.213	0.246
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Rank-Rank Coefficient, Main Job

IV estimates, main job W-2 earnings Rank-Rank coefficient, 2005-2015

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
log(HHI)	-0.00791**	0.0397***	0.0877***	0.126***	0.0867***
	(0.00400)	(0.00553)	(0.00948)	(0.0133)	(0.0115)
Observations	1,366,000	1,229,000	1,092,000	954,000	817,000
R-squared	0.078	0.105	0.117	0.125	0.145
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Rank-Rank Coefficient, with Trends

IV estimates, W-2 earnings Rank-Rank coefficient, 2005-2015, with trends

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
log(HHI)	-0.138***	-0.0382*	0.0313	0.0542*	0.0648**
	(0.0223)	(0.0202)	(0.0256)	(0.0308)	(0.0283)
Observations	1,366,000	1,229,000	1,092,000	954,000	817,000
R-squared	0.302	0.468	0.521	0.576	0.659
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes
Market Trends	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Rank-Rank Coefficient, with Trends

Reduced form, W-2 earnings Rank-Rank coefficient, 2005-2015, with trends

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
$log(HHI^{-m})$	-0.0228***	-0.00623*	0.00451	0.00651*	0.00921***
	(0.00255)	(0.00322)	(0.00359)	(0.00342)	(0.00349)
Observations	1,366,000	1,229,000	1,092,000	954,000	817,000
R-squared	0.305	0.468	0.522	0.576	0.659
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes
Market Trends	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Log Differences

IV estimates, log W-2 earnings difference, 2005-2015

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
log(HHI)	0.144***	0.350***	0.616***	0.843***	0.839***
	(0.0117)	(0.0281)	(0.0522)	(0.0750)	(0.0710)
Observations	1,362,000	1,224,000	1,086,000	948,000	811,000
R-squared	0.469	0.324	0.018	-0.241	-0.105
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Log Differences

IV estimates, log W-2 earnings difference, 2005-2015, with trends

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
log(HHI)	0.128***	0.268***	0.179***	-0.000713	-0.0260
	(0.0293)	(0.0528)	(0.0663)	(0.0613)	(0.0405)
Observations	1,362,000	1,224,000	1,086,000	948,000	811,000
R-squared	0.593	0.632	0.786	0.880	0.903
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes
Market Trends	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Log Differences

Reduced form, log W-2 earnings difference, 2005-2015

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
$log(HHI^{-m})$	0.0611***	0.137***	0.221***	0.277***	0.285***
	(0.00303)	(0.00559)	(0.00808)	(0.00989)	(0.0114)
Observations	1,362,000	1,224,000	1,086,000	948,000	811,000
R-squared	0.590	0.676	0.720	0.750	0.775
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015

Log Differences

Reduced form, log W-2 earnings difference, 2005-2015, with trends

VARIABLES	(1) 1 year	(2) 2 years	(3) 3 years	(4) 4 years	(5) 5 years
$log(HHI^{-m})$	0.0211***	0.0437***	0.0258***	-8.55e-05	-0.00369
	(0.00413)	(0.00706)	(0.00882)	(0.00736)	(0.00571)
Observations	1,362,000	1,224,000	1,086,000	948,000	811,000
R-squared	0.648	0.749	0.820	0.880	0.903
Market FEs	Yes	Yes	Yes	Yes	Yes
CZ by Year FEs	Yes	Yes	Yes	Yes	Yes
Market Trends?	Yes	Yes	Yes	Yes	Yes

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Source: Longitudinal Business Database and Form W-2, 2005–2015