Inequality: Labor Share of GDP - Differences between labor and capital

Labor Economics, 2020

John Van Reenen



THE DIFFERENCE BETWEEN LABOR AND CAPITAL.

US Labor Share 1947-2016



Source: BLS https://www.bls.gov/opub/mlr/2017/article/estimating-the-us-labor-share.htm

Falling Labor Share of Corporate sector Value-Added Evident in Many Countries



FIGURE II Declining Labor Share for the Largest Countries

Changing Labor Share in GDP (KLEMS)



Payroll share of Value Added (US NIPA) declines in (almost) all sectors



Significance of decline in Labor share

• Why should we care about fall in Labor Share?

- 1. Overturns a key 'Kaldor fact'
- 2. Slow GDP growth \rightarrow Labor getting a shrinking slice of slow-growing pie
- 3. Distribution of capital far more unequal than distribution of labor \rightarrow Growing income inequality (IMF, '17)

- Fall seems real and significant
 - Elsby et al. '13; Karabarbounis & Neiman '14, '18; Rognlie '15; Koh et al. '17; Piketty '14; Bridgman '14; Smith et al '19; Autor & Salomons, '18; Gutierrez and Piton, '19

Causes of the Falling Labor Share?

Fall of capital prices : Karabarbonis & Neiman '14

- Neoclassical model with CES production function in L & K
- Lab share decreases if relative capital price falls and, critically, elasticity of L-K sub $\sigma>1$
- But empirical literature suggests $\sigma \le 1$, e.g., Lawrence '15, Oberfield-Raval '14, Antras '04, Klump et al., '07

Automation

 Acemoglu and Restrepo (2019, 2020). Changing direction of technology (e.g. robotics) reducing importance of L

Trade exposure: Elsby et al. '13

• Trade-impacted manufacturing (e.g. China competition)

These representative firm models underplay fact that aggregate labor share fall largely reflects *reallocation* of activity towards "superstar firms"

The Fall of the Labor Share and the Rise of Superstar Firms *QJE 2020*

David Autor David Dorn Lawrence Katz Christina Patterson John Van Reenen

Rise of Superstar Firms: Share of jobs in Firms with over 5,000 workers rose from <u>28%</u> in 1987 to <u>34%</u> in 2016



Source: SBA, https://www.sba.gov/advocacy/firm-size-data#susb

Contributions of Paper

Offers a new 'Superstar Firms' hypothesis

- Large firms tend to have lower labor shares
- Rising prevalence of "winner take most" competition
- Small set of large firms capture increasing share of market, aggregate labor share falls due to reallocation

Presents evidence consistent with this hypothesis

- 1. Three decades of outcome measures
- 2. U.S. firm & establishment data Economic Censuses from multiple sectors (not just manufacturing)
- 3. Cross-national OECD comparisons using industry (KLEMS, COMPNET) & firm-level (BVD ORBIS) data

Summary of Evidence

- 1. A rise in sales concentration within SIC4 industries across US private sector
- 2. Industries with larger increases in concentration see bigger falls in labor share
- 3. Labor share fall largely due to reallocation of activity between firms, not a general fall within most firms
- 4. Reallocation of falling labor share greatest in industries with rising sales concentration
- 5. A rise in aggregate markups also driven by reallocation
- 6. These patterns are seen internationally
- 7. TFP & innovation grwth fastest in concentrating industries

Some Related Literature

- Explanations of labor share fall: (a) <u>Measurement</u>: Rognlie '15; Smith et al '19; (b) <u>Market Power</u>: Kalecki '38; Barkai '16; Grullon et al '17; (c) <u>ICT</u>: Karabarbounis & Neiman '14, '18; Aghion et al '19; (d) <u>Trade</u>: Elsby et al '13; (e) <u>Regulations & Institutions</u> (e.g. unions; antitrust): Blanchard & Giavazzi '03; Azmat et al '12; Döttling, Gutierrez & Philippon '18; Krueger '18
- Firm-level Decompositions of labor share: Kehrig & Vincent '17; Lashkari & Bauer '18; Bockerman & Maliranta '12
- Mark-Ups: Edmond, Midrigan & Xu '18; De Loecker et al '18; Hall '18; Baqaee and Farhi '17
- "Superstar" Firms: Bain '51; Demsetz '73; Schmalensee '87; Furman & Orszag '15; Bernard et al '18; Bonfiglioli, Crino & Gancia '19
- Firm heterogeneity & Wage Inequality increase: Davis & Haltiwanger, '92; Faggio et al, '10; Card et al '13; Song et al '19
- **Productivity:** Andrews et al '15; Decker et al. '17; Ates and Akcigit (2019)

Overview



2. Data and Measurement

3. Evidence

4. Discussion

Superstar Firm Model (New Appendix A generalizes Melitz & Ottaviano, '08)

- Monopolistic Competition with heterogeneous firms
 - General class of utility functions consistent with "Marshall's 2nd Law of Demand" (generates variable mark-ups unlike CES Dixit-Stiglitz preferences)
 - General class of underlying firm productivity distributions (nests Pareto pdf)

Superstar Firm Model Sketch

Heterogeneous firms *i* in an industry, *z_i* (TFPQ)

- $Y_i = z_i L_i^{\alpha} K_i^{\beta}$
 - Y = value-added
 - K = capital
 - L = labor
- <u>Imperfectly</u> competitive product markets with a mark-up of price over marginal cost
 - $m_i = P_i / c_i$
- Competitive factor markets: wage *w*, capital cost *r*
- Firms take random draw of productivity from a distribution with pdf λ(z). Productivity draw determines firm's idiosyncratic marginal cost

The Firm-level Labor Share, S_i

Taking FOC with respect to labor gives *labor share*, S = payroll(wL) over value added (*PY*) for firm *i*

•
$$S_i = \left(\frac{wL}{PY}\right)_i = \frac{\alpha}{m_i}$$

 More productive/lower marginal cost (high z_i "superstars") firms have:

- larger market share $(\omega_i = \frac{P_i Y_i}{\sum P_i Y_i})$ - more output due to lower marginal costs

lower labor share (S_i) because their mark-up m_i is higher (e.g. Melitz & Ottaviano '08; oligopoly models like Cournot, etc.). Why?...

Higher mark-up (m_i) for more productive firms arises in many standard cases

- 1. Demand more inelastic when price is lower (Marshall's 2^{nd} Law). Highly productive firms charge lower prices & so face more inelastic demand. Thus mark-ups m_i higher
- 2. In our data we confirm that larger firms have lower labor shares (& higher mark-ups as in de Loecker & Warzynski '12)
- Consistent with Pass-through literature: 1% marginal cost increase causes less than a 1% increase in price (e.g. Arkolakis et al, '18 survey)

More generally, several reasons that change in environment favoring superstars

- Change in environment which reallocates more market share to superstar firms will tend to (i) increase concentration and (ii) reduce aggregate labor share. **Examples:**
- Increased importance of platform competition (network effects, esp. digital markets). "Google Effect"
- Larger firms better at exploiting (high fixed cost) intangible capital; e.g. ICT – Bessen '17; Crouzet & Eberley, '18; Lashkari et al.'19; Hsieh & Rossi-Hansberg '19. "Walmart effect"
- Falling competition? Wu '18; Grullon et al. '16; Gutierrez & Philippon '17, Döttling et al '18 on weaker antitrust
- But: Basic trade/IO models generate "Matthew effect" from increasing competition - e.g. globalization allocates more output to more efficient firms (Melitz, '03; Mrázová & Neary '17). Example of a formal model in Appendix A

Consider <u>increase</u> in market toughness (globalization or higher variety substitutability)

Model a fall in cost threshold necessary to produce in market (c*: if a firm's marginal cost too high, c > c* it will exit)

- 1. Output shifts to firms with low labor share. "Between firm" reallocation pushes <u>down</u> aggregate labor share
- 2. But for an individual firm, labor share rises because mark-up falls ("within firm")

Effect of increase in market toughness on aggregate Labor Share depends on productivity pdf, $\lambda(z)$

- **Reduces** industry labor share if $\lambda(z)$ is log convex;
- Unchanged if log linear (e.g. Pareto case); Increases if log concave

Hence, fundamentally an empirical issue (cf. Bache and Laugesen '15)

Predictions: Consider a Change in Environment that Favors Most Productive/Superstar Firms

- 1. Concentration levels will increase
- 2. Industries with largest increases in concentration have biggest labor share falls (if $\lambda(z)$ sufficiently skewed)
- 3. Fall in labor share mainly due to *reallocation* towards low labor share firms (rather than uniform fall)
- 4. Rising industry concentration will predict the *reallocation* component of rising labor share
- 5. Aggregate markups should rise due to reallocation
- 6. If the underlying forces are **global**, these regularities will be seen in many countries
- 7. Concentrating industries should have faster **productivity** growth

Overview

1. A Model of Superstar Firms

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Data Sources

Labor share and sales concentration

- US quinquennial Economic Censuses, 1982 2012
- Use six sectors covering $\sim 80\%$ of private sector jobs
 - 1. Manufacturing
 - 2. Retail
 - 3. Wholesale
 - 4. Services
 - 5. Utilities & Transportation
 - 6. Finance
- Every year about 5 million establishments & 4 million firms
- Consistent series of four digit SIC codes (also do Fort & Klimet '06 NAICS6 based definitions)

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- 5. Rise in aggregate markup
- 6. These patterns broadly international in scope
- 7. Productivity rises faster in concentrating industries

Fig 4: Rising Concentration in Manufacturing



Notes: Weighted average across 388 four digit SIC (6 digit NAICS) industries using Economic Census (every 5 years)

Rising Concentration in SIC4 within all sectors

Manufacturing



Retail Trade

Wholesale Trade





Services

Average Concentration 4-digit Industries in Services 9 Top 4 Concentration 24 Sentr ខ្លួន Col 20 _0 0 <u>∞</u> 1990 2010 2000 vea CR4 with Employment CR4 with Sales CR20 with Sales – – – CR20 with Employment

Utilities + Transportation



Finance



Notes: Weighted av. of concentration across the SIC-4's within each sector. 676 SIC4 industries (Manufacturing: 388 inds; Retail: 58; Wholesale: 56; Finance: 31; Services: 95; Utilities & Transport: 48)

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Fig 5: Basic Descriptive Relationship-Larger Firms Have Lower Labor Shares



Table 2: Rising Concentration and Falling Labor Share; Manufacturing, 5 year changes

$$\Delta \left(\frac{\text{Payroll}}{\text{Value Added}} \right)_{jt} = \Delta S_{jt} = \alpha + \beta \Delta \text{Conc}_{jt} + \gamma_t + \varepsilon_{jt}$$

	CR4	CR20	HHI
Baseline	-0.148***	-0.228***	-0.213**
	(0.036)	(0.043)	(0.085)

Notes: ***1% level; ** 5%; * 10%; SE clustered by SIC4; weighted by initial size (VA)

Fig 6: \triangle Labor Share of <u>Sales</u> regressed on \triangle Concentration: Results Across Six Sectors



Notes: OLS Regression coefficient of ∆Labor Share (payroll over sales) on CR20 (5 year changes); 95% confidence intervals; 1982-2012.

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Olley-Pakes (1996) Decomposition Applied to Labor Share

$$S = \bar{S} + [\Sigma(\omega_i - \bar{\omega})(S_i - \bar{S})]$$

- $S = \sum \omega_i S_i$ is aggregate labor share
- $\omega_i = \frac{P_i Y_i}{\sum P_i Y_i}$ is value added share of firm *i*
- $\overline{\omega} \& \overline{S}$ are unweighted mean
- Aggregate labor share divided into:
 - 1. Cross-firm **unweighted average**, \bar{S}
 - 2. **Reallocation** (covariance) term $\Sigma(\omega_i \overline{\omega})(S_i \overline{S})$
- Intuition is that overall labor share depends on within firm (unweighted) mean + between firm covariance (bigger firms have lower labor shares)

Dynamic OP Decomposition between periods 2 & 1: Melitz-Polanec '15 add Entry + Exit

$$\Delta S = S_2 - S_1 = \Delta \overline{S}_S + \Delta [\Sigma(\omega_i - \overline{\omega})(S_i - \overline{S})]_S + \omega_{X,1} (S_{S,1} - S_{X,1}) + \omega_{E,2} (S_{E,2} - S_{S,2})$$

- 1. $\Delta \overline{S}_{S}$ is the change in unweighted mean labor share *within* surviving firms
- 2. $\Delta[\Sigma(\omega_i \overline{\omega})(S_i \overline{S})]_S$ is reallocation between survivors

3. $\omega_{X,1}(S_{S,1} - S_{X,1})$ is contribution of *exiting* firms 4. $\omega_{E,2}(S_{E,2} - S_{S,2})$ is contribution of *entering* firms

 Also do many alternative shift-share decompositions

Fig 7: MP Decomposition for Manufacturing: Between firm reallocation main component



Notes: Overall labor share (**Payroll over value added**) falls 16.1 percentage points 1982-2012. MP decomposition over 5 year periods, aggregated to two 15 year periods

Fig 7: MP Decomposition for Manufacturing: Between firm reallocation main component



Notes: Overall labor share (**Payroll over value added**) falls 16.1 percentage points 1982-2012. MP decomposition over 5 year periods, aggregated to two 15 year periods

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Price-cost markups

- Harder to estimate markups than labor shares! We consider two main approaches:
- Re-write earlier FOC for any variable factor v:

$$\widehat{n_{it}} = \frac{\alpha_{it}^{\nu}}{SHARE_{it}^{\nu}}$$

- 1. Accounting method. Use share of variable factor in total costs to measure α_{it}^{ν} . Then markup = Sales/Total Costs (Antras, Fort & Tintelnot '17)
- 2. Estimate production function in each industry (ACF & LP) to obtain elasticity of output wrt to variable factor (α_{it}^{ν}) ; divide by factor share, $SHARE_{it}^{\nu}$. (de Loecker & Warzynski '12)
- Using all methods for CfM, we obtain consistent results:
 - (i) Higher mark-ups for larger firms in cross section; (ii)
 Increase in aggregate mark-up; (iii) Little change in mark-up
 for typical firm

Fig 10: Aggregate Markup rises, driven by reallocation. Median firm markup stable



Panel B: Levinsohn and Petrin (2013) based measures, Cobb-Douglas



Panel C: Ackerberg et al (2015) based measures, Cobb-Douglas





Notes: Panel A uses Antras et al (2017) method; Panels B-D use production function methods following de Loecker and Warzynski (2012). Census for Manufactures.

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Concentration rising in Europe (OECD MultiProd), Country by industry cells

Share of industry-country sales captured by top 10% of firms



Table A8: Industry Regs of △ Labor Share of Sales on △ Concentration (COMPNET, 10 year change)



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Possible Mechanisms

- **1. Weakening Antitrust**
- 2. Innovation
- 3. Trade
- 4. Worker power
- 5. Domestic Outsourcing
- 6. Capital and IT

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An economic theory of everything

The IMF adds to a chorus of concern about competition

A new study adds to worries about market power



Print edition | Finance and economics >
Apr 4th 2019

P HYSICISTS' QUEST for a "theory of everything" is well-known. The equivalent in economics is the hunt for common causes for the richworld macroeconomic trends of the past decade or so: a shrinking share of the economic pie for workers, disappointing investment and lacklustre productivity growth. These must be reconciled with low interest rates, pockets of technological advance and juicy returns for investors willing to take risks.

The leading economic theory of everything is that competition has weakened as markets have become more concentrated. Unlike firms in competitive markets, monopolies limit production in order to keep prices and profits high. They can therefore be expected to restrain their investment, too. They might still be innovative—with monopoly profits up

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Could our facts be driven by weakening antitrust enforcement? Unlikely to be main story

- 1. Aggregate patterns mainly **reallocation** rather than general rise in markups/fall in labor share
- 2. Similar trends of concentration & markups in EU where enforcement stronger
- 3. Concentrating industries **do not** have faster price rises
- 4. Concentrating industries **are** more dynamic: faster productivity and innovation growth

Possible Mechanisms

- 1. Weakening Antitrust
- 2. Innovation
- 3. Trade
- 4. Worker power
- 5. Domestic Outsourcing
- 6. Capital and IT

Concentrating Industries Show Larger Increase in Innovation, Productivity



Notes: Change in CR20 & change in indicated variables

Possible Mechanisms

- 1. Weakening Antitrust
- 2. Innovation
- 3. Trade
- 4. Worker power
- 5. Domestic Outsourcing
- 6. Capital and IT

China import shock decreases industry output and payroll, but <u>not</u> the labor share

Dependent		Value				Labor Share =
variable:	Sales	Added	Payroll	CR4	CR20	Payroll/VA
OLS	-1.98**	-0.79**	-0.46*	1.16	0.34	2.28
	(0.77)	(0.35)	(0.28)	(4.39)	(4.12)	(1.82)
2SLS	-3.72***	1.17**	-0.78**	4.69	3.50	8.17***
	(1.41)	(0.42)	(0.34)	(5.24)	(4.01)	(3.30)

Notes: 1992-2012; SIC 4 regressions between change in various outcomes and increase in Chinese import penetration; 5 year differences with time dummies; weighted by initial industry size; IV is Chinese imports into 8 other developed countries.

Offshoring? Top US Firms Have Increasingly Global Sales



Notes: Compustat data on 500 U.S. firms with largest global sales.

But Labor Share Fall Not Limited to Most Globalized Firms



Notes: Compustat data on 500 U.S. firms with largest global sales, split by foreign sales above/below industry median

Possible Mechanisms

- 1. Weakening Antitrust
- 2. Innovation
- 3. Trade
- 4. Worker power
- 5. Domestic Outsourcing
- 6. Capital and IT

Concentrating Industries are not those with largest falls in average Wages

	CR4	CR20	HHI
Payroll per Worker	0.013	0.005	0.016
	(0.018)	(0.011)	(0.010)

Notes: SIC 4 correlations between change in concentration & change in indicated variables (5 year differences with time dummies), weighted by initial industry size

- Also: Local employment concentration does not appear to be rising (Rinz, 2018)
- But maybe mark-down of wages increases (less mobility, more noncompetes, occ licensing, etc.)

Possible Mechanisms

- 1. Weakening Antitrust
- 2. Innovation
- 3. Trade
- 4. Worker power
- 5. Domestic Outsourcing
- 6. IT and intangibles

Greater IT Adoption in Larger Firms





Notes: Greater IT adoption in larger firms in France (Lashkari, Bauer, Boussard '19)

Conclusions

- Striking changes in macro-economy: fall in labor shares coupled by rise in concentration
- Simple Superstar Firm story: economic environment increasingly favors large and more productive firms: "winner takes most"
 - Platform competition; higher fixed costs (e.g. intangibles); tougher competition (formal model)
 - More work needed to isolate specific mechanisms (importance probably differs across markets)
- Maybe weaker antitrust in *some* markets (e.g. Cooper et al, 2019 on healthcare). But unlikely to be the main mechanism
- Policy: Even if superstars mainly won on merits still need for modernized & vigorous antitrust enforcement
 - Microsoft example

Back Up

Figure A9: Correcting Census decompositions for intermediate inputs using NIPA



Notes: MP decompositions over the full sample period. Use NIPA to adjust Census for intermediates

The Rise of Superstar Firms



Source: Compustat Analysis

Bigger firms have higher TFP







Bigger Firms have higher labor productivity



Notes. These are binscatters of firm log(output per worker) on the y-axis and firm ln(sales) on the x-axis. We control for a full set of four-digit SIC industry by year dummies (so these are the relationships within an industry-year pair).

Big Firms have higher markups

Notes. These are binscatters of firm markups on the y-axis and firm ln(capital) on the x-axis. We control for a full set of four-digit SIC industry by year dummies (so these are the relationships within an industry-year pair). The ordering of the panels follows Figure 10 in the main text.

Concentration trends (Orbis using <u>right</u> denominator)

Top 4 firm market share: Europe

Bajgar, Criscuolo and Timmis (forthcoming): M&As, productivity and concentration, OECD.

The sales in STAN are based on BEL, DEU, ESP, FIN, FRA, GBR and NLD. Year effects from regressions including industry and year dummies.

Concentration trends (Orbis using wrong denominator)

Bajgar, Criscuolo and Timmis (forthcoming): *M&As, productivity and concentration,* OECD.

Employment underestimates reach: Top 500 Superstar Firms by sales Global Sales of Top500 US Firms tripled from \$4 trillion in 1972 to \$12 trillion in 2015

Table 2: Rising Concentration and Falling Labor Share; Manufacturing, 5 year changes

$$\Delta \left(\frac{\text{Payroll}}{\text{Value Added}} \right)_{jt} = \Delta S_{jt} = \alpha + \beta \Delta \text{Conc}_{jt} + \gamma_t + \varepsilon_{jt}$$

	CR4	CR20	HHI
1. Baseline	-0.148***	-0.228***	-0.213**
	(0.036)	(0.043)	(0.085)
2. Compensation Share	-0.177***	-0.266***	-0.256**
	(0.045)	(0.056)	(0.110)
3. Correct Share for service intermediates	-0.339***	-0.514***	-0.502***
	(0.064)	(0.074)	(0.175)
4. Concentration based on value-added	-0.219***	-0.337***	-0.320***
(instead of sales)	(0.028)	(0.045)	(0.060)
5. Add SIC4 industry dummies	-0.172***	-0.290***	-0.243**
	(0.043)	(0.047)	(0.100)
6. 1992-2012 sub-period	-0.187***	-0.309***	-0.261**
	(0.043)	(0.061)	(0.102)
7. Controlling for Imports	-0.163***	-0.285***	-0.233***
<u>1992-2012</u>	(0.036)	(0.052)	(0.089)
8. Control for initial capital/VA	-0.146***	-0.231***	-0.214**
	(0.035)	(0.042)	(0.084)

Notes: *** significant at 1% level; ** = 5% level; * = 10% level. SE clustered by SIC4 & weighted by initial industry size (value added). Obs=2,328

Table 3: Regressions of Payroll share of Saleson Concentration. All sectors, 5 year changes

	CR4	CR20	HHI
Manufacturing	-0.062***	-0.077***	-0.112***
(obs = 2,328)	(0.013)	(0.025)	(0.026)
Retail	-0.034*	-0.084**	-0.041
(obs = 348)	(0.020)	(0.037)	(0.025)
Wholesale	-0.038***	-0.040**	-0.084**
(obs = 336)	(0.014)	(0.017)	(0.041)
Services	-0.091	-0.128***	-0.350***
(obs = 570)	(0.057)	(0.039)	(0.084)
Utilities/Transport	-0.110***	-0.111**	-0.320***
(obs = 144)	(0.031)	(0.050)	(0.082)
Finance	-0.221**	-0.252***	-0.567**
(obs = 124)	(0.084)	(0.091)	(0.208)
Combined	-0.077***	-0.088***	-0.150***
(obs = 3,850)	(0.017)	(0.022)	(0.028)

Notes: *** significant at 1% level; ** = 5% level; * = 10% level. SE clustered by SIC4 & weighted by initial industry size (sales).

Fig 9: Regression of ALabor Share Components on Sector Level A CR20: Loads on reallocation term

Notes: Coefficients from 24 separate regressions of each reallocation component on concentration. 95% confidence intervals.

Fig 8: \triangle Labor-Share Decomposition in 6 Sectors - Reallocation component dominates

Notes: MP decomposition (payroll/sales) over 5 year periods, full sample period

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Notes: MP decomposition (payroll/sales) over 5 year periods, full sample period

Bigger Firms Have Bigger Markups

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Data Sources (International)

Industry-level labor shares, intermediate services

- KLEMS data
- 12 countries, 32 industries

Industry-level labor shares and concentration

- ECB COMPNET data
- 14 countries, 53 industries
- **Firm-level labor shares**
 - BvD Orbis data
 - 6 EU countries

Concentrating Industries Show Larger Increase in Labor Productivity, <u>All Sectors</u> (Table 6B)

	CR4	CR20	HHI
1. Manufacturing	0.125***	0.067***	0.069**
	(0.027)	(0.018)	(0.016)
2. Retail	0.049	0.098	0.027**
	(0.048)	(0.067)	(0.023)
3. Wholesale	0.160***	0.207***	0.031*
	(0.029)	(0.042)	(0.013)
4. Services	0.082	0.125***	0.041**
	(0.055)	(0.036)	(0.019)
5. Utilities & Transportation	0.415***	0.304***	0.117
	(0.096)	(0.092)	(0.023)
6. Finance	0.270*	0.216*	0.144***
	(0.143)	(0.111)	(0.052)

Notes: SIC 4 correlations between change in concentration & ln(sales per worker); 5 year differences with time dummies; weighted by initial industry size

Concentrating Industries Show Larger Increase in Innovation & Productivity; Mnfg. (Table 6A)

	CR4	CR20	HHI
1. Patents per worker	0.090**	0.057***	0.056**
	(0.006)	(0.022)	(0.022)
2. Value Added per worker	0.126***	0.074***	0.067**
	(0.028)	(0.022)	(0.025)
3. Capital per Worker	0.067**	0.057***	0.024
	(0.029)	(0.014)	(0.026)
4. Five factor TFP	0.055**	0.024*	0.028*
	(0.019)	(0.013)	(0.017)

Notes: SIC 4 correlations between change in concentration & change in indicated variables (5 year differences with time dummies), weighted by initial industry size