

Residential segregation and the politics of welfare

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Abstract

Even as the United States continues to become more diverse, residential segregation continues to persist along ethno-racial lines. Such lack of contact between different racial groups would potentially lead to the existence and persistence of various racial stereotypes. As racial biases are often said to play a major role in American politics, is it possible that the lack of familiarity due to residential segregation could affect which policies are enacted and how they are implemented? Using an aggregated measure of segregation at the state level, this paper examines how residential segregation affects public attitudes towards welfare and the degree of welfare generosity of states. The findings indicate that for states with lower proportion of African Americans, higher segregation (or less exposure) leads to less generous welfare policies while for states with a higher proportion of African Americans, higher segregation leads to more generous welfare policies.

1 Introduction

Does lack of familiarity with other races/ethnicities make us less empathetic to them? Or does it cause less inter-group conflict leading to less of a threat perception? Will diversity with high levels of segregation and dissimilarity lead to less social cohesion? How do race relations in multi-ethnic societies play out depending who our neighbor is? Does the institutionally enforced racial residential segregation of the past and the defacto residential segregation at present contribute to the often racialized discourse surrounding welfare?

While the United States has become more diverse than the past, residential segregation continues to persist even decades after the passage of the Fair Housing Act of 1965. As

of 2010, the country as a whole had a Dissimilarity Index (share of white and black population who would have to move to a different census tract to achieve full integration) of 70 percent, which though less than prior decades was still substantially high. Milwaukee, New York, Chicago and Philadelphia are some of America's most segregated cities with all of them having a Dissimilarity Index above 80 percent as of 2010. African Americans remain the most segregated group with respect to White Americans while Asians and Hispanics experience moderate segregation. Causes of such segregation could range from perceived class differentials of different racial groups to ethno-centric preferences within a group to out-group hostility (Bobo and Zubrinsky, 1996) but their consequences are mostly negative, particularly for poor African Americans.

The issue of Post Jim Crow residential segregation was first brought to light by Massey and Denton (1993) where the authors attributed it to institutional barriers for upward mobility for poor African American in inner cities. Segregation has also been associated with interracial disparities in income and education (Cutler and Glaeser, 1997) and also with health disparities (Robert and Ruel, 2006) and even with an interracial survival gap (Popescu, Duffy, Mendelson, Escarce, 2018).¹ But could it possibly have an impact on issues such as welfare where there is a strong racial component to its discourse particularly when it comes to support for and enactment of more generous welfare policies? Race has historically influenced the development of the welfare state in the US (Lieberman, 1998) and racial attitudes have shaped public opinion of welfare spending (Gillens, 1999). Could residential segregation and subsequent lack of contact influence inter-racial perception in a way that affects the discourse surrounding such as through the perpetuation of racial stereotypes such as the welfare queen. I hypothesize (which I elaborate more on the subsequent sections) that the effect could go in two different ways. On one hand, high levels of segregation may make it easier for negative racial stereotypes (such as the 'welfare queen') to flourish thereby leading to less support for welfare policies. While on the other hand, high segregation can actually prevent negative inter-racial interactions preventing the majority from viewing minorities as a threat, something that is likely in areas with large minority populations and a history of inter-racial conflict. This could in turn lead

¹Other key literature on residential segregation are Darden and Camel (1999) where the authors analysed the link between segregation and socio economic disparities in Detroit and Squires, Friedman, Saidat (2002) where authors do the same in Washington DC

to less prejudiced attitudes and support for less penalising welfare policies as opposition to welfare is often a form of race-coding. I attempt to analyze whether either of the aforementioned phenomena hold true in the period from 1980 to 2010 by constructing an aggregate index of segregation for every state as the explanatory variable and a measure of public opposition to welfare and the state's welfare benefits as the outcome variable. In section 2, I discuss the literature about the relationship between race and welfare. In section 3 I formalize the causal mechanisms that I hypothesize. Sections 4, 5,6 involve the regression design, results and interpretation respectively.

2 Race and welfare

Racial biases are often said to affect people's support or opposition for policies that disproportionately affect minorities more, especially in the area of criminal justice (Peffley and Hurwitz, 1989) and welfare (Gillens 1996). When it comes to welfare, studies show how the demographic composition of a nation is a major determinant of the strength of its welfare state(Wright, 1976). Gillens(2003) argues that poverty as portrayed by the media gradually shifted to being an exclusively 'Black' problem since 1967. Peffley, Hurwitz and Sniderman (1997) show how white opposition to welfare is often rooted in racial attitudes and is a form of race-coding where white Americans can express their prejudice towards blacks without being explicitly racist (Gillens, 1996). Schramm, Soss and Fording (2008) argue in their Racial Classification Model (RCM) that when minorities become more represented in the welfare discourse, race and racial classifications often attain a certain degree of salience to policy makers in their implementation of policies. .The authors shows using a survey experiment that White respondents who believe in the 'blacks are lazy' stereotype are more likely to oppose welfare, even more than respondents who believe that poor people are lazy showing that racial biases have more of an effect on attitudes towards welfare than individualism. The author further uses an experimental manipulation to show how perception of poor whites, or rather white welfare mothers has less of an effect on opposition towards welfare than perception of poor black welfare mothers. This shows how attitudes towards welfare is strongly shaped by racial biases, even more than general attitudes towards the poor.

In 1996 the United States enacted the Temporary Assistance to Needy Families

(TANF) a block grant program, replacing the Aid to Families with Dependant Children(AFDC) program where impoverished families were given cash benefits. Under the new TANF program, the Federal Government allocated block grants to state and allows states to design their own welfare programs. This devolution of welfare policies along with stringent criminal justice policies have lead to poor African Americans being subjected to some of the most punitive forms of social control (Schramm et al, 2008).Aside from attitudes and stereotypes, implementation of welfare can have racial biases as well particularly when it comes to sanctions such as reductions in cash benefits for failing to meet hours of work requirements . Monnat(2010) found that black and Latina women are more likely to be sanctioned than white women. Also while black women may be less likely to be sanctioned in counties with more poor blacks, the reverse is true for Latina women who are even more likely to be sanctioned in areas with more poor Latinas. Using an experiment where case-managers were randomly assigned clients of different race, Schramm, Soss, Fording, Houser(2009) found that black clients were more likely to be sanctioned than white clients. This racial disparity in sanctions is further exacerbated by the fact that black mothers on welfare find it more difficult to find jobs than white mothers on welfare, thus making them even more vulnerable to being sanctioned[Schramm, Soss, Fording, Houser(2009)]. Kaiser, Mueser and Choi(2004) show how the level of sanctions often increase with percentage of non-white population. The impact of immigration on welfare policies was explored by explored by Hawes and McCrea (2017) who showed how immigration levels impact the 'Social Capital' of community which in turn affects its welfare generosity.

While it is undeniable that race and racial attitudes are salient when it comes to the discourse surrounding welfare, it also plays a role in the shaping of state welfare policy (Anderson,2003) even in post-civil rights United States (Brown, 2011). The mechanisms of the race-welfare policy relationship has evolved from institutionalized policies under the New Deal which limited black welfare participation (Quadagno,1996) to less overt racial biases due to racial attitudes and public opinion. Eger(2010) showed how when racial minorities make up a higher proportion of the population, the generosity of welfare benefits decline and the terms and conditions for welfare participation become more stringent. The phenomenon appears to hold true whether it is at the state level (Fellowes and Rowe, 2004 Avery and Peffley,2005) or at the nation state (Alesina and Glaeser

2004). Shcramm eta al(2009) in their Racial Classification Model(RCM) posit that when racial minorities become more prevalent in the welfare discourse the salience of race in the context of policy increases. Hurwitz and Pefley(1997) show how when African Americans are perceived as the policy targets, the impact of racial stereotypes enhances and it leads to African American welfare recipients to be seen as less deserving(Fording 2003).

As race and racial prejudices influence public opinion and policy surrounding welfare how would residential segregation affect this relationship? The literature on inter-racial contact suggest that on one hand inter-racial interaction may combat stereotypes and prejudices (Kinder and Mendelberg, 1995). Forbes(1997) and Voss(1996) show how white voters in racially diverse constituencies are more likely to support a Black mayoral candidate. On the other hand proponents of the 'Group threat hypotheses' posit that when the minority population is large, inter0racial interaction may lead to the majority seeing the minority as a threat. Anderson(2012) showed how inter-racial interaction led to higher tolerance and that racial attitudes stemming from inter-racial interactions explained a sizable variation in welfare policy across states. As residential segregation reduces such inter-racial interaction it could lead to more or less feelings of antagonism which in turn may prove salient when it comes to policy formulations (Herwitz and Pefley, 2007). It is thus reasonable to say that exposure to other racial groups influences the role racial biases play in attitudes and implementation of welfare and criminal justice policies. But how exactly does the level of segregation and lack of familiarity among different groups have an impact on the discourse surrounding welfare and the perception of welfare recipients. Even if segregation and the subsequent lack of exposure affect public opinion regarding welfare would it influence state welfare policies as well ? Cutler and Glaeser(1997) already show how residential segregation leads to inter-racial disparities in individual outcomes.But could its impact also be felt at the macro level when it comes to formulation of policies surrounding welfare ? It is possible that white voters who live in more diverse neighbourhoods and have more interaction with minorities may be less opposed to minorities receiving welfare and may support less harsh punitive criminal laws or that white case managers who grew up in or live in more diverse neighbourhoods may be less harsh to minority clients when it comes to sanctioning. The level of segregation and the resulting lack of inter-racial contact in a particular region may thus be an important determinant of the role that race plays when it comes to attitudes towards welfare policies

as it can either facilitate the perpetuation of stereotypes or prevent minorities from being perceived as a threat by the majority. In the subsequent sections I explore whether states that witnessed a decrease(or sometimes increase) in segregation over the past few decades have enacted more generous welfare policies as a result of increasing(or even decreasing) levels of exposure.

3 Potential hypotheses

The inter-group contact theorists argue that isolation from minorities often aggravates racial prejudices among the majority as more interracial interaction will combat negative racial stereotypes(such as the Welfare Queen) (Allport 1954). Hence more residential segregation(i.e less inter-racial contact) will lead to more perpetuation of racial stereotypes and less support for welfare generosity as opposition to generous welfare policy is rooted in prejudice towards African Americans.

Hypothesis 1 : *Higher levels of residential segregation will lead to less contact between members of different races which will cause welfare related stereotypes about African Americans to perpetuate. This in turn will lead lower support for welfare spending and consequently less generous welfare policies.* I call this the ‘empathy hypothesis’.

On the other hand proponents of ‘Group threat theory’ argue that more inter-racial contact, particularly when the size of the minority population is significant (Oliver and Mendelberg, 2000). As Schramm et al(2011) argue, that more interracial contact might increase the likelihood of of negative interactions leading to more racial conflict that might spillover into the policy dimensions(Brown, 2013) causing the majority to see minorities as a threat. As such less segregation might lead to more racial antagonism which in turn may lead to less support for and implementation of welfare policies.

Hypothesis 2 : *Lower levels of segregation will lead to more interracial contact which will increase the likelihood of conflict(in terms of negative interactions) among different racial groups. This in turn would lead to more antagonism towards African Americans which might lead to less support for generous welfare policies.* I call this the ‘threat hypothesis’.

4 Data and methods

The main explanatory variable in the analyses is the degree of racial residential segregation in a state. According to Massey and Denton(1998) indices of residential segregation include five dimensions: Evenness, Exposure, Concentration, Clustering, Centralization. Most studies involving segregation use the Dissimilarity Index(which measures evenness) or the Exposure index(which measures exposure) as the measure of segregation. As the causal mechanisms hypothesized before center around inter-racial contact(or lack thereof), the Index of Exposure would be a more appropriate explanatory variable. The Exposure Index is defined as the "probability that a member of one racial group interacts with a member of another racial group" or the probability that a member of one racial group shares a neighborhood(or census tract) with a member of another racial group. The index is calculated using two components: what portion of the city's total population of a given racial group lives in a specific neighborhood and the racial makeup of that neighborhood in terms of another racial group. The exposure index is then obtained by taking the weighted average of the racial makeup of a neighborhood with the weights being the share of population of a racial group that lives in that neighborhood(or census tract). It is usually defined for two racial groups and calculated at the census tract level. For example the Exposure Index between white and black people in a given city is

$$ExposureIndex = \Sigma\left(\frac{n_{ib}}{N_b}\right) * \left(\frac{n_{iw}}{n_i}\right)$$

(1)

The numerator on the first and second term represent the population of White and African Americans in a census tract. The denominators of the first and second term represent the total African American population in the city and the total population of the census tract respectively. The first term is the proportion of the city's African Americans who live in that census tract and is used as the weight while taking the weighted average of the second term which is the racial makeup of whites in the census tract.

As an example let us consider a city with two census tracts. The city has a population

of 70 Caucasians and 30 African Americans. The first census tract is home to 50 Caucasians and 10 African American residents while the second census tract is home to 20 Caucasians and 40 African Americans. The census tracts each have 33.3% and 66.6% of the total African American population respective while the percentage of the population in each census tract that is white is 83.3% and 33.3%. The exposure index is thus $0.33*0.83+0.66*0.33= 0.4719$. This implies that the probability of a Caucasian person having exposure to an African American person is 0.4719 or that 47.19% of Caucasians are exposed to African Americans living in their neighborhoods.

As mentioned before, Gillens(1996) showed using a random survey based experiment that welfare and opposition to it is most often rooted in prejudice towards impoverished African Americans(White respondents who believed in the 'Blacks are lazy' stereotype were 47% more likely to oppose higher welfare spending).I thus use the White-Black Exposure Index for the regressions. While White-Latino segregation would influence the welfare discourse as well, its effect is restricted to just a few states in the South-West. Running a simple panel fixed effects regression on variables regarding public opinion on welfare and public racial attitudes towards African Americans(data for both obtained from the GSS) reveals a statistically significant relationship with a coefficient of 37%(p-value = 0.00) between opposition to welfare and antagonistic attitudes towards African Americans. Racial attitudes towards African Americans correlate strongly with attitudes towards welfare. The data for the Exposure Index is obtained from The American Communities Project by Brown University. The data is based on the Census of 1980, 1990, 2000, 2010 and is available at the city level for cities with a population greater than 10000.

While the impact of segregation will be felt largely at the local level, the policies regarding welfare are set at the state level. My main intention here is to assess the impact of residential segregation on welfare policies with the mechanism operating through racial stereotypes that may be exacerbated due to segregation. Johnson(2003) showed how a state's racial attitudes in addition to its mass ideology and partisanship are often a determinant of the generosity of its welfare policies. Schramm et al(2009) in their Racial Classification Model argue that when African Americans are viewed as policy targets, racial stereotypes and reputations become a determinant for welfare policy at the state level. Avery and Peffley(2005) and Soss(2001) showed that when African Americans are

over-represented among welfare caseloads, policy makers may implement less generous welfare policies due to African Americans being perceived as less deserving. As I am positing that residential segregation causes perpetuation of racial stereotypes(that Black people are lazy or they are dangerous) it may lead states adopting less(or more) generous welfare policies due to public opinion regarding welfare recipients(who are perceived to be minorities). In order to asses how the effect of segregation would play out at the state level, I calculate the Exposure Index of a state by taking the weighted average of the Exposure index of the cities with the weights being in terms of the adult voting age white population of the cities. The goal here is to create an approximate measure of the general level of exposure White Americans have towards African Americans in a given state thus giving us an approximate measure of the level of inter-racial contact in a state. This enables us to see whether the degree of inter-racial contact in a state has any effect on its welfare policies through public opinion regarding racial stereotypes. The exclusion of cities with a population less than 10000, does not affect the index much since we are weighting in terms of population. Based on this new aggregate measure, the nation as a whole had an average exposure index of 8.6. Mississippi recorded the highest Exposure index of 29.04 in 2010 while Montana recorded the lowest exposure index of 0.4 in 2000. The Southern States recorded the highest Exposure Indices due to their high proportion of African Americans while the states in New England and the West recorded the lowest exposure scores. The Great Lakes region(Ohio, Michigan, Wisconsin, Pennsylvania) have some of the most segregated cities in the country and as a result their exposure indices are lower relative to their African American population.

Hahn et al(2017) show that states with a higher proportion of African Americans have less generous welfare benefits especially if African Americans are over-represented in the caseloads. We can thus expect the share of African American population of a state to be a major determinant when it comes welfare related racial stereotypes which can be exacerbated due to segregation. Moreover, in regions with a higher proportion of African Americans less segregation may lead to more of a threat perception than empathy. In order to capture this effect I add an interaction term to the main regression equations consisting of the Exposure Index and the percentage of African Americans in a certain state. The states in the Great Lakes region which have high levels of segregation and lower proportion of African Americans have welfare policies more generous(above average

levels of benefit to income ratio) than the Southern States which have relatively lower levels of segregation but high Exposure index due to their high proportion of African Americans. However their welfare policies are less generous than states like Alaska and North Dakota(both which have some of the highest benefit levels under TANF) which have lower levels of segregation and lower proportion of African Americans.

The data for the welfare related variables are obtained from the Correlates of State Policies dataset. The main variable of interest is a measure of welfare generosity at the state level. For this we take the ratio the Maximum TANF Benefit for a family of three(adjusted for 2007 dollars) and the median household income of a state, as a proxy for a State Government's generosity when it comes to welfare spending. The justification for using the Maximum TANF Benefits, as per Hawes and McCrea(2017), Larimer(2005) and Hero and Preuhs(2007) is that Benefit levels are set almost entirely by the state Government(as opposed to Food Stamps and Medicaid which are supplemented by the Federal Government) and given their no-strings attached nature are more likely to be criticized by opponents of generous welfare policy. The Data is from 1996(when TANF was enacted) to 2010. As the benefits would depend on how wealthy a state is and its cost of living, I take the ratio between the Benefit level and the median household income.

Another measure of welfare generosity that I use is the AFDC/TANF coverage rate. This is obtained by dividing the average number of AFDC/TANF Caseloads by the population living under poverty in a given state. This is a somewhat noisy measure as caseloads are often for an entire family while population under poverty is in terms of individuals, as a result of which this ratio might understate the actual coverage rate. Nonetheless, this ratio gives us somewhat of a measure of how much a state is willing to ensure that its impoverished populace receives welfare.

For the public opinion aspect I use another outcome variable which is the "Share of population of a state that believe that we are spending too much on welfare". The data is based on the Generalized Sample Survey(GSS). For most states the Share of population opposed to Welfare spending fluctuated in the 1980s, followed by an increase from the late 1980s to the mid 1990s. Since 2000 Opposition to welfare has declined except for certain states which witnessed a sudden increase in the latter part of the decade.

Dye(1984) argues that socio-economic variables are very important determinants for state welfare policy while Plotnick and Winters(1996) argued that political variables

interact with socio-economic variables in a complex way to determine welfare policy. In my analyses I use both socio-economic and political variables as controls. The Socio-economic variables include

i) Share of African American population: The proportion of African Americans or minorities in general is often a predictor of Welfare generosity(Fellows and Rowe, 2004)

ii) Poverty rate : States with higher poverty rate will need to adopt more generous welfare policies.

iii) Unemployment Rate: Higher unemployment will necessitate more welfare caseloads and more generous welfare policies.

iv) Share of Urban population : A more urbanized electorate will support more generous welfare policies.

v) Total TANF Caseloads: Higher caseloads might not allow a state to adopt generous welfare benefits.

As Schramm et al (2008) and Herwitz and Peffley(1997) show that when poverty is seen as a black problem and black people are viewed as policy targets, black recipients are seen as less deserving, and the opposition to welfare translates. into less generous welfare policies at the state level. Hence I include a number of political variables that in the latter regressions when I attempt to link public opposition to welfare to policy. The two main political variables in my regression are the degree of electoral competition and partisanship. This is based on Hill and Winton-Anderson(1995) where the authors talk about how the link between public opinion and policy depends on, among other factors, partisanship and electoral competition. Higher degree of partisanship would result in the legislators enacting more partisan policies. Given the very partisan nature of welfare spending, this is likely to play a key role when it comes to whether a state enacts more or less generous welfare polices. In order to account for this in my design I use a measure of state government ideology called ADA / COPE Measure of State Government Ideology based on Ringuist et al (1998). Similarly higher electoral competition would mean legislators are more likely to cave into public demands regarding policy. As the there is widespread opposition to welfare in many states(upto 70 percent in certain states) a more competitive electoral scenario would mean that the legislators would be more likely enact less generous welfare policies in such states due to public pressure. The measure of Electoral competition I use is the Holbrook and Van Dunk competitiveness measure

Table 1: Summary Statistics

	Mean	Standard Deviation	Minimum	Maximum
Exposure Index	7.43	6.08	0.25	29.08
TANF Benefit to income ratio	0.0094	0.003088	0.00444	0.021
AFDC/TANF Coverage rate	0.085	0.0533	0.006	0.006
Local Governments per 100000 people	23.22	42.76	0	271.3659
Share of African American Population	10.54	10.95	0.22	43.43
Poverty Rate	13.04	3.94	2.9	27.2
Unemployment Rate	5.89	2.15	1.688	18
Citizen Ideology	49.48	15.47	8.44	95.97
Share of Urban Population	70.4	15.11	32.2	100
Electoral Competition	40.01	11.6	5.69	66.2
State Ideology	51	25.1	0	97.916
AFDC/TANF Caseloads	56718	91337	327	652070
GSP	157113	218839	4856	191171

based on Holbrook and Van Dunk(1995). This is calculated by first taking the averages of the percent Of votes Winning Candidate Received, Winning Margin, percentages of Uncontested Seats, and percentage of Safe Seats and subtract it from 100 over 4 yr. Moving Average. As both partisanship and electoral competition seemingly influence one another I interact the two and use it as an additional control in my regression equation.

There is still a major endogeneity issue. The degree of residential segregation in a state is endogenous as regions with more anti-welfare sentiment due to racial biases are more likely to self segregate with people choosing to live among their own kind. In order to account for this endogeneity I use an instrumental variables approach. Cutler and Glaeser(1997) use the number of local governments in an MSA as an instrument for segregation. The idea is that the more local governments there are, the more likely there is to be differentials in policies within different regions of an MSA which in turn will lead to more sorting. As my analyses is at the state level, I use the number of local governments in a state(both municipal and township) as a potential instrument. In order to account for differences in state sizes I scale it according to the population. Now, population in theory may not be exogenous in this context however after running a few panel fixed effect regressions of the welfare related variables on population size, it appears that there is no correlation between a state's population and its degree of welfare generosity(p-values ranging from 0.56 to 0.89). The population of a state can thus be assumed to be exogenous in this context. The first stage regression (with year fixed effects) yields a coefficient of -0.04 and is statistically significant with an F-Value of 202 which means that the instrument is significantly correlated with our Exposure Index. In order to test for the exclusion restriction, I run a regression of the different outcome variables on the instrument with the covariates as controls. The coefficients are not statistically significant with p-values greater than 0.05. The instrument is thus valid in this context. My approach is thus an instrumental variable panel data approach with year fixed effects in the subsequent sections. As the main explanatory variable is also a part of an interaction term with the share of African American population, I create an additional variable which is the product of the instrument(number of local government per 100000 people) and the share of African American population and use it an additional instrument for the interaction term involving the Exposure index and the share of African American population.

In the next section, I begin by regressing the public opinion variable on the Exposure Index(using both OLS and Instrumental Variables) and then move on to whether it translates into enactment or implementation of generous welfare policies.

5 Results

The first regression involves regressing the share of population opposed to welfare on the exposure index. I begin with an OLS regression followed by an Instrumental Variables regression with year fixed effects where Exposure index is instrumented by the number of local governments per 10000 people. The Control variables used are the Share of Black population, poverty rate, unemployment rate, citizen ideology, share of urban population, inequality and a dummy for citizen zoning laws. The standard errors reported are robust and all estimates are scaled to the power -3. The results are

Table 2: Anti-welfare opinion

	OLS	2SLS
	(1)	(2)
Exposure Index	-3.6*	-47.63
	(1.66)	(1.260)
Exposure Index times	0.0688	1.6
	(0.0498)	(0.414)
Share of Black Population		
Share of Black population	-1.8	-10.7
	(1.682)	(11.9)
Poverty Rate	-4.24	-11.86
	(1.4)	(26.5)
Unemployment Rate	6.69	13.06
	(1.6)	(26.7)
Citizen Ideology	-1.03	-1.9
	(0.2)	(0.7)
Share of Urban Population	-0.9625	-0.27
	(0.27)	(0.17)
Inequality	-25.2	-72.4
	(17.7)	(15.6)
Citizen Zoning Laws	1.6	-2.3
	(0.4)	(0.035)
Constant	585	799.5
	(34.5)	(5.37)
Fixed Effects	No	Year
F-Statistic	6.75	19.69
Adjusted R-Squared	0.3191	0.45
No of Observations	200	200

All estimates scaled to the power -3. *:significant at 5%. Standard Errors reported are robust.

The OLS estimates are -0.0036 for the Exposure index and 0.0000688 for the interaction terms which are smaller than the 2SLS estimates of -0.047 for Exposure Index and 0.0016 for the interaction term.. The IV estimates are obtained by using the number of local governments per 100000 people to instrument for Exposure Index and the product of the number of local governments and share of African American population as the instrument for the interaction term. This shows that once endogeneity is accounted for the magnitude of the relationship between segregation and opposition to welfare is higher. The OLS estimate implies that a one percent rise in Exposure reduces opposition to welfare by $(-0.36 + 0.00688 * \text{Share of Black population})$ percent and the relationship is significant at 5 percent level ($p\text{-value} = 0.033$). However once we instrument for segregation and account for endogeneity the resulting 2SLS coefficients imply a $(-4.7 + 0.0016 * \text{Share of Black population})$ percent reduction in opposition to welfare with one percent rise in Exposure. The 2SLS estimates however are not statistically significant at 5 percent level ($p\text{-value} = 0.792$). In both cases, the coefficient on the interaction term is positive (0.000068 and 0.0016) and is higher for the IV estimates. This suggests that the relationship is positive for states with higher proportion of African Americans (threat hypotheses) and negative for states with lower proportion of African Americans (empathy hypotheses).

As we have established that segregation, though its effect is largely local, does in fact influence public opinion regarding welfare at the state level, the next question is does this opposition to welfare translate into less generous welfare policies? Shcramm et al (2009) and Herwitz and Peffley (1997) show that racial stereotypes particularly when black clients are viewed as policy targets, influence policy makers decisions when it comes formulating welfare policies. In order to assess the impact of residential segregation on actual welfare policies, we account for two additional political variables as controls which are the degree of electoral competition and partisanship as per Hill and Winton-Anderson (1995). As both partisanship and electoral competition seemingly influence one another I interact the two and use it as an additional control in my regression equation. The outcome variables now are the cash benefit to income ratio under TANF and the AFDC/TANF coverage rate. The rest of the regression is similar as before. Just as the previous table, the estimates are scaled to the power -3 and the Standard errors reported are robust. (Table displayed on next page)

Table 3: Results for welfare generosity

	TANF Benefit to		AFDC/TANF	
	Income ratio		Coverage rate	
	OLS	2SLS	OLS	2SLS
	(1)	(2)	(3)	(4)
Exposure Index	-0.264 (0.0843)	-1.05 (9.13)	-2.134 (1.1405)	-3.4 (12.35)
Exposure Index times Share of African Americans	0.0186 (0.249)	0.0289 (3.4)	0.0596 (0.0326)	0.1964 (0.457)
Share of Black population	-0.386 (0.814)	-0.4564 (1.17)	-0.6015 (1.043)	-2.99 (13.60)
Poverty Rate	-0.0393 (0.851)	-0.9 (0.024)	-1.547 (1.065)	-6.6 (2.013)
Unemployment Rate	-0.1345 (0.0932)	0.4 (0.3)	-4.2267 (1.1892)	5.59 (3.07)
Share of Urban Population	-0.438 (0.16)	-0.4 (0.24)	0.3601 (0.188)	-0.96 (21.4)
Inequality	-0.6235 (0.8978)	-1.6 (1.8)	5.8 (11.7)	-0.9 (21.4)
State Ideology times Electoral Competitiveness	-0.0529 (0.0588)	0.148 (0.456)	0.0525 (0.0755)	0.483 (0.15)
TANF Caseloads	0.033 (0.0987)	1.3 (0.174)		
Citizen Zoning laws	-2.38 (0.878)	-1.64 (1.3)	-33.9 (10.8)	-27.2 (11.3)
Constant	138 (2.4)	124.9 (4.6)	67.22 (30.4)	89.4 (48.9)
F-Statistic	7.2	5.61	9.8	9.73
R-Square	0.4739	0.2377	0.414	0.4192
Fixed Effects	No	Yes	No	Yes
No of Observations	100	100	200	200

All values scaled to the power -3. *: significant at 5%

For both of our outcome variables, the OLS estimates are smaller than the IV estimates suggesting that similar to public opinion, the magnitude of the relationship is higher once we account for endogeneity with an instrumental variable. The IV estimates are obtained by using the number of local governments per 100000 people to instrument for Exposure Index and the product of the number of local governments and share of African American population as the instrument for the interaction term. Just like the previous case the OLS estimate is statistically significant while the IV estimates are not. The coefficient on the Interaction term is positive in all cases which suggest that the net direction of impact depends on the share of African American population of a state.

For the regression involving TANF Benefit to Income ratio the coefficient of the Exposure Index is -0.000264 (p-value of 0.007) under OLS and -0.00105 under IV (p-value of 0.793) while the coefficients on the interaction terms are 0.0000186 and 0.0000289 respectively. This suggests without any fixed effects and not accounting for endogeneity, a one percent increase in Exposure Index results in an increase of $(-0.0264 + 0.00186 * \text{Percentage of African Americans})$ percent increase in the Benefit to income ratio. Once we account for endogeneity through instrumentation and include year fixed effects, a one percent increase in the Exposure index causes a $(-0.105 + 0.00289 * \text{Percentage of African Americans})$ percent change in the benefit to Income ratio which is higher than the previous case under OLS. The estimates suggest that for states with a low proportion of African Americans higher exposure (i.e less segregation) leads to more generous welfare policies (empathy hypotheses) while for states with a higher proportion of African Americans higher exposure leads to less generous welfare policies (threat hypotheses).

For the regression involving the coverage rate the coefficient of the Exposure Index is -0.002 (p-value of 0.007) under OLS and -0.0034 under IV/2SLS (p-value of 0.793) while the coefficients on the interaction terms are -0.0000596 and 0.0001964 respectively. This suggests without any fixed effects and not accounting for endogeneity, a one percent increase in Exposure Index results in an increase of $(-0.2 + 0.00596 * \text{Percentage of African Americans})$ percent increase in the coverage rate. Once we account for endogeneity through instrumentation and include year fixed effects, a one percent increase in the Exposure index causes a $(-0.0034 + 0.01964 * \text{Percentage of African Americans})$ percent change in the coverage rate which is higher than the previous case under OLS. The results are in line with the previous regressions where the empathy hypotheses holds for states

with a lower proportion of African Americans while the threat hypotheses holds for states with a higher proportion of African Americans.

In the next section I discuss the substantive significance of the aforementioned estimates using California and Florida as examples.

6 Discussion and conclusion

Based on all of the previous regressions it is reasonable to conclude that residential Segregation does in fact have an impact on public, opinion, generosity of welfare policies and implementation of said policies. The net effect depends on the share of African American population of a state, with states with higher proportion of African Americans more likely to exhibit the threat hypotheses and states with lower proportion of African Americans more likely to exhibit the empathy hypotheses. The magnitude of the estimates are larger once we instrument for segregation and include year fixed effects. In line with Schramm et al(2009) Racial Classification Model, we can thus say that residential segregation(and corresponding exposure) contributes to salience of race and racial biases in the politics of welfare through perpetuation of stereotypes and subsequently influences welfare policies at the state level.

For the regression involving the TANF Benefit-to-Income ratio, the IV estimate is -0.00105 and that of the interaction term is 0.0002. This regression was based on the post-TANF era, it involves two years(2000 and 2010). In these two years, the median value of the exposure index is 8.6. Florida has an exposure index of 11.6. This implies that if the average white American in the US had the same level of Exposure to African Americans as White Americans in Florida do, we could expect the average benefit to income ratio across states would change by $(-3*0.00105 + 0.00002*10.54*3) = -0.0025$. The current median benefit to income ratio across states is approximately 0.0081 and the aforementioned decline would mean it would decrease to 0.0056 or that the benefit would be 0.56 percent of the state's median household income. Given that the average of the median household income across states is \$53581 this implies that the average cash benefit should be approximately \$ 300 which is a decline of \$134 dollars from the current national average, if the average White American had the same level of exposure to African Americans as an average White American in Florida.

California has a lower than average exposure index of 4.8 . If the average White American had the same level of exposure to African Americans as whites in California then the average TANF Benefit to income ratio across states would change by $-(-0.00105*4+4*0.00002*10.54) = 0.00335$ or that the Benefits would increase by \$181 and be approximately \$ 606 .

For the AFDC/TANF coverage rate, the coefficient on Exposure Index is -0.0034 while the coefficient of the interaction term is 0.00019. The average coverage rate is

is 0.085 while California has a coverage rate of 0.116. As mentioned before California has an exposure index of 4.9, roughly 4 percentage points below the national average. If white Americans across the nation on average have the same Exposure to African Americans as white Americans in California, the coverage rate would change by $-(0.0034*4+3*0.00019*10.54) = 0.0055$. This would roughly translate to a coverage rate of $0.085+0.0055 = 0.0905$ or approximately 9.05 percent of all poor people receive some form of TANF Benefits.

The Southern states have a higher than average Exposure Index and a high proportion of African Americans, have a benefit to income ratio between 0.5 to 0.9% and it has declined slightly over the decade as exposure to African Americans increased. Within the South, states with higher exposure indices(the Deep South) have a lower benefit to income ratio than those with lower exposure index(the Upper South). The threat hypothesis seems to at play here and is reasonable considering the racially charged history of the South. The same appears to hold true for the Upper Midwestern states which have some of the highest levels of segregation(their Exposure Index is low relative to their share of African American population). All the states witnessed a decline in their benefit to income ratio as exposure increased.

The states in New England and the West Coast all have lower than average exposure and higher than average benefit to income ratio and the ratio has increased from 2000 to 2010 while exposure has increased. The 'empathy hypothesis' appears to be in play here as higher exposure to African Americans seems to to mitigate negative racial stereotypes and subsequently lead to more. generous welfare policies

Overall, for most states, welfare generosity declined with increase in exposure to African Americans though for some it increased. The effect seems to be the strongest in the Upper Midwest and New England and the weakest in the South and West Coast. Across states, welfare generosity and exposure are positively correlated for less diverse states(in terms of share of African American population) such as those in the West and New England, while it is negatively correlated for more diverse states such as those in the Deep south and Upper Midwest.

All in all residential segregation does in fact have an impact on the discourse of welfare with the direction of the impact depending on the state in question, its history of race relations and the share of African American population.

The existing Index of Exposure has its limitations in capturing the magnitude of segregation. Firstly, it does not include towns with a population less than 10000. Now while this may not change the index much(since we are weighing in terms of population), it still is important to know what the rural communities' role is in the discourse of welfare. Also rural communities that are predominantly poor and white, may support more re-distributive policies out of self interest regardless of their attitude towards African Americans. Secondly, the exposure index for each city is calculated at the census tract level, and as result does not take into account the level of segregation within a census tract.

Residential segregation may not necessarily lead to lack of contact between different races if schools, social venues and workplaces are not equally segregated. A more composite measure incorporating residential, school and other forms of segregation would be able to shed more light on how much inter-racial contact actually happens.

The use of Maximum TANF benefit as a measure of welfare generosity too has its limitations as it is not clear how many people actually get the maximum amount in a state. Taking the ratio of it in terms of median household income too has its drawback, as the benefits are for a family of 3 while the median household size in a state may be more than three.

There are other factors too that affect the welfare discourse . States with a long tradition of philanthropy and religious charities might feel that it is not the government's job to financially assist the poor resulting in higher anti-welfare sentiments. If most such states are located in a particular region(say the deep south or the west coast) then their levels of exposure index would be similar and their welfare policies may be less generous than states located in different region with a different set of values for the exposure index resulting in the cross state variations arising from such charities and philanthropy rather than exposure. Immigration and associated demographic changes is also another factor that influences both segregation and a state's attitude towards welfare. Increasing diversity due to immigration may lead to more people choosing to self segregate thereby reducing exposure while at the same time increasing opposition to welfare spending. As such it may cause certain states to have higher segregation(lower exposure) and less generous welfare policies at the same time. In such cases, the negative correlation between generosity of welfare policies and segregation would be caused due to immigration(and

diversity) affecting both.

As the demographics of the United States of America continue to change the issue of residential segregation and its role in race relations will become more and more salient. As the demand for more generous welfare spending (particularly medicare for all) rises, the role of race in welfare and how segregation contributes to it will need to be analysed in more detail.

7 References

- Alesina, Alberto and Glaeser Edward. 2004. *Fighting Poverty in the US and Europe*. Oxford University Press.
- Alport, Gordon. 1954. *The nature of prejudice*. Addison-Wesley.
- Oliver, Eric and Mendelberg, Tali. *Reconsidering the environmental determinants of White racial attitudes*. American Journal of Political Science. Vol. 44, No. 3 (Jul., 2000), pp. 574-589
- Avery, James M., and Mark Peffley. 2005. "Voter Registration Requirements, Voter Turnout, and Welfare Eligibility Policy: Class Bias Matters." *State Politics Policy Quarterly* 5(1): 47–67.
- Bobo, Lawrence and Zubrinsky, Camille. *Attitudes on Residential Integration: Perceived Status Differences, Mere In-Group Preference, or Racial Prejudice?*. *Social Forces* Vol. 74, No. 3 (Mar., 1996), pp. 883-909 (27 pages)
- Brown, Hana. *The New Racial Politics of Welfare: Ethno-Racial Diversity, Immigration, and Welfare Discourse Variation*. *Social Service Review*, Vol. 87, No. 3 (September 2013), pp. 586-612
- Cutler, David and Glaeser, Edward. 1997. *Are Ghettos good or bad ?*. *The Quarterly Journal of Economics*, Volume 112, Issue 3, August 1997, Pages 827–872.
- Fellows, Matthew and Rowe, Gretchen. 2004. *Politics and the New American Welfare State*. *American Journal of Political Science*. Volume 8, Issue 2.
- Gilens, Martin. *Race Coding and White opposition to welfare*. *The American Political Science Review*. Vol. 90, No. 3 (Sep., 1996), pp. 593-604 (12 pages)
- Hawes, Daniel and McCrea, Austin. *Give us your tired, your poor and we might buy them dinner*. *Political Research Quarterly*. Volume: 71 issue: 2, page(s): 347-360
- Holbrook, Thomas M., and Emily Van Dunk. 1993. *Electoral Competition in the American States*. *The American Political Science Review*, 87(4): 955–62.

- Hurwitz, Jon, and Mark Peffley. 1997. *“Public Perceptions of Race and Crime: The Role of Racial Stereotypes.”* American Journal of Political Science 41(2): 375–401.
- Kaiser, Lael. Mueser, Peter and Choi, Seung-Whan. (2004) *Race, Bureaucratic reform and implementation of welfare policy.* American Journal of Political Science. Vol 48, Issue 2
- Kinder, Donald and Mendelberg, Tali. *Cracks in American Apartheid: The political impact of prejudice on desegregated whites.* The Journal of Politics, Vol. 57, No. 2 (May, 1995), pp. 402-424
- Larimer, Christopher. 2005. *The Impact of Multimember State Legislative Districts on Welfare Policy.* State Politics and Policy Quarterly, Vol. 5, No. 3 (Fall 2005): pp. 265–282.
- Massey, Douglas and Denton, Nancy. 1988. *American Apartheid: Segregation and the making of the American underclass.* Harvard University Press
- Monnat, Shannon and Bunyan, Laura. *Capitalism and Welfare Reform: Who Really Benefits from Welfare-to-Work Policies?.* Race, Gender Class, Vol. 15, No. 1/2 (2008), pp. 115-133
- Monnat, Shannon. *The Color of Welfare Sanctioning: Exploring the Individual and Contextual Roles of Race on TANF Case Closures and Benefit Reductions.* The Sociological Quarterly 51 (2010) 678–707
- Quail Hill, Kim and Hinton Anderson, Angela. 1995. *‘Pathways of representation: A causal analysis of public opinion and policy linkages’.* American Journal of Political Science Vol. 39, No. 4 (Nov., 1995), pp. 924-935 (1
- Ringuist, Evan. Berry, William. Fording, Richard and Hanson, Russel. 1998. *Measuring Citizen and Government Ideology in the American States.* American Journal of Political Science Vol. 42, No. 1 (Jan., 1998), pp. 327-348
- Scramm, Sanford. Soss, Joe. Fording, Richard. Housier, Linda. *Deciding to Discipline: Race, Choice, and Punishment at the Frontlines of Welfare Reform.* American Sociological Review, 2-+009, Vol. 74 (June:398–422)