

# Labor Market Conditions and Discrimination: Is There a Link?

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January 4, 2019

# Introduction

- In recent years, U.S. policymakers have become attuned to the relationship between equal economic opportunity and economic performance.
- Moreover, recent research has documented that the racial gaps found in U.S. unemployment rates are countercyclical.

We ask, “is labor market discrimination also dependent on aggregate macroeconomic conditions?”

## Related Literature

We are first to look at the impact of labor market conditions on the prevalence of race-based employment discrimination.

We bring together two strands of the literature on the labor market outcomes of underrepresented minorities:

- Recent research documenting the large and countercyclical racial gap in unemployment (e.g. Cajner et al., 2017; Hoynes et al., 2012; and Rodgers, 2008).<sup>1</sup>
- The microeconomics of labor market discrimination (e.g. Neumark, 2018; Darity and Mason, 1998; Lang and Lehman, 2012).<sup>2</sup>

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<sup>1</sup>This literature ignores discrimination as a possible explanation.

<sup>2</sup>This literature ignores the role of macroeconomic conditions.

# What We Do

We hypothesize that in a tight labor market discrimination is less prevalent because firms can't afford to discriminate when competing for workers.

We examine this hypothesis through two dimensions:

- The degree to which reported discrimination within states varies over time as a function of the unemployment rate.<sup>3</sup>
- What explains the variation in reported discrimination between states.<sup>4</sup>

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<sup>3</sup>Using panel data.

<sup>4</sup>Using cross-sectional data.

# Preview of Results

Our findings are consistent with the view that employer's decisions to discriminate are sensitive to the economic costs attendant upon them.

Specifically we find:

- A strong countercyclical pattern in discrimination – falling unemployment is associated with a decrease in the number of charges filed.
- The number of charges filed are disproportionately responsive to the Black/African-American and Hispanic/Latino-specific unemployment rates.
- Most of the variation in charge rates across states is explained by the proportion of blue collar workers AND the proportion of Black/African-American and Hispanic/Latino workers in the labor force.

# Charges of Discrimination

Our analysis focuses exclusively on **raced-based discrimination charges** compiled by the U.S. Equal Employment Opportunity Commission (EEOC) from 2009-17:

- A charge of discrimination is a signed statement filed with the EEOC asserting employment discrimination in the workplace and requests that the EEOC take remedial action.<sup>5</sup>
- We then construct a **race based charge rate** which is the number of reported race-based discrimination charges, divided by the combined labor force.

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<sup>5</sup>The law requires the EEOC to accept charges alleging discrimination, gives it the authority to investigate, and determine a remedial course of action.

# Labor Market Conditions

We measure labor market conditions using:

- Data on the **labor force** and **unemployment rates** from the Bureau of Labor Statistics (BLS) by race/ethnicity and state.<sup>6</sup>
- EEOC data on **employment** by occupation, race/ethnicity, and state.<sup>7</sup>

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<sup>6</sup>The BLS Local Area Unemployment Statistics.

<sup>7</sup>The EEOC's Job Patterns for Minorities and Women in Private Industry report.

Table 1: Descriptive Statistics

	Mean	SD	Min	Max
Race-based claims	940.8	740	64.4	3155
Claims/labor force	1.10	0.64	0.19	2.55
Overall unemployment	7.06	0.99	5.27	9.46
White unemployment	6.12	1.01	4.47	8.83
Black unemployment	12.43	2.07	8.94	17.68
Hispanic unemployment	8.72	1.68	5.46	12.73
White labor force share	0.79	0.08	0.62	0.90
Black labor force share	0.14	0.09	0.03	0.34
Hispanic labor force share	0.12	0.11	0.03	0.43
Blue-collar share	0.54	0.06	0.43	0.68
Black blue-collar share	0.69	0.05	0.55	0.77
Hispanic blue-collar share	0.75	0.06	0.60	0.88
White blue-collar share	0.46	0.07	0.35	0.59

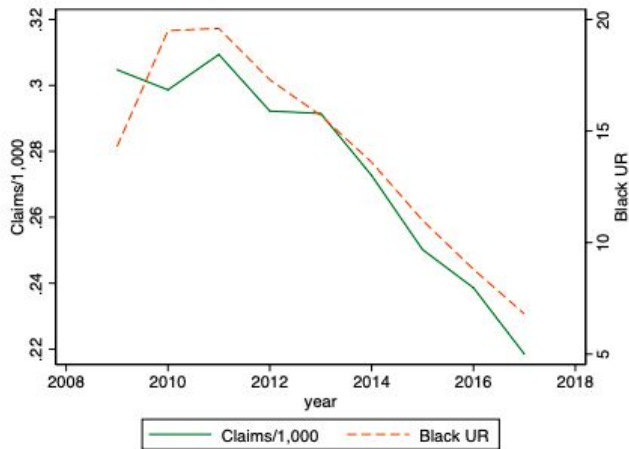
*Note:* The 15 states with missing data are excluded, Rhode Island is also dropped due to the very small number of race-based discrimination claims. The total number of states is 34, and the sample covers the 2009–17 period.



## Descriptive Statistics:

- The average charge rate per state is 1 charge per thousand workers.
- The average unemployment rate per state is highest for blacks, hispanics, and lastly whites.
- On average, whites make up close to 80% of the labor force in each state.
- On average hispanics, then blacks, and then whites have the largest share of blue-collar workers in each state.

# Describing Racial Discrimination Over Time



(b) California

The figure plots the times series of the raced based charge rate and the Black unemployment rate for California.

The plot shows that high employment rates are associated with a high rate of charge filing.

# Explaining Racial Discrimination Over Time

Table 2: Panel regression results

	(1)	(2)	(3)	(4)
Total	0.0729*** (13.19)	-0.0132 (-0.92)		
White unemployment rate			0.0144 (1.00)	-0.0565** (-3.21)
Black/AA unemployment rate			0.0220*** (4.20)	0.0116* (2.14)
Hispanic/Latino unemployment rate			0.0163* (2.28)	0.0146* (2.14)
Constant	0.586*** (14.49)	1.377*** (10.26)	0.598*** (15.48)	1.363*** (10.22)
State effects?	Yes	Yes	Yes	Yes
Time effects?	No	Yes	No	Yes
$R^2$	0.391	0.482	0.420	0.506
Adjusted $R^2$	0.315	0.399	0.343	0.422

*Notes:* The dependent variable is the number of race-based discrimination claims divided by the labor force, expressed in claims per 1,000 workers. The sample consists of the 34 states with complete data for the 2009–17 period, and excluding Rhode Island due to the small number of claims filed in that state. The total number of observations is 306. Parentheses contain  $t$  statistics, and asterisks indicate statistical significance:  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < 0.001$ .

Our econometric approach is to estimate a standard fixed-effects panel regression:

- Discrimination is highly countercyclical, rising during economic contractions and falling during expansions.
- A one percentage point decline in in the unemployment rate is associated with a decrease in the discrimination rate significant at the .001 level.
- Unemployment rate drops out when time fixed effects are included in the model.<sup>8</sup>
- Disaggregate by race/ethnicity improves model fit (R-squared).
- Effects of labor market conditions differ sharply across groups; black/AA and Hispanic/Latino; white drops out; results still significant with time fixed effects.

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<sup>8</sup>In other words, fluctuations in discrimination due to aggregate labor market conditions rather than those in the state.

# Describing Racial Discrimination Across States

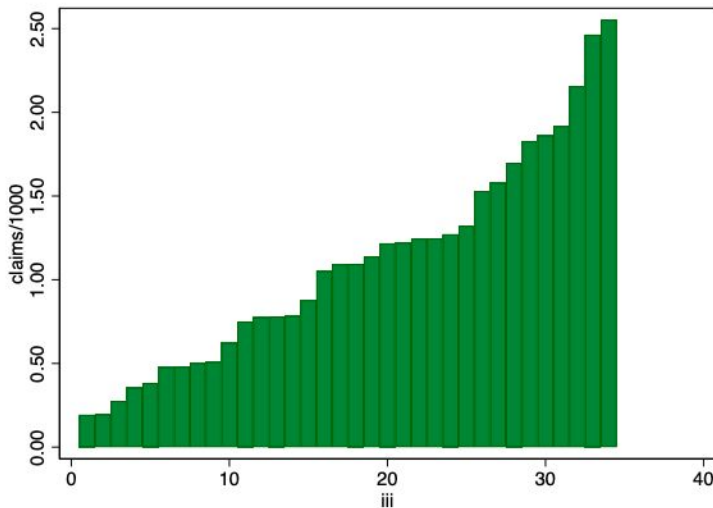


Figure 2: Distribution of race-based charges

The figure plots race-based charge rates for the 34 states we study.

The plot shows stark differences in the frequency of filing discrimination charges across individual states.

# Explaining Racial Discrimination Across States

Table 3: Cross-section regression results

	(1)	(2)	(3)
Black share in labor force	-0.652 (-0.69)	-2.706* (-2.40)	-1.982* (-2.32)
Hispanic share in labor force	-2.239 (-1.97)	-3.364*** (-3.87)	-3.283*** (-5.22)
White blue collar share	5.462* (2.54)		
Black blue collar share	-3.800 (-1.00)		
Hispanic blue collar share	2.346 (1.26)		
White unemployment rate	0.0155 (0.14)	0.00425 (0.04)	
Black unemployment rate	0.0277 (0.61)	0.0204 (0.45)	
Hispanic unemployment rate	-0.156* (-2.51)	-0.138* (-2.17)	-0.143** (-3.46)
Share of blue collar workers		5.068** (3.57)	5.770*** (5.03)
Confederate dummy		0.254 (1.22)	
Constant	0.737 (0.41)	0.00198 (0.00)	-0.0801 (-0.11)
Observations	34	34	34
$R^2$	0.739	0.736	0.717
Adjusted $R^2$	0.656	0.665	0.678

Note: The dependent variable is the number of race-based discrimination claims divided by the labor force, expressed in claims per 1,000 workers. The sample consists of the 34 states with complete data for the 2009–17 period, and excluding Rhode Island due to the small number of claims filed in that state. Parentheses contain  $t$  statistics, and asterisks indicate statistical significance:  $p < 0.05$ ,  $** p < 0.01$ ,  $*** p < 0.001$ .



We estimate a cross-sectional regression using time averages of the state-level data to get at the source of state fixed effects in the panel regressions:

- We find that occupational mix matters. States with relatively more workers in blue-collar occupations tend to report more discrimination.
- Moreover, Black/AA and Hispanic/Latino labor force shares are negatively associated with our charges-based measure of discrimination.

# Conclusion

Using charges filed with the EEOC, we find that race-based employment discrimination varies systematically over the business cycle and across states.

This variation is consistent with employers weighing Becker's (1971) "tastes for discrimination" against the opportunity cost of indulging those tastes.

Our findings have important macroeconomic implications:

- Reducing discrimination should not be overlooked as a benefit of a strong economy.
- Moreover, macroeconomic policies that reduce discrimination in the near term are likely to enhance the economy's long-term growth prospects.