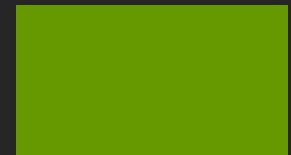
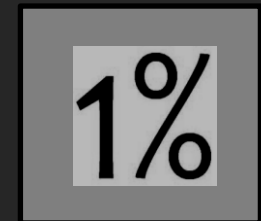
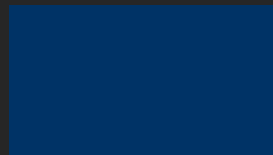
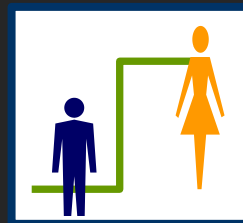
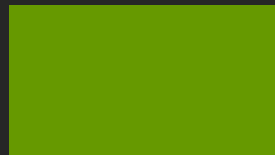
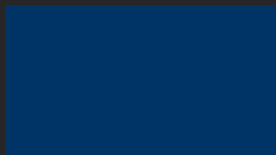
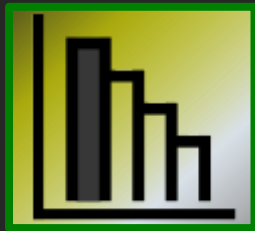


FRBSF Joint Board of Directors Meeting
Economic Research Seminar Session
April 11, 2012

U.S. Income Inequality in Perspective





Rising U.S. Wage Inequality: Whither the Middle Class?

**Prepared for FRBSF Seminar
U.S. Income Inequality in Perspective
April 11, 2012**

**Rob Valletta
Research Advisor
Federal Reserve Bank of San Francisco**

Thanks to Jeremy Gerst and Timothy Ni for research assistance, plus Mary Daly and FRBSF staff in Community Development, Economic Research, and the Research Library for advice.

Rising wage inequality

- Not just a 1% vs. 99% issue
- Wage distribution pulled apart
 - Growing gaps between high, middle, and low-wage workers
- Ongoing trend:
Middle-class squeeze

Outline of talk

- Some basic inequality facts and definitions
 - Why do we care?
- Rising wage inequality: Patterns
- Rising wage inequality: Sources
 - Technology vs. other factors

Wide disparities in income & wages

Income and Earnings Levels, 2010 (households and individuals, annual)

	<u>HH Income</u>	<u>Earnings</u>
10th Percentile (P10)	11,904	16,500
Median (P50)	49,445	33,333
90th Percentile (P90)	138,923	76,923
95th Percentile (P95)	180,810	100,000
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P90/P10 ratio	11.7	4.7

Sources: U.S. Census Bureau for pre-tax/transfer HH income, FRBSF calculations from BLS monthly household survey (CPS) for hourly wages (all employees age 18-64).

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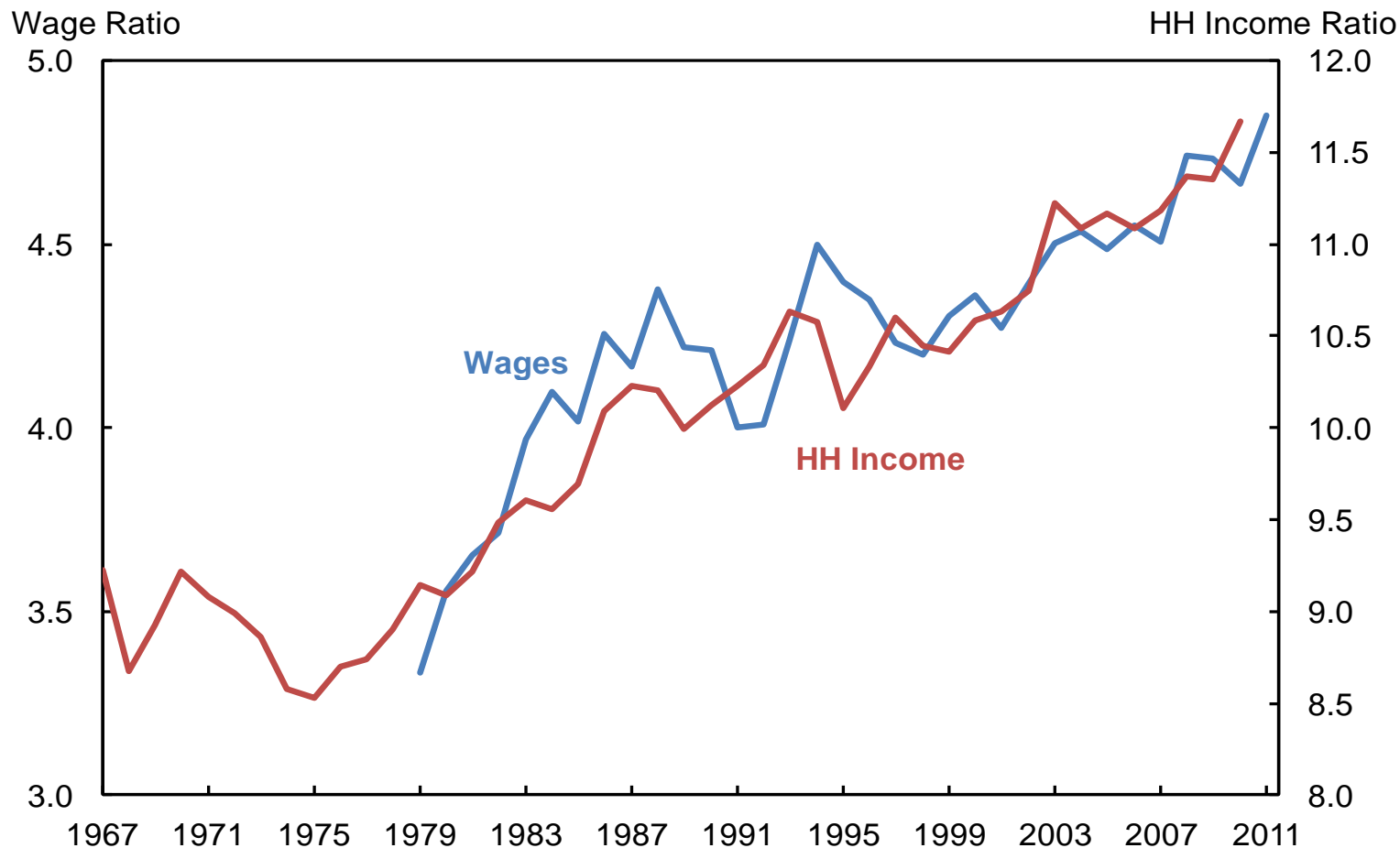
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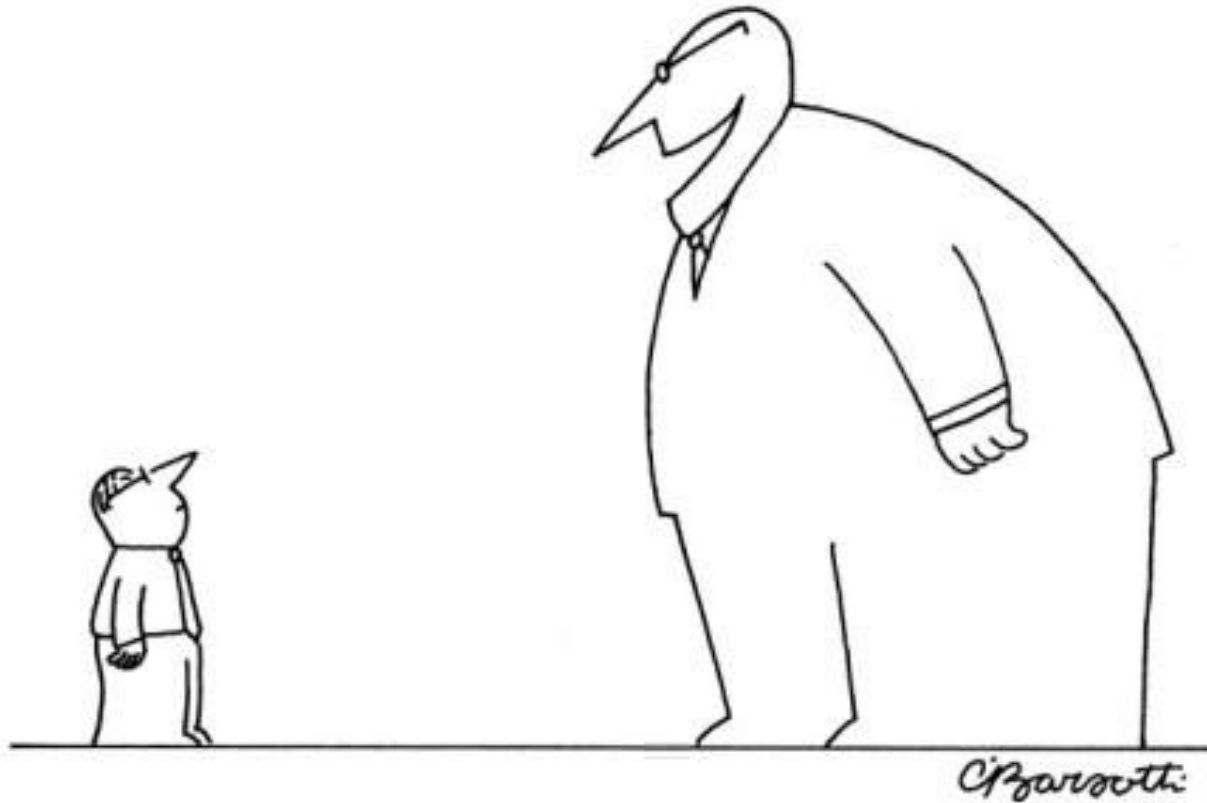
Household income inequality tracks wage inequality

Inequality in Wages and Household Income

(P90/P10 ratio)



Why do we care?



"Don't be silly—mathematically, there will always be a middle class."

Source: *The New Yorker* magazine, December 20, 2010

Why do we care?



- Social justice
 - Social cohesion, economic incentives
- Market vs. non-market influences
- Not everyone benefits from economic growth

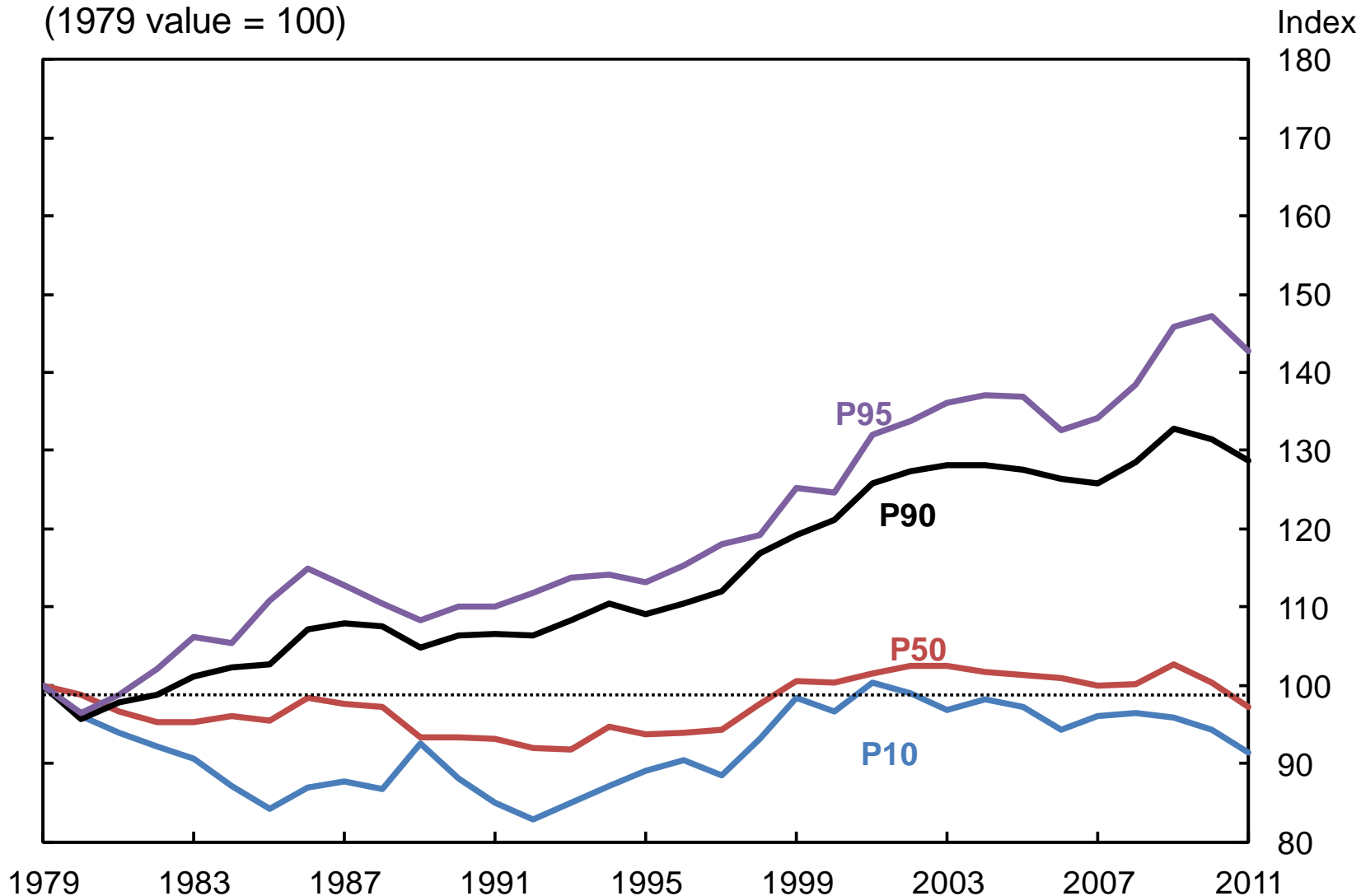
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Men's wages stagnant, median & below

Real Wages, Men

(1979 value = 100)

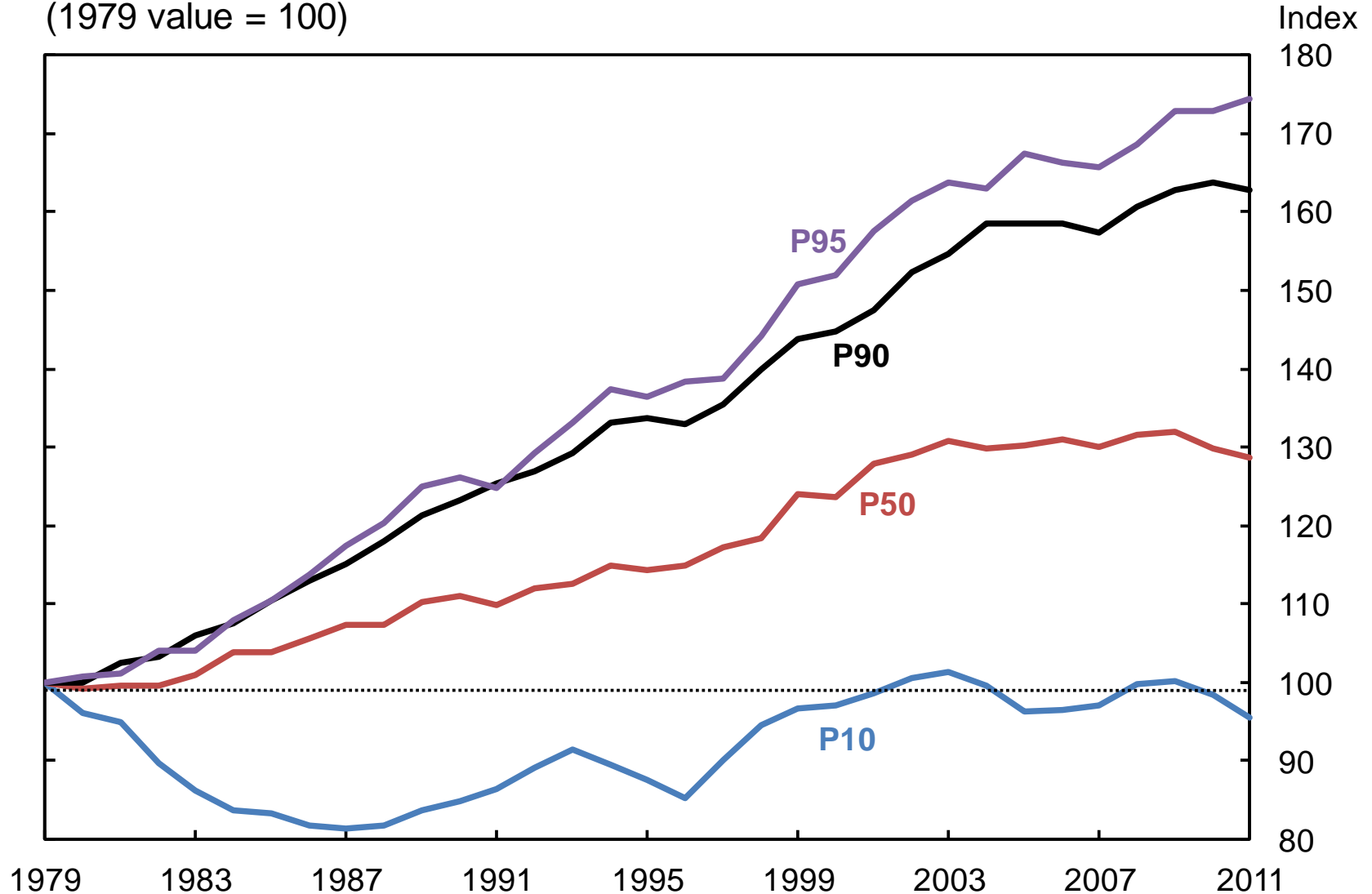


Note: Inflation adjusted using the BLS CPI-U-RS series.

Women doing better, except lowest

Real Wages, Women

(1979 value = 100)

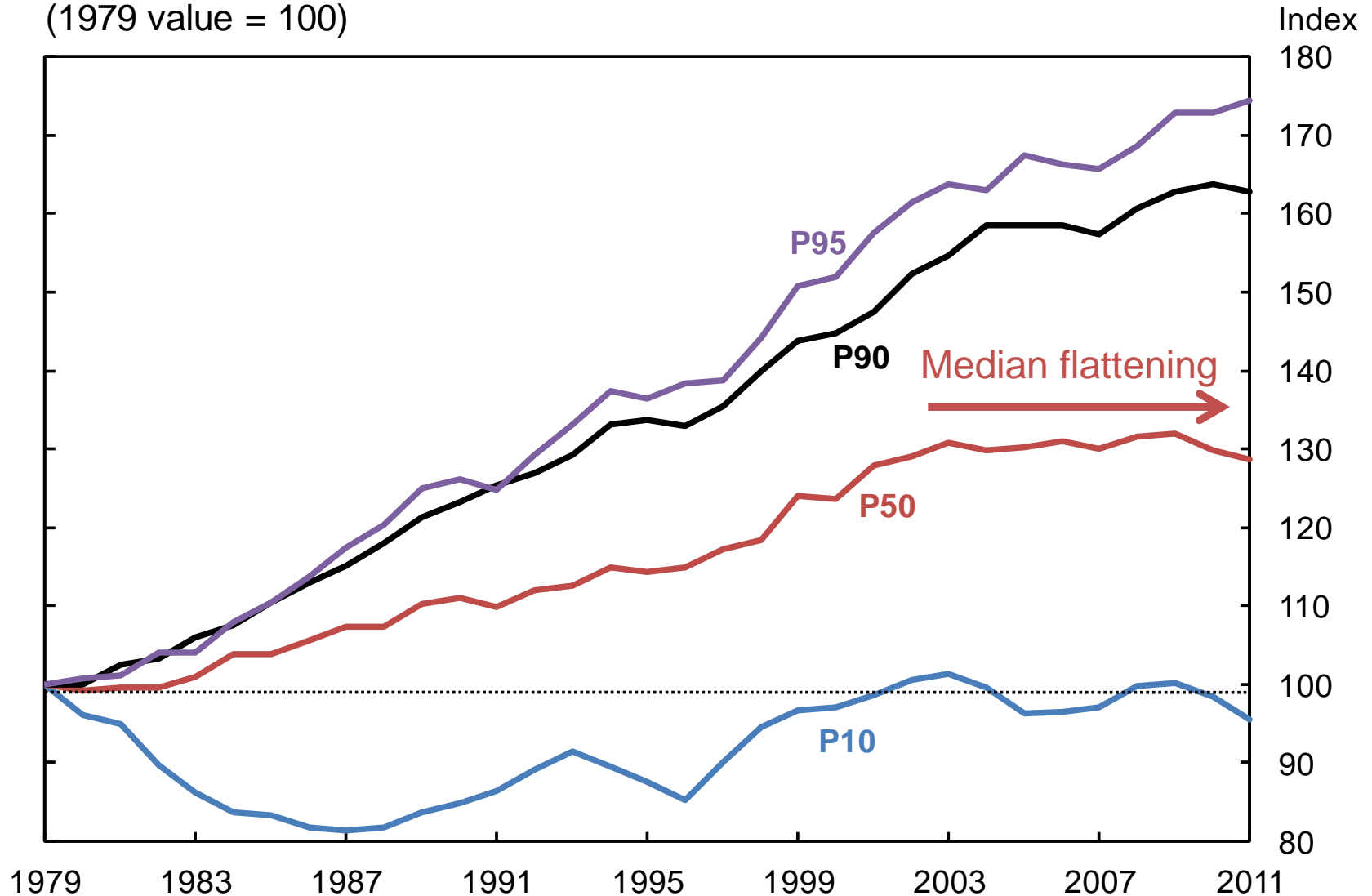


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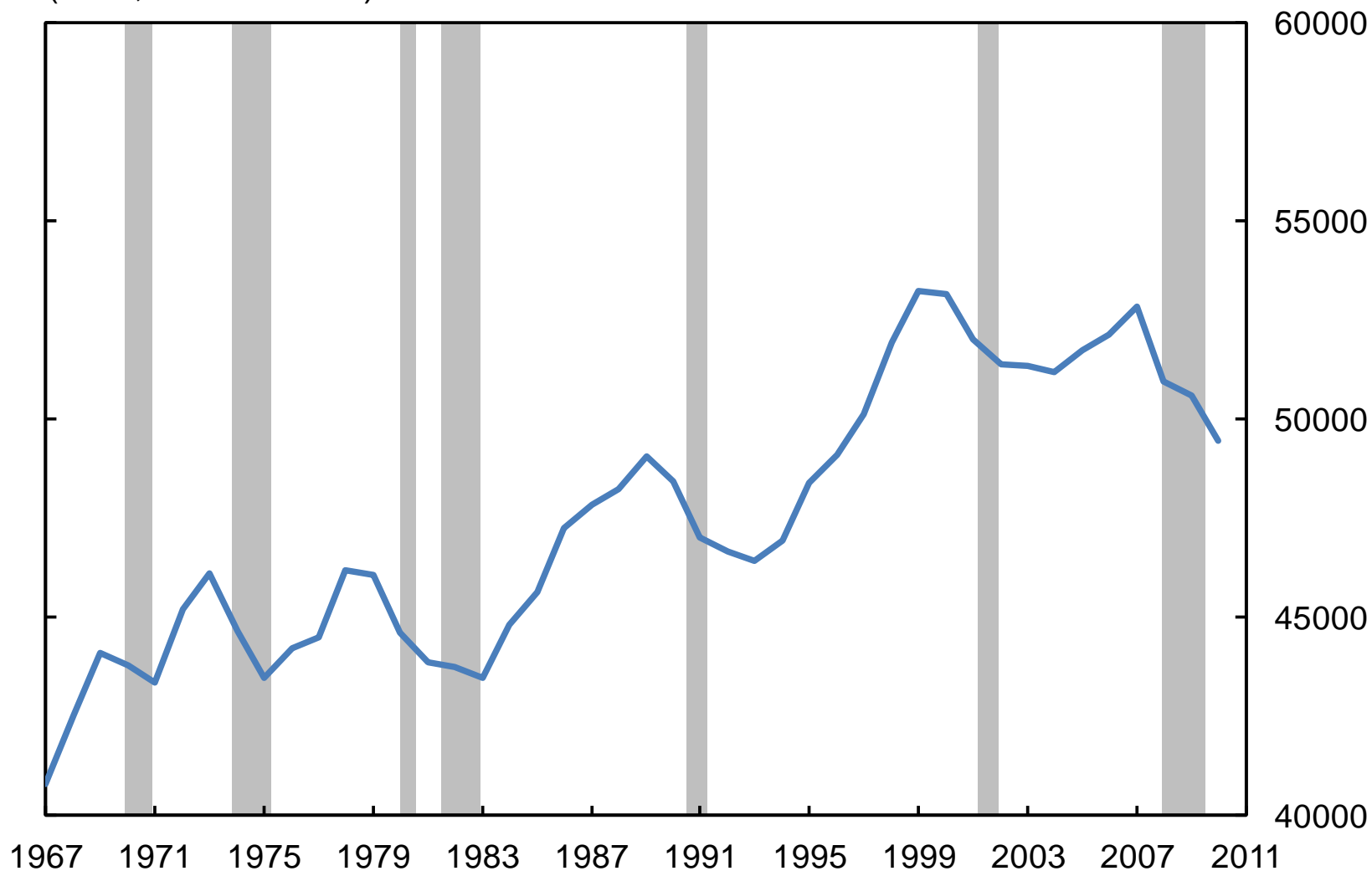


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Gains in median HH income eroded

Median Household Income

(Real, 2010 Dollars)

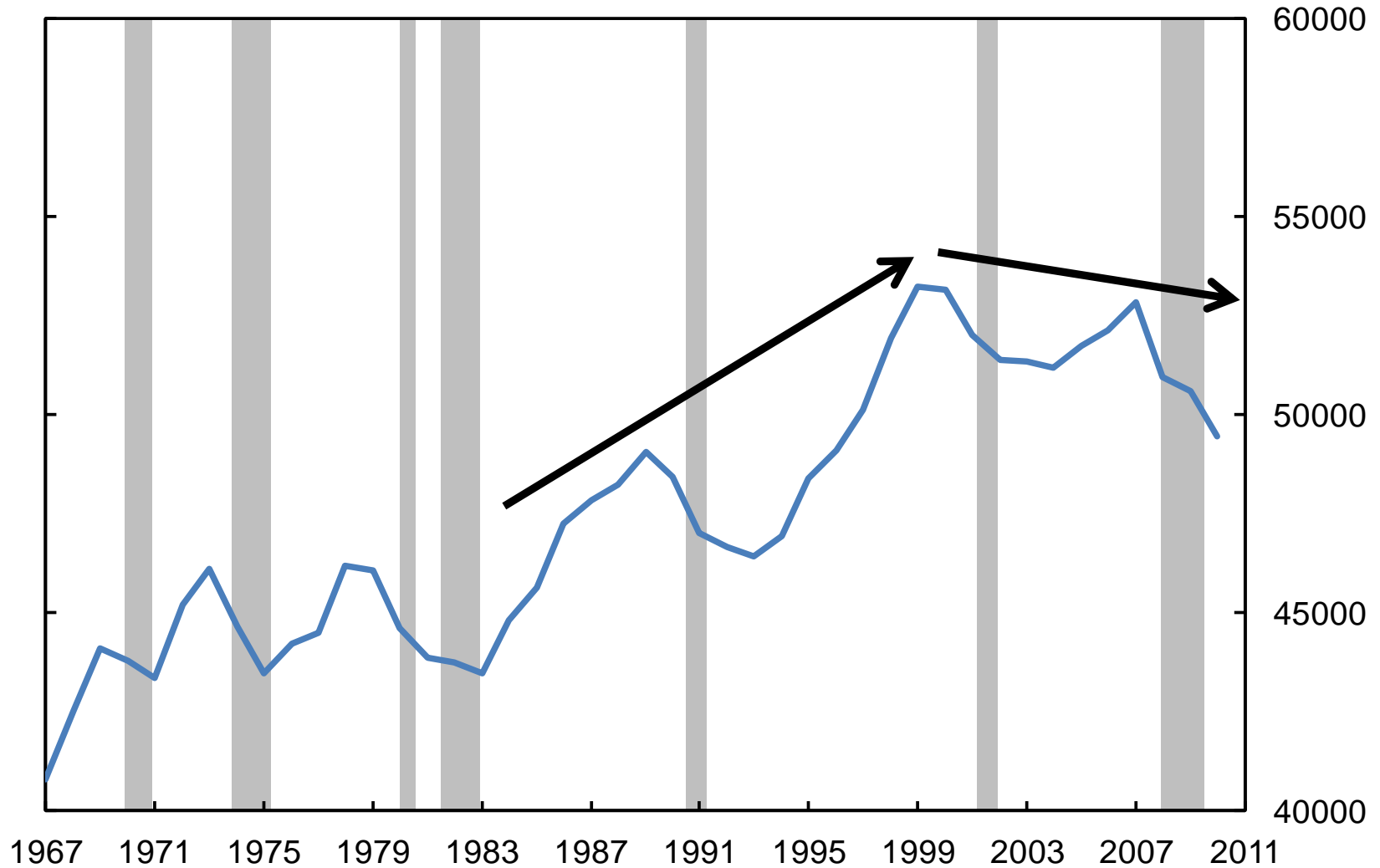


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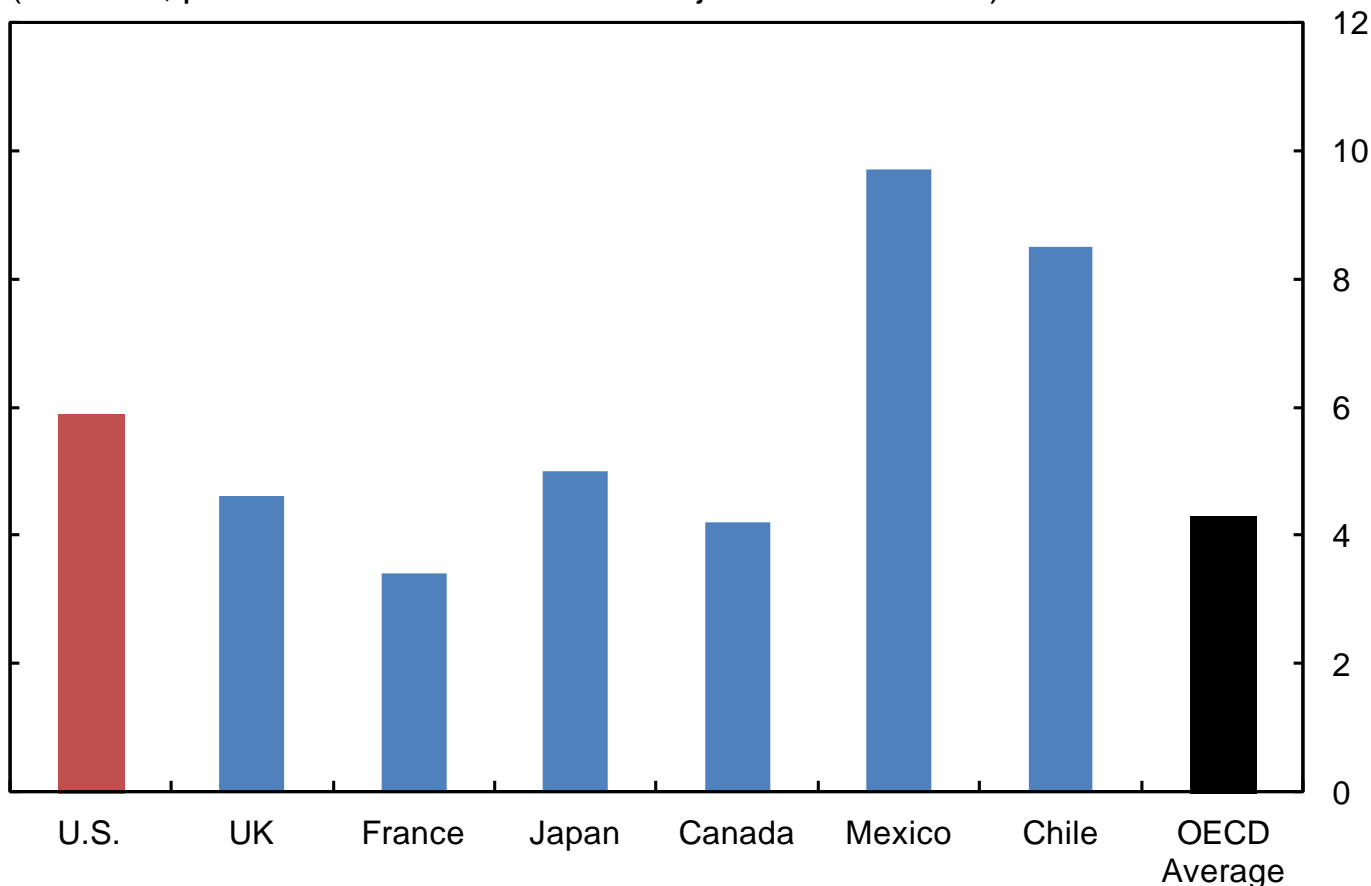


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U.S. inequality high vs. other countries

Inequality in OECD Countries

(P90/P10, post-tax/transfer HH income adjusted for HH size)



Source: OECD; figures refer to year 2008 for most countries (range is 2006-2009)

And generally rising faster in U.S. than elsewhere (since mid-1980s)

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Explanations for middle-class squeeze

- Technological change
 - Skill biased, or “SBTC”
- Globalization
 - Trade/outsourcing, decline of manufacturing jobs
- Institutions and norms
 - Unions (collective bargaining)
 - Pay practices (bonus and incentive pay)

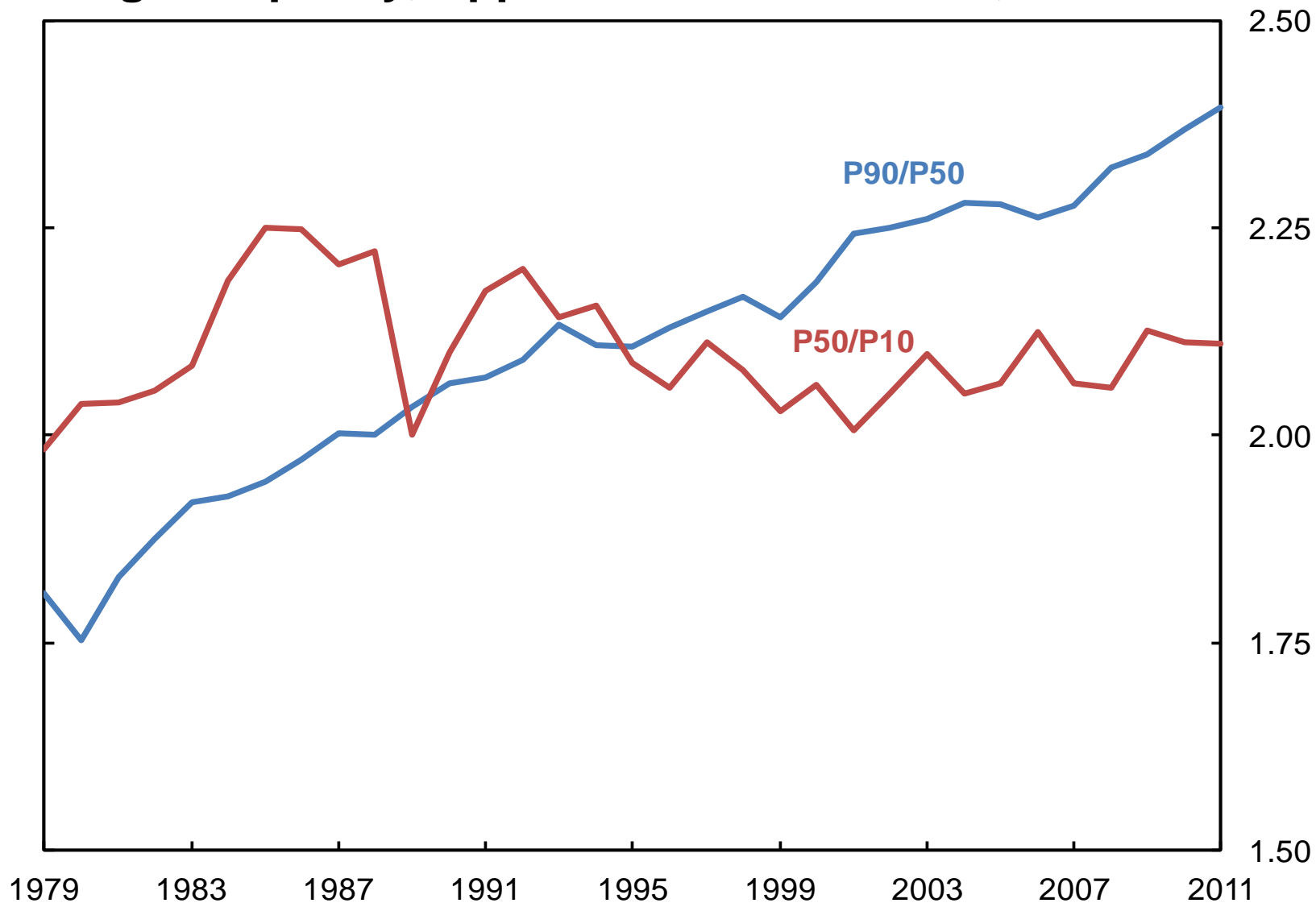
SBTC and “polarization”

- **“Polarization” hypothesis** (David Autor of MIT and others):

New computer-related technologies replace moderately skilled workers (e.g., clerical) but have little effect on lesser skilled workers (e.g., janitors).

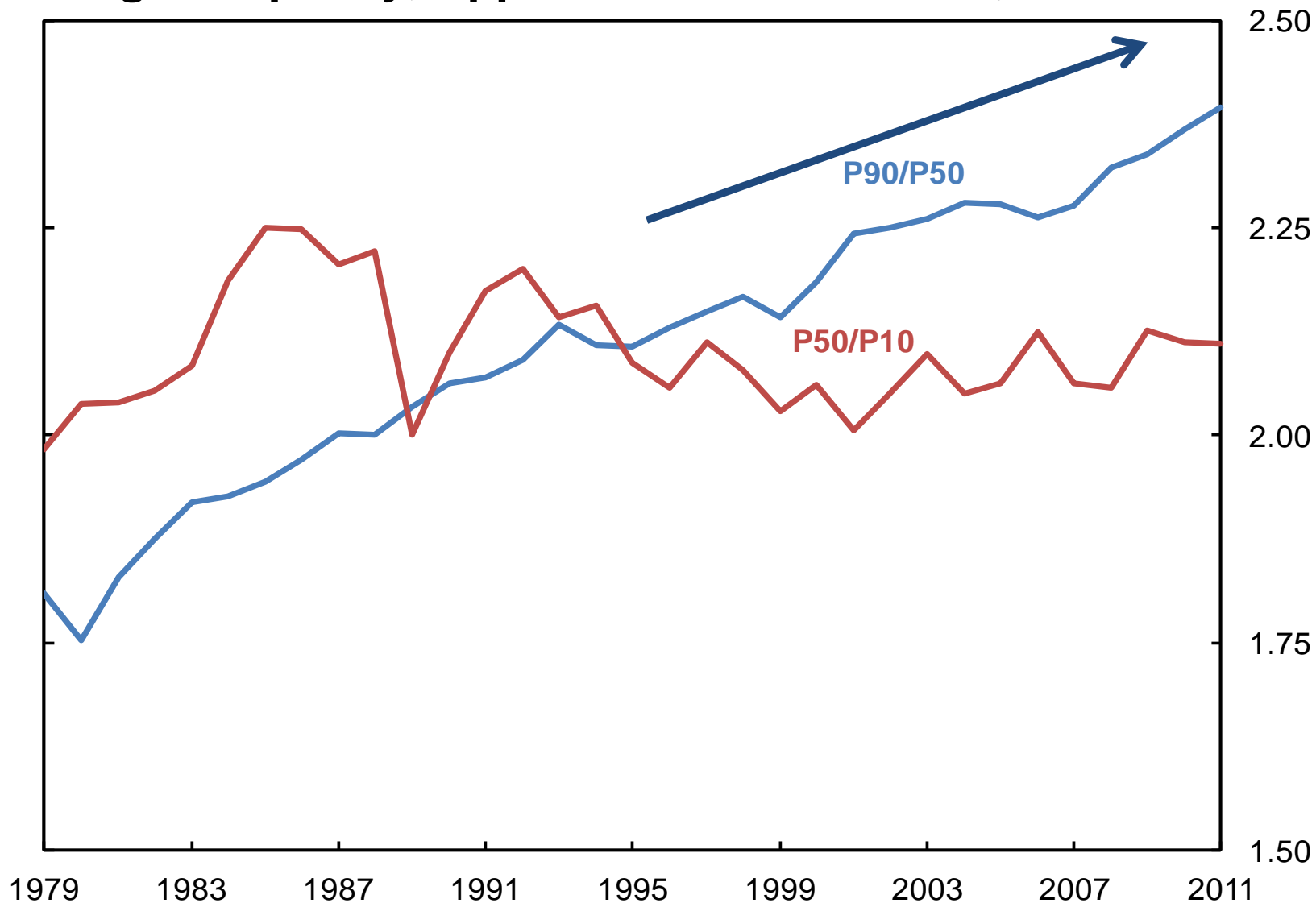
Polarization: top-half inequality up

Wage Inequality, Upper and Lower Halves, Men



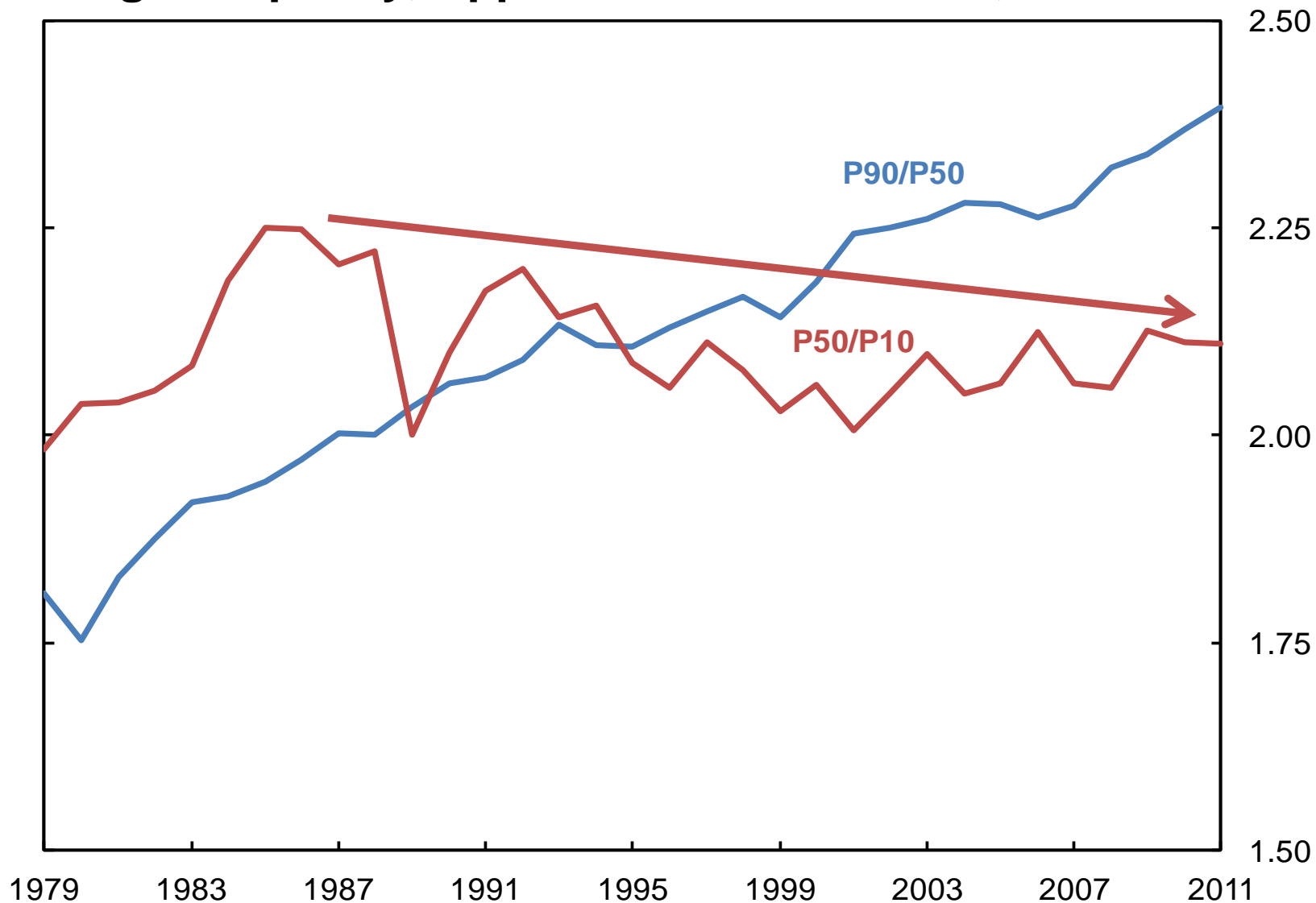
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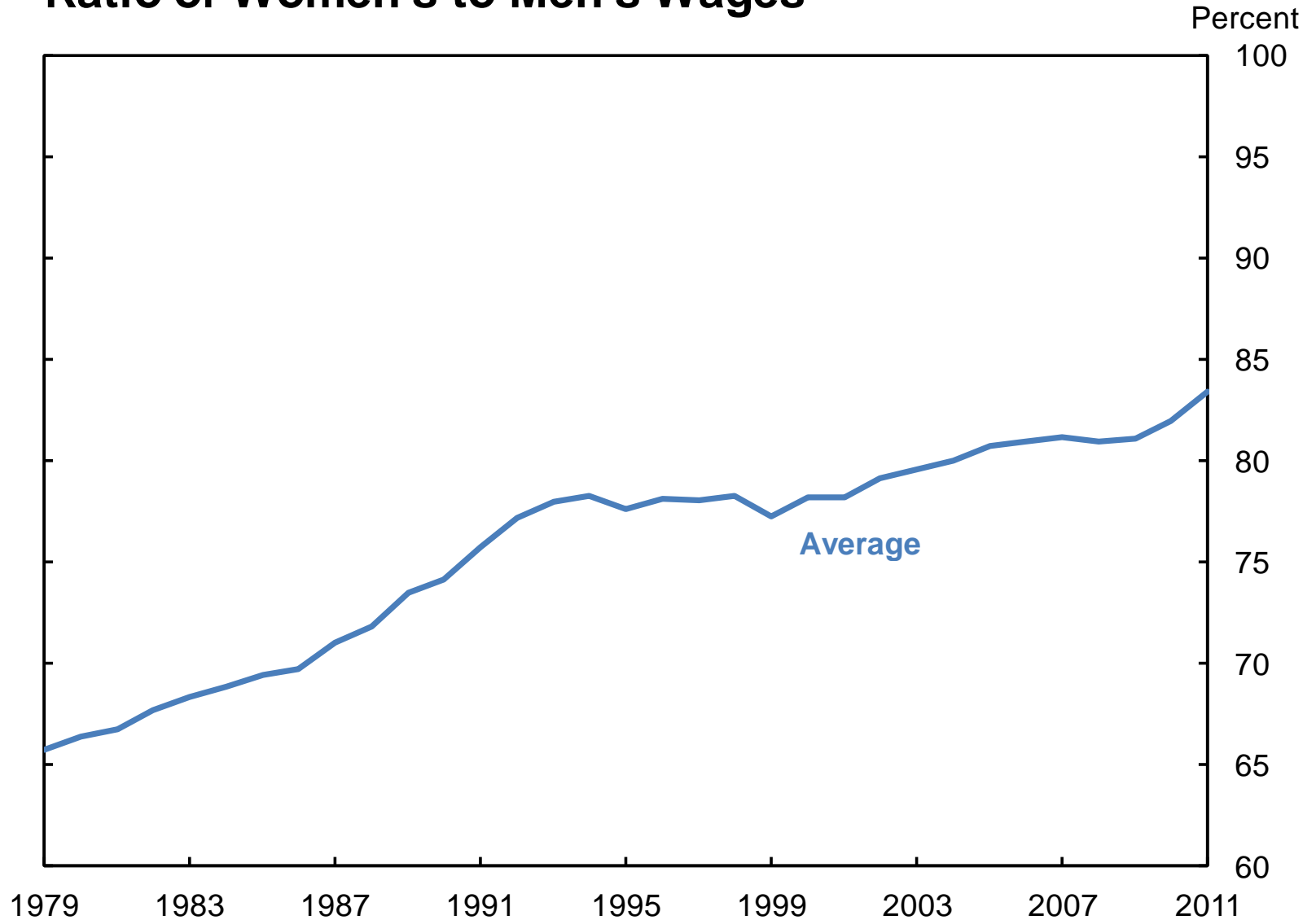
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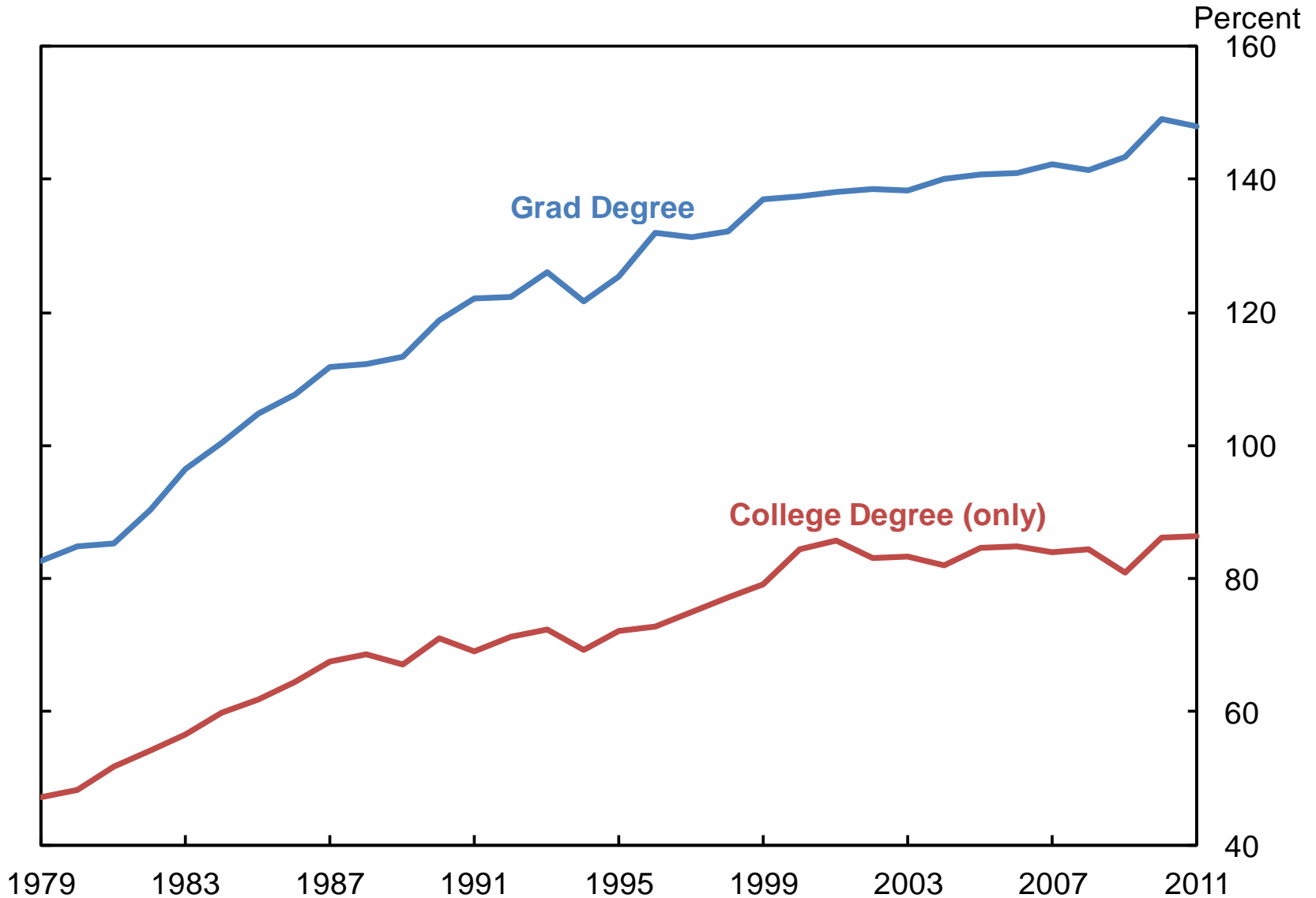
Women hurt less by SBTC

Ratio of Women's to Men's Wages



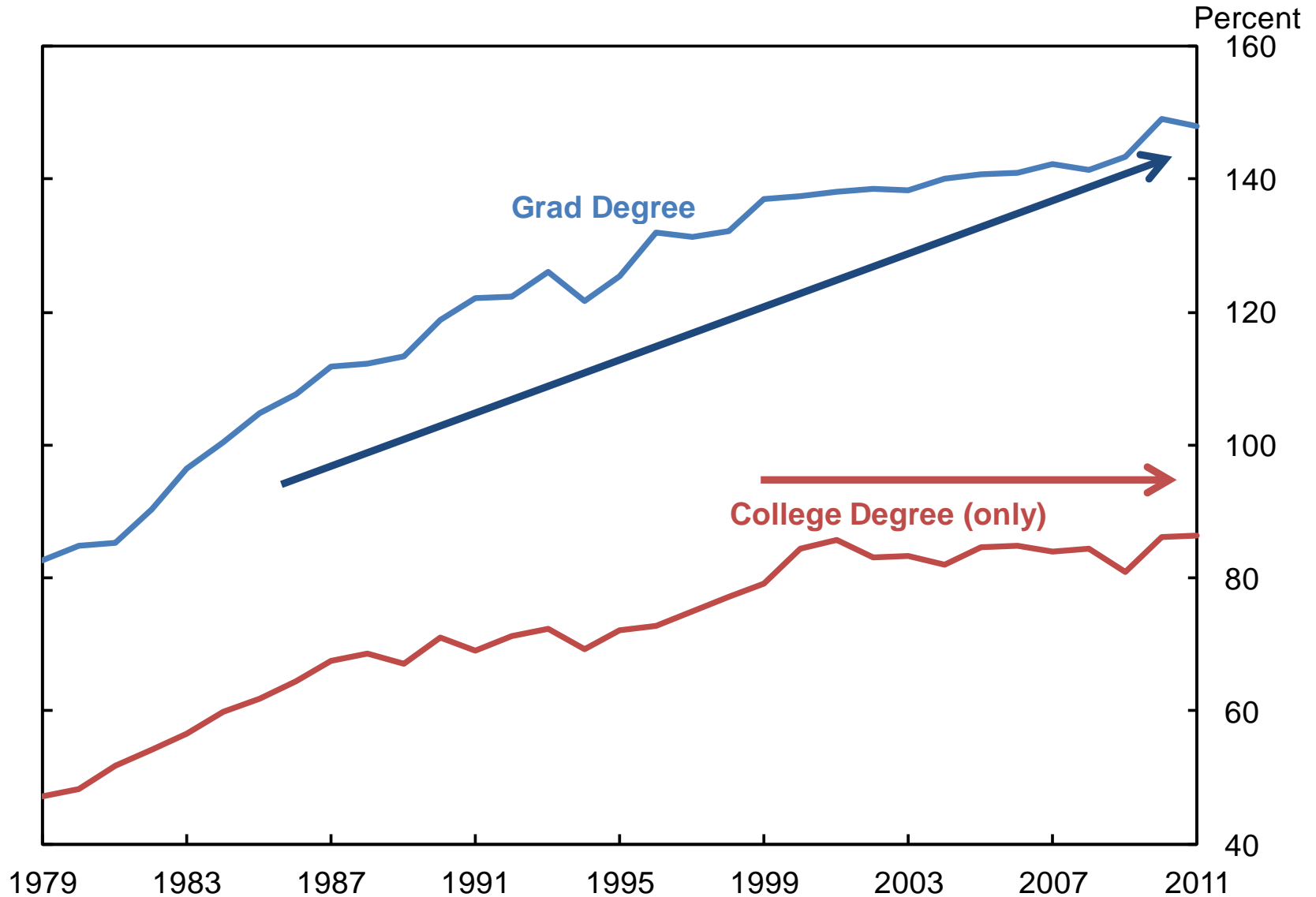
College is no longer enough

Grad School and College Wage Gaps (versus High School)



College is no longer enough

Grad School and College Wage Gaps (versus High School)

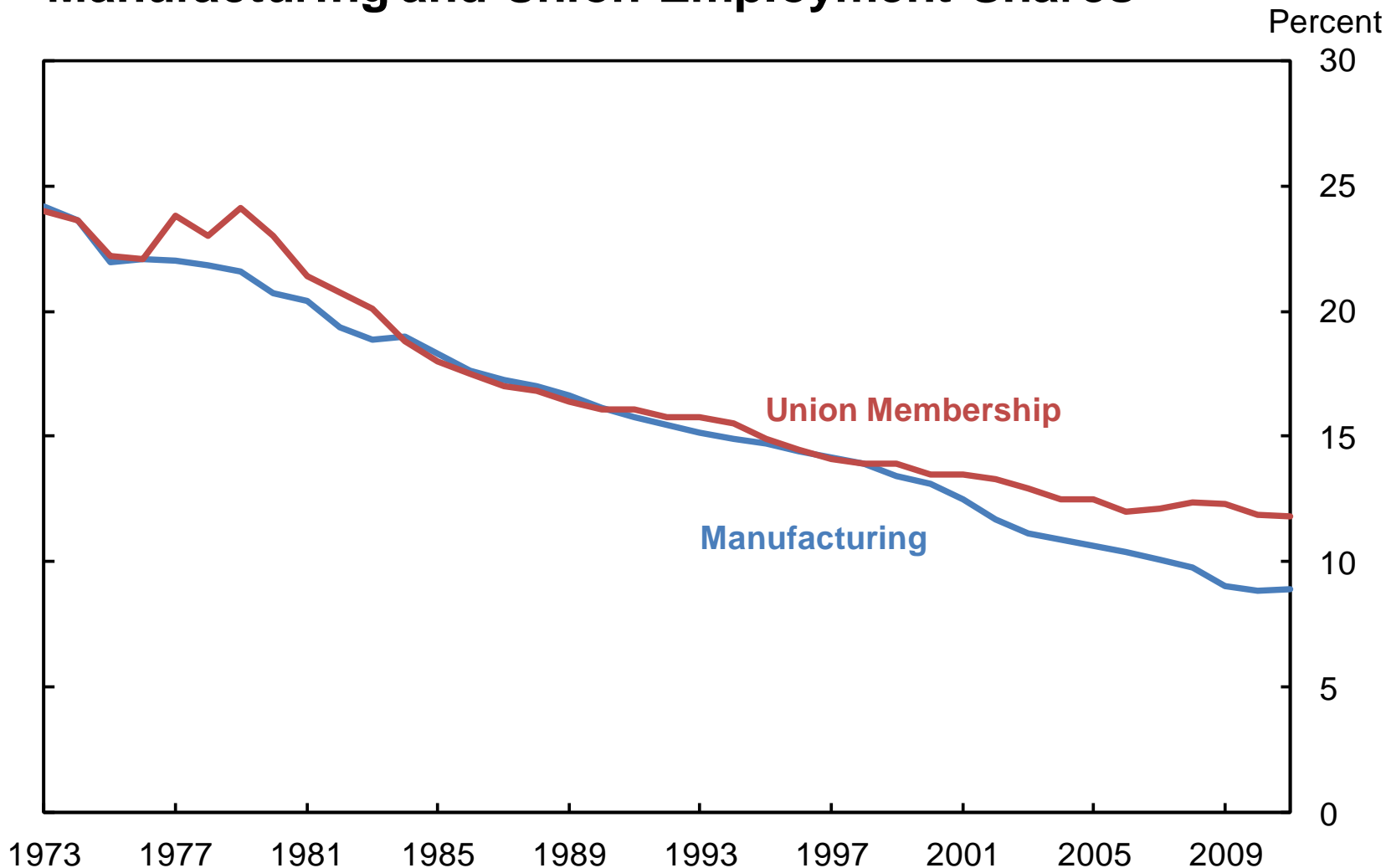


Related to SBTC: globalization, manufacturing, unions

- Trade impacts: debate continues
 - Direct trade impacts limited
 - But outsourcing reflects SBTC, undercuts demand/wages for mid-level skills
- Decline of traditional middle-class jobs

Manufacturing and union decline

Manufacturing and Union Employment Shares



Source: Unionstats.com (Hirsch & Macpherson; share of all wage and salary workers who are union members) and BLS (manufacturing share of total nonfarm employment).

Changing pay practices (related to SBTC?)

- Recent research finds that rising reliance on bonuses and other incentive pay is important for the top-half inequality increase
- Tournament-style competition for jobs (winner take all)

Summary

- Middle-class workers squeezed due to changing technology and leveling of global economic landscape
 - Can't all have MBA/JD/PhD
 - Globalization forces easing? (e.g., China is getting more expensive)
- Institutional and cultural factors have reinforced rather than offset market factors (negative attitudes towards unions, rising costs of higher education, bonus pay)

