

Racial Gaps in Labor Market Outcomes in the Last Four Decades and over the Business Cycle

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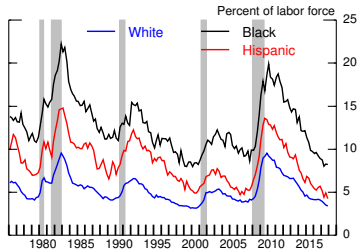
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May 2018

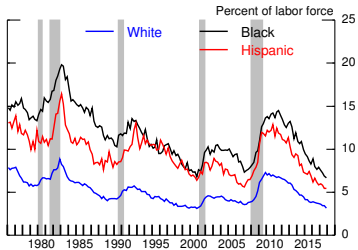
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Motivation

Unemployment Rate, Men

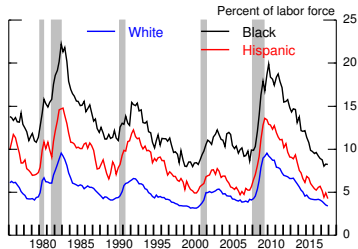


Unemployment Rate, Women

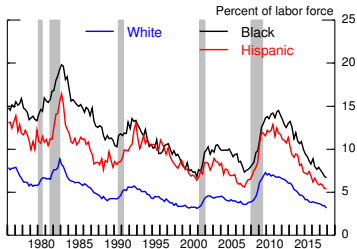


Motivation

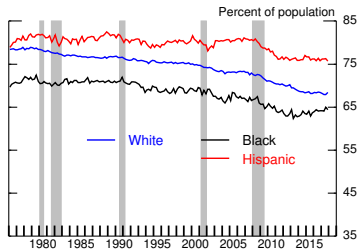
Unemployment Rate, Men



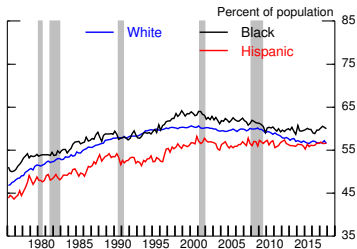
Unemployment Rate, Women



Labor Force Participation Rate, Men



Labor Force Participation Rate, Women



What we do

Examine racial/ethnic disparities in key labor market outcomes for men and women:

- ▶ non-Hispanic whites, non-Hispanic blacks, and Hispanics (all mutually exclusive)
- ▶ Outcomes
 - ▶ Unemployment Rate (UR)
 - ▶ Labor Force Participation Rate (LFPR)
 - ▶ Employment-to-Population Ratio (EPOP)
 - ▶ Part-Time Employment for Economic Reasons (PTER)
- ▶ Examine evolution of racial gaps over time (1976-2017) and over business cycle

Approach

- ▶ Explore how much of the racial gaps can be explained by observables (Oaxaca-Blinder decompositions)
- ▶ Analyze differences in labor force flows
- ▶ Study sensitivity of racial gaps to business cycle
- ▶ Investigate dynamic responses of gaps to aggregate shocks (VARs)

Outline

- ▶ Data
- ▶ Decomposing gaps in UR, LFPR, EPOP (Oaxaca-Blinder)
- ▶ Cyclicity of gaps
- ▶ Flows-based analysis of gaps

Data

- ▶ CPS microdata (1976-2017)
 - ▶ About 50 million individual-month observations (age 16+)
 - ▶ Flows: longitudinally match individuals to estimate month-to-month transitions across labor force states

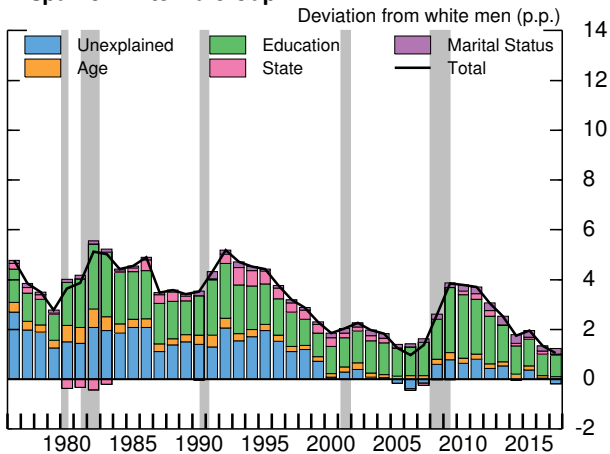
Oaxaca-Blinder (OB) Decomposition

- ▶ How much of the racial gaps can be explained by differences in observables across groups?
- ▶ Given two groups, A and B, outcome u , and characteristics X , OB decomposes average difference in outcome as

$$\bar{u}_A - \bar{u}_B = \underbrace{\beta_A \times (\bar{X}_A - \bar{X}_B)}_{\text{"explained"}} + \underbrace{(\alpha_A - \alpha_B) + \bar{X}_B \times (\beta_A - \beta_B)}_{\text{"unexplained"}}$$

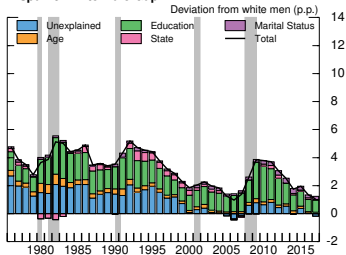
Unemployment Rate Gap: Hispanic-White Males

Hispanic-White Male Gap

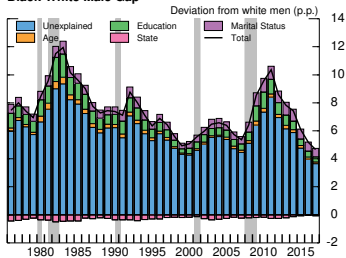


Unemployment Rate Gaps

Hispanic-White Male Gap

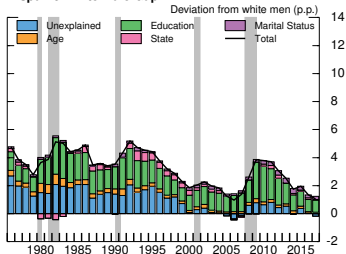


Black-White Male Gap

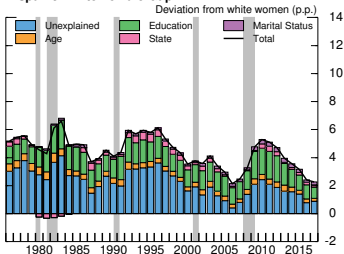


Unemployment Rate Gaps

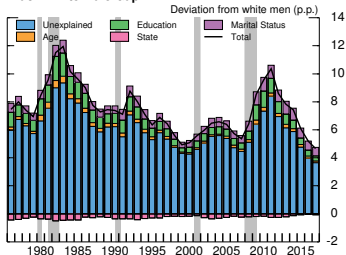
Hispanic-White Male Gap



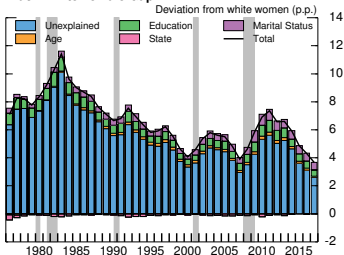
Hispanic-White Female Gap



Black-White Male Gap

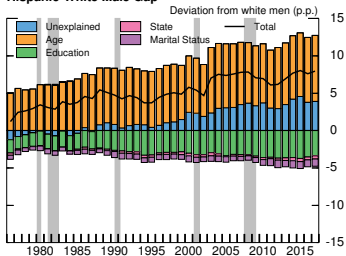


Black-White Female Gap

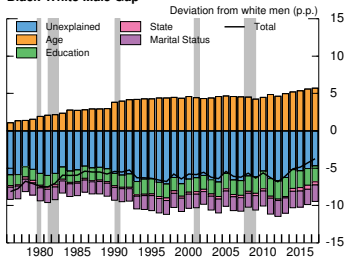


Labor Force Participation Rate Gaps

Hispanic-White Male Gap

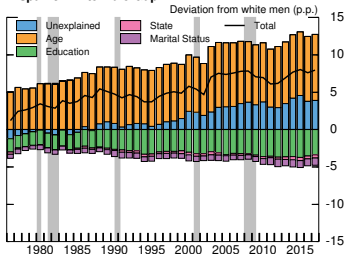


Black-White Male Gap

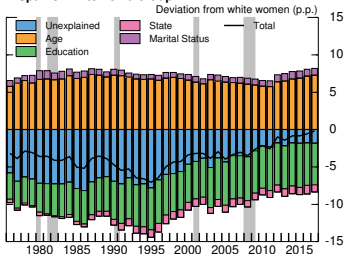


Labor Force Participation Rate Gaps

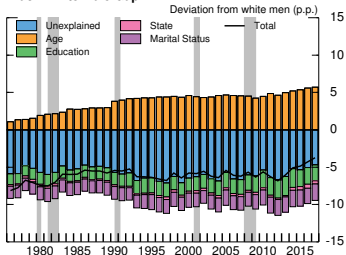
Hispanic-White Male Gap



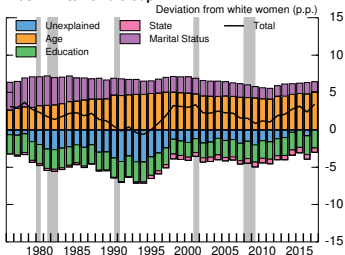
Hispanic-White Female Gap



Black-White Male Gap

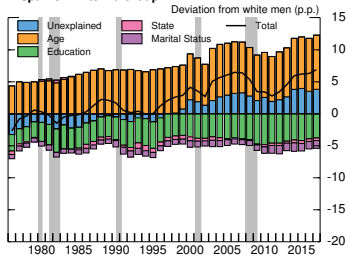


Black-White Female Gap

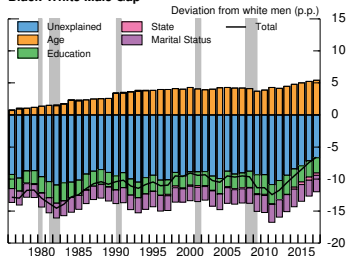


Employment to Population Ratio Gaps

Hispanic-White Male Gap

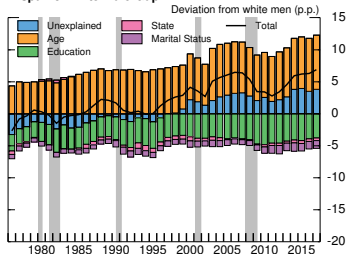


Black-White Male Gap

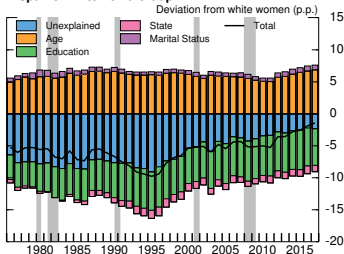


Employment to Population Ratio Gaps

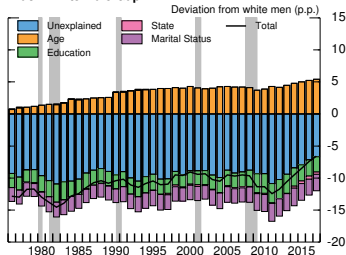
Hispanic-White Male Gap



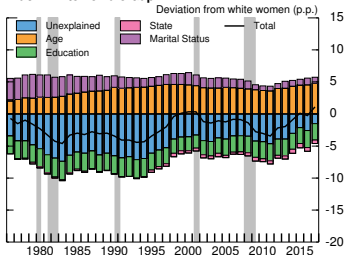
Hispanic-White Female Gap



Black-White Male Gap



Black-White Female Gap



Labor Force Flows

- ▶ Do UR gaps reflect differences in job-finding or job-losing rates?
 - ▶ Much of the discrimination literature that looks at employment focuses on differences in hiring
- ▶ Do LFPR gaps reflect differences in labor force entry or exit rates?

Labor Force Flows

Approach

- ▶ Let E = employment, U = unemployment, N = nonparticipation.
- ▶ The UR can be expressed as a function of the flows EU , UE , EN , NE , UN , NU (via steady-state approximation; e.g. Abraham & Shimer 2001).
- ▶ We can use this to decompose the UR gaps into parts that reflect differences (between groups) in each flow.

Flows Decompositions of Gaps

- ▶ Steady-state UR approximation:

$$u_t^* = \frac{EN_t NU_t + NE_t EU_t + NU_t EU_t}{EN_t NU_t + NE_t EU_t + NU_t EU_t + UN_t NE_t + NU_t UE_t + NE_t UE_t}$$

- ▶ For EU contribution, compute counterfactual:

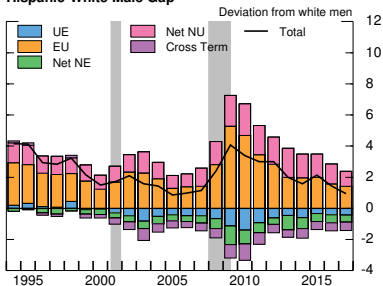
$$u_t^{EU, counterfactual} = \frac{\widehat{EN}_t \widehat{NU}_t + \widehat{NE}_t EU_t + \widehat{NU}_t EU_t}{\widehat{EN}_t \widehat{NU}_t + \widehat{NE}_t EU_t + \widehat{NU}_t EU_t + \widehat{UN}_t \widehat{NE}_t + \widehat{NU}_t \widehat{UE}_t + \widehat{NE}_t \widehat{UE}_t}$$

- ▶ EU contribution is:

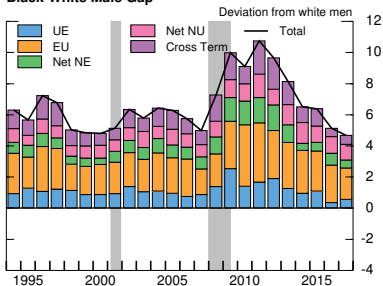
$$u_t^{EU, contribution} = u_t^{EU, counterfactual} - u_t^*$$

Flows Decomposition of Unemployment Rate Gaps

Hispanic-White Male Gap

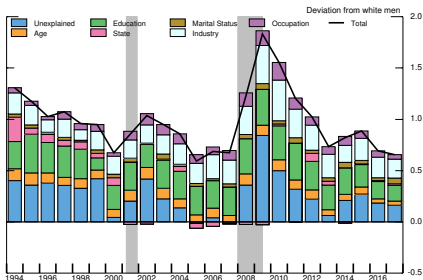


Black-White Male Gap

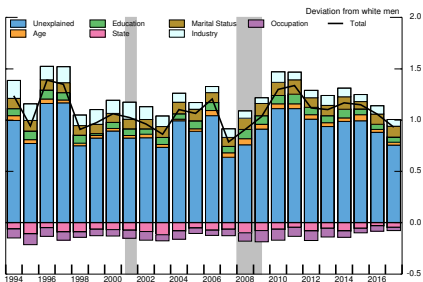


Decomposing the EU Gap

Hispanic-White Male EU Gap

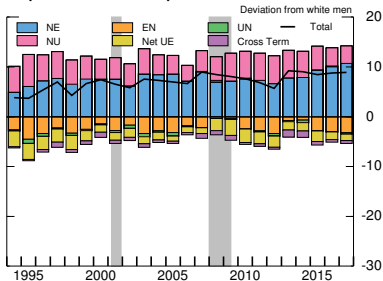


Black-White Male EU Gap

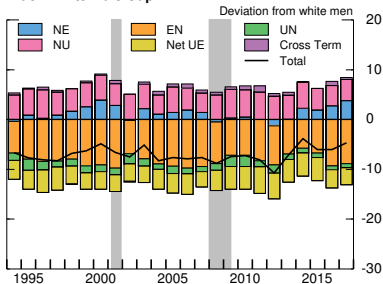


Flows Decomposition of Participation Rate Gaps

Hispanic-White Male Gap

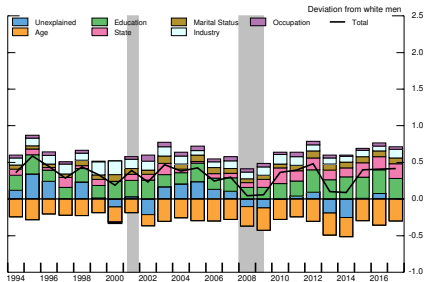


Black-White Male Gap

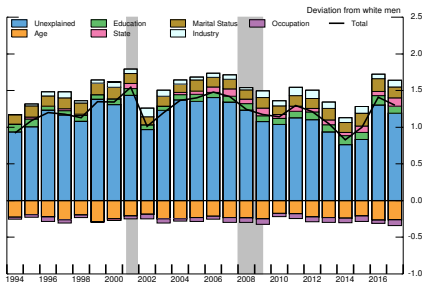


Decomposing the EN Gap

Hispanic-White Male EN Gap



Black-White Male EN Gap



Discussion: What is in the unexplained component?

- ▶ Differences in (unobserved) skills?
 - ▶ Neal & Johnson ('96): very important for wage gaps
 - ▶ Fryer ('11): large cognitive skills differences start early in life
 - ▶ Ritter & Taylor ('11): but less important for employment than wage
- ▶ Discrimination?
 - ▶ Fryer ('11): discrimination relatively less important now
 - ▶ Darity & Mason ('04), Bertrand & Mullainathan ('04): discrimination persists
- ▶ Incarceration?
 - ▶ % adult men in prison in 2008: Whites 1%; Hispanic 3%; Black 8%
 - ▶ Holzer et al ('05), Mueller-Smith ('15): incarceration reduces future employment
- ▶ Other omitted variables?
 - ▶ Family background?
 - ▶ School quality?
 - ▶ Childhood neighborhood?
 - ▶ Chetty et al ('18): neighborhoods with low poverty, low racial bias, high father presence lead to smaller black-white male income gaps

Summary: Key Findings

- ▶ Blacks have much higher and more cyclical URs than whites and observables explain very little of differential; gap mostly reflects higher risk of job loss.
- ▶ Hispanic-white UR gap is smaller and largely explained by lower educational attainment of (mostly foreign-born) Hispanics; "unexplained" gap has basically vanished.
- ▶ Remarkably low LFPR of black men is unexplained by observables; mostly reflects higher LF exit rates; little improved in last 40 years.
- ▶ Blacks and Hispanics more likely to be in PTER; education and occupation important factors, but unexplained gaps still large. Slow recovery for black men from GR reflects less stable movement from PT to FT work.
- ▶ Robust recovery of labor market in last few years has substantially reduced the large gaps that had soared with the GR. But, disparities remain large.

- ▶ Supplemental Slides

Cyclicality of Racial Gaps

- ▶ All groups negatively affected by recessions; but blacks and Hispanics affected relatively more than whites on average.
- ▶ How different across groups is the sensitivity to the business cycle?
- ▶ Are there important differences in the *dynamics* of the UR and LFPR responses to changes in aggregate economic activity?
- ▶ Approaches:
 - ▶ Regressions of racial gaps on estimates of (aggregate) output gap
 - ▶ Reduced-form VARs to examine differences in persistence of aggregate shocks

Cyclical Unemployment Rate Gaps

Male Black-White Gap	Female Black-White Gap	Male Hispanic-White Gap	Female Hispanic-White Gap
Panel A - Dependent Variable: Raw Unemployment Rate Gaps			
-0.65*** (0.11)	-0.38** (0.15)	-0.31*** (0.10)	-0.21** (0.09)
Panel B - Dependent Variable: Unexplained Unemployment Rate Gaps			
-0.44*** (0.09)	-0.29* (0.15)	-0.07 (0.07)	-0.09 (0.08)

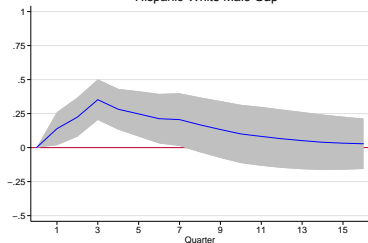
Reported coefficients are coefficients on the GDP gap. Standard errors are in parentheses.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

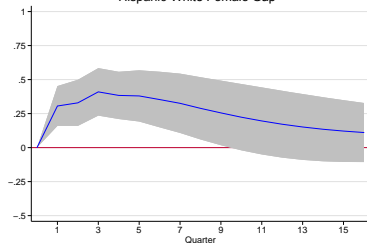
Cyclical Dynamics: VARs

Unemployment Rate Gaps

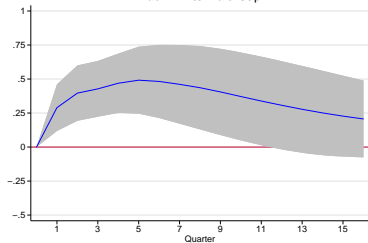
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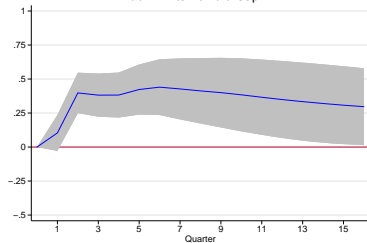
Hispanic-White Female Gap



Black-White Male Gap

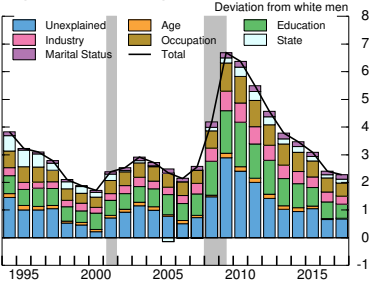


Black-White Female Gap



PTER Gaps

Hispanic-White Male Gap



Black-White Male Gap

