

Disruption in the Workplace and at the Ballot Box: Globalization, Superstars, and New Work

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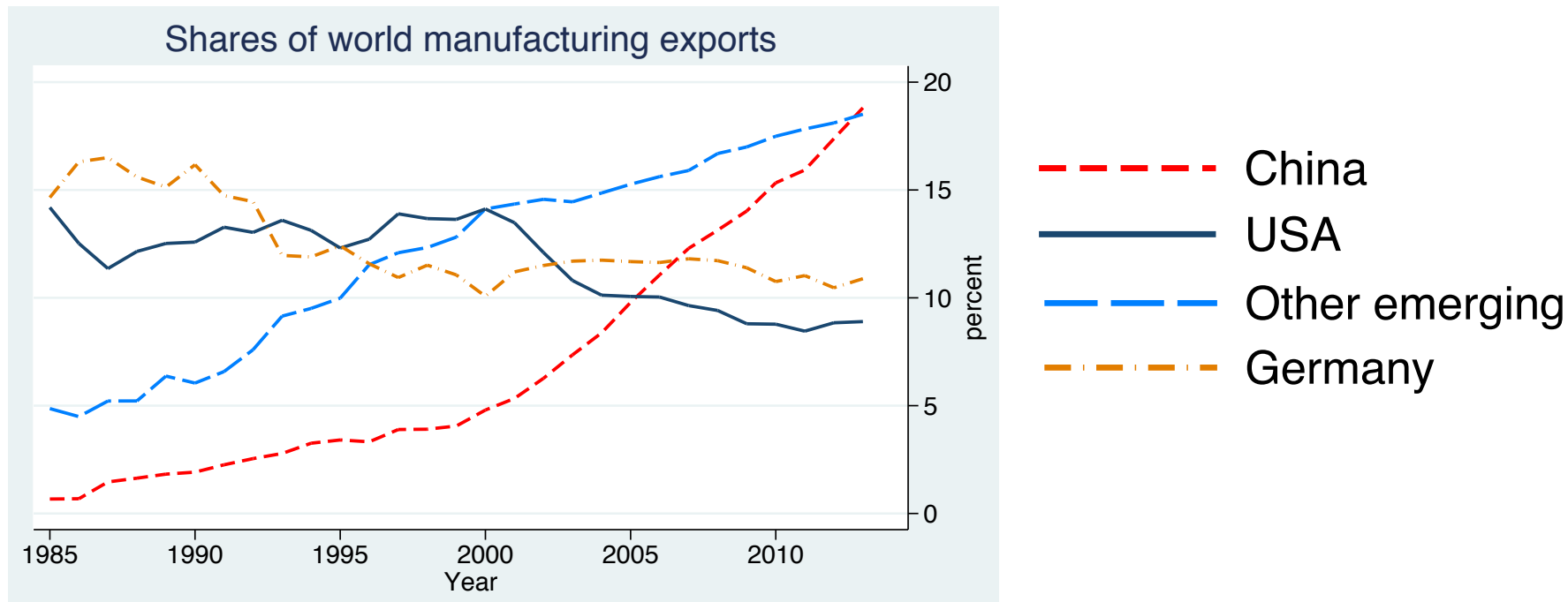
Disruption in the Workplace and at the Ballot Box: Globalization, Superstars, and New Work

1. The 'China Shock' – is it over?
2. At the Nexus of Globalization and Technical Change: The Role of 'Superstar Firms'
3. The Work of the Future

The 'China Shock'

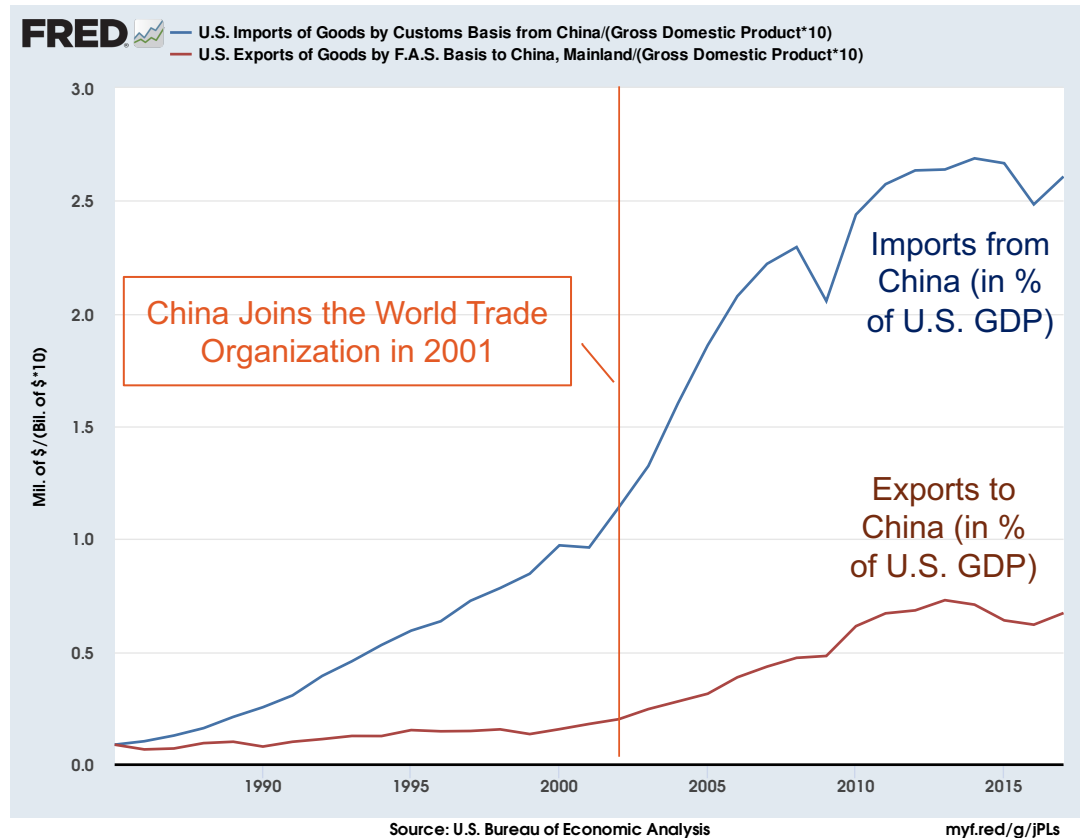
– Is it Over?

China's Share of World Manufacturing Exports Rose from <1% in 1985 to ~20% in 2014, to >20% Today



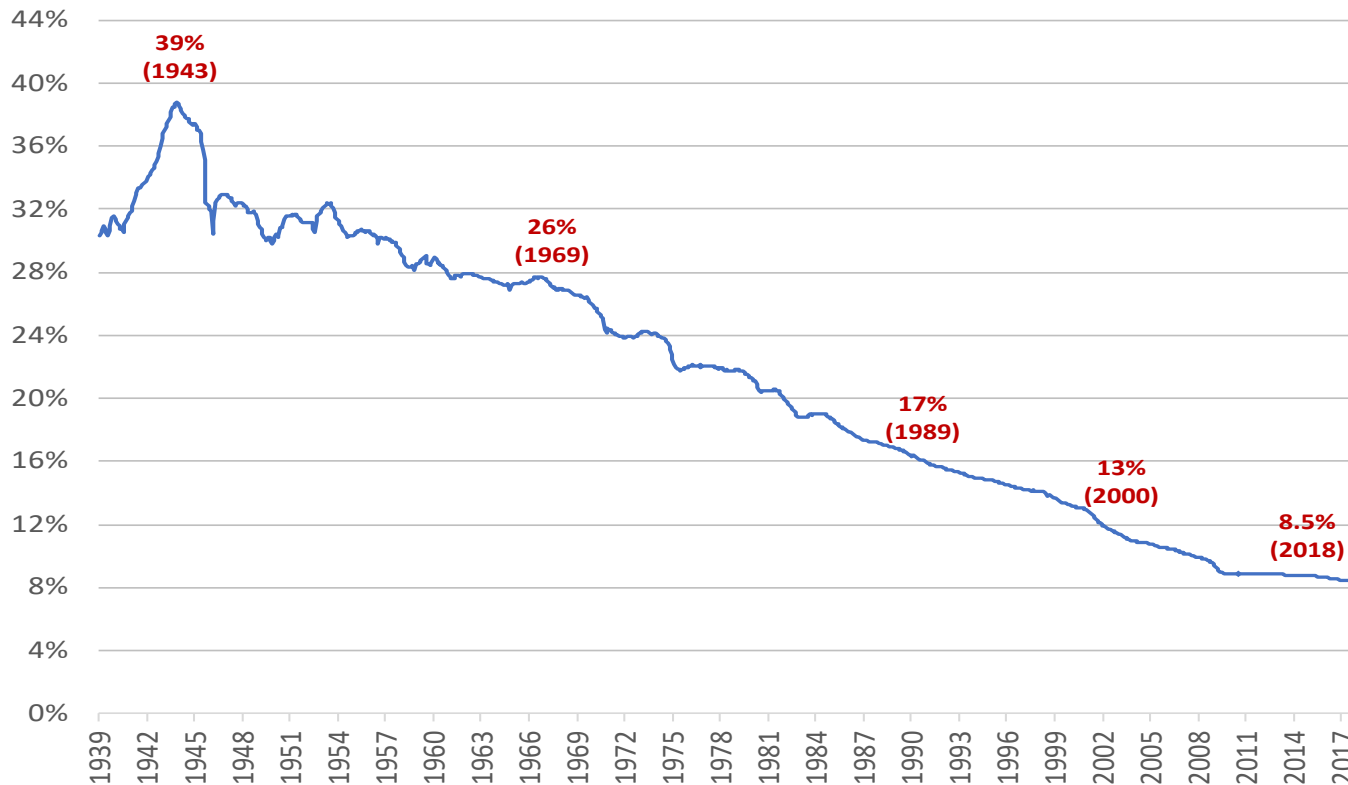
Autor, Dorn, Hanson 2016

The China Import Surge: Imports from Exports to China as a Percentage of U.S. GDP, 1985 – 2018

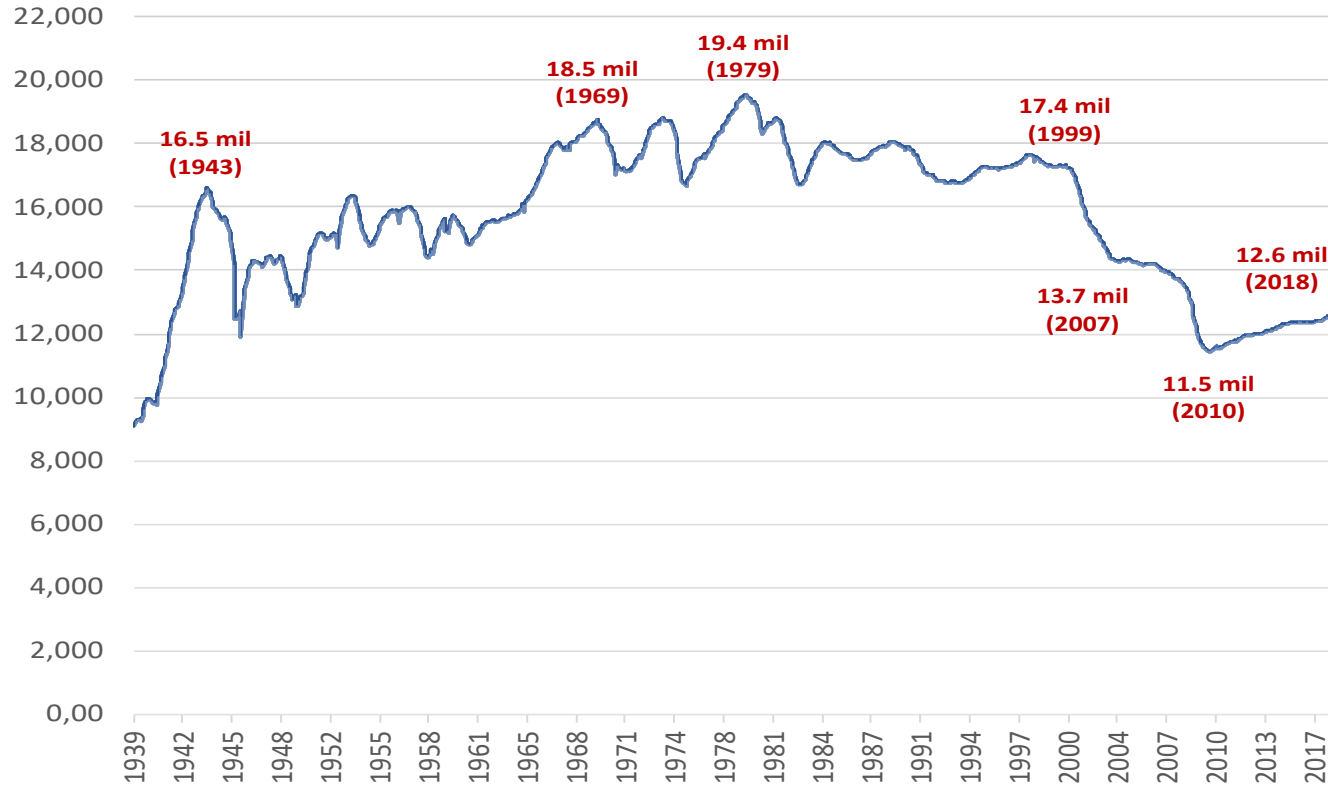


- China's exports to U.S:
From 0.25% of GDP
to 2.5% of GDP
- China's imports from U.S:
From 0.25% of GDP
to 0.6% of GDP

A Long Decline: The Share of U.S. Employment in Manufacturing, 1939 – 2018



But the 2000s Were Different: U.S. Manufacturing Emp Fell by 22% Between 1999 - 2007, by 34% Between 1999 – 2010



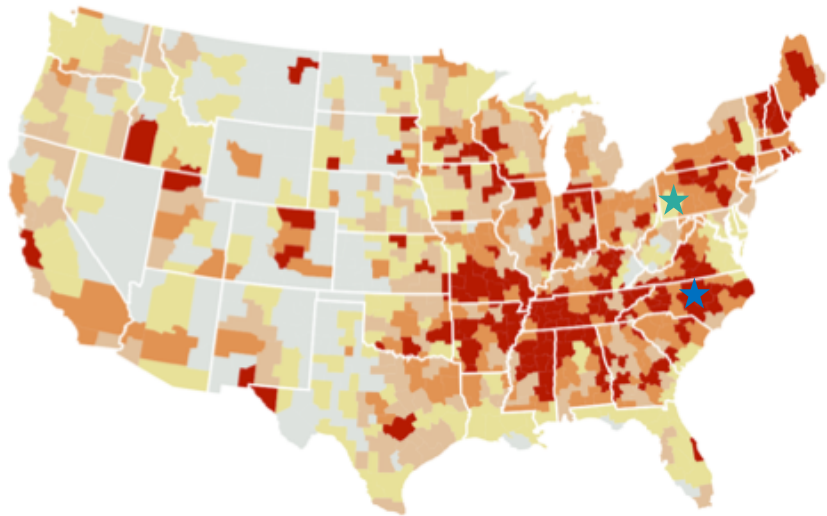
Manufacturing Employment is Regionally Concentrated

Darker Colors Indicate Greater China Trade Exposure

Most-affected areas of the U.S.

Colors show which areas were most affected by China's rise, based on the increase in Chinese imports per worker in each area from 1990 to 2007. Hovering over each area on the map will show a demographic breakdown of that area, below, and its most-affected industries, at right.

Most-affected 20% Second-highest 20% Middle 20% Second-lowest 20% Least-affected 20%



Most-affected industries

Most-affected industries, based on number of areas*

Impact per worker†

Furniture and fixtures
196 areas
\$44k

Games, toys, and children's vehicles
114 areas
\$488k

Sporting and athletic goods
106 areas
\$82k

Electronic components
87 areas
\$65k

Plastics products
84 areas
\$11k

Motor-vehicle parts and accessories
79 areas
\$12k

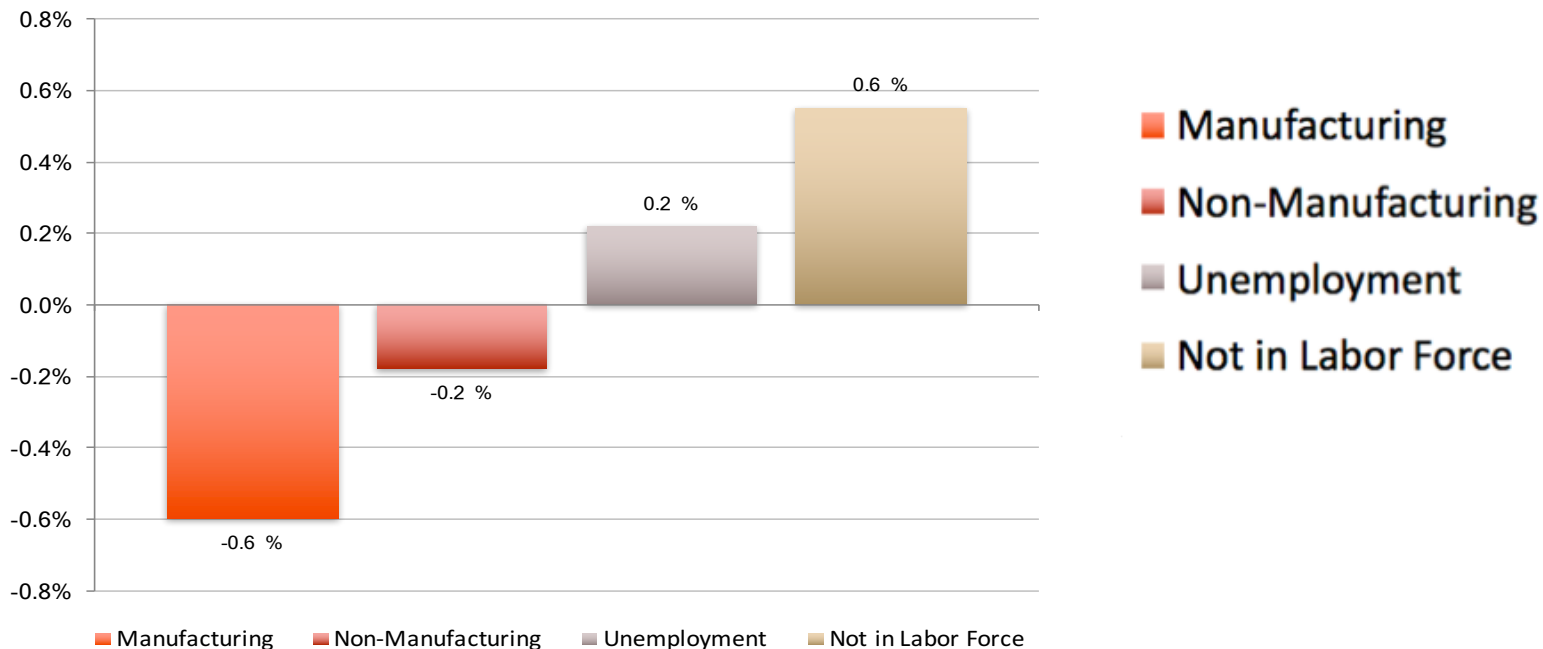
Electronic computers
68 areas
\$207k

Regional variation

- Gives rise to 'geographic experiments'
- Consider **Pittsburgh, PA** vs. **High Point, NC**

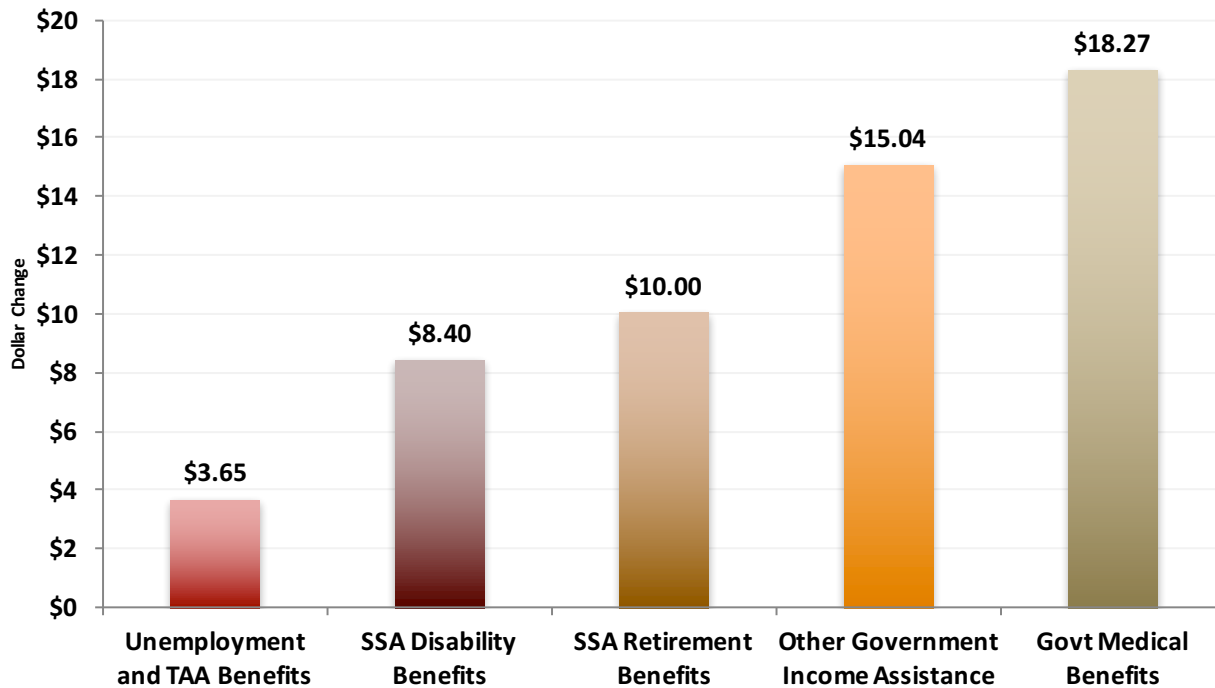
Loss of Manufacturing Employment Not Primarily Offset by Rising Non-Manufacturing Employment

*Effect of an \$1000 Per Worker Increase in Imports from China during 1990-2007 on
Share of Population in Employment Categories*



Induced Rise in Public Transfer Benefits – But Mostly Not Unemployment and Trade Adjustment Assistance

*Effect of an \$1000 Per Worker Increase in Imports from China during 1990-2007
on Dollar Change of Annual Transfer Receipts per Capita*



Is the 'China Shock' Over – *Three Answers*

1. Yes!

- Manufacturing employment has stabilized, and is perhaps rebounding
- Employment reallocating towards non-manufacturing
- Legacy industries closed – no longer at risk
- Many large firms shifted business models: from making stuff to designing stuff and offshoring production

Is the 'China Shock' Over – *Three Answers*

2. No: Trade war's underway!

- China aggressively moving up the value chain
- Examples: Electric cars, aircraft, power generation, networking equipment, artificial intelligence

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By *Lingling Wei* in Beijing and *Bob Davis*

Sept. 26, 2018 10:27 a.m. ET



Is the 'China Shock' Over – *Three Answers*

3. No! Economic disruption leads to political disruption

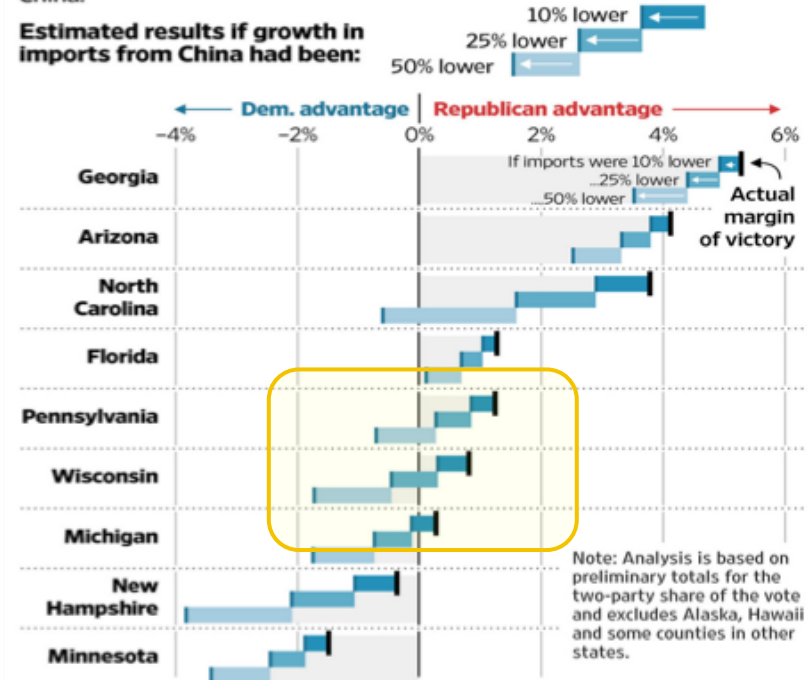
The 'China Shock' tipped the election to Donald Trump in Michigan, Wisconsin, & Pennsylvania

[Autor, Dorn, Hanson, Majlesi, 2016]

Game Changer

Economists estimate that results in key swing states would have been different if those states hadn't been hit as hard by rising imports from China.

Estimated results if growth in imports from China had been:



Sources: David Autor of the Massachusetts Institute of Technology; David Dorn of the University of Zurich; Gordon Hanson of the University of California, San Diego; Kaveh Majlesi of Lund University

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2. At the Nexus of Globalization and Technical Change: The Role of 'Superstar Firms'

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

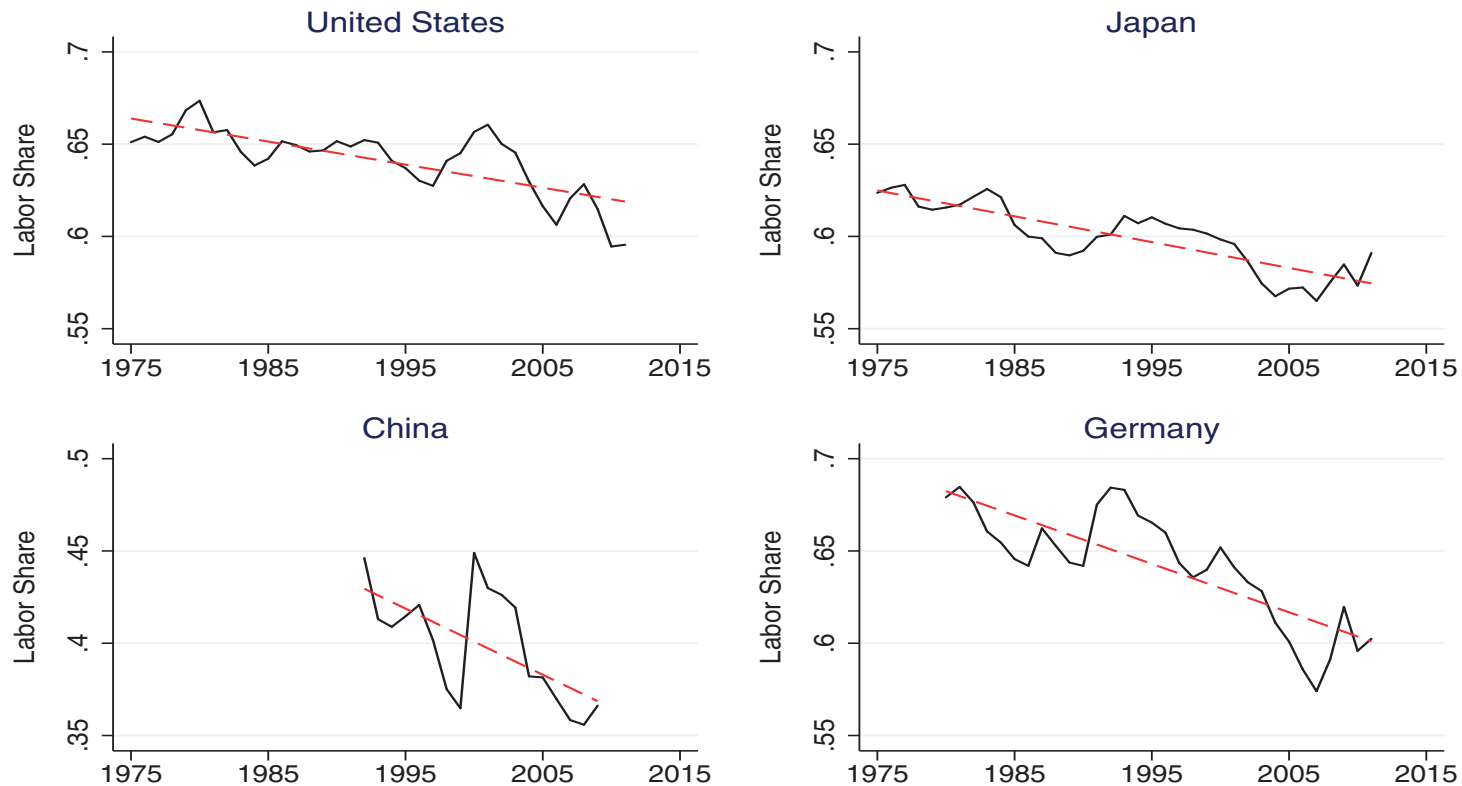
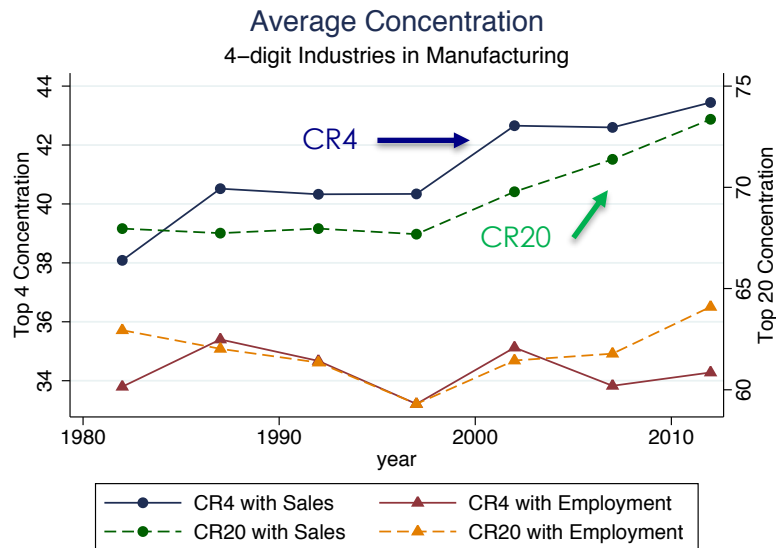


FIGURE II

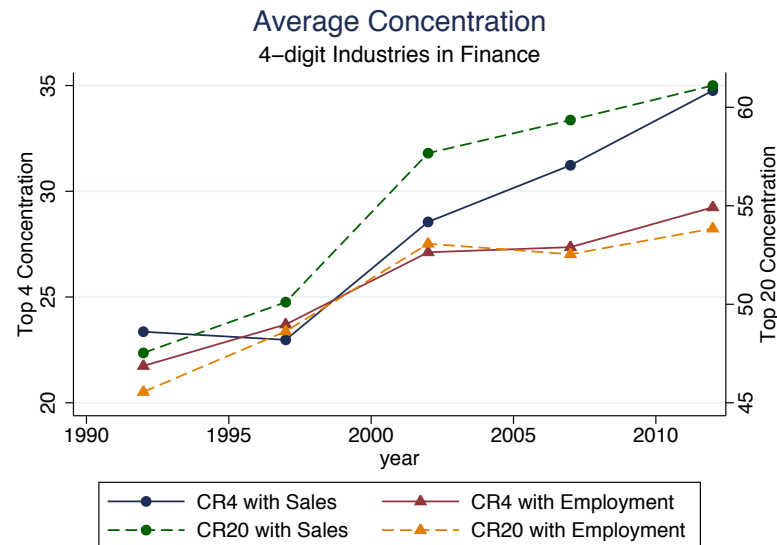
Declining Labor Share for the Largest Countries

Rising Concentration: Manufacturing and Finance

Manufacturing Sector



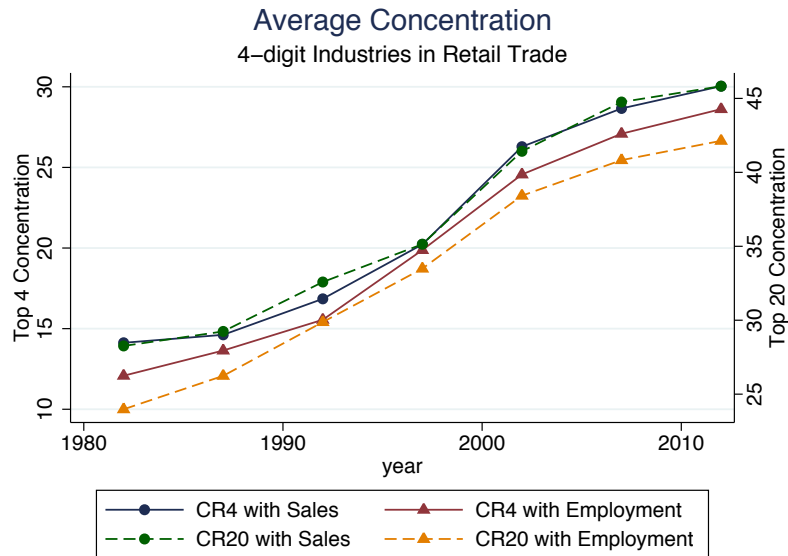
Finance Sector



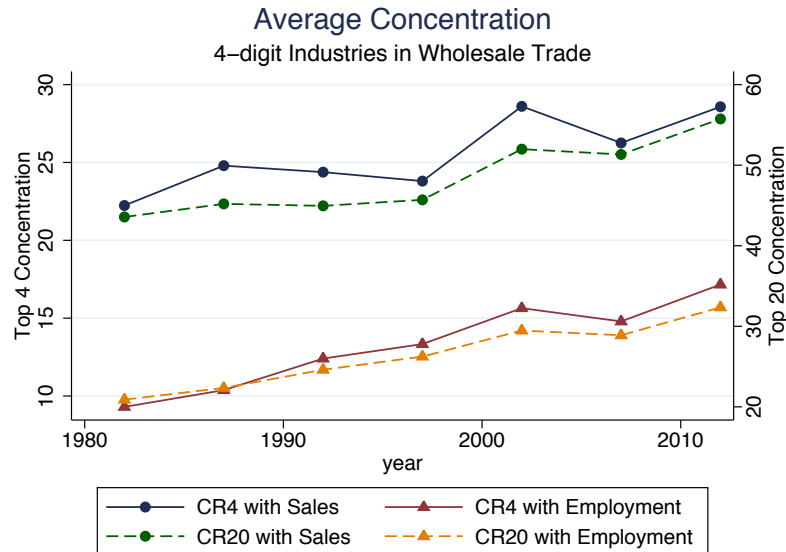
Notes: Weighted average of 4 digit industries within each large sector.
Manufacturing: 388 inds; Finance: 31.

Rising Concentration: Retail and Wholesale Trade

Retail Trade



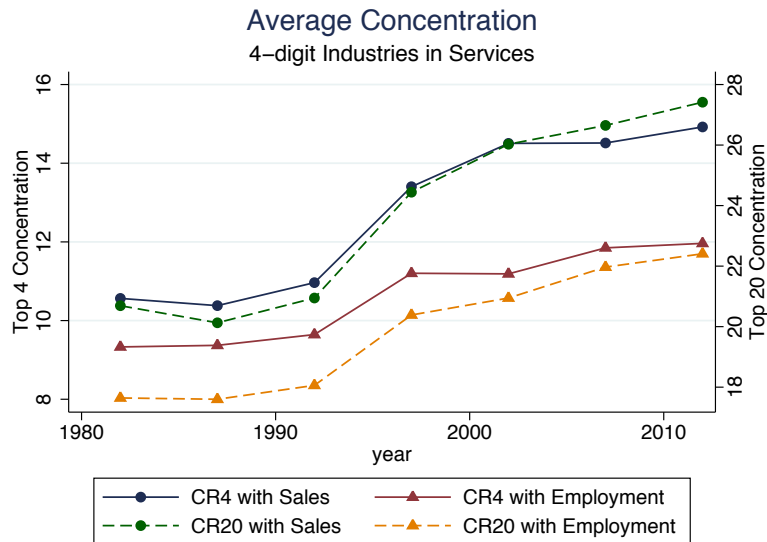
Wholesale Trade



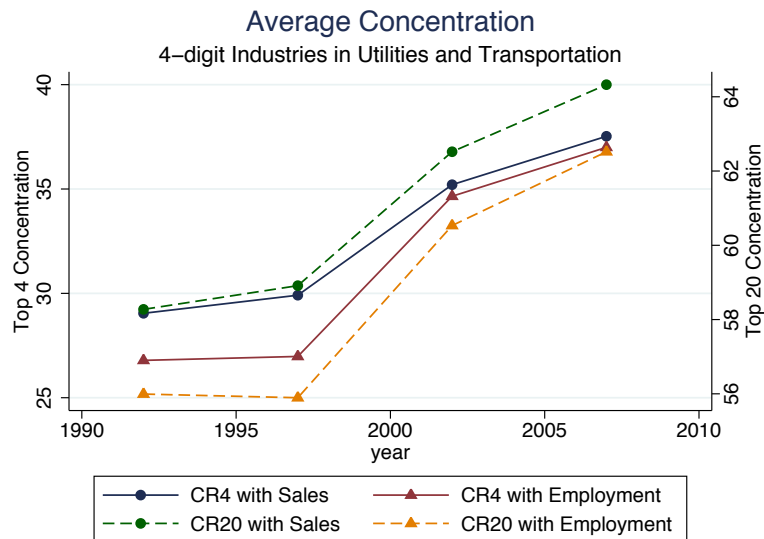
Notes: Weighted average of 4 digit industries within each large sector.
Retail: 58; Wholesale: 56.

Rising Concentration: Services and Utilities + Transport

Service Sector

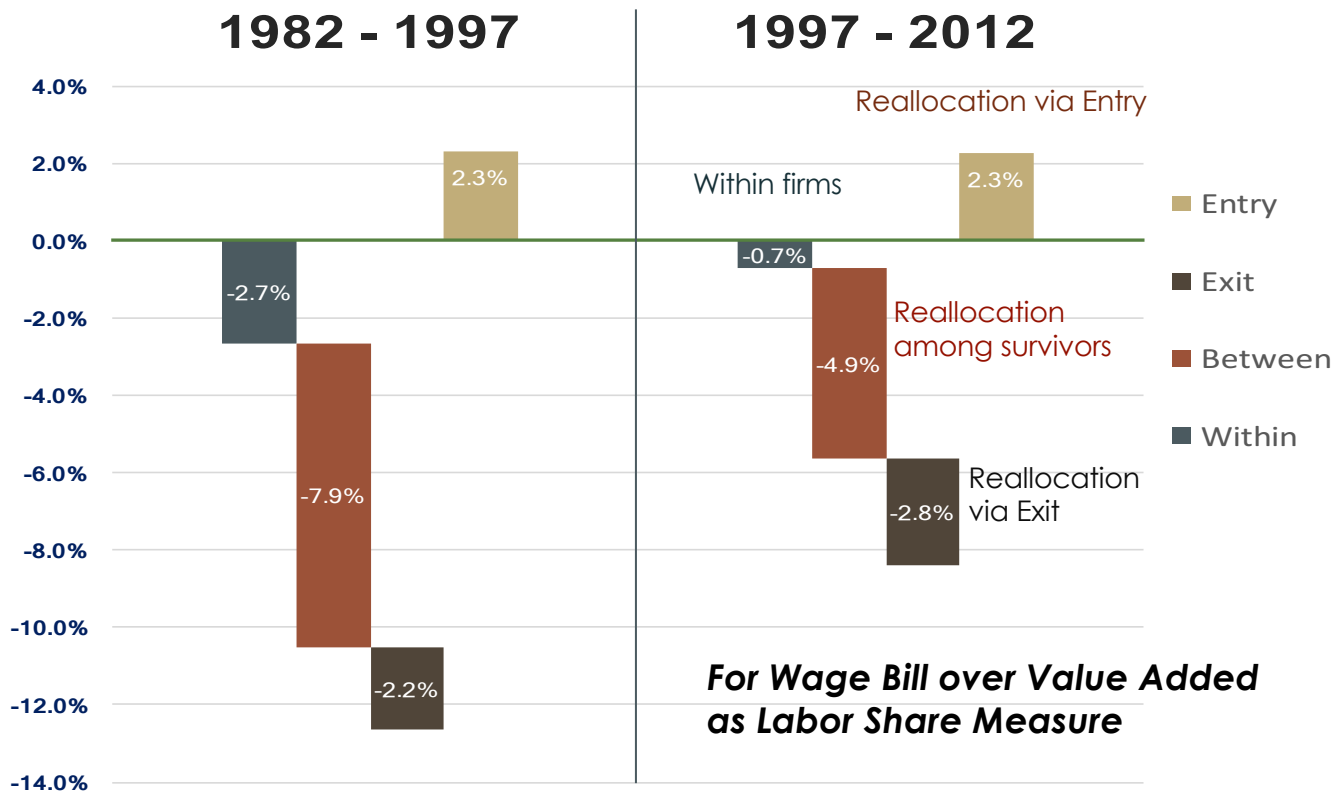


Utilities + Transportation

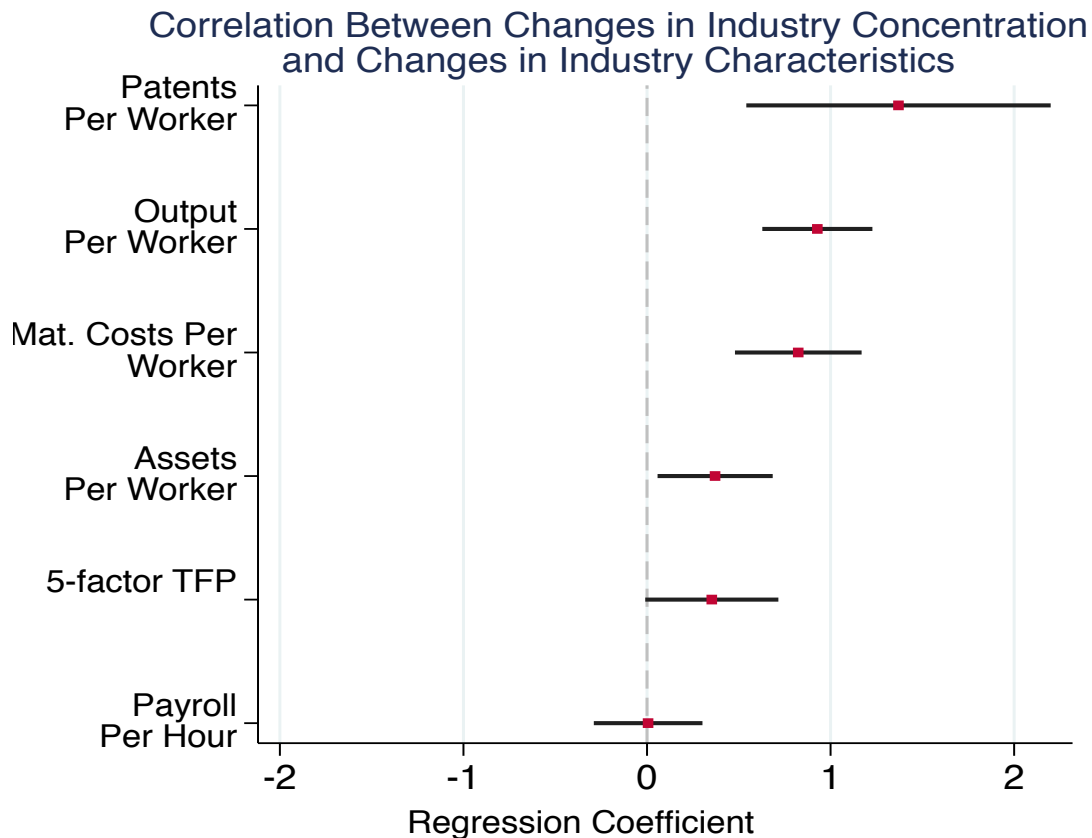


Notes: Weighted average of 4 digit industries within each large sector.
Services: 95; Utilities & Transport: 48.

Decomposition for U.S. Manufacturing: The Role of Firms in the Fall in Labor's Share of Value-Added

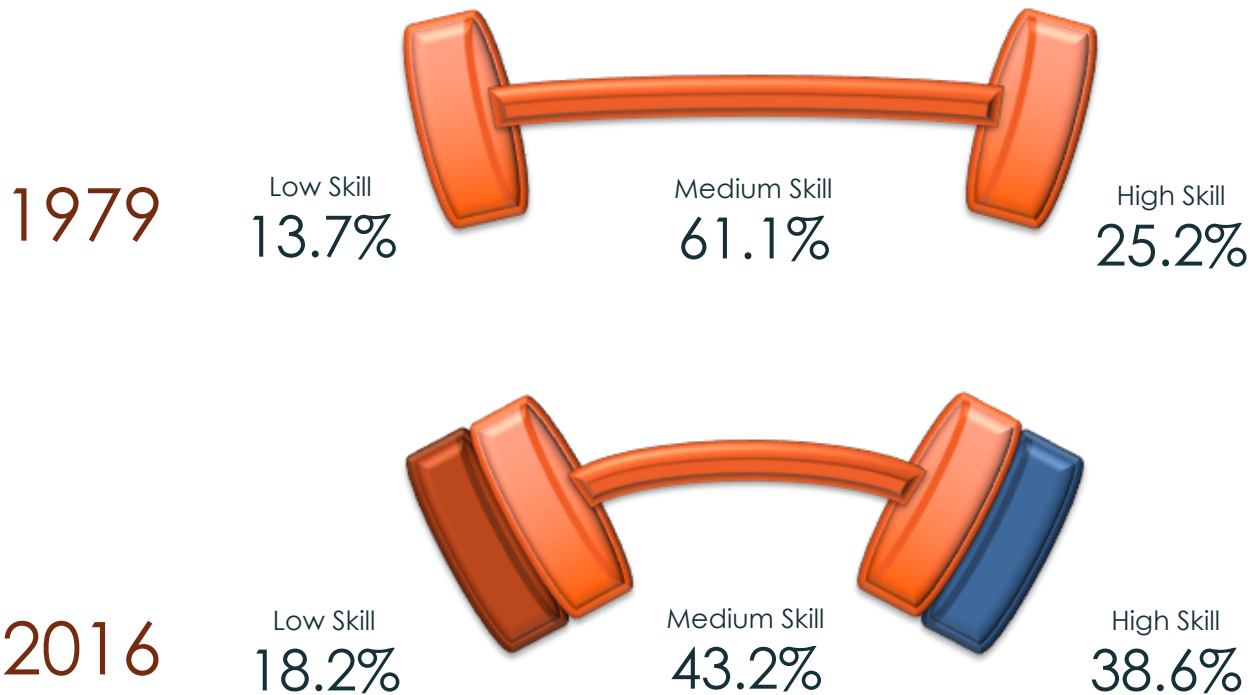


Not Simply 'Fat and Mean' – Concentrating Industries Show Larger Increase in Innovation, Productivity



3. The Work of the Future: Three Perspectives

Biased Technical Change → Shrinking Middle: The 'Barbell' Labor Market (AKA Job Polarization)

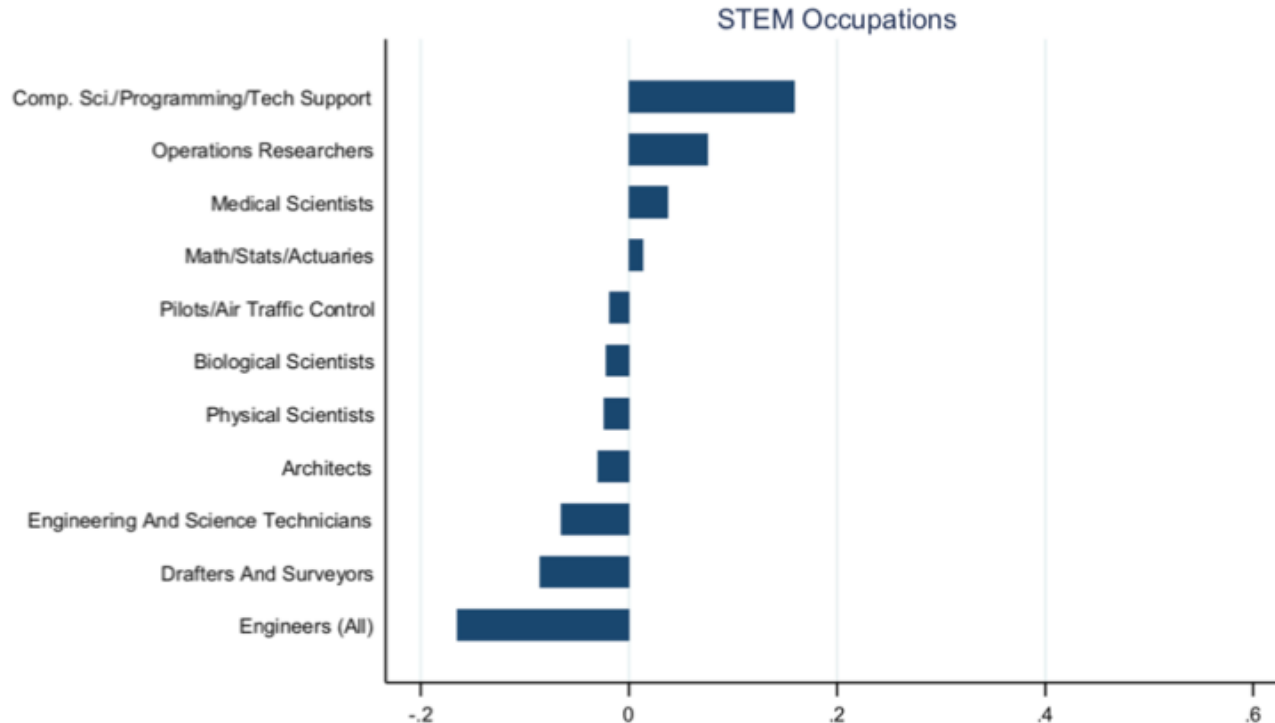


Tüzemen and Willis 2013
Autor and Dorn 2013

New Jobs are Not Primarily Science, Technology, Engineering, and Mathematics (STEM)!

Change in Relative Employment for Cognitive Occupations, 2000-2012

100 x Change in Employment Share



Source: Deming, "The Growing Importance of Social Skills in the Labor Market, 2018"

Many Growing Occupations Virtuously Combine Interpersonal and Technical Skills (2000 - '12)



Source: Deming, "The Growing Importance of Social Skills in the Labor Market, 2018

Invention of New Work

1. Frontier jobs
2. Wealth work
3. Last mile jobs

'Frontier Jobs' – New Technologies Demand New Skills and Expertise

Search Engine Optimization Analysts



Search Engine Optimization Analyst
Collabera
Framingham, MA
via Glassdoor
🕒 2 days ago 🏢 Full-time



Search Engine Optimization (SEO) Strategist
Charles River Interactive, Inc.
Waltham, MA
via LinkedIn
🕒 8 days ago 🏢 Full-time



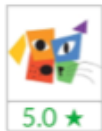
Project Manager, Search Engine Optimization
Fidelity Investments
Boston, MA
via Glassdoor
🕒 27 days ago 🏢 Full-time

'Frontier Jobs'

- Robot integrators
- Cloud computing specialists
- Autonomous vehicle programmers
- Biomedical engineers
- Radiation therapists

'Wealth Work' – Jobs Created by Rising Incomes

Job Postings: Animal Psychologist



Behavior Specialist/Dog Trainer

Animal Humane New Mexico – Albuquerque, NM

24 days ago



5.0 ★



Kennel Technician -FT

Canine Companions for Independence, Inc. – Irving, TX

21 days ago



4.2 ★



Lead Animal Behavior Management Specialist

Emory – Atlanta, GA

Great Benefits



3.5 ★

'Wealth Work'


- Body piercer
- Horse exerciser
- Indoor landscaper-gardener
- Pet crematory worker
- Oyster preparer

'Last Mile Jobs' – Supporting the Machine

Social Media Content Tagger

Social media tagger Jobs

2 Jobs





4.4 ★

Junior Editor - Content Tagger

ApTask – New York, NY

29 days ago






Content tagger | New York City, NY| 6+ Months Contract with

Newyork City Interviews – New York, NY

21 days ago



'Last Mile' Jobs

- Image tagger
- Adult content filterer
- Photo verification agent
- Amazon 'M-Turker'

Environmental Control: Amazon/Kiva Order Fulfillment – Robotic Drive Units Move Shelves to Workers for Picking



Amazon/Kiva-Worker Interaction – Guided by Laser Pointer, Human 'Pick Worker' Picks Items for Shipping



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