
America's Jobs and Inequality Challenges

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The Four U.S. Jobs Challenges

(1) **Macroeconomic Unemployment Issues**

- High Remaining Cyclical Unemployment and Nonemployment
- Weak Labor Demand and the Short-Run Job Creation Challenge

(2) **Persistent Economic and Social Costs of Job Loss and a Weak Labor Market for Young Workers and New Entrants**

- Long-Term Joblessness
 - Sclerotic Labor Market with Low “Churn”
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The Four U.S. Jobs Challenges

(3) Longer-Term Structural Labor Market Changes since 1980

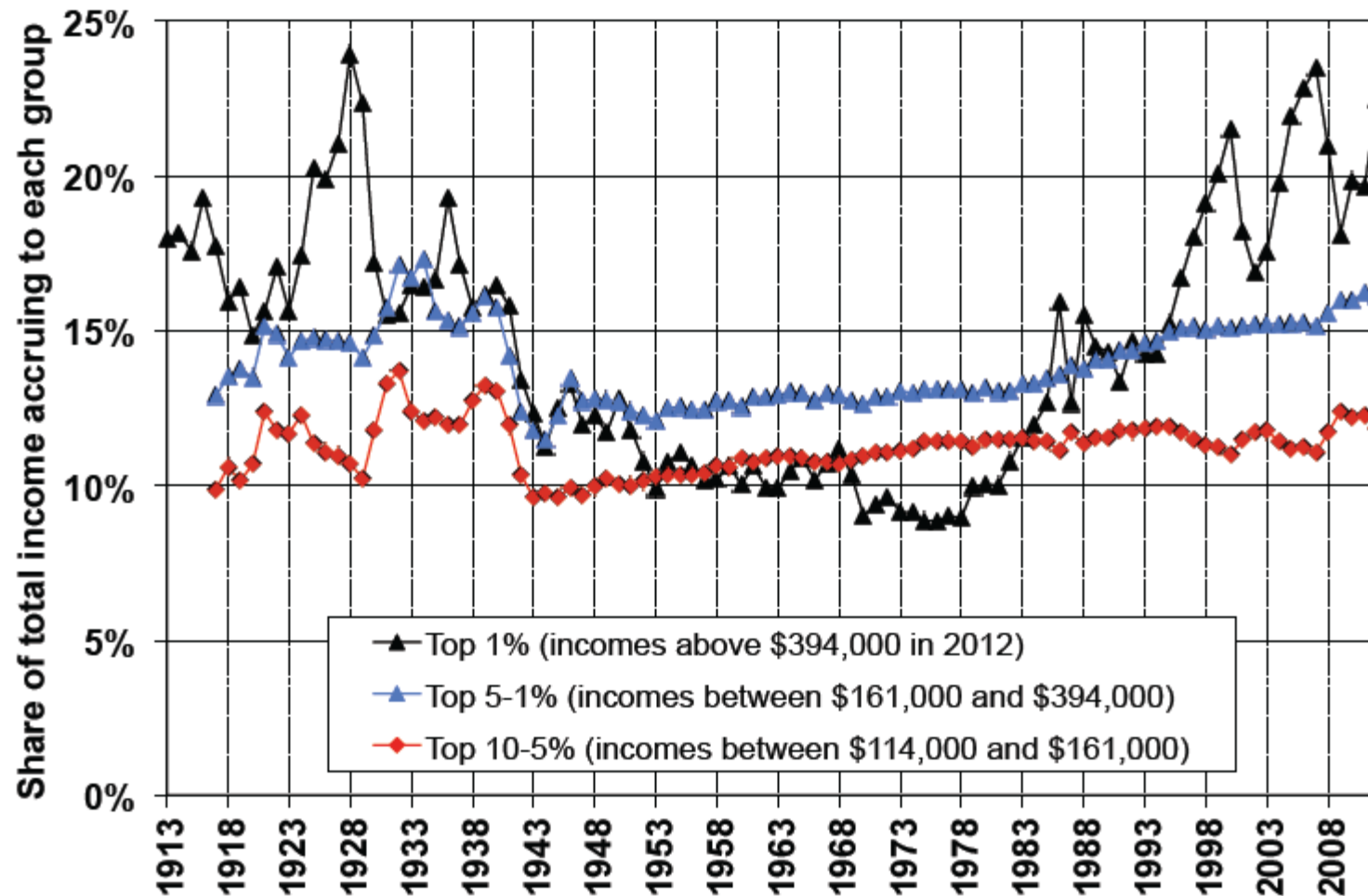
--Rising Economic Inequality: Top 1% vs. rest for income, Top 0.1% vs. rest for wealth, high educational and skills wage gaps, role of employer identity, declining labor's share in 2000s

--Losing *The Race Between Education and Technology*, the Polarization of Labor Demand

--Growing residential economic segregation and geographic concentration of poverty

(4) The problems of disadvantaged workers and families (persistent poverty) even in a “full employment” (normally functioning) labor market

Top 1% Share Up from 10% in 1980 to 22.5% in 2012



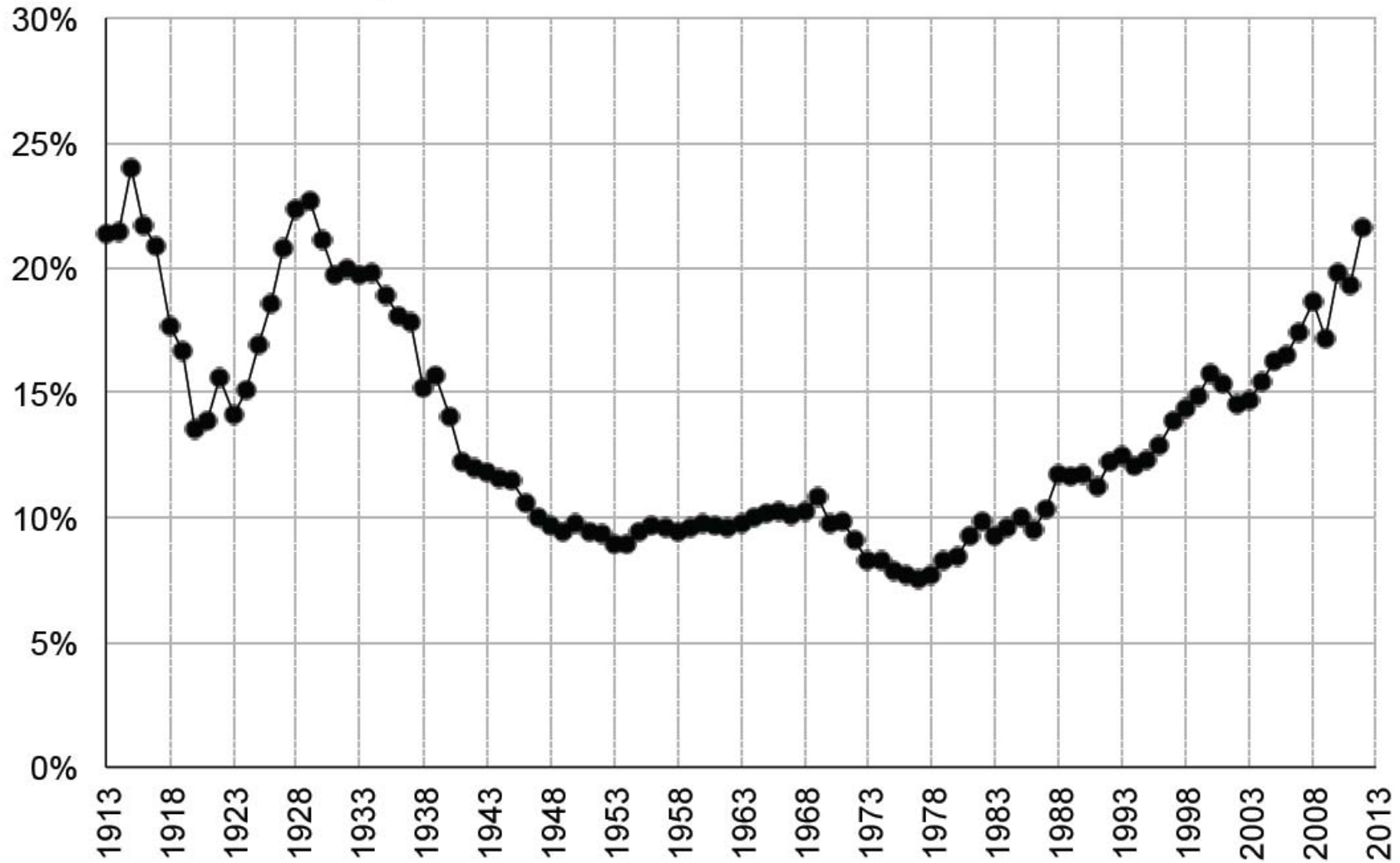
Saez (2013) IRS Data

FIGURE 2

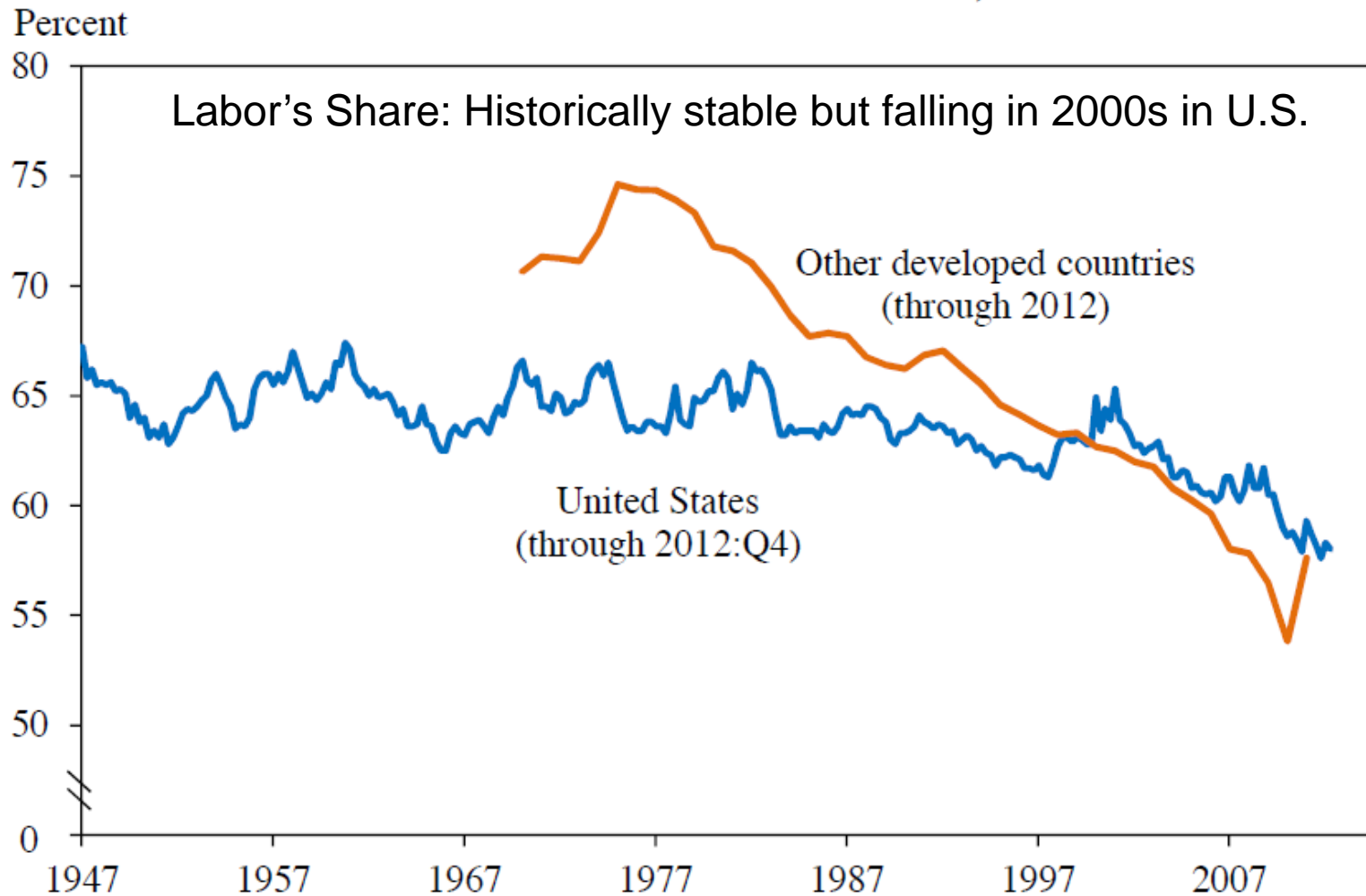
Decomposing the Top Decile US Income Share into 3 Groups, 1913-2012

Saez-Zucman (2014)

Top 0.1% wealth share in the U.S., 1913-2012



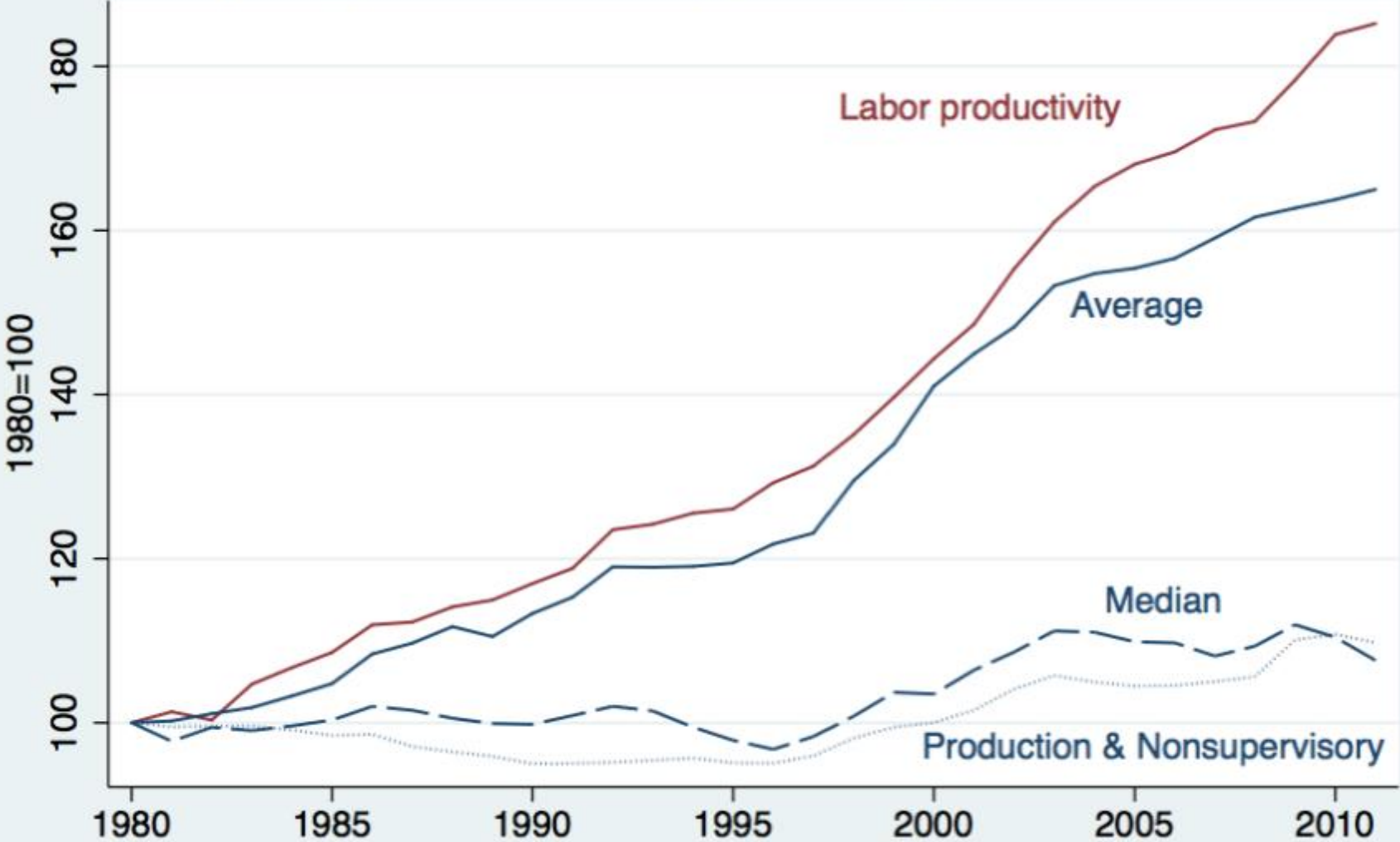
Labor Share of Nonfarm Business Income, 1947–2012



Note: "Other Developed Countries" refers to the OECD member states. The U.S. labor share includes imputed proprietor's income. The OECD labor share excludes the farm, mining, fuel, and real estate sectors, and is aggregated by the CEA on an annual basis for 22 countries using GDP weights at current exchange rates.

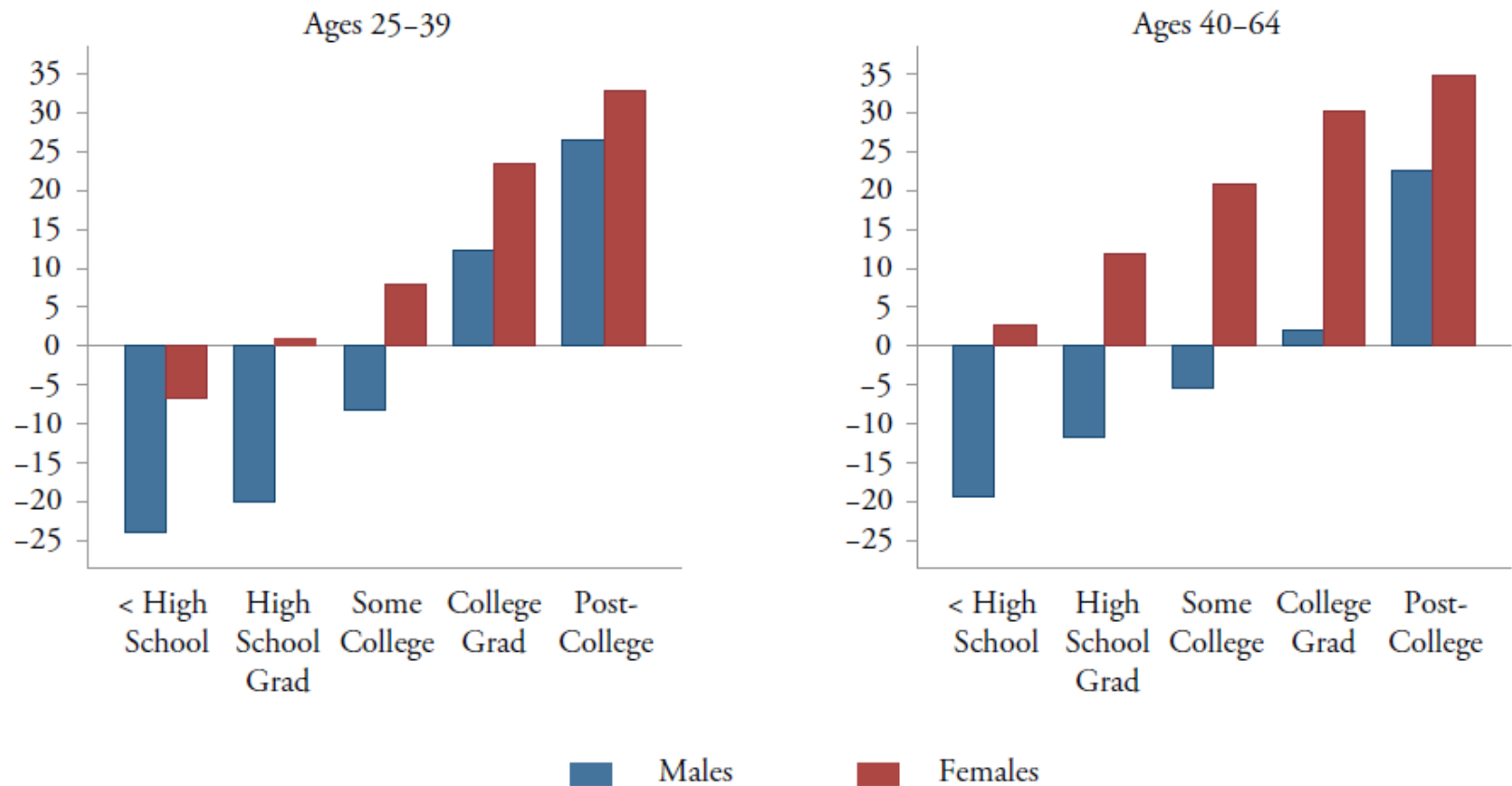
Source: Bureau of Labor Statistics, Productivity and Costs; OECD, Annual Indicators.

US: Hourly Compensation of Average, Median, and Production Workers



Source: Economic Report of the President, Table B49; State of Working America, 12th ed: Table 4U, estimate based on BEA National Income and Product Accounts data.

**Figure 2: Percent Changes in Real Hourly Wage Levels 1979-2010
(By Education and Sex)⁹**



Source: May/Outgoing Rotation Groups Current Population Survey data for years 1979-2010.

Autor and Wasserman (2013)

Top 1% vs. College Wage Premium Growth

Rise in college wage premium explains 60% of rise in U.S. wage inequality since 1980

How large is Top 1% share growth? Piketty and Saez (2013)

- Keep Top 1% share fixed at 1979 level so the 12.5% growth in share to 2012 (from 10% to 22.5%) is redistributed then
 - To bottom 99% get \$7105 per tax unit or 16% increase
 - To bottom 90% get \$7815 per tax unit or 28% increase

How large is the college wage premium growth? CPS data

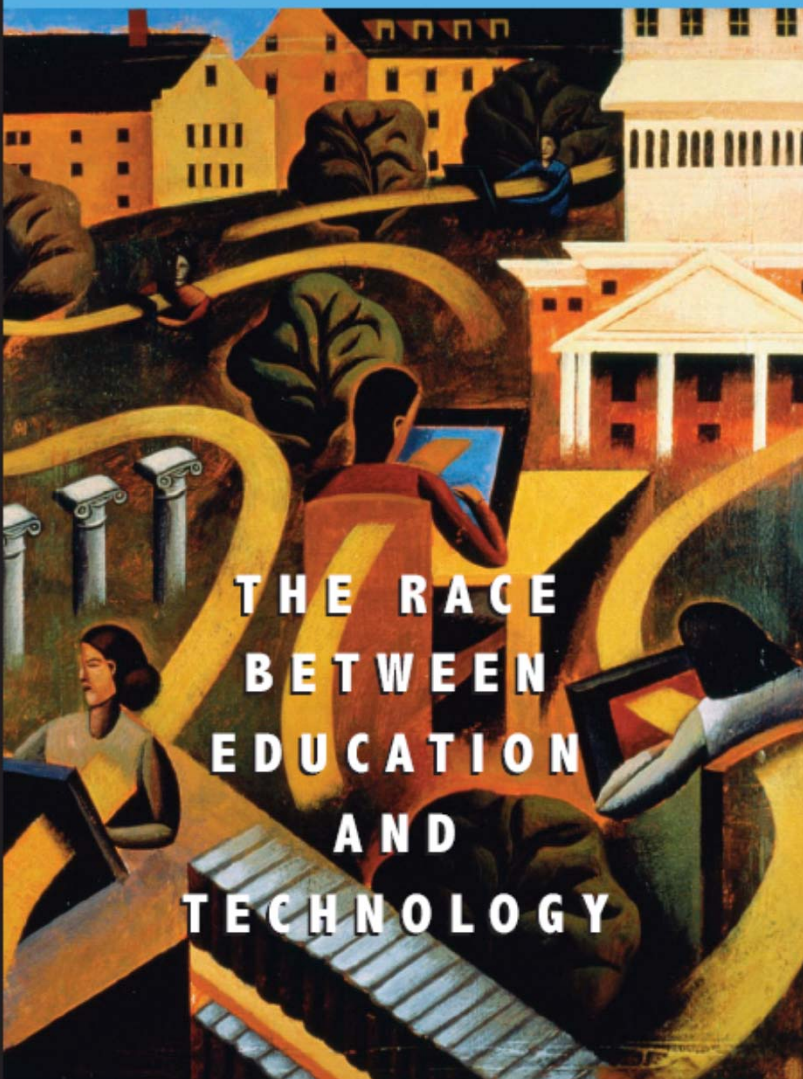
- Full-time, full-year college plus/HS wage gap at the median increased by about \$19,100 for 1979 to 2012 for males and by \$11,400 for females
 - College premium growth of \$30,000 for two full-time earners couple at median vs. \$7815 from redistribution from Top 1%
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& Katz

THE RACE
BETWEEN
EDUCATION
AND
TECHNOLOGY

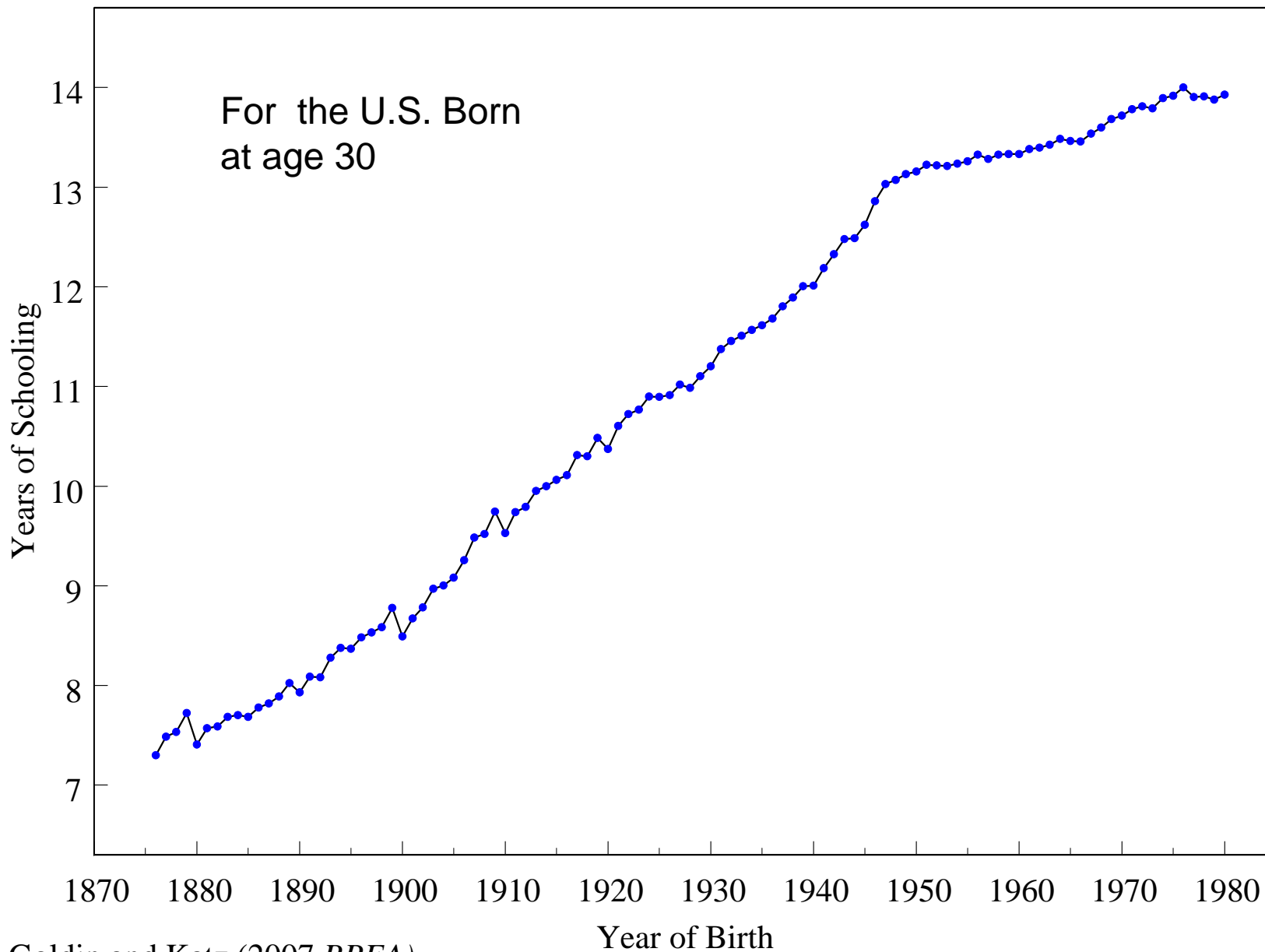
Belknap
Harvard



Theme: Race between Education and Technology

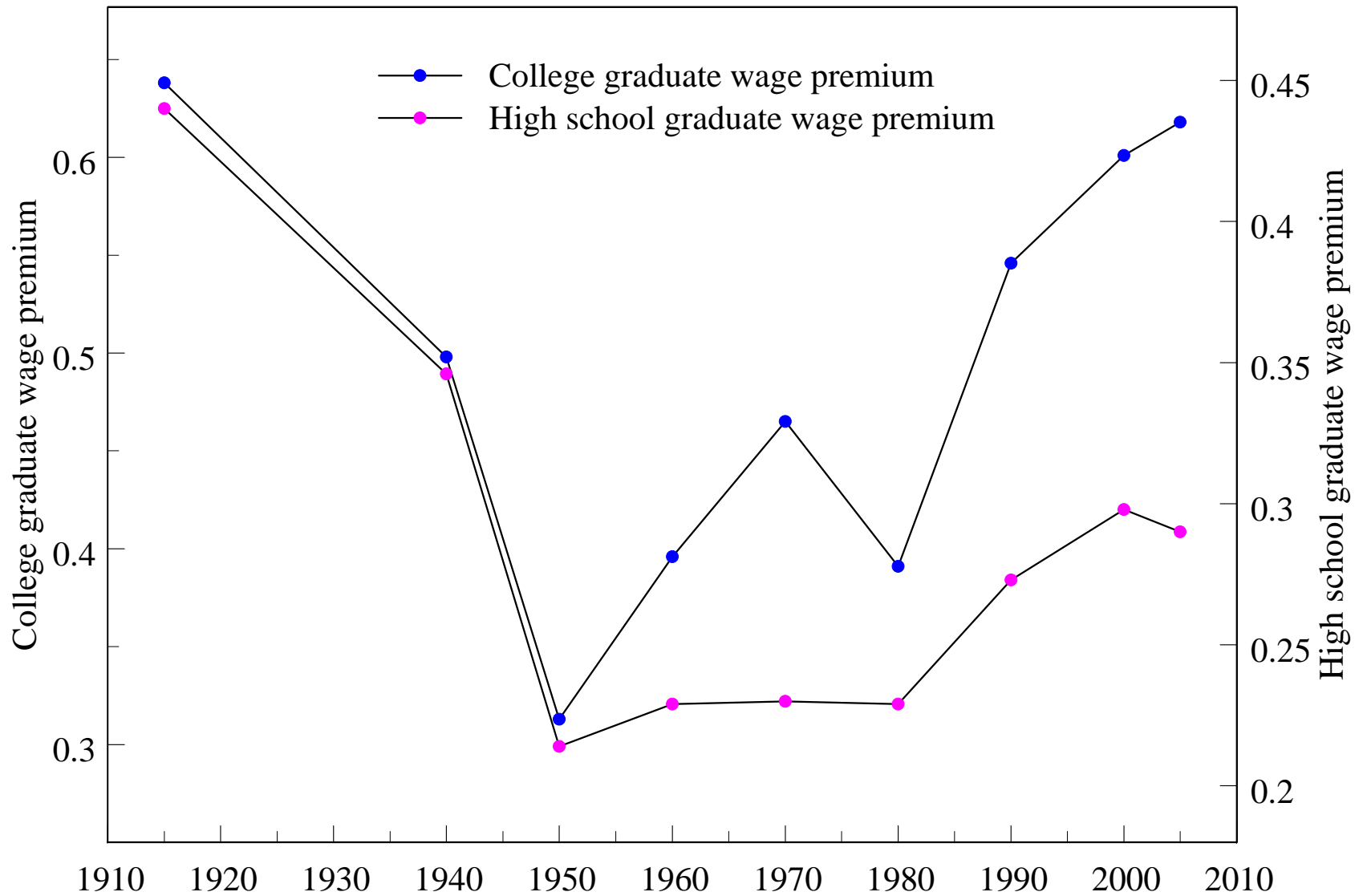
- (1) Rapid Secular Growth in Demand for Skills from Skill Biased Technological Changes
 - (2) Variation in rate of growth of supply of skills is key factor: acceleration around 1910 with high school movement and deceleration post-1980
 - (3) Rise in College Wage Premium since 1980 from Slowdown in Skill Supply Growth from Slower Growth of Education Attainment of the U.S. Born for post-1950 Birth Cohorts
 - (4) No persistent SBTC acceleration; Immigration Only Minor Role
 - (5) Change in Nature of Skill Demand Shifts: Impact of computers and offshoring on labor market is more subtle than standard monotonic SBTC view – manual vs. routine vs. abstract tasks – polarization of labor demand; growth of finance key to top end
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The Human Capital Century: Mean Years of Schooling by Birth Cohort



Goldin and Katz (2007 *BPEA*)

College and High School Wage Premiums, 1915 to 2005

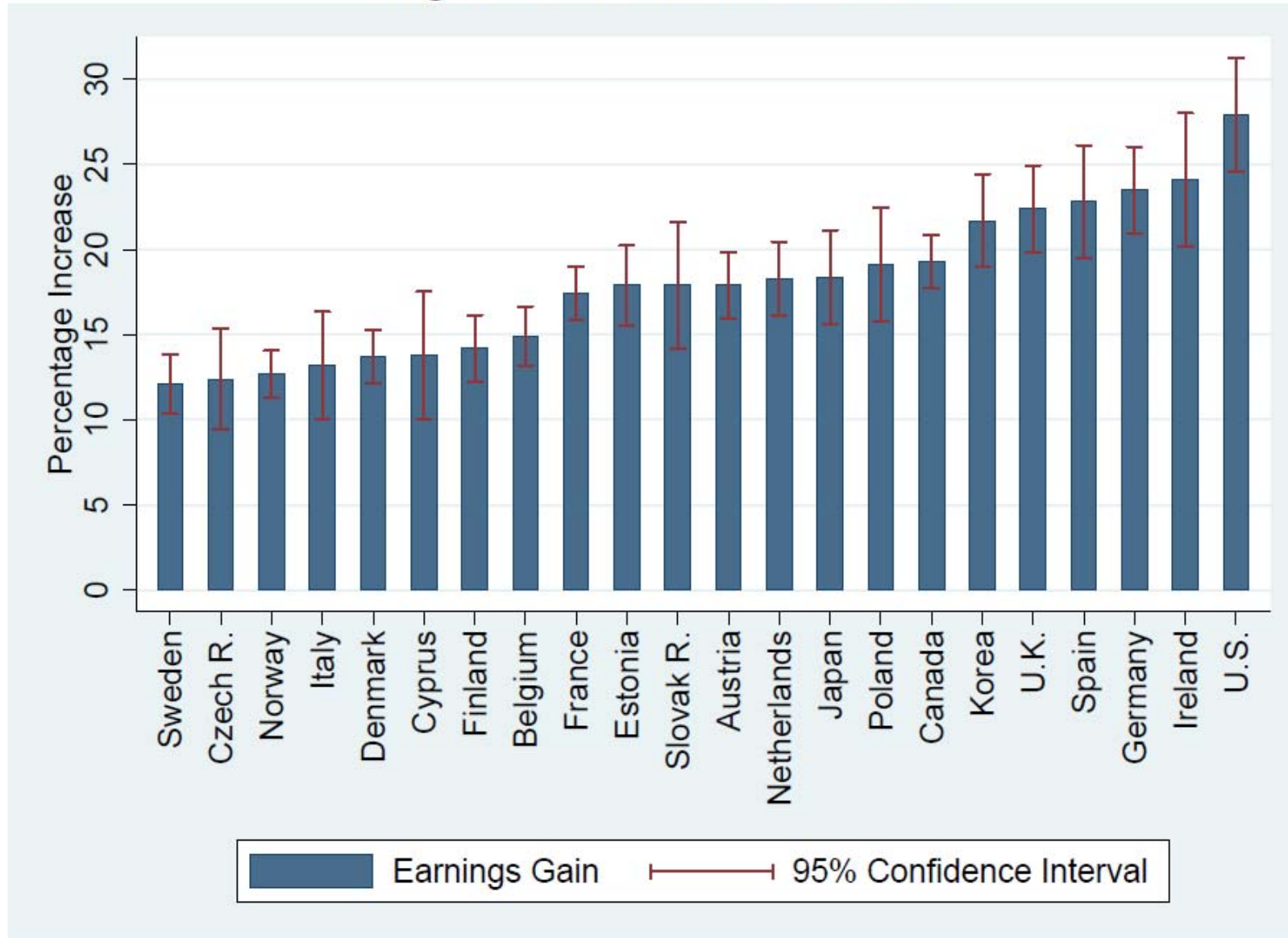


Goldin and Katz (2008 *RBET*)

The Slowdown in U.S. Educational Attainment Growth

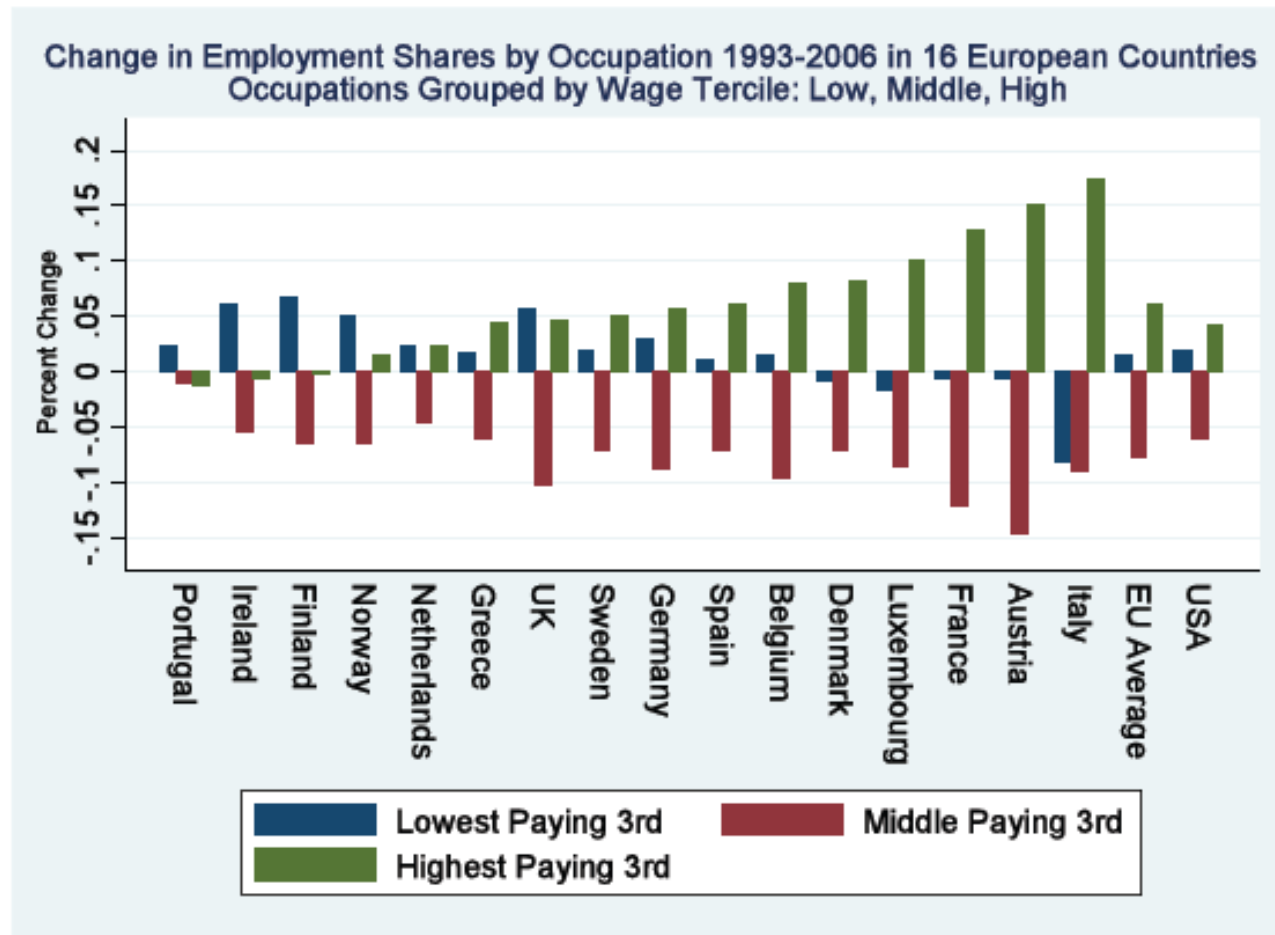
- Educational attainment increased by 6.2 year for cohorts born in 1876 to 1951 or by 0.82 years per decade
 - Educational attainment increased 0.50 years for cohorts born from 1951 to 1975 or 0.21 years per decade
 - U.S. led the world in education over most of 19th & 20th centuries: leader in common school & HS movements and initial college access – no more
 - **U.S. leads in educational attainment among 55 year olds today but no longer for those under 35 years old; 12th for 25-34 year olds in OECD**
 - U.S. now near bottom of OECD in high school graduation rates, middle of OECD in college graduation rates, tops in any college attendance
 - School quality problems in international comparisons of standardized tests
 - Huge geographic (state) variation in U.S. on international test scores: MA near top of world on TIMS & PISA
 - **U.S. young workers near bottom in OECD in adult skills, but 55+ at the top in new Program of International Assessment of Adult Competencies (PIAAC) for cognitive and workplace skills**
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Figure 3: Returns to Skills (OECD PIAAC scores)



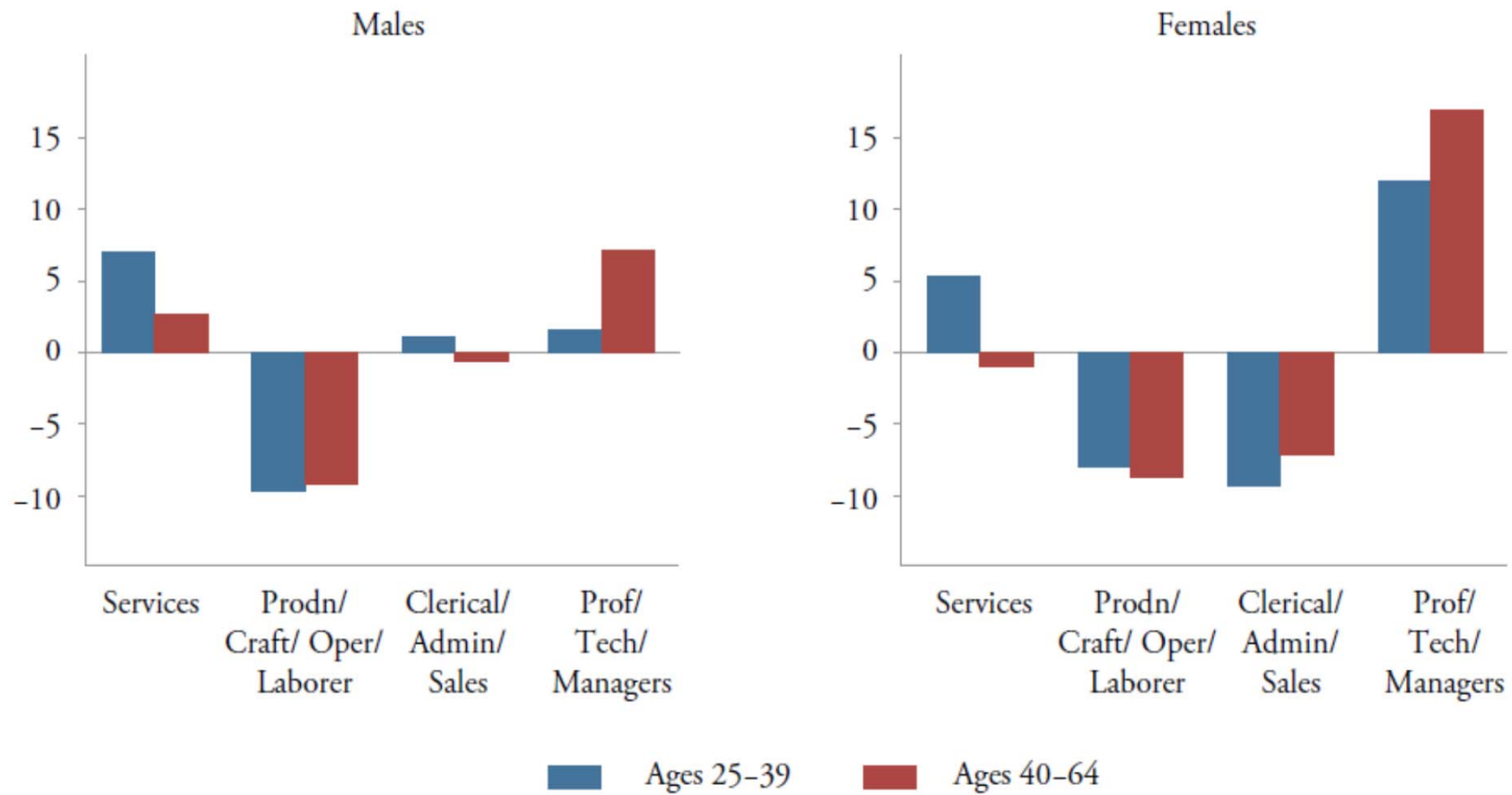
Based on Hanushek et al. (2013): Literacy, Numeracy, and Problem-Solving Skills

Employment Polarization in Europe and the U.S.



Source: Data on EU employment are from Goos, Manning and Salomons, 2009a. US data are from the May/ORG CPS files for earnings years 1993-2006. The data include all persons ages 16-64 who reported having worked last year, excluding those employed by the military and in agricultural occupations. Occupations are first converted from their respective scheme into 326 occupation groups consistent over the given time period. These occupations are then grouped into three broad categories by wage level.

**Figure 3: Percent Change in Employment Share 1980-2009
(By Age Group and Major Occupation)¹¹**



Source: Data are Census IPUMS 5 percent sample for 1980 and U.S. Census American Community Survey 2010.

Autor and Wasserman (2013)

What Computers Can and Can't Do

Levy and Murnane (2013)

Figure 1: Varieties of Computer Information Processing¹⁰

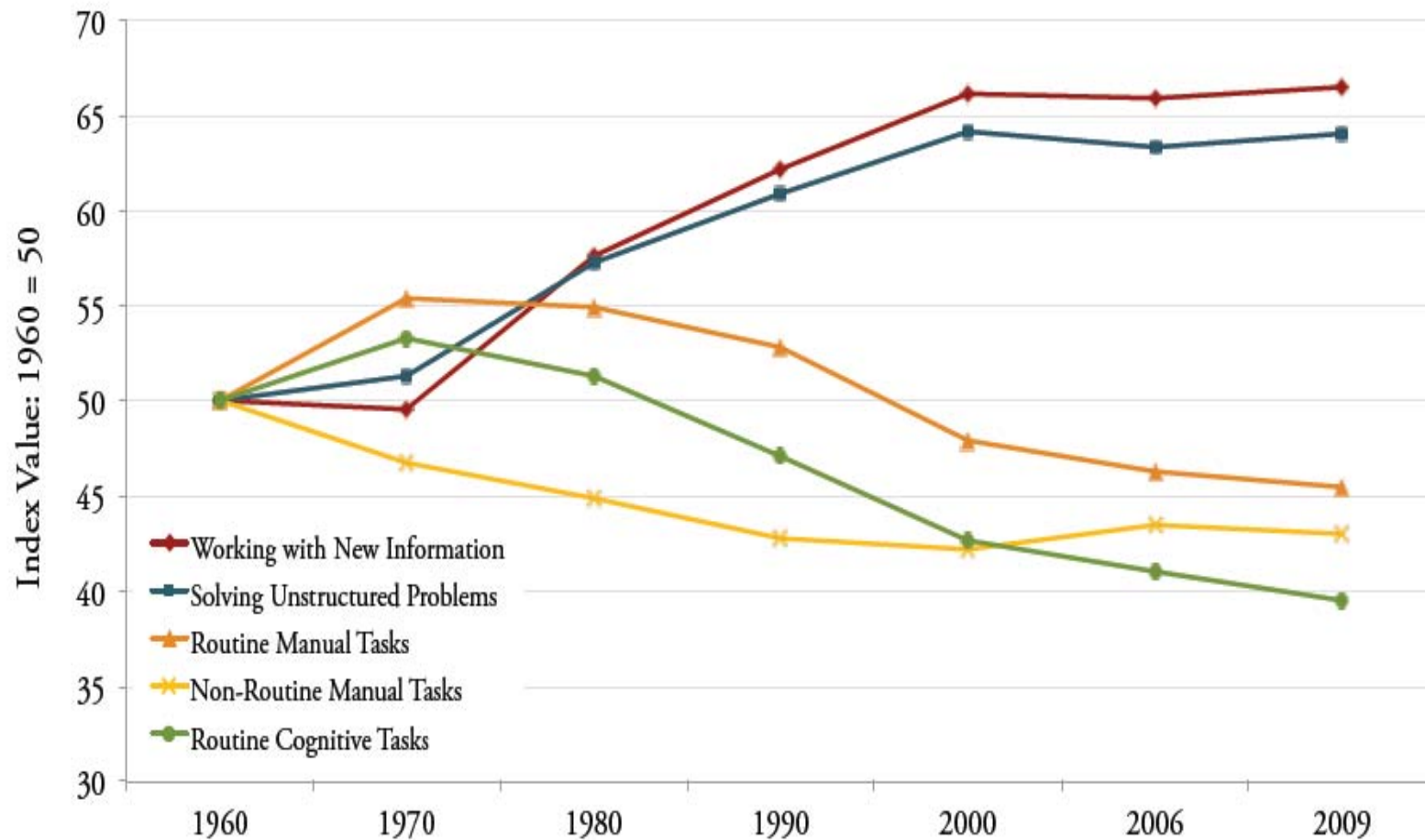
Increasingly Difficult to Program



	Rules-Based Logic	Pattern Recognition	Human Work
Variety	Computer Processing using Deductive Rules	Computer Processing using Inductive Rules	Rules cannot be Articulated and/or Necessary Information cannot be Obtained
Examples	Calculate Basic Income Taxes Issuing a Boarding Pass	Speech Recognition Predicting a Mortgage Default	Writing a Convincing Legal Brief Moving Furniture into a Third Floor Apartment

Levy and Murnane (2013) *Dancing with Robots*

Figure 3: Index of Changing Work Tasks in the U.S. Economy 1960-2009²¹

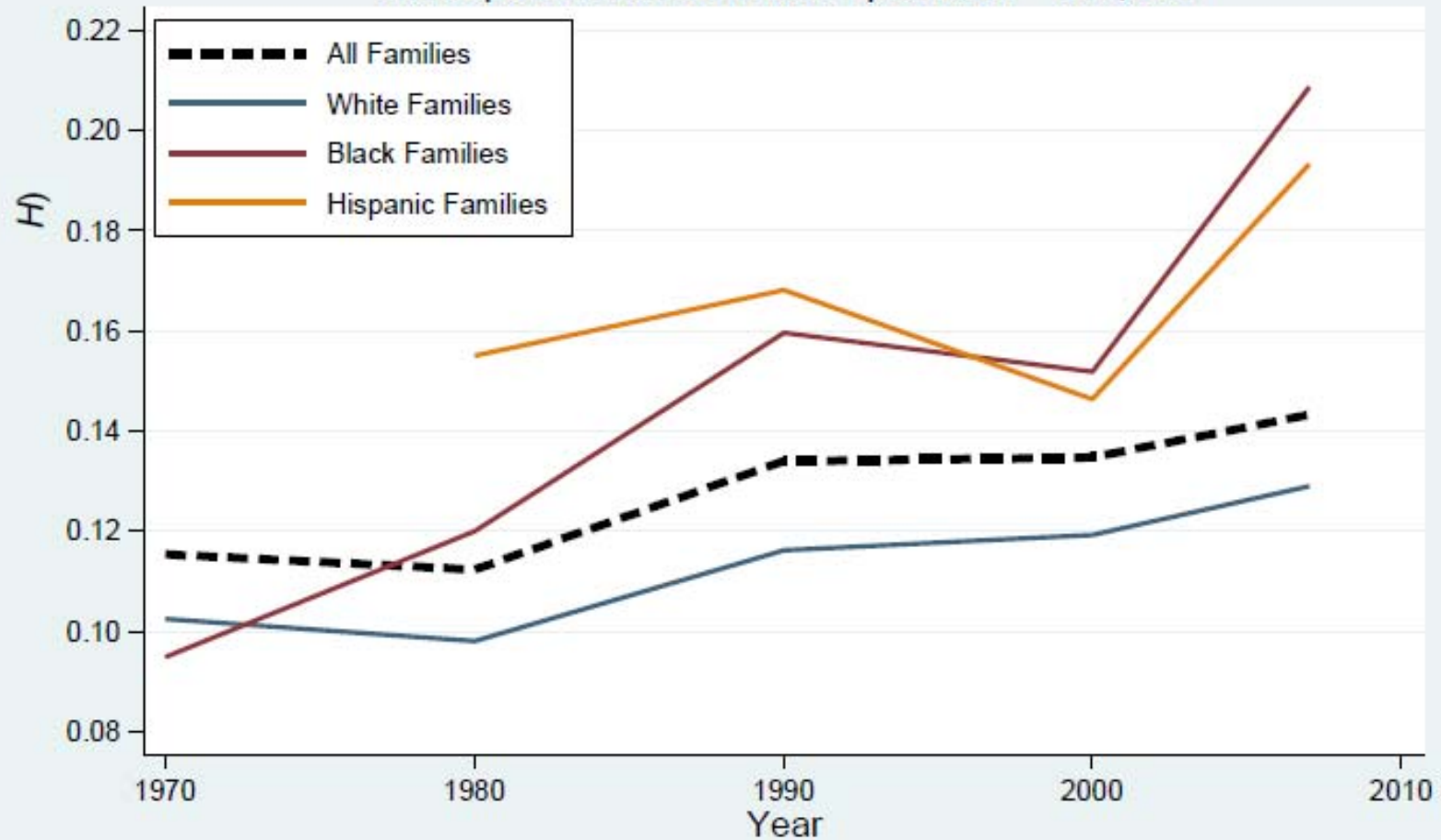


Some Comments

- This is not the first period of employment polarization from SBTC
- Mid to Late 19th century similar polarization of employment in mfg with hallowing out of middle skill (craft) occupations in favor of white collar (high skill) and operative/laborer (low skill)
- Shift from artisanal shop to factory with steam power & then electrification -- Katz-Margo (2013) & Goldin-Katz (1998)
- Rising White collar wage premium, declining artisan wage in mid to late 19th
- Shared prosperity restored with high school movement and expansion of supply of skills
- How do we win Race between education and technology today?

Reardon and Bischoff (2011)

Trends in Family Income Segregation, by Race Metropolitan Areas With Population > 500,000



Neighborhoods vs. Schools as Policy Levers

- Moving to Opportunity Housing Mobility Experiment-- large change in neighborhoods, little in schools
- High Performing Charter Schools (NYC, Boston, MA) Harlem Children's Zone, Tennessee Project STAR, Chetty et al. on teacher valued-added, Court-Ordered School Desegregation, Fryer in Houston and Denver – large change in schools not in neighborhoods
- Neighborhoods → large direct effects on health and well-being but less on education and economic self-sufficiency for adults and children
- Schools → Large impacts on educational and economic outcomes – class size (holding teacher quality constant), teacher quality, top Charter schools, small High Schools, ...
- How translate into large scale impacts? Micro to Macro

Public Policy Response Agenda I

- More Progressive Wealth & Income Taxes, Int'l Coordination
 - Complementarity of Cyclical and Structural Policies
 - Large displacement effects of structural policies (active labor market policies) in slack labor market – just musical chairs
 - Net gains in helping firms expand employment faster and improve operations in tight labor market
 - Key evidence Crépon et al. (*QJE* 2013) – Clustered RCT across 250 French labor markets
 - More Expansionary Fiscal Policies and Don't Ease off Yet on Monetary Policy – need tighter labor markets
 - Infrastructure, R&D, and Science
 - Early childhood education – quality and quantity
 - Teachers, High Dosage Tutoring, STW, Community Colleges
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Public Policy Response Agenda II

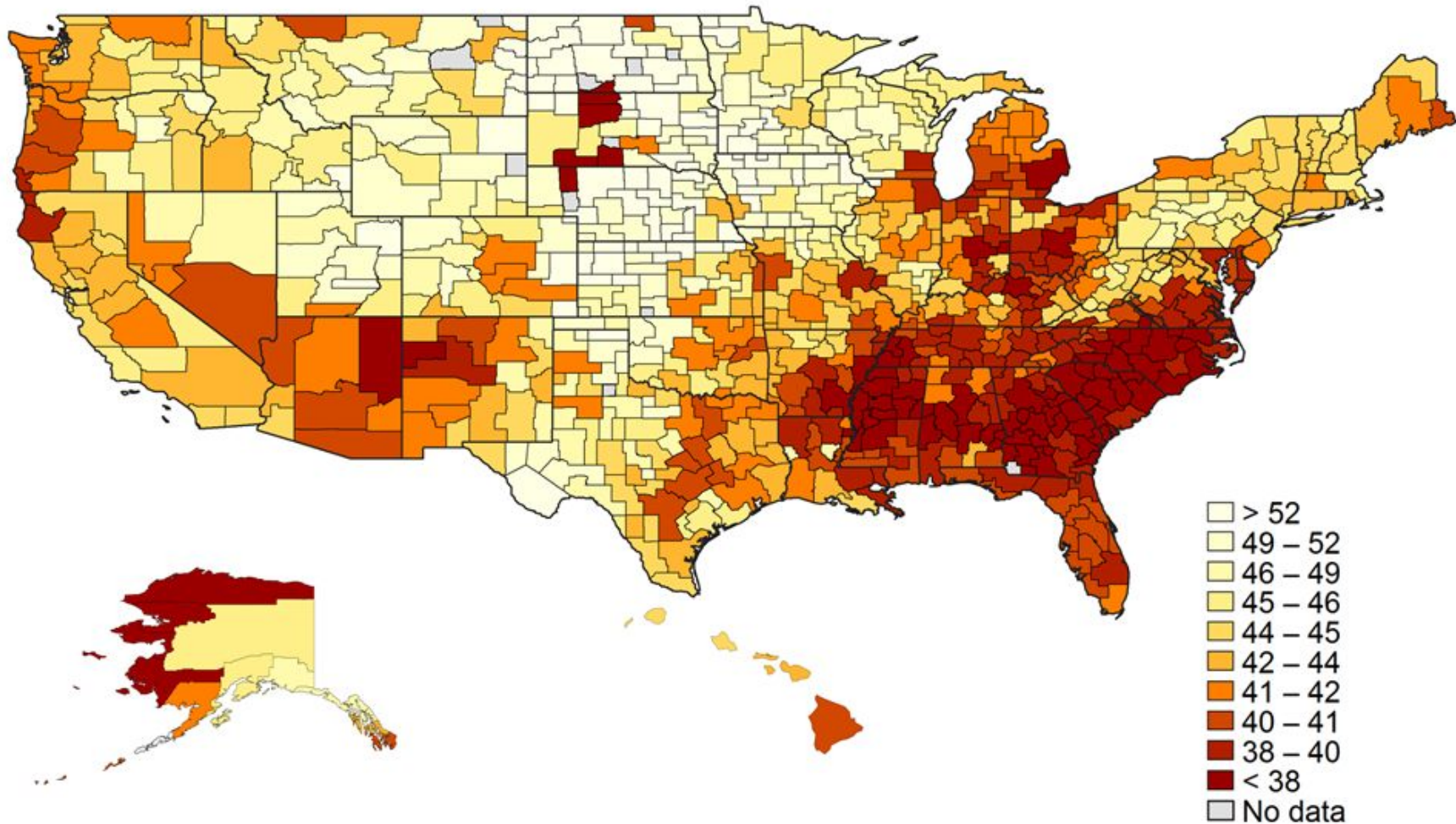
- Making Work Pay for Today's Adults
 - EITC Expansion to Childless, Increased Generosity
 - Secondary workers tax credit
 - Phelpsian Employer-side wage subsidies
 - Minimum wage increase
 - Blocking the low-road & incentivizing the high-road: WBPP
 - Improving Employment and Training System
 - Improving Schools – Pre-K to College
 - For-Profit Higher Education: Nimble Critters or Agile Predators? A cautionary tail
 - Funding Experimentation -- Pay for Success, SIB, RCTs – Liebman's Challenge
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U.S. Geographic Variation as Source of Hope

- Large U.S. geographic variation in upward intergenerational social mobility – Chetty et al. (2014) IRS data – Boston, SF and Iowa vs. Atlanta, South Carolina
 - Large U.S. geographic variation in school quality (NAEP, educational attainment, PISA) positively related to mobility
 - Looks like map of 1920s high school movement, Putnam social capital, & racial divide/black share (but shows up for whites)
 - Parts of U.S. have economic and social mobility and school performance similar to Canada and almost like Scandinavian countries despite high returns to skills and inequality
 - MA schools improvement: MA PISA Scores = Canada, Finland
 - NYC small high schools; early childhood interventions
 - Job training and employment systems
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Chetty, Hendren, Kline and Saez (2014)

Absolute Upward Mobility Across Areas in the U.S. Mean Child Rank for Parent at 25th National Quantile (Y_{25})



Note: Lighter Color = More Absolute Upward Mobility

Promising Directions for Assisting the Disadvantaged I

- **Sectoral Employment Programs** with employer involvement, training and life skills component, job development and placement, and retention/follow-up services
 - Training to match employer needs- Per Scholas, JVS, Project Quest
 - PP/V evaluation of large 2 year earnings impacts
 - MDRC is testing this mode in **Work Advance** demonstration
 - Programs with Evidence of Long-Run Benefits
 - **MDRC Career Academies**
 - **MDRC Jobs-Plus** for Public Housing Residents vs. MTO and issues of increasing residential economic segregation
 - Job Corps
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Promising Directions for Assisting the Disadvantaged II

- Some evidence that Intensive Training with broad supports is more effective than work-first programs alone – Human Capital investments matter
 - Autor-Houseman (AEJ: Applied 2010)
 - MDRC welfare-to-work research
 - Prisoner re-entry into labor market: MDRC Transitional Jobs Demonstrations, CBT, and BAM
 - Direct Job Creation for Youth and Disadvantaged as in YIEPP
 - Improve Job Training Choice Infrastructure – market for helping individuals choose with random assignment to intermediaries and pay for (long-run) success
 - MDRC Work Advancement and Support Centers
 - Mathematica ITA Guided vs. Structured Choices
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