

# Proposal for UC Davis Center for Poverty Research 2013-2014 Small Grant Program Research on Labor Markets and Poverty

**Project Title:** Prejudice and Racial Matches in Employment for Low-Skilled Workers

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## 1 Project Abstract

The current national poverty rate masks great racial heterogeneity in the state of poverty in the U.S. According to the 2010 Census, 27% of blacks live below the official poverty line, nearly three times the rate for non-Hispanic whites. Non-labor market factors such as differences in family structure or geography can explain a significant portion of this disparity, yet it is difficult to ignore the role of the large and persisting racial gap in labor market outcomes. Inequality in labor market performance is especially salient for low-skilled black workers who face close to 10% lower wages and 25% longer unemployment durations compared to similar whites (Lang and Lehmann 2012). For college-educated blacks, however, the wage gap is virtually non-existent and the employment gap is much smaller. Understanding the sources of these labor market racial disparities for low-skilled workers is critical for explaining and mitigating the high poverty rates among blacks. In this project, we seek to provide the first theoretical and empirical analysis of the relation between prejudice and the rates at which workers match with and separate from same-race employers and its impact on the wage and employment dynamics of low-skilled black workers. We test the predictions from the model using a uniquely created dataset that links multiple confidential data sources with information on regional levels of prejudice, employer race, and earnings and employment histories of workers. Results from our study will greatly inform our understanding of the varying levels of limited employment opportunities afforded to low-skilled blacks across the U.S. and the sources of persistent low earnings and employment that contribute to greater rates of poverty among black Americans.

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## 2 Project Narrative: *Prejudice and Racial Matches in Employment for Low-Skilled Workers*

### 2.1 Specific Aims of Research and Policy Significance

Fifty years after the passage of major civil rights legislation, blacks still lag significantly behind whites in nearly every economic indicator, a reality reflected in their greater likelihood of falling below the poverty line. According to the U.S. Census Bureau, 27 percent of blacks in the U.S. live in poverty, the highest for any racial group except for American Indians and nearly three times the rate for non-Hispanic whites. Differences in family structure, geography, education, and health can explain a significant portion of this disparity. However, many black families' inability to rise above poverty is undoubtedly related to large and persisting racial gaps in labor market outcomes, in particular for low-skilled black workers.

While observable skill differences can account for much of the black-white differences in wages (Neal and Johnson 1996), there remains a 10 percent wage gap and a 25 percent gap in unemployment duration after accounting for personal characteristics and cognitive test scores (Lang and Lehmann 2012). Further, there is little evidence of convergence in the black-white income gap since 1980 despite broad interventions, such as Head Start, designed to alleviate these factors (Neal and Rick 2013). The existence of a significant wage gap between blacks and whites in the U.S. is well-known. However, there is less awareness of the fact that the black-white wage gap is predominantly concentrated among the low-skilled. High-skilled blacks face a much smaller, even non-existent, wage gap. Substantially less attention has been paid to racial employment and unemployment differentials compared to the wage gap, despite the fact the size of the gaps in employment is much larger. Further, in contrast to studies on wages, Stratton (1992) and Johnson and Neal (1998) find that black-white differences in unemployment and hours worked are largely unexplainable by differences in cognitive ability. These differences in employment suggest that understanding the factors that determine the frictions in the low-skilled black workers' job search is critical for explaining unequal outcomes.

We will introduce the first theoretical and empirical analysis of the relation between prejudice and the match and separation rates between workers and employers of the same race and its impact on the wage and employment dynamics of low-skilled black workers. We propose a model of job search in which black workers expect lower hiring probability and higher separation rates from

white employers in labor markets where racial prejudice is higher. Perceived prejudice causes black workers to increase their relative search intensity among black employers, leading to greater rates of same-race employer-employee matches, lower reservation match quality and wage, higher separation rate, and longer unemployment duration for low-skilled blacks. We will test these predictions using a unique dataset linking the General Social Survey Sensitive Data and the National Longitudinal Survey of the Youth 1997 Geocode data that includes measures of local levels of prejudice, employer race, employment histories of workers, and local labor market conditions.

Using both theoretical and empirical tools, we will explore several related questions about the wage and employment dynamics of low-skilled blacks and how they relate to the race of current and past employers and levels of local prejudice. In labor markets with higher levels of racial prejudice, are low-skilled blacks less likely to match with white employers/supervisors even controlling for other local market conditions? Do black workers who match with black employers receive lower/higher wages and separate at higher/lower rates compared to similar blacks? How does matching with a black employer early in a black worker's career change the evolution of his later wages and employment? Determining an important channel through which cycles of low wage and unstable employment persist among low-skilled blacks will help policy makers in designing and identifying the most effective programs to alleviate unequal frictions facing low-wage workers.

## **2.2 Relevant Literature**

In neoclassical models of discrimination, employers' prejudice against black workers does not lead to racial wage inequalities (Becker 1971). Unprejudiced employers are able to employ black workers at lower wages, competing out those with prejudice. In the long-run equilibrium, black and white workers may segregate but they earn equal wages. However, these models neglect labor market frictions. When workers must sequentially search for employers, prejudiced employers may remain in the market to the adverse effect of those who face prejudice (Black 1995). The high incidence and duration of unemployment for blacks, especially for the low-skilled, suggest that such a model with strong predictions about the employment gap between black and white workers is needed to explain labor market data.

Previous work has shown that black managers hire more black workers, both across (Stoll, Raphael and Holzer 2004) and within firms (Giuliano, Levine and Leonard 2009). While it is difficult to interpret these studies strictly as causal, it is clear that the hiring officer's race is important in

determining the racial employment composition. In particular, Giuliano et al. (2009) show that these patterns have a strong geographic component, especially in the American South. That the South likely contains both a higher level of prejudice and proportion of low-skilled workers is of concern given that discriminatory hiring practices appear to affect primarily blacks with low skills. (Lang and Manove 2011). Ours is the first empirical study to examine the causes and consequences of same-race matches, using a nationally representative dataset with detailed information about worker occupation and local labor market conditions. We will assess the impact of prejudice on this phenomenon using our created index of local attitudes on race.

### **2.3 Research Design, Proposal Methodology, and Data Sources**

**Data:** We require information about the levels of racial prejudice at the local labor market level as well as data on individual workers' economic outcomes such as wage and employment, and the race of their employers. For the former, we will use the General Social Survey (GSS), a nationally representative survey of social attitudes, to create an index of local levels of prejudice across the U.S. We plan to use responses on whether individuals believe that racial differences are due to inborn disability or lack of will, whether they would vote for a black president, whether they support affirmative action and open housing laws, whether blacks should overcome prejudice without favors, and how close respondents feel to different racial groups. Using the restricted-access version of the data, we can create measures of prejudice down to the county-level.

We will combine this information on local levels of prejudice with individual worker and employer race information found in the National Longitudinal Survey of the Youth 1997 (NLSY97). The NLSY97 is a longitudinal survey of individuals who were born in 1980-1984 conducted annually since 1997 on their household and employment characteristics. To our knowledge, the NLSY97 is the first nationally representative dataset with information about the supervisor's race, which we will use to measure whether the worker is in a same-race employer match. The confidential geocode data contains information on individuals' zip-code which will allow us to match these occupations with GSS data on prejudice. We have been approved for access to all sensitive data and have gained IRB approval at our respective institutions.

**Basic Outline of Our Theoretical Model:** Our model will extend the simple job search model with employer prejudice studied by Black (1995). Workers choose the intensity with which they

sequentially sample employers of differing races. Some employers hold prejudice against workers of other races, especially for the low-skilled, and will only offer them employment at lower wages. Upon meeting, workers and employers receive a signal from which they form an expectation of match quality. The worker must then choose whether or not to accept the match or to continue searching. From this basic model we can derive several predictions. The black-white wage gap will be increasing in racial prejudice. Prejudice causes blacks to be less selective in the acceptance of their employment offers, because there are fewer alternative employers willing to hire them. Blacks will enter into less stable employment when they do accept offers, since they are a worse match on average. Blacks will be more likely to be employed by blacks as prejudice is increasing, because whites will be less likely to employ them and blacks will seek out black employers anticipating prejudice.

**Proposed Estimation Strategy:** Since we are interested in the impact of racial prejudice on the matching of blacks to black employers, we will be first interested in estimating regressions that specify whether an individual has a same-race employer on the left-hand side and our measure of local prejudice on the right-hand side (along with other controls). Assuming that there is a correlation, we will estimate the differences in wages across the different matched type. Specifically, we will estimate whether the return to a same-race employer-employee match is higher or lower in areas with more racial prejudice, using interactions between our prejudice measures and whether the employer and employee are of the same race on the right-hand side and wages on the left-hand side. We will attempt similar analysis on the dynamics of wages with a same-race match (how does the return to tenure differ by racial match depending on the level of prejudice) and employment stability (are same race employer-employee matches more stable and does this stability vary with prejudice in the area).

## 2.4 Summary of Contribution to Policy and Literature

While previous work has analyzed the likelihood of same-race employer matches there has been little work on understanding what drives their prevalence. We will be the first to link the data on local levels of prejudice with data on same-race employer-employee matches and to study their relation. Should we find that prejudice drives the rates of same-race matches and that these matches have long-lasting consequences on the wages and employment of low-skilled blacks, our findings can have

important implications for identifying effective policies to aid low-wage minority workers. Findings from our study will inform on the importance of initiatives encouraging minority business ownership and managerial racial diversity by highlighting both the short- and long-run costs of prejudice in job search. Our study will also have important implications for the value of affirmative action policies. If affirmative action programs can increase the pool of minority managers, our findings can predict that low-skilled minority workers will receive a positive impact on their wages and employment. Results from our study will greatly inform our understanding of the varying levels of limited employment opportunities afforded to low-skilled blacks across the U.S. and the sources of persistent low earnings and employment that contribute to greater rates of poverty among blacks.

## References

- Becker, Gary S (1971) *The Economics of Discrimination*: University of Chicago Press.
- Black, Dan A (1995) "Discrimination in an equilibrium search model," *Journal of Labor Economics*, pp. 309–334.
- Giuliano, Laura, David I Levine, and Jonathan Leonard (2009) "Manager race and the race of new hires," *Journal of Labor Economics*, Vol. 27, No. 4, pp. 589–631.
- Johnson, William R and Derek A Neal (1998) "Basic skills and the black-white earnings gap," *The Black-White test score gap*, pp. 480–500.
- Lang, Kevin and Jee-Yeon K Lehmann (2012) "Racial Discrimination in the Labor Market: Theory and Empirics," *The Journal of Economic Literature*, Vol. 50, No. 4, pp. 959–1006.
- Lang, Kevin and Michael Manove (2011) "Education and Labor Market Discrimination," *The American Economic Review*, Vol. 101, No. 4, pp. 1467–1496.
- Neal, Derek A and William R Johnson (1996) "The Role of Premarket Factors in Black-White Wage Differences," *The Journal of Political Economy*, Vol. 104, No. 5, pp. 869–895.
- Stoll, Michael A, Steven Raphael, and Harry J Holzer (2004) "Black job applicants and the hiring officer's race," *Industrial and Labor Relations Review*, pp. 267–287.
- Stratton, Leslie S (1992) "Racial differences in men's unemployment," *Indus. & Lab. Rel. Rev.*, Vol. 46, p. 451.