Rising Black/White Disparities in Job Displacement, 1979-2015

Elizabeth Wrigley-Field and Nathan Seltzer
ewf@umn.edu

Abstract:
Social scientists have increasingly called for attention to economic insecurity—the chances of losing what one has—alongside material deprivation. An important source of insecurity is job displacement (permanent layoffs). Surprisingly little is known about the racial patterning of job displacement in the United States, despite sustained attention to racial disparities in other economic outcomes. Here, we provide the first documentation of black/white inequality in displacements occurring from 1979 to 2015. We show that, for both men and women, blacks are nearly always more likely to be displaced than whites, but that the black/white disparity has generally grown over time. In particular, excess black displacement was notably low during the 1990s but had nearly doubled for women, and nearly tripled for men, by the 2010-2015 period. The rising racial inequality in displacement occurred for workers with and without a college degree, and during the 1990s, being black replaced lack of college as the better predictor of displacement.

Job displacement—permanent layoffs—represents an important dimension of economic insecurity (Gandolfi and Hansson 2011, Hollister 2011, Western et al. 2012). Displacement is distinct from more commonly studied deleterious labor market outcomes, such as unemployment, in two ways. First, it represents a form of potential downward mobility that may upend individuals' expectations about their economic trajectories (and potentially lay to waste any investments made on the basis of those expectations, whether job-specific human capital or home ownership). The displaced represent the unluckiest of the lucky: they managed to get a job, but not to keep it. In contrast to jobs that are defined from the outset as temporary or contingent, a displaced job is one that was conceived as permanent (or, at least, indefinite) but then lost, for reasons not of individual performance, but of the declining fortunes of a type of job. Following from that, displacement is distinct for a second reason: it is a crucial link between changes in the job structure and negative individual-level outcomes. To the extent that displacement is a major driver of unemployment, therefore, it may bear on debates such as whether low employment and low wages represent a "skills mismatch" between workers and jobs (e.g., Faberman and Mazumder 2012).

Like other labor market outcomes, job displacement may be experienced unequally by workers of different races. Yet whether, and when, this is true is a surprisingly under-studied question (Hollister 2011). In spite of important work by economists, sociologists, and demographers, the basic racial patterning of job displacement over the past thirty years--let alone comprehensive explanations for this patterning--has not received sustained attention. We do know some basic facts: Economists have shown that throughout the 1990s, black men experienced greater job turnover (voluntary and involuntary transitions between jobs) than white men (Jaeger and Stevens 1999, Neumark et al. 2000); that, across the 1980s and 1990s, nonwhite men and women sometimes (though not always) had higher rates of involuntary job termination than white men and women (Gottschalk and Moffitt 2000); and that job ending was more likely to result in unemployment spells for nonwhite men and women (Gottschalk and Moffitt 2000).

Demographers have shown that, during recessions, black men are more likely than white men to transition from employment to unemployment (Couch and Fairlie 2010). And sociologists have shown racial disparities in particular occupational groups, generally professionals or managers (Kalev 2014, McBrier and Wilson 2004, Wilson and McBrier 2005, Wilson and Roscigno 2010), which may depend on firm-level organizational decisions (Kalev 2014). Yet in spite of recent calls for more attention to economic insecurity (e.g., Kalleberg 2011, Western et al. 2012), sociologists have devoted substantial effort to understanding racial disparities but have paid relatively little attention to layoffs, while economists have done quite the reverse.

This research offers the first systematic analysis of racial disparities in job displacement in the United States over the past three decades. Using the Displaced Worker Survey (DWS), a supplement of the Current Population Survey (CPS), we analyze disparities in job displacement across and within subpopulations of white and black men and women.

Data

We use as data the Displaced Worker Survey (DWS), a supplement to the Current Population Survey (CPS) in even-numbered years beginning in 1984 (asking retrospectively about layoffs beginning in 1979), with the most recent wave in January 2016. (The January 2018 data will become available this Fall and will be incorporated into our research before the PAA meetings.)

The DWS's chief virtue over the main alternatives, the PSID (e.g., Boisjoly, Duncan, and Smeeding 1998) and the NLSY (Bernhardt et al 2000), is that its sample size suffices to simultaneously explore displacement, time, race, gender, and (separately) key demographic and economic dimensions such as public/private status, occupation, or industry. In this proposal, we report only preliminary demographic results, but propose to incorporate these economic dimensions as well.

Displacement is conceptualized as involuntary job loss for reasons other than individual performance. The DWS endeavors to identify every person aged 20 or older in each survey household who was displaced during the previous five (until 1994) or three years.[1] Because the DWS is linked to the full CPS, the DWS allows estimation of nationally-representative rates of displacement for the non-institutionalized population.[2]

[1] The DWS likely does not capture all and only the people it should. The main risk of false negatives comes from the survey instrument asking whether respondents lost their job for various prompted reasons (some of which qualify as displacement and some do not) or "some other reason." Those who select the latter are excluded from the study without further inquiry. This is particularly problematic because the immediately prior question asks whether a job was lost for any of a list of qualifying reasons "or another similar reason," and there is some concern that the prior reference to other "similar" reasons primes respondents to describe genuine cases of displacement in those terms for some reason or other (Esposito 1999). The main risk of false positives, on the other hand, comes from voluntary job leavers. This risk was likely exacerbated by a wording change in 1996, which made the question determining sample eligibility syntactically simpler at the cost of placing greater emphasis on the possibility of leaving (not losing) a job (Esposito 1999). Comparing trends in the DWS to trends in employment-to-unemployment transitions in the March CPS, Stewart (2000) argues that the DWS do show evidence of a jump in false positives in 1996 compared to earlier years. Nevertheless, the DWS is generally considered to provide good data in an area plagued by measurement and conceptual problems (Farber 1997).

[2] That the CPS sampling frame is limited to the non-institutionalized is a potentially significant form of bias. This sampling frame excludes those living in prison, military barracks, college dormitories, or residential health care facilities. Given extreme racial disparities in incarceration, this choice of population can generate a significantly distorted view of racial inequality when the non-institutionalized population sampled by the CPS is erroneously assumed to reflect the national population as a whole (Pettit 2012). In the case of displacement, those who are never at risk of displacement because they are incarcerated simply do not enter into the analysis. However, because the measure is retrospective, the exclusion of institutionalized populations can bias results even for the non-

We operationalize time as the year of the survey, rather than the year of displacement. This seemingly-counterintuitive choice avoids a potentially significant form of bias in the estimated disparities arising from the fact that only a single displacement is recorded in each survey for each worker, no matter how many times they may have been displaced during the survey observation window. Thus, the seemingly more natural measure of the year of displacement could substantially bias the estimated disparities if some groups of workers are more likely than others to have been displaced multiple times.[3] Operationalizing time as the survey year and conceptualizing the outcome as the rate of experiencing at least one displacement in a three-year (or five-year) period avoids this problem. Farber (2011), who also makes this choice, provides evidence that this operationalization does not overly distort the dynamics of the business cycle. Since the reporting window for displacements changed from five years to three years in 1994, in some analyses we interpret the trend in displacements separately before and after this switch.

In order to lose a job, one had to have a job in the first place. Displacement is a clearly negative experience relative to keeping a permanent job, but not clearly negative relative to never having had one in the first place. Thus, racial disparities in displacement will be understated, and displacement will lack a clear interpretation as a negative experience, if they are estimated without regard to who had a job that might have been displaced. However, the CPS lacks a measure of employment over the previous three years. In order to estimate the population at risk of displacement, we use the combined set of two groups: anyone who experienced displacement, regardless of their current employment status, and anyone who is currently employed, regardless of their past displacement status. This operationalization also follows Farber (2011).

We operationalize race as non-Hispanic blacks vs. non-Hispanic whites.

Preliminary Results

1. Black/white disparities in displacement are growing

Figure 1 shows black and white displacement rates over time, for men (Panel A) and women (Panel B). The solid lines show raw displacement rates, weighted to be nationally representative. The dashed lines show fitted rates estimated from logistic regressions (without weights, following Winship and Radbill [1994]). The regressions, estimated separately for each gender, model displacement as a function of race fully interacted with a linear time trend and indicators for surveys capturing major and minor recessions (along with an indicator for the switch from a five-year to a three-year displacement window). The regression coefficients are reported in Table 1.

Figure 1 and Table 1 show that blacks generally are more likely to be displaced than whites, and that this black/white disparity has grown over time. The growth in the displacement disparity is statistically significant (p estimated as 0.00 for both genders).

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institutionalized population. For example, if a non-institutionalized worker is laid off and subsequently is imprisoned, or joins the military, before the DWS layoff reporting window has ended, that worker is not eligible to appear in the sample even though they were displaced as a non-institutionalized worker. If this outcome is more likely to occur for some demographic groups (e.g., black men) than others (e.g., white men), the measured displacement disparities will be biased. Here, we simply note that this potential form of bias is conservative for finding racial disparities in displacement.

[3] For example, if black workers were more likely than white workers to be displaced multiple times between 1997 and 1999, the 2000 survey may underreport 1997 displacements for blacks (who might report a 1999 displacement) more severely than for whites.

Figure 2 shows the ratio of black and white displacement probabilities, in raw and fitted forms, for men and women. The ratios are generally similar for men and women, although men show a spike in displacement disparities during major recessions and women do not. During the 1990s, black women on average were 17%, and black men 12%, more likely than whites of the same gender to have experienced displacement. By the 2000s, this became 27% for women and 31% for men, and by the 2010s, black women were 31% more likely than white women and black men were 36% more likely than white men to have been displaced.

2. Being black has displaced lack of a college degree as the better displacement predictor

Figure 3 shows displacement rates for black and white men (Panel A) and women (Panel B) with and without a college degree. For both men and women, during the 1980s, blacks with a college degree had lower displacement risk than whites without a college degree. During the late 1990s or early 2000s, blacks with a college degree began to have similar, or greater, displacement risk as whites without one. Meanwhile, displacement was dramatic for blacks without a college degree, particularly during the Great Recession. Fully 20% of black men without a college degree reported a displacement in the 2010 survey, capturing displacements 2007-2009.

Proposed Analyses

By the time of the PAA meetings, we expect to have completed the following additional analyses:

1. Incorporated the 2018 survey wave, which is expected to be publicly released this fall, and captures displacements occurring 2015-2017.

2. Decomposed displacement disparities into disparities within and between major occupational and industrial groupings. This will show whether the increasing excess black risk of displacement reflects increasing black concentration in sectors of the economy that are at greatest risk of layoffs, or whether it reflects growing black vulnerability within key sectors.

The CPS records occupations and industries at four levels of detail. We will use the broadest levels, since the more detailed levels are too detailed for a sample in which the positive cases per year number only in the thousands.

The occupational and industrial codes have changed several times during the survey range of 1984-2016, with the most important changes occurring between 1992 and 1994, and between 2002 and 2004. For this reason, we will analyze each of the resulting time periods (1984-1992; 1994-2002; 2004-2016) separately as well as using occupational and industrial crosswalks developed by IPUMS (their OCC90 and IND90 crosswalks). The crosswalks allow consistent categories over time at the expense of imposing categories that make less sense for the modern context than the more recent categories do; as a result, we will analyze the data both ways.

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FIGURES

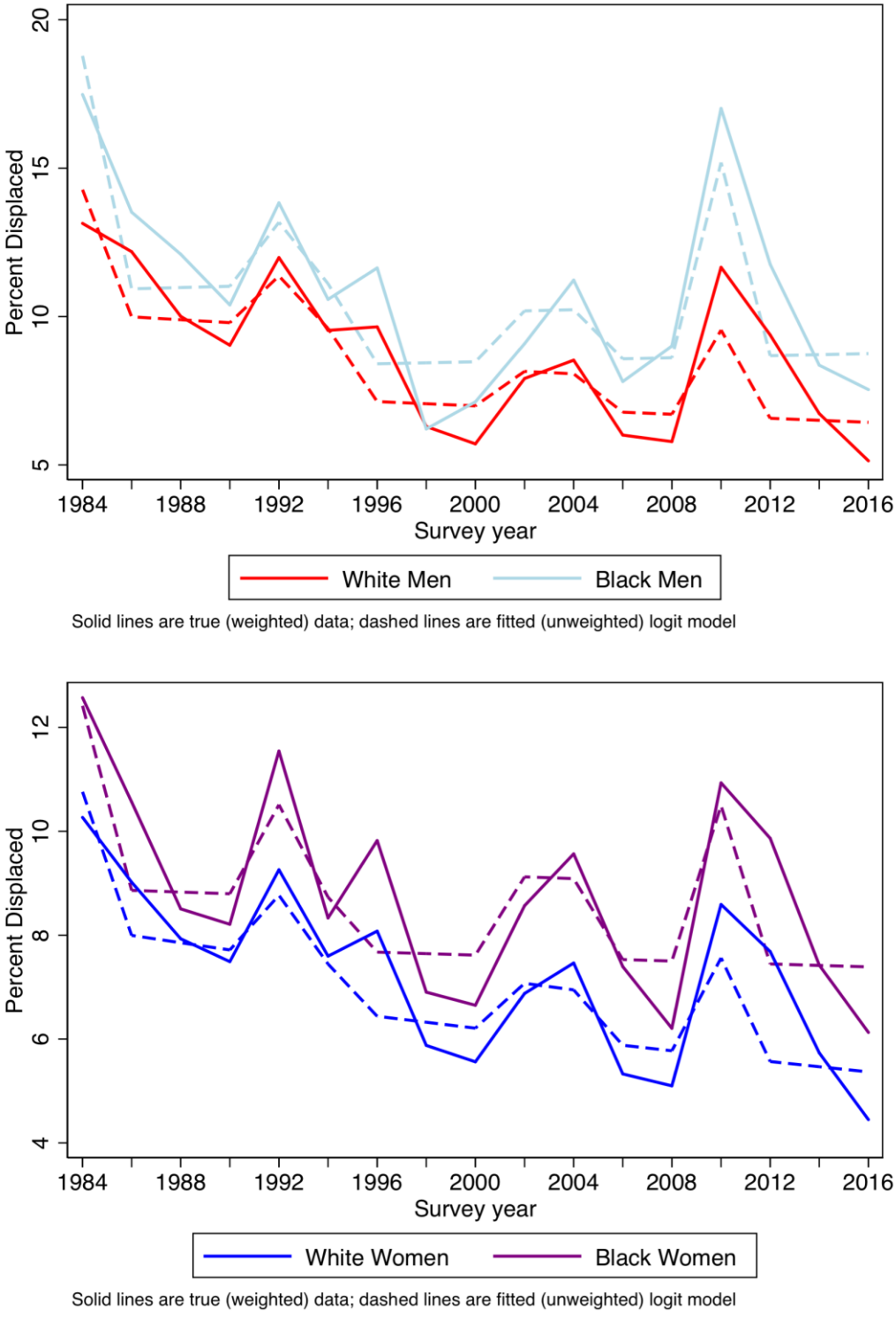

Figure 1. Displacement risk by race.

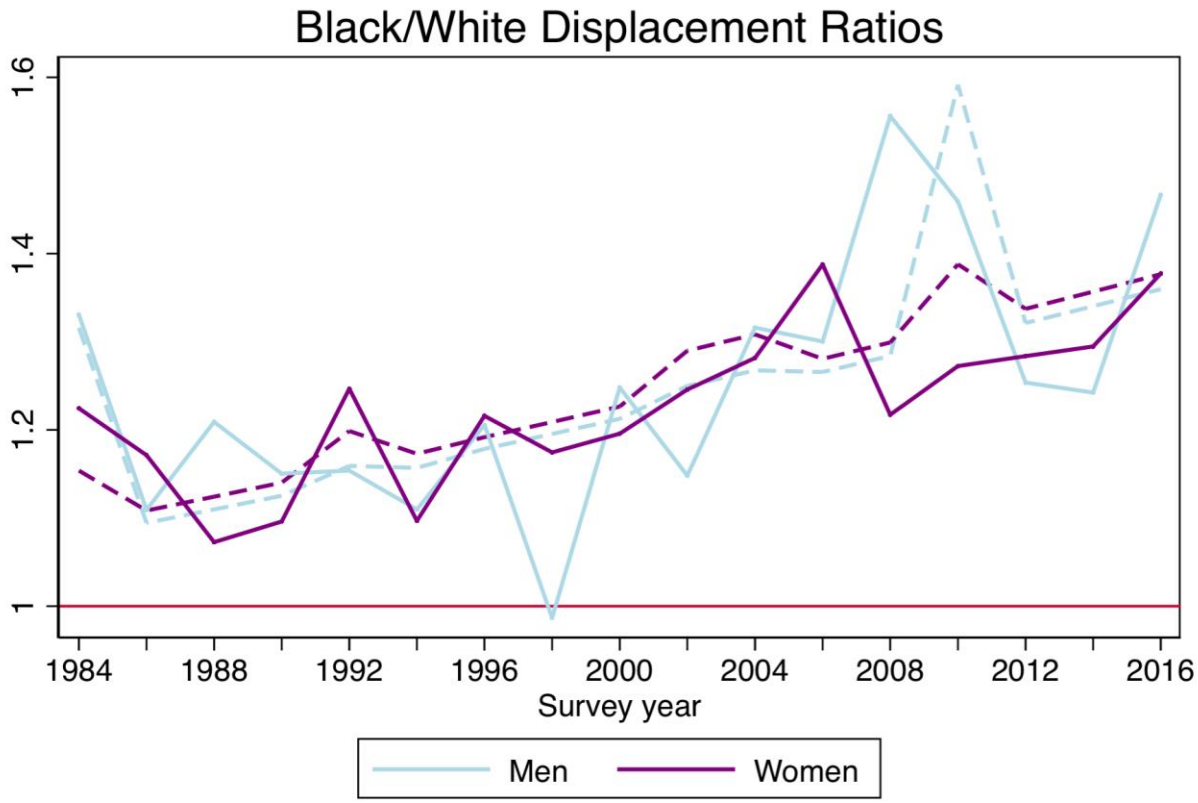

Figure 2. Black/white displacement ratios by sex.

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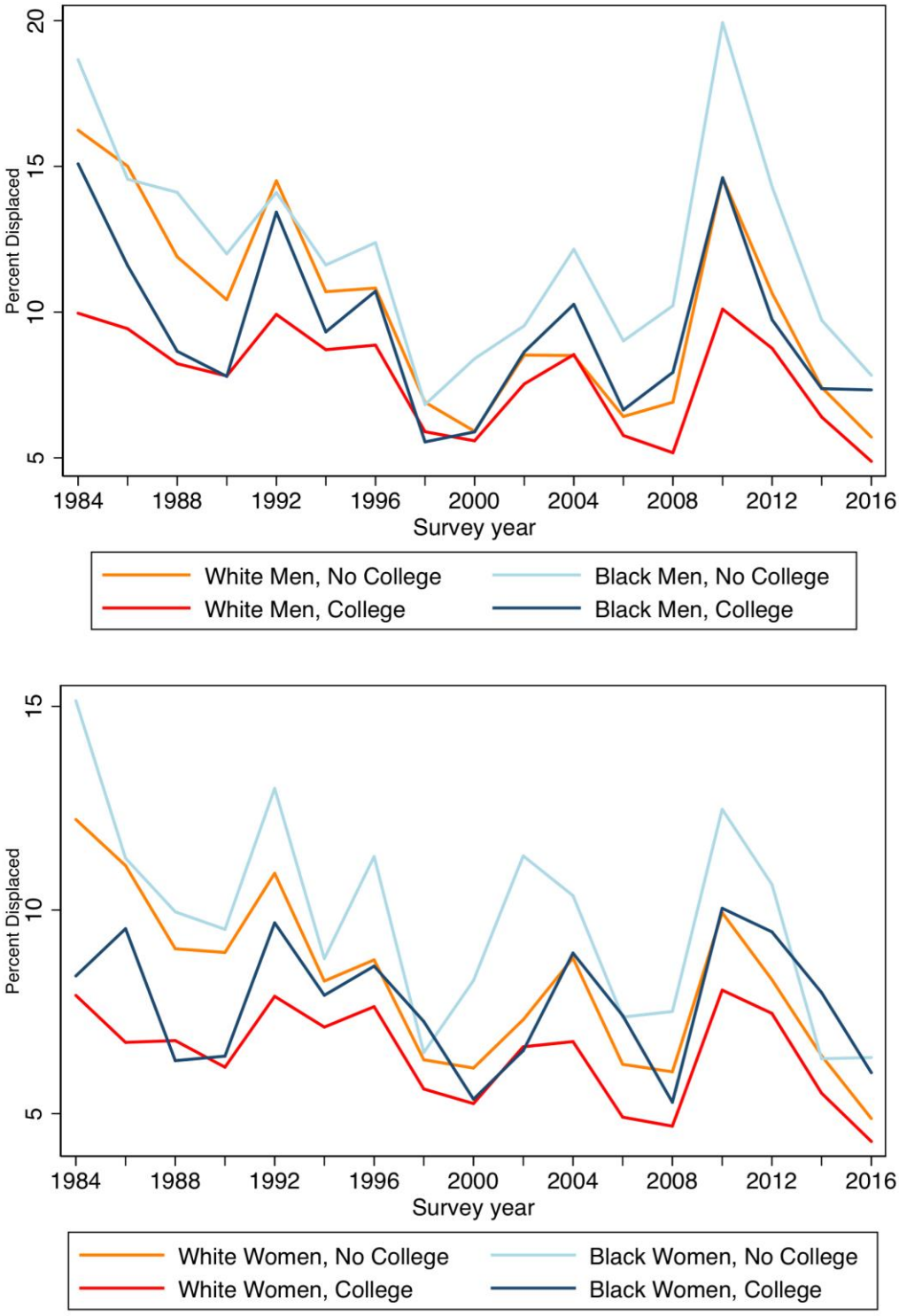

Figure 3. Displacement risk by race and education.

TABLES

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Logistic regression                             Number of obs     =    457,260
                                                LR chi2(8)        =    2794.95
                                                Prob > chi2       =     0.0000
Log likelihood = -136504.61                     Pseudo R2         =     0.0101

------------------------------------------------------------------------------
                        disp |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------------+------------------------------------------------------------------
                        race |
                       Black |   .2088456   .0220514     9.47   0.000     .1656257    .2520655
                yearcentered |  -.0055289   .0010891    -5.08   0.000    -.0076634   -.0033944
                             |
      race#c.yearcentered |
                       Black |   .0077149   .0017304     4.46   0.000     .0043233    .0111065
                             |
   1.majorrecessionsurvey |   .3945137   .0152623    25.85   0.000     .3646001    .4244274
                             |
race#majorrecessionsurvey |
                    Black#1 |   .2431533   .0467694     5.20   0.000     .1514869    .3348197
                             |
   1.minorrecessionsurvey |   .1775563    .014152    12.55   0.000     .1498189    .2052938
                             |
race#minorrecessionsurvey |
                    Black#1 |   .0211494   .0458268     0.46   0.644    -.0686695    .1109683
                             |
              fiveyearwindow |   .3124959    .020975    14.90   0.000     .2713857     .353606
                       _cons |  -2.588178   .0107503  -240.76   0.000    -2.609248   -2.567108
------------------------------------------------------------------------------

Logistic regression                             Number of obs     =    414,369
                                                LR chi2(8)        =    1248.84
                                                Prob > chi2       =     0.0000
Log likelihood = -107696.15                     Pseudo R2         =     0.0058

------------------------------------------------------------------------------
                        disp |      Coef.   Std. Err.      z    P>|z|     [95% Conf. Interval]
-----------------------------+------------------------------------------------------------------
                        race |
                       Black |   .2192181   .0218167    10.05   0.000     .1764581    .2619781
                yearcentered |  -.0096641   .0012291    -7.86   0.000    -.0120731   -.0072551
                             |
      race#c.yearcentered |
                       Black |    .007626   .0017858     4.27   0.000     .0041259    .0111261
                             |
   1.majorrecessionsurvey |   .3081796   .0185269    16.63   0.000     .2718675    .3444917
                             |
race#majorrecessionsurvey |
                    Black#1 |   .0645746   .0507133     1.27   0.203    -.0348216    .1639708
                             |
   1.minorrecessionsurvey |    .158688   .0163751     9.69   0.000     .1265935    .1907825
                             |
race#minorrecessionsurvey |
                    Black#1 |   .0423265   .0448661     0.94   0.345    -.0456095    .1302624
                             |
              fiveyearwindow |   .1367003   .0234558     5.83   0.000     .0907278    .1826729
                       _cons |  -2.714895   .0120118  -226.02   0.000    -2.738438   -2.691353
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Table 1. Regression of displacement risk on race and temporal and economic variables for men (top) and women (bottom).