Unresolved Issues in the Rise of American Inequality

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This Paper is About the Rise in American Inequality Since 1970

- Lots has been written about facts, measurement, interpretations about the bottom (<90%) and the top (>90% up to 99.99%)
- In part this is a sequel to our 2005 BPEA paper, where we were the first to
  - Link NIPA and IRS data
  - Unravel the puzzles of stable labor's share, rising mean wage income, and stagnant *median wage income.*

Our Headline Result in 2005

- *Over the period 1966-2001 only the top 10 percent of the income distribution had real compensation growth equal to or above the rate of economy-wide productivity growth*

- This new paper
  - Briefly reviews two measurement issues that led to criticism
  - Goes deeper into the substance of why inequality widened

# First Let's Look at Labor's Share

- **Two Concepts**
  - Straightforward share of NIPA employee compensation in net domestic factor income
  - Add in labor's part of business proprietors' income
- **What to notice**
  - Up-down cycle 1997-2006 repeats 1987-97
  - Share was higher in 70s
  - Comprehensive concept no change since 50's

What has Happened to Labor's Share?

Compensation with labor component of Proprietor's income

Compensation
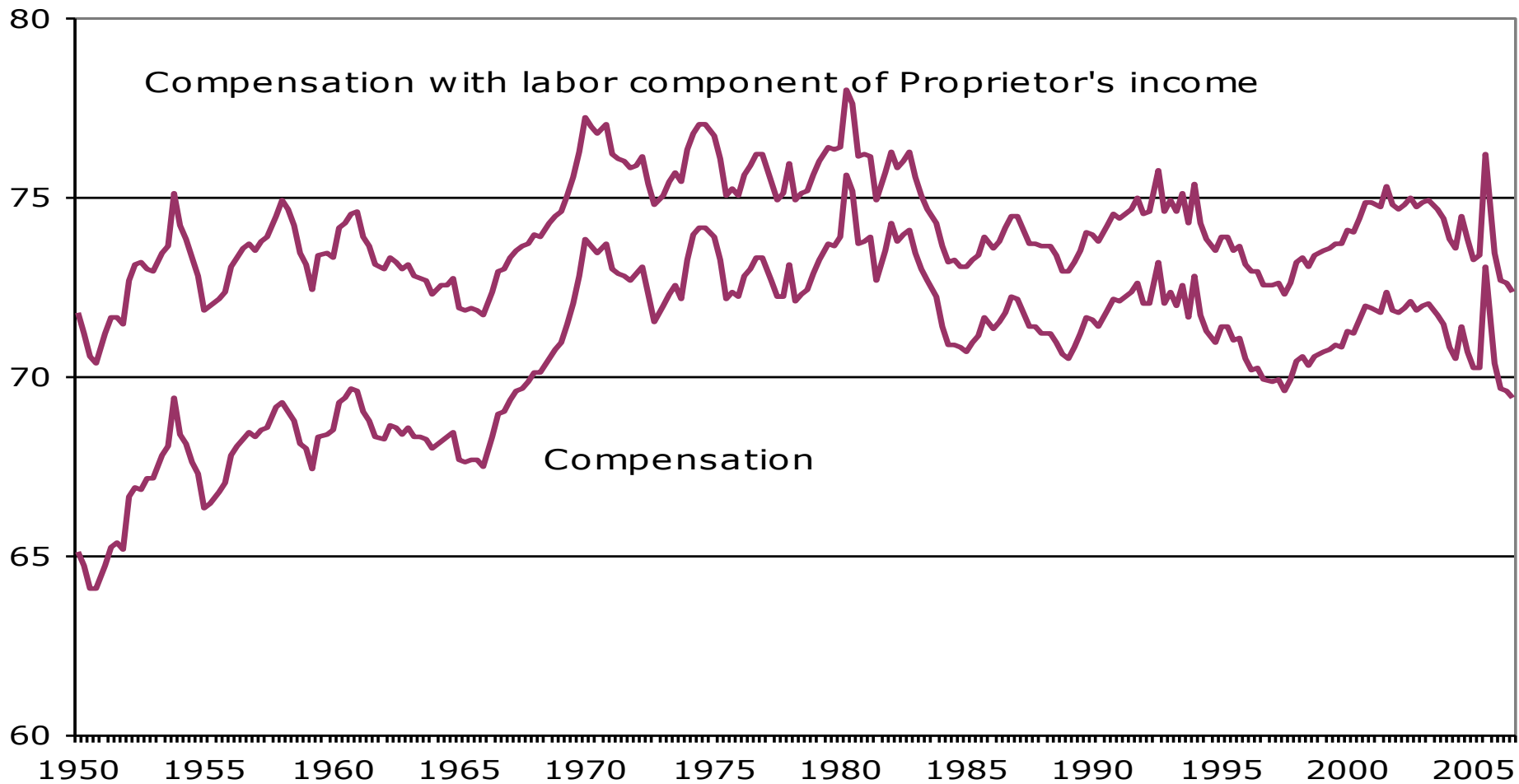
Lack of Connection between Labor's Share and Inequality

- Incomes were much more equal in 1950s but labor's share was the same (or lower for the narrow measure)

- Much of the rise in inequality $> 90^{th}$ percentile occurs in labor income, not capital income

- The main story is increased skewness within labor income, not a shift from labor to capital income

Measurement Issues

- In 2005 we assumed
  - The change in benefits was the same as the change in wages in each income quantile
  - The change in hours of work were flat across the income distribution
- By limiting our analysis to changes, we did not need to make an assumption about the *level* relationship between wages and either benefits or hours
- Figure 2 shows that benefits increased as a share of compensation, from 5 percent in 1952 to 18 percent in 1985. But flat at 18 percent since 1985.

How Large is the Bias in our 2005 Analysis of Changes?

- Pierce (1999) showed that total comp grew slightly faster than wages at the middle and slower in the tails.

- Compared to our results in his period (1982-96) total comp at the middle grows 0.2 points faster per year, at the top and bottom 0.4 points slower.

- No bias in the growth of the 90-10 ratio

- Limitation: Pierce's short sample period

# Levels vs. Growth Rates of Hours by Income Quantile

- Table 1 shows rising hours with income, as we would expect. In 2001:
  - Tax units in 0-20 worked 850 hours per year
  - Tax units in 90-100 worked 3850 hours per year
- But we only need information on growth rates
- What does Table 2 show?

Growth in comp per hour
With and without hours adjustment

- The hours adjustment makes little difference except at the bottom where hours increased

- Thus true compensation per hour in the 0-20 quantile fell much more in 1979-97 and rose much less 1997-2001 than in the unadjusted IRS data

- Overall, the gap in comp per hour growth rates is slightly smaller between the top and middle, and substantially larger between the middle and bottom
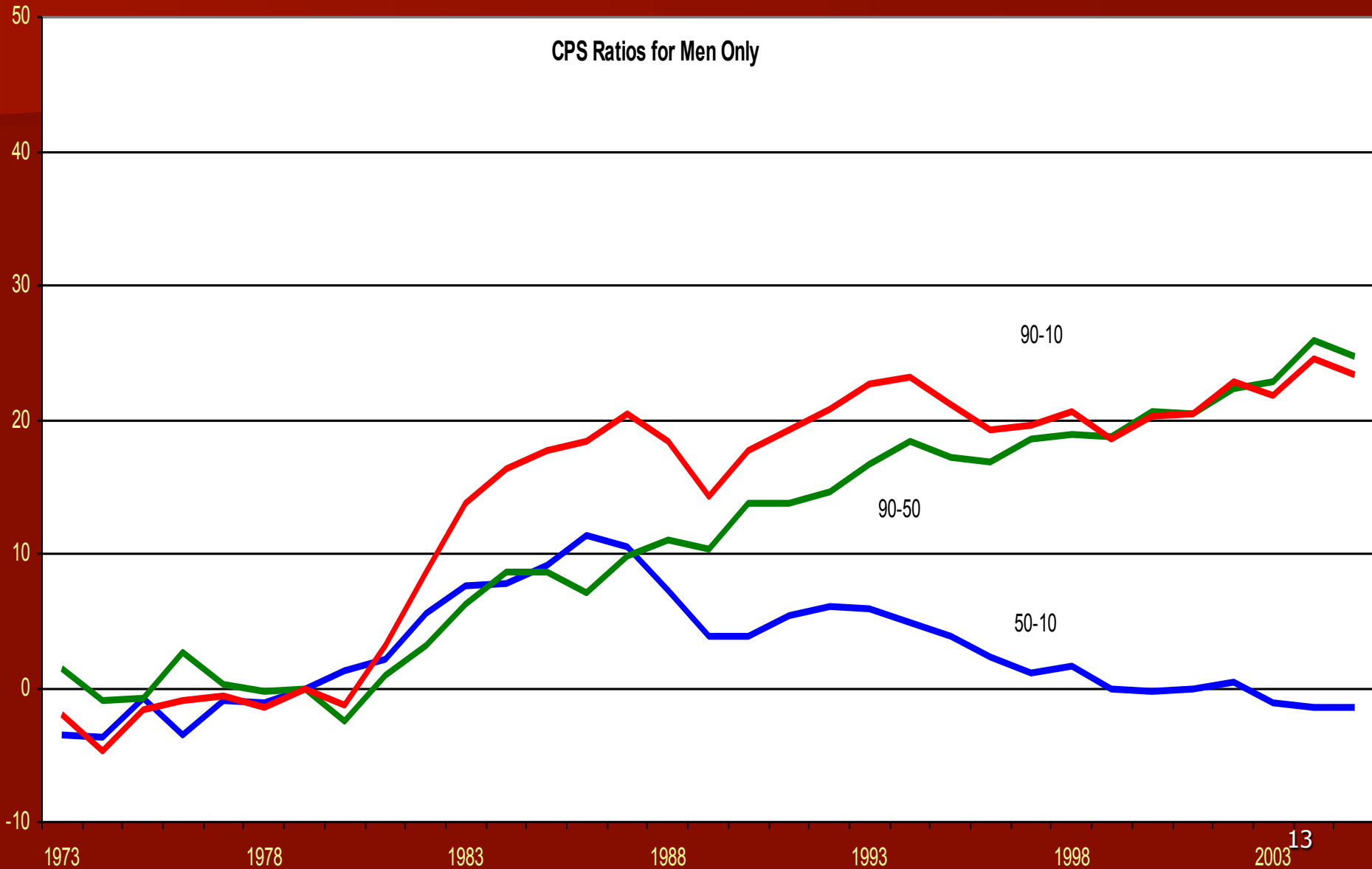
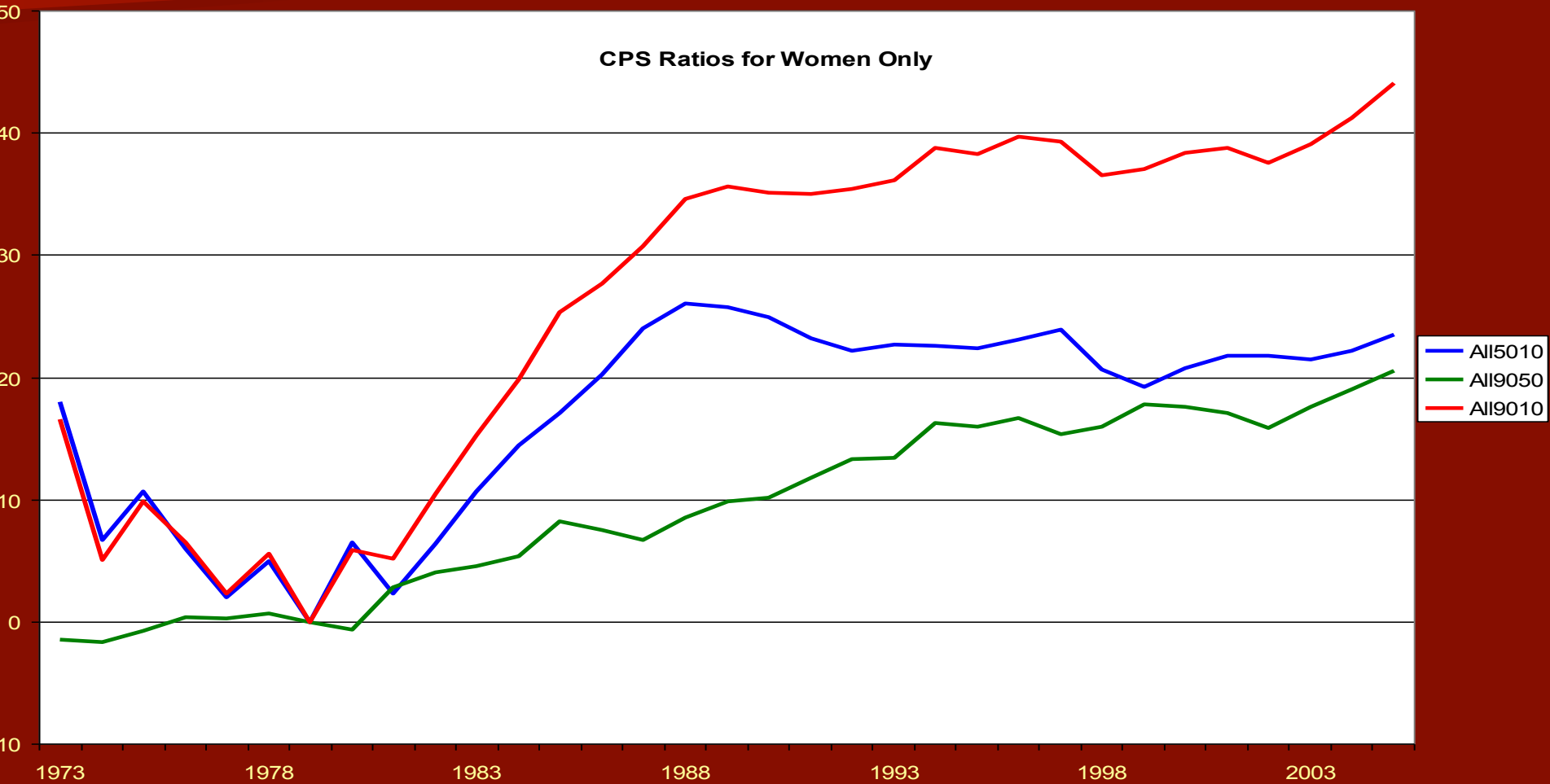# Original and Corrected AAGR of Compensation per Hour
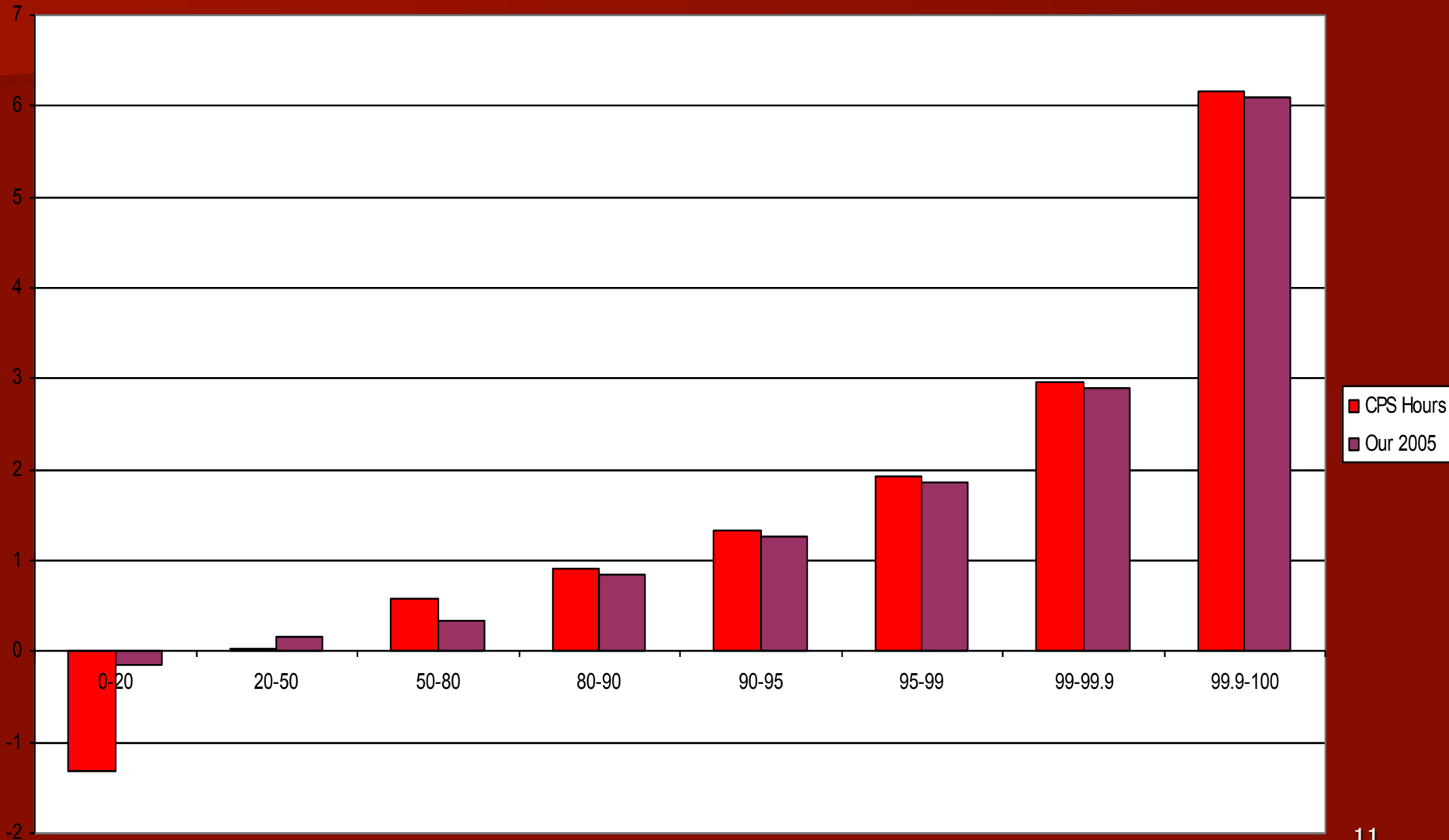
Income Inequality below 90th Percentile

- Many articles and hypotheses focus on the timing of changes in the 90-50 and 50-10 ratios

- We had previously looked only at data on men and women combined

- But the time path for men and women is quite different, and here we present ratios from the latest CPS data (EPI web site)

Ratios 1973-2005 for Men

CPS Ratios for Men Only

90-10

90-50

50-10

Ratios 1973-2005 for Women

CPS Ratios for Women Only

Legend:
- All5010 (blue)
- All9050 (green)
- All9010 (red)

Organizing Principle for 90-10 Ratio: Reversal of the Great Compression

- Elements of the great compression of the income distribution in 1940-70: rise of unions, disappearance of imports and immigration

- Reversal: decline of unions, rise of imports and immigration

- Extra elements: equalizing influence of high school educ 1910-40 and min wage

The Role of Deunionization

- Everyone agrees it mainly affects men
- Main source is Card-Lemieux-Riddell
- Main conclusions:
  - Union wage distribution compressed
  - Small effect, just for males, maybe 14 percent of growth in variance of male wages 1973-2001
  - SOWA 2006-07 has similar conclusions in a different metric

Second Aspect of Great Compression: Imports

- Trade, Imports, Job Displacement
- SOWA imply job losses across the income distribution
  - No real impact on the income distribution
  - Perhaps slightly more job losses at the bottom
- Trade has bigger impact on manufacturing employment; raises inequality if lost mfg jobs are above average wages

Third Aspect of Great Compression: Immigration

- Fact: Since 1970 triple the flow of immigrants as ratio of population and share of foreign-born workers in the labor force

- Borjas-Katz reduced form approach
  - Lower real wages of domestic workers by 3% 1980-2000
  - Loss reached 9 percent for domestic workers without a HS degree

Challenge to Borjas-Katz from Ottaviano and Peri (2006)

- Replace Partial Equilibrium by General Equilibrium
- When Immigrants arrive, they stimulate capital investment
- Substitution is not general, immigrants compete with each other
  - Implication: New immigration drives down wages of existing foreign-born residents
- Thus we may have been asking the wrong question, not about the impact on native Americans but on the wages and skills of the entire population including the immigrants themselves

Minimum Wage

- Circumstantial Evidence
- Minimum wage hits women harder than men
- 50-10 ratio for women increased much more than for men and increased permanently
- It is hard to think of another convincing hypothesis than the influence of the minimum wage on the 50-10 ratio for women

Skill-biased Technical Change

- The gradual increase in 90-50 for both men and women lends plausibility to this hypothesis

- Our paper disputes some anti-SBTC arguments that are based on timing

- We endorse Autor-Katz-Kearney in broadening the concept of SBTC to encompass five groups, "nonroutine interactive" down to "routine manual"

- Reason for skepticism: occupational group data show low wage increases for engineers and computer experts, fast for "managers"

Increased Inequality at the Top, 99.99 vs. 90.0 percentile

Previous distinctions (Kaplan-Rauh):
  trade theories (Hecksher-Ohlin)
  increasing returns to generalists (A-K-K)
  stealing theories (Bebchuk et al)
  social norms (Piketty-Saez)
  greater scale (Gabaix and Landier)
  SBTC (Katz and Murphy)
  Superstars (Rosen)

In this context, our 2005 paper introduced the Superstar vs. CEO distinction

- Our critics of 2005 said "superstars account for too little" but we explicitly included
  - Entertainment stars
  - Sports stars
  - Lawyers
  - By implication textbook authors, painters, musicians

Kaplan-Rauh vs. Our 2005 Paper

- The question is how much of the *WAGE AND SALARY INCOME (W-2)* can we find of the top 0.01 percent? (entry level $3m)

- In our 2005 paper we claimed we could find about 60 percent

- Kaplan-Rauh said we were wildly wrong

- But in this paper we come up with 63 percent

Core of the Difference

- **Three reasons**
  - Our simple arithmetic mistake
  - Kaplan-Rauh look at actual distribution not averages
- **But the third reason is the big one**
  - They look at contribution of executive pay to total AGI income including capital incomes, taxable pensions, and capital gains
  - We just looked at 2005 income

We asked a different question and the right question

- How much of total W-2 income in the top 0.01 percent is accounted for by top corporate executives (1500 * 5)?

- Answer 20%

- Adding in all of Kaplan-Rauh's other executives (private firms, lawyers, sports and entertainment stars) brings up to 63%

- QED: We were right in 2005: superstars and CEOs explain the explosion of inequality at the top

Substantive Hypotheses about CEOs

- William Shakespeare *(Hamlet,* I, iv)*:*
  - "Something is Rotten in the State of Denmark"

- Why distinguish CEOs from Superstars?
  - Because they can choose their own salaries
  - Because they bribe directors compensation committees with perks and stock options
  - Because they are involved in criminal activity on a daily basis

Why Say More?
Just Read Newspapers

- Nardelli kicked out as CEO of Home Depot after six years in which stock price declined
  - Compensation package on the job $240m
  - Golden Parachute $210m
  - Maybe some overlap, but who cares?
- Bebchuk on Steve Jobs and Apple in WSJ 01/06/07 ("Inside Jobs")
  - Massive backdating of options
  - Bebchuk paper "Lucky CEOs" this is a massively widespread and pervasive practice. 12% of public firms were involved.

Remaining Unanswered Questions, Here We Start on Next Draft

- Gabaix-Landier hypothesis about exec pay mirroring increases in market cap
  - Doesn't work for 1970-2005 in US
  - Works in wrong direction 1940-1970 in US
  - Hardly works at all EU vs. US in recent years
- Who are all these Super-stars and CEOs?
  - Kaplan-Rauh make a good start on 99.99 level
  - At 99.9 and 99 and 95 and 90
- Lots of research left to do, starting with the missing section of the paper on cross-country differences