Tides and Prejudice: Racial Attitudes During Downturns in the United States 1979-2014

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Abstract

What happens to racial prejudice during economic downturns? This paper analyzes white attitudes towards African Americans in the United States at different points in a business cycle from 1979-2014. Using a number of indicators of hostility towards African Americans available from the General Social Survey we develop an indicator of racial prejudice. We combine this with data on unemployment from the Current Population Survey and find robust evidence that racial hostility as measured by our indicator of prejudice is counter cyclical and rises during periods of higher unemployment for whites. Specifically a one standard deviation in the unemployment rate being experienced by whites is associated with a .03 to.05 standard deviation increase in the discrimination index. This is of a magnitude comparable with one year less of education. We undertake a quantile regression to show that this effect is widespread across the distribution of prejudice and that apart from those with initially low levels of prejudice, increasing own group unemployment results in statistically significant increases of similar magnitude in prejudice across that distribution. Finally, we show that discrimination is robustly positive correlated with measures of life dissatisfaction, further underscoring the significance of periods of distress in generating racial hostility.

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Introduction

Nearly every day in the news and in the rhetoric of our political campaigns the issue of racial tension in the United States confronts our awareness . Survey evidence from the Gallup organizations suggests that more Americans feel that racial relations are poor than any time in the last two decades[1]. The rise of the Black Lives Matter movement following a high profile set of police killings of African Americans is only one overt manifestation of underlying discord and the continuing 'othering' of African Americans. At the same time, the rise of the Trump phenomenon and its overt racialized hostility towards Hispanics and Muslims suggests the hardening of prejudice among a significant proportion of the electorate. Is it a coincidence that this rise in conflictual attitudes and outcomes has manifested itself at a point of general economic malaise? Is there a link between increased racial prejudice and poor macroeconomic performance? Does racial tension rise in periods of economic downturns and when jobs disappear in a region? While it is true that racial minorities are hit the hardest when there is a general economic downturn, it is also possible that the experience of insecurity also exacerbates discrimination against racial minorities by whites. Evidence from other situations strongly suggests that in periods of insecurity, out-group prejudice rises substantially. Johnston and Lordan (2016) find that self-reported prejudice rises when there is higher unemployment in regions of the UK between 1993 and 2011 among men. Mayda (2006) finds that anti-immigrant sentiment across several different countries rises when labor market conditions are worse . In a study of social psychology Krosch and Amodio (2014) finds that when primed with stories of scarcity this influences people's visual representations of race in a way that may promote discrimination: whites perceive people as 'black' sooner than under situations where they are not primed with such stories.

Despite these efforts there have few attempts, to the best of our knowledge, that examine the impact of macroeconomic performance and labor market dislocation on racial attitudes towards African Americans. There are of course several related literatures: on the empirics of racial prejudice and its economic impacts in the US (a (very) incomplete list might include Charles and Guryan (2008); Guryan and Charles (2013); Fryer and Torelli (2010); Arrow (1998); Donohue and Heckman (1991); Goldsmith et al. (2007); Darity and Goldsmith (1996); Lang and Lehmann (2012)) and a related empirical literature bearing on social attitudes towards migrants across different contexts (see among others Dustmann and Preston (2006); Dustmann et al. (2005); Dustmann and Preston (2007); Mayda (2006); Johnston and Lordan (2016); Facchini and Mayda (2009)). We here undertake to test the hypothesis that macroeconomic conditions can inflame prejudicial attitudes. If it is the case that insecurity and the disappearance of work result in feelings of vulnerability and competitiveness, can they exacerbate underlying prejudice? By contrast, in periods where there is sufficient economic activity to employ all workers, white individuals may become less ill-disposed towards blacks.

Baseline racial prejudice is slow to adjust (typically over years or decades) while business cycles are infrequent and usually short lived. Given this, we use an approach which exploits cross-sectional variation across geographic regions and time in order to identify the impact of slack labor market conditions on prejudice. We use data on prejudice from the General Social Survey from 1972 to 2014 and unemployment rates , disaggregated by race and educational level from the CPS-MORG for 1979-2014. Our approach closely follows that of Johnston and Lordan (2016) . We describe this methodology in later sections. To foreshadow our results, we find strong confirmation for

[1] http://www.gallup.com/poll/1687/race-relations.aspx

the hypothesis that racial prejudice increases in periods of higher own-group unemployment. We undertake a quantile regression to see whether the effects vary across parts of the distribution of prejudice. That is, is the increase in measured prejudice a result of initially more prejudiced people becoming more prejudiced or is this a more widespread phenomenon. We find that the increase in racial prejudice is fairly widespread. We supplement our analysis by examining whether racial prejudice responds to individual respondent's own life satisfaction. Again, we find strong evidence that measured prejudice increases when an individual faces more difficult labor market situations.

Our findings have clear policy implications. To the extent African Americans face a large set of social dislocations as a result of prejudice (crime, wage penalties), this can be made worse by an increase in unemployment for whites as this increases levels of open and covert prejudice.

The rest of the paper is outlined as follows. We begin with a description of our data and methodology. The following section provides the basic result of the paper: that unemployment rates of college-educated whites and whites with high school or less are strong correlates of measured prejudice . The section that follows examines the extent to which prejudice responds differently to unemployment at different parts of the distribution of prejudice. The penultimate data assesses the extent to which individual experiences of lower reported levels of life satisfaction, particularly with respect to labor market outcomes is correlated with prejudice. The final section concludes.

Data

In order to obtain a measure of racial prejudice, D, we use the General Social Survey (GSS). We use data from multiple waves (1972-2014) of the GSS to build a proxy for prejudice. The GSS is nationally representative dataset that provides survey questions which have been used to judge racial prejudice (see for example Charles and Guryan (2008)). The questions asked vary considerably in scope from the appropriate role of government policy in helping African Americans to more direct measures of racial hostility (whether the respondent opposes interracial marriage, for example). Unfortunately, not all questions are asked in all years. Since we are interested in a consistent data series over time, we limit our analysis to 6 questions that were asked of whites for several years, through the 70s, 80s, 90s and 2000s in order to create an index of discrimination[2] . These are: RACOPEN (whether owners should be allowed to discriminate in housing), RACPUSH (whether blacks should not push as much as they do), HELPBLK(whether governments should aid blacks), NATRACE (whether governments should be improving the condition of blacks), RACPRES (whether the respondent would vote for a black president) and RACMAR (whether the individual objects or not to interracial marriage). There are several ways to aggregate this information. We chose a direct mean of these variables as the index (suitably recoded so that higher values meant more discrimination), although the main results are qualitatively similar if we use other measures such as a principal components index.

Table 1 provides an indication of the trends in the components of the discrimination variable over time. Clearly prejudice has attenuated over time, with steep declines in the fraction of people unwilling to vote for a Black President or being opposed to interracial marriage between 1972 and 2012. Interestingly however, when it comes to questions that reference the appropriate role of the

[2]while there are several questions that were asked in multiple years, these were the only ones with a long enough time frame to use to track prejudice across the four decades

government in assisting blacks (variables d1 and d3) , there has been virtually no reduction. This in turn suggests that it may not be appropriate using all the variables because of the possibility that the latter two questions may be less to do with prejudice than the respondent's beliefs about the state's role in racial relations. Given this possibility, we create two indices D_{all} and D_{prej} which are the means of **(d1, d2, d3, d4, d5 and d6)** and **(d2, d4, d5 and d6)** respectively. In that sense D_{prej} captures 'pure' prejudice more effectively.

Table 2 gives evidence of substantial regional variation in the level of measured prejudice. The measures suggest that racial prejudice as measured is strongest in the southeastern portion of the country and least severe in New England and in the West Coast. Specifically, the index is largest in the East South Central division (AL, KY, MS, and TN) and next greatest in the South Atlantic (DE, DC, FL, GA, MD, NC, SC, VA, and WV) . Prejudice is least severe in New England (CT, ME, MA, NH, RI, and VT) and in the Pacific (AK, CA, HI, OR, and WA). This is in strong concordance with Charles and Guryan (2008) who use the same dataset for a different purpose.

In order to obtain data for unemployment rates, we used CPS MORG data for 1979-2014 and identified black and white unemployment rates both overall and by education category for each race for each region and each year in the period. Basic trends are provided in figure 1. Given that there are substantial differences in the levels and sometimes the trend of the unemployment rate between college graduates and those with high school degrees and lower, we merged the unemployment rates of each group to the individuals in the GSS data that corresponded to that group (i.e. white college workers 'own group unemployment rate' is the unemployment rate among white college educated people in a region in a given period while the 'own group unemployment rate' for whites without college degrees is the unemployment rate in the region for those with high school or less education.)

Methodology

In order to identify the impact of labor market weakness on prejudice, we utilize a framework that has been used in similar contexts in order to assess attitudes towards migrants (Mayda, 2006) and to assess the degree of self-reported prejudice Johnston and Lordan (2016) in the UK. We closely follow the latter. Specifically, we regress the prejudice index on own group unemployment rates, controlling for area and time fixed effects and a number of plausible controls. We run a linear regression of the form

$$D_{ijt} = \alpha U_{jt} + \beta' X_{ijt} + \mu_t + \gamma_j + \delta_j t + \epsilon_{ijt} \tag{1}$$

where D_{ijt} is the reported racial prejudice of individual i residing in area j in year t, U_{jt} is the region-level unemployment rate for whites in the respondent's educational group (higher than high school or high school and below), X_{ijt} vector of individual-level control variables, γ_j is a region fixed-effect, μ_t is a time fixed effect , $\delta_j t$ is an region-specific time-trend, and ϵ_{ijt} is a random disturbance term. Standard errors are clustered by area to allow for correlation between disturbances across years within regions.

Region-level intercepts (fixed-effects) and region-specific linear time trends control for regional differences in intercepts as well as regional differences in the speed to which racial prejudice has changed

Table 1: Prejudicial Attitudes Over Time

Year	**d1**	**d2**	**d3**	**d4**	**d5**	**d6**
1972		1.25			3.08	1.37
1973	1.88			1.65	3.05	1.37
1974	1.89	1.16				1.33
1975	1.97	1.17	3.50	1.65	3.09	1.38
1976	1.98			1.64	3.00	1.32
1977	1.99	1.22			3.06	1.27
1978	2.01	1.15		1.58		
1980	1.99			1.56	2.87	1.29
1982	1.76	1.10			2.52	1.25
1983	1.89	1.15	3.67	1.52		
1984	1.79		3.53	1.46	2.60	1.24
1985	1.90	1.14			2.69	1.26
1986	1.79	1.12	3.61	1.47		
1987	1.65		3.27	1.39		1.21
1988	1.79	1.17	3.62	1.41		1.23
1989	1.79	1.16	3.59	1.38		1.20
1990	1.75	1.12	3.41	1.40		1.18
1991	1.77	1.09	3.41	1.36		1.17
1993	1.78	1.10	3.53	1.31		1.16
1994	1.88	1.09	3.58	1.34	2.28	1.13
1996	1.86	1.07	3.60	1.30	2.22	1.10
1998	1.81		3.57		2.20	1.11
2000	1.79		3.48		2.20	1.10
2002	1.85		3.58		2.15	1.10
2004	1.80		3.67	1.33		
2006	1.79		3.54	1.28		
2008	1.76	1.06	3.55	1.26		
2010	1.84	1.03	3.56	1.24		
2012	1.79		3.66	1.26		
2014	1.83		3.60	1.25		

d1: Is the government spending too much, too little or just correct on improving the condition of blacks, (1=too little, 3=too much)
d2: Would you vote for a black president (1=yes, 2 =no)
d3: Should government help blacks of should people (1=government, 4=people)
d4: Would you prefer a law in which an owner of a house can discriminate against blacks or one in which they cant: 1=cant discriminate, 2= can)
d5: Blacks should not push too much:1= strongly disagree, 4 =strongly agree)
d6: Do you oppose interracial marriage (1=no, 2 =yes)

Table 2: Prejudice Across Regions

Region	**States**	**d1**	**d2**	**d3**	**d4**	**d5**	**d6**
New England	CT, ME, MA, NH, RI, and VT	1.79	1.07	3.44	1.36	2.30	1.13
Middle Atlantic	NY, NJ, PA	1.81	1.11	3.44	1.40	2.57	1.17
East North Central	OH, IN, IL and MI	1.87	1.12	3.54	1.42	2.67	1.21
West North Central	MN, IA, MO, ND,SD, NE, KS	1.86	1.13	3.64	1.46	2.54	1.22
South Atlantic	DE, DC, FL, GA, MD, NC, SC, VA, and WV	1.85	1.17	3.56	1.45	2.80	1.31
East South Central	AL, KY, MS, and TN	1.95	1.24	3.66	1.53	2.93	1.43
West South Central	AR, LA, OK, and TX	1.90	1.17	3.61	1.44	2.67	1.27
Mountain	AZ, CO, ID, MT, NV, NM, UT, and WY	1.88	1.08	3.65	1.34	2.42	1.14
Pacific	AK, CA, HI, OR, and WA	1.83	1.08	3.48	1.31	2.42	1.11

d1: Is the government spending too much, too little or just correct on improving the condition of blacks, (1=too little, 3=too much)
d2: Would you vote for a black president (1=yes, 2 =no)
d3: Should government help blacks of should people (1=government, 4=people)
d4: Would you prefer a law in which an owner of a house can discriminate against blacks or one in which they cant: 1=cant discriminate, 2= can)
d5: Blacks should not push too much:1= strongly disagree, 4 =strongly agree)
d6: Do you oppose interracial marriage (1=no, 2 =yes)

(i.e. the slope may differ by region). Regional-specific trends can capture time-variant unobservable factors that are associated with both prejudice and unemployment. The regression therefore assesses the effect of own group unemployment rate on prejudice by focusing on the within-region variation in unemployment in relation to within-region variation in prejudice around its trend.

X_{ijt}, the vector of individual controls include a standard set: gender, age, years of education, whether the person is working , the level of family income (in constant terms) and stated political affiliation [3].

Table 3 provides the summary statistics for the variables used in the regression model.

Table 3: Summary Statistics

Variable	Obs	Mean	Std. Dev.	Min	Max
D_all	55880	2.0	0.8	1.0	5.0
D_prej	47901	1.5	0.5	1.0	4.0
Own Unemployment Rate	38899	5.3	2.6	1.6	14.4
Years of Education	59434	12.8	3.1	0.0	20.0
Party ID	59246	2.8	2.0	0.0	7.0
Age	59388	44.5	17.0	18.0	89.0
Working	59599	0.6	0.5	0.0	1.0
Sex	59599	1.5	0.5	1.0	2.0
Family Income	53546	48900.3	37687.9	369.5	180386.0

Thus, the discrimination indices have a mean of 2 and 1.5 respectively. Unemployment among

[3]The addition of several other plausible controls does not materially affect the main result.

Table 4: Effect of Unemployment on Prejudice

	(1) D_all	(2) D_prej
Own Unemployment Rate	**0.0102**$^{+}$	**0.00905**$^{+}$
	(2.06)	(2.06)
Age	0.00399*	0.00504*
	(10.29)	(22.65)
Years of Education	-0.0265*	-0.0228*
	(-6.85)	(-7.24)
Political Affiliation	0.0440*	0.0138*
	(13.12)	(5.33)
Working	0.0263^{+}	-0.00921
	(1.94)	(-1.26)
Gender	-0.0602*	-0.0701*
	(-8.14)	(-9.82)
Family Income/1000	0.000288	-0.000373*
	(1.83)	(-5.50)
N	32528	27572

t statistics in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$

Regression includes year, region and year*region fixed effects, standard errors are clustered at the regional level

whites ranges from 2.6 % to 14.4 % during the sample period, with a mean of 5.3 years. The average years of education is slightly above high school (with 12.8 years). Family income ranges from 369 dollars to 180000 dollars a year in constant (2000) terms. The respondents are on average 44 years old.

Table 4 provides the main results on running the regression for both D_{all} and D_{prej}. The results show a positive effect of own group unemployment rate on the index of discrimination. Specifically, a one standard deviation increase in the unemployment rate is associated with a 0.03 standard deviation increase in the index of D_{all} and a .05 standard deviation increase in the index of D_{prej}. To give a sense of magnitude, this is roughly equivalent to the impact on prejudice from having a year less education or being 5 years older.All other variables enter with expected signs and are statistically significant at the one percent level (except for whether the respondent is working or not). Women are much less likely to be discriminatory than men. In addition, there is a significant positive effect on the discrimination index if one is older, one is not married, or if one leans to the right (the value of the party affiliation variable ranges from 1 (strong democrat) to 7 (strong republican).

Supplementary Analysis

Having established that there is a relatively robust and substantial correlation between objective measures of own group unemployment in a region and racial prejudice among whites in that region, we explore two other issues. First, we ask whether the impact of increasing unemployment has similar impacts on discrimination along the distribution of prejudice/discrimination. There are reasons to believe that economic impacts vary across the prejudice distribution and that there may be differential effects of unemployment on prejudice. In a different context, Charles and Guryan (2008) for example note that relative black wages vary negatively with the prejudice of the "marginal" white in a state and with with the prejudice in the lower tail of the prejudice distribution, but that wages are not responsive to the the prejudice of the most prejudiced persons in a state. Thus if unemployment has differential impacts upon prejudice along the distribution of prejudice, we may expect differential follow on effects such as the impact on relative wages. Second we ask whether prejudice is correlated with other survey measures of general life dissatisfaction.

In order to analyze the first question this we undertake a quantile regression. Table 5 below illustrates how the effects of own group unemployment varies over quantiles of prejudice, and how the magnitude of the effects at various quantiles differ from the OLS coefficient. As is evident, while at the lower end of the distribution of prejudice (i.e. at the 10th quantile) there is little effect of unemployment, across all other quantiles, there is a strong positive effect, with the coefficient remaining of roughly the same size (0.009-0.014) as the OLS coefficient. This suggests that the response of prejudice to own group unemployment is actually fairly even spread across the distribution of prejudice among whites.

Financial Comfort

Our previous analyses focused on the responsiveness of prejudice to objective measures of labor market dislocation at the regional level. We supplement this analysis by examining the responsiveness of prejudice to individual level survey responses about general financial satisfaction. We use three indicators from the General Social Survey to create an index of dissatisfaction. These are the respondent's general dissatisfaction with his or her finances (SATFIN) , dissatisfaction with his or her job (SATJOB) and his or her dissatisfaction with family (SATFAM). We simply use the mean of these three indicators as our measure of dissatisfaction. Our regression therefore is

$$D_{ijt} = \alpha + \eta_{ijt} + \beta' X_{ijt} + \mu_t + \gamma_j + \delta_j t + \epsilon_{ijt} \tag{2}$$

where η is the measure of dissatisfaction.

Table 6 shows the results of the regression. There is a very strong correlation between dissatisfaction with life in general and prejudiced attitudes towards blacks. The standardized coefficients suggest that a one standard deviation in dissatisfaction is associated with a .08 standard deviation in D_{all} and a 0.16 standard deviation D_{prej}. This further supports the general thesis that periods of scarcity and malaise are also those in which racial prejudice increases.

Table 5: Models of Unemployment on Discrimination OLS and QR

	(OLS)	(Q(0.1))	(Q(.25))	(Q(0.5))	(Q(0.75))	(Q(.9)))
Own Unemployment Rate	0.0102*	-4.12e-16	0.00949*	0.00912*	0.0104*	0.00802
	(3.09)	(-0.00)	(2.26)	(2.20)	(2.42)	(1.12)
Age	0.00399*	-7.67e-18	0.00464*	0.00479*	0.00456*	0.00360*
	(14.21)	(-0.00)	(12.93)	(13.55)	(12.43)	(5.87)
Years of Education	-0.0265*	-2.83e-16	-0.0260*	-0.0304*	-0.0335*	-0.0283*
	(-11.83)	(-0.00)	(-9.10)	(-10.78)	(-11.45)	(-5.79)
Political Affiliation	0.0440*	-1.11e-16	0.0393*	0.0420*	0.0391*	0.0331*
	(20.21)	(-0.00)	(14.13)	(15.35)	(13.76)	(6.97)
Working	0.0263*	1.94e-16	0.0277*	0.0334*	0.0161	0.000446
	(2.55)	(0.00)	(2.10)	(2.57)	(1.20)	(0.02)
Gender	-0.0602*	-3.05e-16	-0.0756*	-0.0680*	-0.0647*	-0.0569*
	(-6.76)	(-0.00)	(-6.63)	(-6.05)	(-5.55)	(-2.92)
Family Income/1000	0.000288*	1.97e-19	0.000133	0.000160	0.000250	7.41e-05
	(2.25)	(0.00)	(0.81)	(0.99)	(1.49)	(0.27)
N	32528	32528	32528	32528	32528	32528

t statistics in parentheses

$^{+}$ $p < 0.10$, * $p < 0.05$

Regression includes year, region and year*region fixed effects, standard errors are clustered at the regional level

Table 6: Dissatisfaction and Discrimination

	(1)	(2)
	d_all	d_prej
Dissatisfication	0.0280***	0.00440*
	(13.84)	(3.22)
Years of Educatoin	-0.0322***	-0.0297***
	(-11.85)	(-14.83)
Party Identification	0.0378***	0.0122***
	(12.48)	(5.06)
Age	0.00493***	0.00544***
	(14.32)	(34.65)
Working	0.00817	-0.00517
	(0.75)	(-0.75)
Sex	-0.0568***	-0.0598***
	(-9.55)	(-9.59)
Family Income/1000	0.000535**	-0.000308**
	(3.64)	(-4.43)
N	41120	36155

t statistics in parentheses

* $p < 0.05$, ** $p < 0.01$, *** $p < 0.001$

Regression include year region and regionyear fixed effects. Standard errors clustered at the regional level

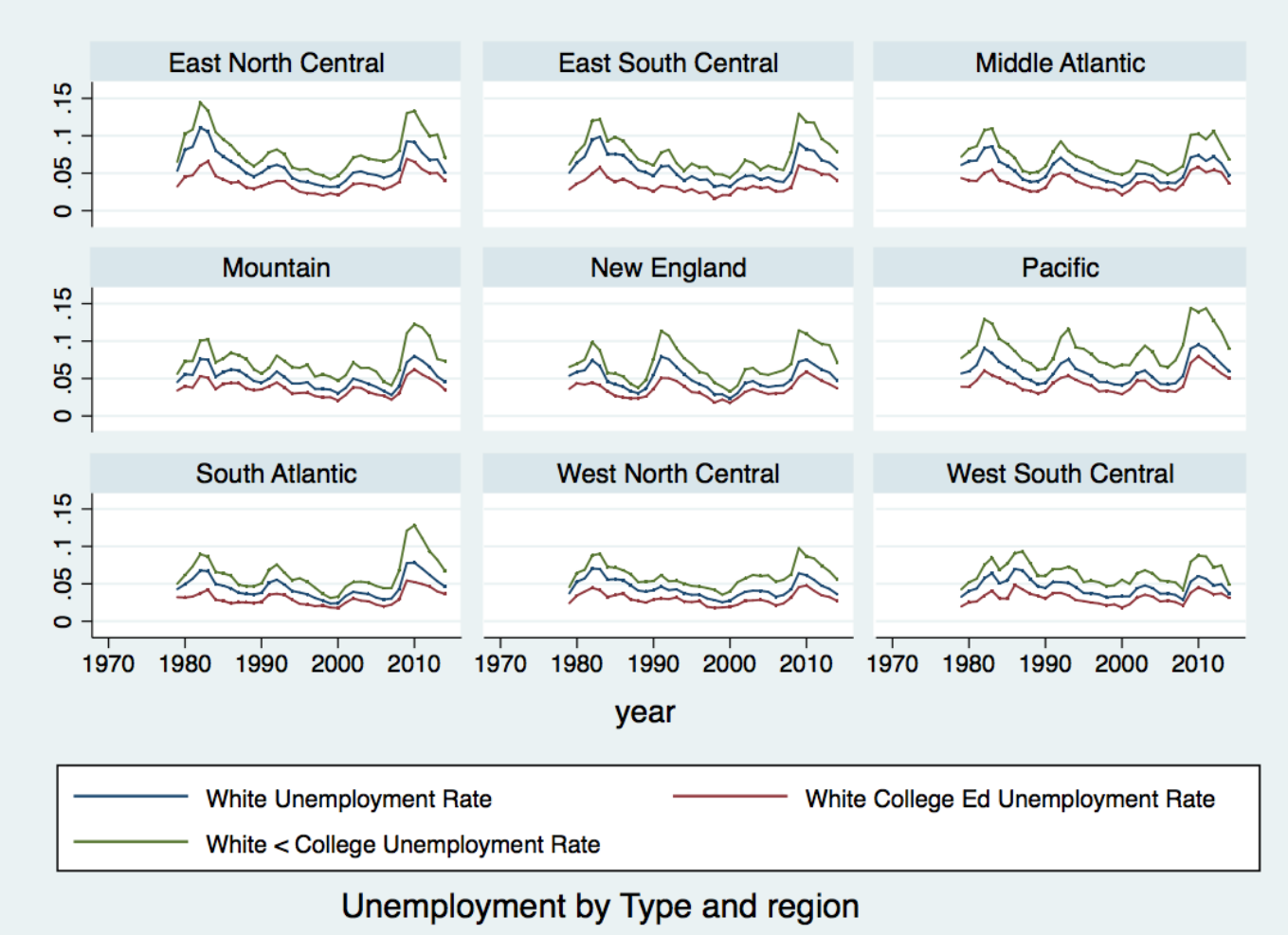
Conclusion

Our primary goal in this paper was to empirically test the often stated, but understudied relationship between racial prejudice and economic downturns. Using the extensive data on prejudicial attitudes for the last 40 years available from the General Social Survey, and combining this with data on unemployment among college educated whites and whites with less than a college degree from the Current Population Survey, we document a robust relationship between own group unemployment and an index of prejudice. We further document significant regional differences in prejudice across different regions of the country and over time. We show further that this impact is relatively evenly spread across the distribution of prejudice. We further supplement our analysis by showing that other indicators of general dissatisfaction are also directly correlated with prejudice.

The paper's results suggest an important confirmation of the link between labor market dislocation and hostility in racial attitudes. We are silent however about the causal linkages. Our findings are of course in complete consonance with the theoretical prediction of labor market competition between racial groups during periods of labor market insecurity. However nothing in our analysis allows us to say whether the increase in racial prejudice during downturns is a result of such competition or whether periods of economic downturn also involve social dislocations (increased crime for example) that exacerbate social tensions. Much certainly remains to be done to further disentangle these effects, and to analyze the follow on impacts on social, political and economic outcomes. If economic insecurity exacerbates racial animosity the latter can poison our politics and deform the politics of economic policy and institutions. Our results do suggest that racial animus should not be seen simply as a given that changes only over long periods of time, but should be seen as malleable and influenceable even in the short run, especially as the economy undergoes sharp downturns. This obviously has important implications for understanding the side effects of macroeconomic policies, both fiscal and monetary, that lead to economic insecurity, even for short periods and is an important avenue for further research.

[h!]

Figure 1: Unemployment Rates of Whites by Level of Education



Source: Authors Calculation from CPS MORG

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