Redistribution & the New Fiscal Sociology:

Race and the Progressivity of State and Local Taxes

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Abstract: States redistribute wealth through two mechanisms: spending and taxation. Yet, efforts to delineate the determinants of redistribution often focus exclusively on social spending. This article aims to explore how one important determinant of redistributive social spending—racial composition—influences preferences for and the structure of tax systems. First, using fixed-effects regression analyses and unique data on state and local tax systems, we demonstrate that changes in racial composition are associated with changes in the progressivity of state and local tax systems. Specifically, between 1995 and 2007, an increase in the percentage of Latinos in a state is associated with more regressive state and local tax systems as well as higher tax burdens on the poor. Second, using evidence from a nationally representative survey experiment, we find that individual preferences for taxation are actively shaped by the changing racial composition of the community. Finally, we show that in-group preference—or feeling "solidarity" with neighbors—is a key mechanism through which racial threat shapes preferences for taxation. By providing empirical evidence that racial composition drives preferences for taxation at the individual level as well as the structure of tax systems at the state and local levels, this paper serves as an important contribution to our understanding of welfare state policy and the determinants of redistribution as well as the broader project of the new fiscal sociology.

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INTRODUCTION

States redistribute wealth through two mechanisms: spending and taxation. Yet analyses of the social determinants of redistribution typically focus exclusively on government spending, ignoring the role of taxation. Although the overall *level* of taxation may be largely a function of spending level, the *structure* of tax systems can vary dramatically even across states with the same level of spending. The distribution of relative tax burden—the degree to which a tax system is progressive or regressive—is one aspect of tax structure that has important consequences for inequality and individual well-being. Motivated by Joseph Schumpeter's assertion that the best way to understand a society and its priorities is to analyze how it taxes its citizens (1991 [1918]), this article furthers the project of the New Fiscal Sociology (Martin & Prasad 2014; Martin, Mehrotra, & Prasad 2009) in examining how racial composition—shown to be an important determinant of redistributive social spending—influences the progressivity of state and local taxes in the United States.

Where racial heterogeneity is higher, government spending is lower. This association has been documented in analyses of public spending both within and between countries (see e.g., Alesina, Baqir, & Easterly 1999; Alesina, Glaeser & Sacerdote 2001). In the U.S., for example, racial composition is an important predictor of cash welfare spending across states, net of a host of other factors (see, e.g., Rodgers & Tedin 2006). Although cash assistance is a critical component of welfare state policy, total welfare spending in the United States is substantially less than the direct cash transfers to low-income households delivered through the tax code in the form of refundable tax credits. Indeed, tax policy is central to not only shaping aggregate levels of inequality, but also understanding the size and generosity of the welfare state, particularly in the United States (Howard 1999; Garfinkel, Rainwater & Smeeding 2010). Understanding the

structure of tax systems is therefore necessary to understanding the overall level of redistribution in a given society. At the same level of revenue, a highly regressive tax system can serve to reduce the net redistributive effect of high levels of social spending: low-income households may benefit from spending on education and welfare, but at the cost of reduced disposable income. Indeed, how states tax has been found to have a direct effect on individuals and households net of social spending, with high tax burdens on the poor being negatively associated with the well-being of low-income households and, conversely, tax systems that reduce the net tax burden on the poor witnessing improvements on measures of health and well-being (e.g., Newman & O'Brien 2011; Strully et al. 2010; Evans & Garthwaite 2010).

Beyond their redistributive functions, tax systems also provide a unique lens for analyzing larger social forces, in this case the changing nature of ethnoracial conflict in the United States and its role in the perpetuation of inequality. Indeed, historical accounts document the important role of racial division—at times characterized by overt racism—in structuring American tax policy from the colonial era to the present at all levels of government (see, e.g., Einhorn 2006). Although attributing policy positions to overtly racist motivations is less common today, race continues to shape policies and preferences by serving as a salient marker of group membership (see Bonilla-Silva 2006; DiTomaso 2013). Studies of public opinion reveal that support for redistributive policies is partially contingent on whether respondents believe those policies will benefit members of their own ("co-ethnic") in-group (Luttmer 2001; Gilens 1999), a process of inequality reproduction Tilly labels "opportunity hoarding" (Tilly 1999). Moreover, these feelings of in-group solidarity are theorized to be most salient when members of the dominant racial group feel their group position is threatened, which is likely to occur when there is an increase in the number of minorities present in the community (Blumer 1958; Blalock

1967; Enos 2014). Given this, we anticipate that preferences for redistribution, including the structure of taxation, are strongly influenced by *change* in the racial composition of states over and above the level of racial diversity present.

This investigation provides three empirical contributions to our understanding of race as a determinant of redistribution and to the social processes that shape the structure of tax systems. First, using fixed-effects regression analyses and unique data on state and local tax systems, we demonstrate that changes in racial composition are associated with changes in the progressivity of state and local tax systems: Between 1995 and 2007, an increase in the percentage of Latinos in a state is associated with more regressive state and local tax systems and increasing tax burden on low-income households. Second, using evidence from a nationally representative survey experiment we find that individual preferences for taxation are actively shaped by the changing ethnoracial composition of the community. Third, we use evidence from our survey experiment to show that in-group preference—or feelings of "solidarity"—is one mechanism through which racial change shapes tax preferences.

By providing empirical evidence that racial composition influences not only preferences for taxation at the individual level but also the real structure of tax systems at the state and local levels, this investigation makes an important contribution to our understanding of the determinants of redistribution and welfare state generosity. Moreover, in analyzing how social forces shape tax structures, this paper contributes to the broader project of the New Fiscal Sociology, a movement enjoying a resurgence as sociologists explore the cultural and historical roots (Morgan & Prasad 2009; see especially Martin, Mehrotra, & Prasad 2009), modern politics (Pearson 2014; Martin 2009; see also Prasad & Deng 2009), and social consequences of tax systems (Newman & O'Brien 2011).

RACE & REDISTRIBUTION

Racialized Origins of the American Tax State

Documenting and detailing the role of race and racial division in the development—or underdevelopment—of the U.S. Welfare State has been and continues to be a focus of researchers from a variety of disciplinary backgrounds (e.g, Quadagno 1994; Lieberman 2001; see Manza 2000). The historical and social scientific literatures on race and redistribution document the myriad ways race has served to not only dampen overall levels of social spending at the federal, state and local levels but also shape the contours of the American Welfare State—perhaps most notably its decentralized (federalized) structure which emphasizes local control. One line of research analyzes the role of race in the development of welfare state policy by focusing on how specific policy efforts to increase social spending were either curtailed or wholly blocked by racially motivated politics most notably during key historical periods from Reconstruction to the New Deal to the Great Society. A second related analytic approach prioritizes the role of race in the creation and perpetuation of institutional barriers to welfare state development such as super majority voting requirements, localized control of public programs and public dollars, as well as the role of federalism and other "veto points" that serve to impede the implementation of progressive spending policies.

As social spending is tightly coupled with tax revenues, particularly in earlier epochs, disentangling the role of race in the evolution of the American Welfare State from the role of race in the evolution of the American tax state is complicated. In documenting how race shapes the politics of social spending, the existing literature already articulates—either directly or indirectly—one pathway through which race has influenced tax policy at all levels of

government. Efforts to block increases in social spending (almost always) by definition also serve to block increases in the tax level. The reverse is also true. Yet beyond the *level* of taxation, there is also significant historical evidence that the *structure* of tax systems, namely the distribution of tax burden, has been and continues to be shaped by race and racialized politics. Race has influenced the structure of tax systems in specific historical moments (e.g., Reconstruction, New Deal and Great Society eras) as well as shaped the distribution of tax burdens over time through racially motivated institutional barriers to progressive taxation.

Analysis of tax and spending policies in the Southern states in the decades before and after the Civil War provide a particularly sharp example of how racialized politics shaped not only the level but also the structure of tax systems (Newman & O'Brien 2011; Thornton 1982; Foner 2005). Throughout the colonial and antebellum periods, as historian Robin Einhorn (2006) details, southern slave owners colluded with white small land holders to require that all property be taxed at the same rate, an idea motivated out of fear that voters may want to adopt a more progressive structure that taxed slave-wealth—and therefore the rich—at higher rates. According to Einhorn, these "uniformity clauses" put downward pressure on property taxes in the south, resulting in a poorly funded public sector and an institutional legacy of taxation that gave preferential treatment to property.

In the reconstruction period following the Civil War, newly enfranchised blacks moved to increase social spending, particularly on education (Foner 2005; Thornton 1982; Woodward 1971; Kousser 1980). With increased spending came increased taxes, often levied with distinctly progressive rate structures, including significant new taxes specifically on property, of which blacks owned very little. This sharp increase in the level taxation—necessary to fund a public education system that now serves blacks in addition to whites—as well as the progressive

distribution of the tax burden fueled backlash and resentment among land-owning whites which culminated in a dramatic reappropriation of power by whites. During this "Redemption" era, both the level and structure of taxation was changed as public spending was cut and the newly instituted progressive property taxes were rolled back in favor of significantly more regressive tax policies such as poll taxes, which had the added benefit of disenfranchising black Americans (Foner 2005; Thornton 1982; Woodward 1971). Efforts to roll back progressive tax policies were pursued through legislatures as well as the courts where the uniformity clauses of the antebellum period were invoked to strike down the new progressive tax instruments (on income, property, business) (Einhorn 2006; Newman & O'Brien 2011).

The racialized politics of the reconstruction era structured tax policy in the region for decades to come. And not just through the inertia inherent to tax systems. Beginning in the Redemption era, white landholders across the south put in place a series of institutional barriers—from supermajority requirements to state constitutional amendments—designed to impede efforts to increase any taxes and particularly progressive taxes such as those on property (Newman & O'Brien 2011; Einhorn 2006). Similar procedural obstacles to progressive taxation were put in place during the Great Depression Era, a period where racialized politics served as a major constraining force to FDR's New Deal agenda (Biles 1994; Wright 2010; Wright 1986). And three decades later, as racial tensions flared during the civil rights era, yet more procedural barriers to progressive taxation were put into place: following the passage of the Voting Rights Act of 1965, Louisiana adopted a constitutional amendment requiring a 2/3 majority to increase any tax in the state. Mississippi followed suit with a $3/5^{th}$ majority Similar institutional barriers swept states and localities across the country in the decades that followed (Newman & O'Brien 2011; Knight 2000; Mullins & Wallin 2004; Waisanen 2008; see also Pearson 2014).

Although more work is needed to elucidate the unique role of race in the evolution of tax policy at the federal, state and local levels, existing research demonstrates that racial division was pivotal to the successful implementation of regressive tax schemas in key historical moments as well as to institutionalization of barriers to progressive taxation—such as supermajorities and constitutional limits—that continue to shape the structure of tax systems to this day: in 2007 the state of Alabama settled a lawsuit which asserted that the underfunding of public higher education in the state is the direct result of a century-old discriminatory tax system (Walker 2007).

Race, Spending & Taxation in the Modern Era

Complementing historical analyses of how racial division undermined progressive social policies throughout the 19th and 20th centuries, more recent empirical studies of the link between racial composition and levels of redistributive social spending have found a consistent inverse (and arguably causal) relationship (Orr 1976; Cutler, Elmendorf, and Zeckhauser 1993; Ribar and Wilhelm 1996; Poterba 1997; Alesina, Baqir, and Easterly 1999; Alesina, Glaeser and Sacerdote 2001; Rodgers & Tedin 2006). Alesina, Glaeser and Sacerdote (2001) demonstrate, for example, that redistributive social spending is lower when beneficiaries are disproportionately from minority backgrounds, and that this association holds both within and across countries. In one study of U.S. cities, for example, Alesina, Baqir, and Easterly (1999) find that spending on productive public goods, including education, sewers, and roads, is lower in cities with higher levels of ethnic fragmentation. More recent work analyzing implementation of the Temporary Assistance for Needy Families (TANF) program following the welfare reforms of the mid-1990s finds racial heterogeneity to be an important predictor of state adopting more restrictive and punitive rather than inclusive welfare policies (Soss et al. 2001; Fellowes & Rowe 2004).

In analyzing levels of social spending, these studies provide indirect evidence for how racial composition also influences the level of taxation, given the relationship between the two. Yet these studies tell us little about how race might influence the structure of tax systems, specifically the distribution of tax burden.

Two articles in the sociological study of taxation attempt to address this gap in the literature by analyzing changes in the federal tax code. Using event history analysis to explore changes in the US federal tax code over the second half of the 20th century, Jacobs and Helms (2001) find that events that reflect positively on racial minorities, such as peaceful civil rights demonstrations, are associated with progressive changes to the federal tax code whereas events that reflect negatively on racial minorities, such as violent urban riots, are associated with regressive changes to federal taxes. Notably, the authors find no evidence for a direct effect of changes the racial composition of the population on the structure of the tax system. Earlier work by Jacobs, in collaboration with Waldman (1983), did find some evidence that racial composition influenced the structure of tax systems at the subnational level, specifically that states with a higher proportion of black residents had more regressive tax systems.

A more recent study in political science of local tax votes in Texas and Massachusetts suggests that it may not be the level of ethnoracial diversity present that influences taxation but rather the degree of demographic *change*. Analyzing local tax votes in these two states, Hopkins (2009) finds no evidence of an association between the level of racial heterogeneity present and the likelihood a community votes to increase taxes, yet he does find strong evidence of reduced support for increased taxes in communities that had experienced recent demographic change, specifically an increase in racial heterogeneity. The idea that racial change is the key driver of

both shifting public opinion and public policy, as evidenced by this limited study by Hopkins, motivates both the theoretical model and empirical strategies employed below.

Group Position, Opportunity Hoarding & Racialized Preferences for Redistribution

How might an increase in the presence of ethnoracial minorities influence preferences for tax policy? According to Blumer (1958), racial prejudice is engendered when the dominate group (e.g. whites) feel their sense of group position—atop the hierarchy and/or in control of economic and political resources—is challenged (see also Bobo & Hutching 1996; Bobo 1999). Minority groups do not need to actively challenge the dominant group, however, for the feelings of threat to be salient. As Blalock asserts (1967), simply the increased presence or visibility of racial or ethnic minorities may to increase the sense of threat felt by the (white) majority over control of economic resources and political power.

The cognitive basis for this sense of threat has been systematically explored by social psychologists. Experimental evidence demonstrates that negative stereotypes held by whites about blacks and Latinos, particularly low-income blacks and Latinos, are derived from reduced feelings of warmth and perceptions of competency (Fiske et al. 2002). Moreover, low-income minorities are seen to be in competition with the majority population, evoking a "contemptuous prejudice" (Fiske et al. 2002; Cuddy et al. 2007) among whites. Therefore, differential group membership premised on ethnoracial distinctions may engender preferences for policies that actively harm the out-group (see, e.g., Enos 2014).

Yet the forces that perpetuate racial inequality today need not be, and indeed may not be, compelled by active feelings of race prejudice (DiTomaso 2013; Bonilla-Silva 2006). Charles Tilly's (1999) notion of opportunity hoarding may therefore be a more fruitful theoretic lens for

understanding how race may shape preferences for and patterns of redistribution. Instead of analyzing redistributive preferences and processes as a site for overt racialized conflict—where dominant whites actively harm subordinate minority populations through reduced welfare spending or higher tax rates—Tilly asserts that the same social outcomes can be produced through a process in which whites acquire power and resources that are used for the benefit of in-group members. There need not be active, deliberate harm to out-group members for inequalities to be perpetuated.

For Tilly, key to understanding how or why a dominant group (e.g. whites) may serve to perpetuate racial inequality is not the degree to which they fear or hate an out-group (e.g. blacks, Latinos) but rather the degree to which in-group members feel bound by notions of solidarity and loyalty (and often reciprocity, as emblematic of immigrant networks). Where solidarity is higher, the motivation, and perhaps even capacity, for the group to "hoard" opportunities for the benefit of group members is greater (Tilly 1998). Indeed Tilly points to the politics of inequality in both wealthy and developing countries as a strategic site for the hoarding of political rights and economic spoils by "categorically bounded" groups, with particular emphasis on ethnoracially dominant groups and men (1998:10, 194-212).

Studies of how race colors preferences for redistributive social spending illustrate Tilly's point. In his analysis of attitudes towards redistributive spending, Luttmer (2001) finds that levels of support for welfare spending is strongly influenced by the percent of local welfare recipients that are co-ethnics. He concludes that support for social programs is higher where welfare spending is perceived to benefit members of one's own ethnic group. This "racial group loyalty" shapes preferences for welfare spending net of respondent's own income level; even low-income households who stand to benefit from greater welfare spending are less likely to

support increased spending when they perceive welfare to disproportionately benefit other racial or ethnic groups. In his highly influential study, Gilens (1999) similarly finds that anti-welfare attitudes among whites are motivated by assumptions that this spending disproportionately advantages minorities (specifically blacks) who whites view as being lazy and lacking work ethic. These stereotypes undermine feelings of solidarity with the minority groups (or perhaps vice versa) and thereby reduce white's motivation to actively mobilize resources for their benefit.

Solidarity within the categorically bounded group of white Americans—perhaps heightened in areas with increasing populations of ethnoracial minorities—may engender a set of policy preferences that favors a more progressive taxation regime in ethnically homogenous communities and a more regressive taxation regime in increasingly heterogeneous communities. And, importantly, race may influence individual preferences for and the actual structure of tax systems distinct from how it shapes preferences for and the actual level of social spending and taxation.

Is there evidence that changes in the racial composition of states is associated with changes in the structure of state and local tax systems? And, if so, is there evidence that racial change can influence preference for tax policy? These questions are addressed in the empirical sections that follow.

CHANGING RACIAL COMPOSITION AND THE PROGRESSIVITY OF STATE & LOCAL TAXES

Informed by the above empirical work on the determinants of taxation and redistributive social spending, we identify 2 guiding hypotheses for how changing racial composition at the state level may influence the progressivity of state and local tax systems:

> *Hypothesis 1*: As the percentage of Latinos and percentage of blacks in a state increases, state and local tax systems will become less progressive.
>
> *Hypothesis 2*: As the percentage of Latinos and percentage of blacks in a state increases, the tax burden on low-income households will increase.

Before proceeding to our first set of empirical analyses on the link between racial composition and the changing structure of state and local tax systems, we begin with a discussion of how we operationalize and measure progressivity in the current investigation.

Measuring Tax Progressivity-The Suits Index

Measuring the progressivity of tax systems can be conceptually problematic and practically difficult. In the most basic sense, tax systems are understood to be progressive when higher income earners pay a greater proportion of their income in taxes than those with lower incomes. Statements about progressivity, therefore, are inherently comparative, i.e. a given tax or tax system is said to be more or less progressive than another tax or tax system.

One approach to measuring the progressivity of a tax system holistically is to analyze the mix of taxes used to fund the public sector. Comparisons of tax systems across nations reveals that, on average, sales and excise taxes are more regressive than income and property taxes

(Prasad & Deng 2009). Whereas all tax instruments can be designed to be more or less progressive, on average, greater reliance on the sales tax is associated with more regressive tax systems. Although understandably useful in making cross-national comparisons, systematic analysis of tax systems at the subnational level necessitates a finer level of detail, particularly in the United States where the use of specific tax instruments varies across states and localities; for example, a number of states do not levy a sales tax and another subset of states does not levy a personal income tax.

Another way to measure progressivity is to calculate the ratio of the tax burden of two different points in the income distribution, e.g. the ratio of the tax burden on the top quintile to the tax burden of the bottom quintile. Although intuitively appealing, measures of this type fail to incorporate any information about the distribution of the tax burden across quintiles. Moreover, this type of measure does not incorporate any information about the actual distribution of income or degree of income inequality. The latter information is central to our understanding of tax progressivity; for example, holding the relative tax burden of the top and bottom earners constant, we may have a very different interpretation of progressivity if the income gap between the top and bottom earners is 10:1 rather than to 2:1.

One measure of tax progressivity that considers inequality in both income and taxes is the Suits Index, named for economist Daniel Suits who developed the measure in the 1970s. Analogous to the Gini index for income or wealth inequality, the Suits index captures the cumulative percentage of taxes paid across households as a proportion of the cumulative percentage of income earned across households. It therefore simultaneously incorporates information on both the distribution of income as well as the distribution of taxes. A Suits index

of 1—extreme progressivity—is when all of the taxes are paid by the highest earner. A Suits index of -1—extreme regressivity—is when all taxes are paid by the lowest earner.

Ideally, the Suits Index of tax progressivity would be constructed using data on the income earned and taxes paid by all households. Given data limitations, however, this information is often approximated using data on the cumulative income earned and taxes paid by households at various points in the income distribution. For the purposes of this investigation, the Suits Index will be calculated using data on the income earned and taxes paid from 7 different points in the income distribution: bottom 20%, second 20%, third 20%, fourth 20%, next 15%, next 4% and the top 1%. (For a full discussion of the Suits Index see Suits 1977).

By incorporating information on the total income earned and taxes paid across the income distribution, the Suits Index overcomes many of the limitations of other measures of tax progressivity. Yet it should be noted that this measure—indeed any attempt to measure "progressivity"—fails to capture any information on the overall *level* of taxation. For this reason, differences in tax "progressivity" across states cannot be used to directly infer differences in tax "burden" across levels of income. The tax burden on the poor could be very high in a state that is still considered progressive (if taxes on everyone are high) and the tax burden on the rich could be very low in a state that is still considered progressive (if taxes on everyone are low). As the actual level of the tax burden on the poor has been shown to be associated with a number of measures of individual and household well-being (Newman and O'Brien 2011), the analysis presented below will additionally explore a connection between racial composition and actual tax burden of the poor.

We next turn to a description of the data used in this investigation as well as our empirical approach for isolating a connection between the racial composition of states and the progressivity of state and local taxes.

Data & Methods

The power to tax is vested at many levels of government. In addition to federal and state governments, a myriad of overlapping subunits within state—-including municipalities, counties, school districts, and even special taxing districts—are empowered to tax their residents. The structure of tax systems therefore varies widely across the states, both in which government entity levies taxes and what they tax. In some states, for example, the general sales tax is reserved as an instrument of the state government whereas in other states sales tax rates are determined and revenue is collected at the county level for local use, and in still other states, the sales tax is used at both the state and local level. The same is true for property and personal income taxes. Given differences both across states and over time in the role of local versus state governments in both taxing and spending, this study aggregates state and local spending and uses state as the unit of analysis.

Data for this analysis are taken from the Institute for Taxation and Economic Policy, a nonprofit, nonpartisan, research organization with an expertise and focus on U.S. tax policy at the federal, state, and local levels. Since 1996, ITEP has maintained and updated a microsimulation model for estimating the net effect of current and proposed laws on overall tax revenues as well as the tax burden of households by income quintile. In addition to routinely updating data on federal, state, and local tax laws, the ITEP microsimulation model is estimated

using data from a number of sources, including hundreds of thousands of individual tax returns from the IRS public use files as well as the Current Population Survey, American Community Survey, and Survey of Consumer Expenditures.[2]

Although comparable to microsimulation models used by the US Treasury, Congress, and Congressional Budget Office, ITEP's model is unique in its ability to simulate tax incidence at the state level, including aggregated state and local estimates. The degree of detail in the model is essential for estimating the true "net effect" of tax law on households—published tax rates for personal income, property or sales taxes can vary substantially from the actual taxes paid, due to numerous credits, offsets and exemptions that exist at the federal state and local levels. The model also incorporates estimates of indirect taxes that may be paid by households; most notably, for example, households who do not own their own homes are nevertheless considered to bear some brunt of property taxes in a state/locality by way of higher rent.

Estimates of tax burden by income for all 50 states using ITEP's microsimulation model have been calculated for the three years for which data are available: 1995, 2002 and 2007. In each of these years, ITEP calculated the total tax burden paid by households in the first 20%, second 20%, third 20%, fourth 20%, next 15% (80-95th percentile), next 4% (96-99th percentile) and the top 1%.

To calculate the Suits Index for each of the 50 states at each of point in time, we combined this information with the state specific income distribution information used by ITEP to calculate the tax burden. Using the ITEP model results, we calculated the total income earned in each state and then calculated the proportion of income earned by each of the bottom four quintiles, the next 15%, the next 4% and the top 1%. We then calculated the total amount of state

[2] For more information, see: http://www.itep.org/about/itep_tax_model_full.php

and local taxes paid overall and then calculated the proportion of taxes paid by each of the bottom four quintiles, the next 15%, the next 4% and the top 1%. Relating the cumulative income earned to the cumulative taxes paid according to the function outlined by Suits, generates a state specific Suits Index for the progressivity of the state and local tax systems of each of the 50 states in 1995, 2002, and 2007, the three years for which data are available.

The above calculations yield a Suits Index for each of the 50 states in the US at 3 points in time, or 150 state-year observations in total. To ease interpretation of results in our regression models, we standardized the Suits Index by dividing by the standard deviation. As a reminder, a (hypothetical) Suits Index of 1 indicates a tax system is perfectly progressive whereas a (hypothetical) Suits Index of -1 indicates a tax system is perfectly regressive. Therefore, in looking at within state change in the Suits Index over time, an increase in the value of the Suits Index reflects a move towards greater progressivity whereas a decrease reflects a move towards greater regressivity.

The calculated Suits Index for each state and each year is reported in the appendix (Table A). Notably, every state-year estimate is below zero, meaning that all state and local tax systems can be characterized as regressive. Note also that states which are generally considered relatively "progressive" or generous in terms of redistributive social spending do not always have progressive tax systems, e.g. Washington. Moreover, some states that are often characterized as being laggards in social spending have relatively progressive tax structures, e.g. South Carolina. This discrepancy further underscores the need to analyze the social determinants of taxation separately from the determinants of redistributive social spending.

As described above, our primary interest is in the association between a change in the racial composition of a state and a change in the progressivity of state and local tax systems.

Therefore, data is analyzed using a linear model with state and year fixed effects. State fixed effects permit us to net out all time-invariant state specific characteristics that may be associated with racial composition and the structure of tax systems. Moreover, inclusion of state fixed effects permits us to better isolate any association between racial composition and tax progressivity by focusing on the changes in the two variables over time.

Our key predictors for racial composition are percent (non-Hispanic) black, percent Latino and percent (non-Hispanic) Asian in the state. These numbers are derived from the Current Population Survey and are scaled to 0-100. We use percent of the population by ethnoracial category over other commonly used metrics of heterogeneity, i.e. ethnic diversity or "fractionalization" indices, in our analysis for several reasons. First, blacks, Latinos and Asians (and other ethnoracial or nationalist groupings) have distinct histories and historical trajectories in the United States; indeed, historically the nature and level of welfare support low-income households receives varies across ethnoracial categories, beyond a white-nonwhite dichotomy (Fox 2012; Soss et al. 2001). Second, the content of race-based stereotypes and racial prejudice varies significantly across these groups (Fiske et al. 2002; Cuddy et al. 2007; Gilens 1999). Third, given that we are particularly interest in looking at change in racial composition over time, having separate indicators for the percent of each minority group in the population allows for a more nuanced examination of demographic change, relative to a summary index or more general measure such as percent non-white. Although summary indexes may be necessary in cross-national studies where minority distinctions vary and may be premised on religion or language (e.g., Alesina, Glaeser and Sacerdote 2001), we believe that using these distinct—but still coarse—measures is important and potentially instructive in the U.S. context.

In addition to state and year fixed effects, we also include in the model a number of state level covariates that may change over time and may be associated with both the changing racial composition of the state and the changing progressivity of the tax system. First we include a measure of the percent of state residents who are foreign born, to ensure we are isolating the effect of changing ethnoracial composition net of immigration status. Second, we include a number of measures to capture the macroeconomic condition of the state, including labor force participation rate (scaled 0-100), unemployment rate and poverty rate (scaled 0-100) from the Current Population Survey, as well as total income per capita (logged), which is an aggregate measure of all income earned by individuals in the state, adjusted for inflation. Log income per capita is highly correlated with state gross domestic product and, in addition to serving as a proxy for macroeconomic conditions, serves as a control for changes in the taxable resources available to a state, which likely has important implications for the structure of tax systems.[3] Political party control—which can both influence tax policy and may be shaped by changing demographics—is accounted for by a continuous measure of Republican control of the state house, taken from Harmon (2011).[4] Finally all models include state-specific Gini coefficients, as inequality may be associated with both changing racial composition as well as changing distribution of tax burden.

To correct for potential autocorrelation across waves, standard errors are clustered at the state level. Models are robust to various lag structures; unlagged results are presented in the tables below (see Lynch 2011).

[3] Separate analysis used state gross domestic product instead of total income. Results are unaffected by choice of measure.

[4] From Harmon 2011: "State House and Senate variables were constructed by centering the percent Republican around 50% so that Republican control represents positive deviations from 50%, while Democratic control represents negative deviations. The absolute values of the deviations were then logged with the negative sign returned to the Democrats to create a logarithmic scale with positive and negative deviation from zero to represent the diminishing returns of political party concentrations" (Page 103, Note 20).

Results

Table 1 presents results from the regression model predicting the progressivity of state and local tax systems, as operationalized by the Suits Index. In the basic random effects model, the coefficient for percent Latino is negative and statistically significant; across states, those with higher Latino populations have more regressive tax systems, net of all covariates. The coefficients for blacks and Asians are not significant. Although this cross-sectional evidence is suggestive, the unique (often racialized) histories of state-local tax policy yielded significant differences across states that must be netted out in order to evaluate whether changing racial is associated with changing tax structures net of underlying differences in tax systems.

Model 2 presents evidence from a model that includes state fixed effects. Here we see evidence that within state change in the percent Latino is associated with changes in the progressivity of state and local tax systems: a one percentage point increase in the proportion of the state population that is Latino is associated with a 7.7% standard deviation decrease in the progressivity of state and local taxes over this time period. This association exists net of changes in state macroeconomic characteristics, percent foreign born, level of income inequality, and political party control. Notably, percent black and percent Asian do not appear to be significant predictors of changes in the progressivity of state and local tax systems over this period, which is not unexpected given the small change in percent black or Asian at the state level relative to the changes in percent Latino over this time period.

Our model provides compelling evidence that racial composition at the state level structures the progressivity of tax systems. Yet, as noted above, changes in progressivity may not directly translate into changes in absolute tax burden. Recall that a tax system can simultaneously become more regressive while actually *reducing* the net tax burden on those at

the bottom, if, for example, the tax burden on those at the top is also reduced. Although changing progressivity is an important process of interest in its own right, we might also wish to know the association between changing racial composition and changes in the absolute tax burden, particularly the burden on low-income households whose well-being is likely to be strongly affected by the design of tax systems (Newman and O'Brien 2011). Using estimated total tax burden on those in the bottom quintile estimated by ITEP as the dependent variable, models 3 and 4 test for this relationship using random effects and fixed effects specifications, respectively. Although the random effects model suggests that the overall percentage of Latinos is not associated with higher taxes on the poor, the fixed effects model provides evidence that increasing percentage of Latinos in the state is indeed associated an increase in the absolute tax burden on low-income households.

The above analyses demonstrate that an increasing percentage of Latinos in a state is associated with a more regressive state and local tax system and, moreover, this increasing regressivity is being driven in part by increasing the tax burden on low-income households. The fixed effects modeling strategy coupled with the macroeconomic and political covariates helps to rule out competing explanations for this association and to isolate a direct, causal effect for racial composition on the structure of tax systems. Notably, percentage Latino is a significant predictor of both tax progressivity and tax burden on the poor even after accounting for percent foreign born in the state (which itself is not a significant predictor of tax progressivity or burden on poor).

Although we have demonstrated that increasing proportion of Latinos is associated with increasingly regressive tax systems, these models provide no evidence for a potential mechanism. The next set of analyses moves from the state level to the individual level in an

effort to explore how changing racial composition may actively influence individual preferences for taxation.

CHANGING RACIAL COMPOSITION & PREFERENCES FOR TAXATION

Whereas the above analyses provide compelling evidence that changing racial composition at the state level influences the structure of state and local tax systems, the nature of the data make it difficult to directly test for mechanisms through which ethnoracial change may shape tax progressivity. A first order hypothesis is that ethnoracial change may influence the structure of tax systems by shaping the preferences of voters, which in turn shapes policy. Individual voter preferences, or mass public opinion, plays an important role in shaping policy priorities and policy outcomes although the strength of this relationship is contingent on many factors (Brooks & Manza 2007; Gilens 2005). Given that race has been shown to influence preferences for redistributive social spending (Luttmer 2001; Gilens 1999) and racial change is negatively associated with citizens voting for local tax increases (Hopkins 2009) it is important and instructive to explore if and how race may influences preferences for tax progressivity.

Is there evidence that changes in the ethnoracial composition of local areas influence preferences for taxation? Motivated by this question, we designed a survey experiment to test three additional hypotheses:

> *Hypothesis 3*: Whites who are told to imagine that their community has experienced a recent influx of black or Latino residents will be less likely to support higher taxes.

Hypothesis 4: Whites who are told that their community has experienced a recent influx of black or Latino residents will be more likely to prefer a regressive, flat tax over a more redistributive, progressive tax.

Building on the notional mechanism offered by Tilly (1998) and suggested by Luttmer (2001), our final hypothesis attempts to experimentally test for how feelings of solidarity may influence preferences for taxation and mediate any observed relationship between racial composition and preferences for taxation.

Hypothesis 5: Respondent's feelings of solidarity with members of their community will mediate the effect of ethnoracial change on preferences for taxation.

Survey Experiment

For the experimental study we recruited a sample (n=1,030) of individuals to complete an online survey. The sample was recruited from a privately managed online panel and was designed to be nationally representative of the United States by income, age, and gender.[5] Respondents were presented with a vignette that asked them to imagine they were living in a hypothetical county that recently experienced rapid population growth. Respondents were randomly assigned to one of three conditions where they were told the new arrivals to the county were predominately (1) white, (2) black, or (3) Latino. All respondents were told that the new arrivals to the county were generally low-income, in order to reduce the likelihood that tax

[5] The survey was administered to participants in an online panel recruited and maintained by Qualtrics, a research firm. The general adult population in Qualtrics sample was invited to take the survey and Quotas were used to make the sample representative across income, age and gender. Although this sampling strategy is inferior to a true national probabilistic design, we do believe that the diversity of respondents we were able to recruit through this method is a significant improvement over convenience samples typically used in experimental designs (e.g. university students).

preferences were based on inferences about the income of the new arrivals. The vignette went on to note that the local government has decided it needs to raise additional revenue and asked the respondent for their opinions about how taxes should be raised.

Our analytic sample is limited to non-Hispanic whites who successfully passed the manipulation check at the end of the survey by identifying the race or ethnicity of the new arrivals described in their treatment condition (n=473). A multinomial logistic regression model predicting respondent status in each of the conditions confirms covariate balance was achieved across groups through randomization (see Table B in the appendix). In addition to analyses of the full sample, we also conducted analyses on subsets of the sample by sex, given evidence in the literature that men and women tend to have substantially different preferences for redistribution, with women consistently favoring higher levels than men (see Alesina & Giuliano 1999; Fong 2001; Pinker 2006). Data was analyzed using OLS models adjusted for basic demographic covariates, including income (log), age (linear and squared terms), education, and marital status. Although all results presented are from models with control variables, the results are not sensitive to the inclusion of controls (see Mutz 2011; Gerber & Green 2012).

After reading the initial vignette, respondents were first asked whether they would support or oppose the county council's efforts to raise taxes in the county (1-6 scale with 1 being "strongly oppose" and 6 being "strongly support"). As illustrated in Table 2 and Figure 1, support for increased taxation was highest among respondents who were told that the new arrivals to the county were predominately white. Conversely, respondents who were told the new arrivals were black or Latino were less likely to support raising taxes, although notably only the Latino condition was statistically different from the white condition. Being in the Latino

condition was associated with a .37 point lower score on a 6 point scale, equivalent to one-quarter of a standard deviation.

The above finding provides supportive evidence for our first hypotheses: increasing percentage of nonwhites reduces support for efforts to increase taxation. But does the changing racial composition of an area influence respondents preferences for the structure of taxes? To test for this association, respondents were asked:

> **Overall, would you prefer a "flat tax" (where everyone would pay the same percentage of their income in new taxes) or a "progressive tax" (where the tax rate increases with income, in other words, middle- and higher-income people would pay a greater percentage of their income in new taxes than lower-income people)?**

Respondents were asked to report whether they preferred a "flat tax" or a "progressive tax" (1-6 scale with 1 being "strongly prefer flat tax" and 6 being "strongly prefer progressive tax"). As shown in Table 3 and Figure 2, analysis of the full sample of respondents found no statistically significant difference between the white condition and either of the minority conditions in preferences for a flat versus a progressive tax. However, when we disaggregated our sample by sex of respondent, we found substantial differences. Specifically, male respondents in both the black and Latino conditions were significantly more likely to prefer a flat tax than male respondents in the white condition; when the new arrivals to the county were nonwhite, support among white males for a progressive, redistributive tax was lower. Put another way, white male respondents who were told that the new arrivals to the county were white were more likely to prefer a redistributive, progressive tax than those who were told that the new arrivals to the county were black or Latino. The coefficient point estimates reflect that, relative to those in the white condition, the average response for male respondents in the black condition was about .57

points lower on the 6 point scale (approximately 30% of a standard deviation) and the average response for male respondents in the Latino condition was about .78 points lower (approximately 40% of a standard deviation).

Interestingly, the women in our sample reported no statistically significant differences in their preference for flat versus progressive taxation across the three conditions, suggesting a potential new direction for the literature on gender differences in preferences for redistribution. It is also notable that the order of conditions is consistent in both Figures 1 and 2: the point estimates are lower for the Latino condition than the black condition in both instances, although it is important to note the difference between these two conditions is not statistically significant in either case.

These results provide some support for hypotheses 4: increasing presence of racial minorities reduces support for progressive tax structures, although notably only for male respondents.

Overall support for taxation—and for male respondents, support for progressive taxation—is lower for whites who are told their community has recently experienced an influx of nonwhites. But what drives this association? Following Tilly (1998), we hypothesized that respondents would be more likely to support raising taxes and, specifically, to support raising taxes progressively, when they felt "solidarity" with the new arrivals, that is, when they felt the new arrivals were like them and therefore more readily identified as being part of the "in-group". To test for this potential mechanism, respondents were asked the degree to which they believed the new arrivals to the county were like them or not like them (6 point scale with 1 being "Not at all like me" and 6 being "Just like me"). As shown in Table 4 and Figure 3, those in the black and Latino conditions were significantly less likely to report that the new arrivals to the county

were like them than those in the white condition. In other words, experimentally manipulating the race of the new arrivals significantly altered the degree to which respondents felt solidarity with the group, with the average response for those in black and Latino conditions being .6 and 1 point lower on the 6 point scale, respectively (which translates to approximately 44% of a standard deviation lower for the black condition and 78% lower for the Latino condition, relative to the white condition). Notably, respondents in the Latino condition felt less solidarity with the new arrivals than those in the black condition, a difference that is statistically significant at the $p<.01$ level.

But does this difference in expressed solidarity account for any of the difference in preferences for taxation across the three conditions?

Results from a mediation analysis are presented in Table 5. Model A reproduces the results from our earlier analysis which found that support for taxes was significantly lower among respondents in the Latino condition relative to the white condition. To test whether respondents' expressed feelings of solidarity with the new arrivals mediates the association between the race of the new arrivals and support for taxation, in Model B we added our measure of solidarity to the equation. Results demonstrate that solidarity is a significant predictor of support for taxation—the higher a respondent's feeling of solidarity towards the new arrivals, the greater the support for increased taxes. At the same time, when we include our measure of solidarity in the model, the coefficients for both the black and Latino conditions shrink towards zero. Indeed, once solidarity is included in the model, the average response for those in the Latino condition shrinks towards zero and is no longer statistically different from the white condition. Changes in the Latino coefficient between the two models suggest that variation in

feelings of solidarity can account for approximately 57% of the observed association between being in the Latino condition and reduced support for taxation. [6]

Solidarity is both a meaningful predictor of support for taxation and, as evidenced by comparing coefficients in Model A and Model B, serves to mediate the association between the race conditions and support for taxation. But do feelings of solidarity influence respondent preferences for a progressive tax structure?

Model C reproduces the previous analysis which found a strong effect of race condition on preferences for progressive taxation among male respondents: support for progressive taxation was lower among males who were told the new arrivals to the county were black or Latino. Model D adds our measure of solidarity to the model. Results demonstrate that solidarity is a significant driver of support for a progressive, rather than flat, tax structure. At the same time, inclusion of solidarity in the model shrinks the coefficients for the black and Latino conditions towards zero. Moreover, after accounting for solidarity, the differences in preferences for a progressive tax we see among male respondents in the black and Latino conditions relative to the white condition shrink towards zero and are no longer statistically significant. Changes in the coefficients for the black and Latino conditions between the two models suggest that our measure of solidarity accounts for about 28% and 36%, respectively, of the association between being in the black condition and Latino condition on reduced support for progressive taxation.[7]

These findings provide support for hypothesis 5—observed differences in support for increased taxes and preferences for progressive tax systems by race condition can be explained,

[6] Sobel mediation test is significant at p<.01
[7] Sobel mediation test is significant at p<.05

in part, by differences in the degree to which white respondents feel solidarity with the new arrivals to their hypothetical county.

EXTENSIONS AND COMPETING HYPOTHESES

Ethnoracial Divisions or Nativity & Citizenship Status?

The regression analysis of the change in the progressivity of state and local tax systems found that as the percent of Latino residents in a state increased, the tax system became more regressive. Notably, we found no evidence for an association between percent black or Asian and the progressivity of tax systems, perhaps because few states saw an appreciable change in the proportion of residents who were black or Asian between 1995 and 2007. Our experimental results demonstrated a statistically significant difference among white respondents in their feelings of solidarity towards blacks as well as Latinos, with respondents feeling less similar to Latinos than blacks. One reason why whites may feel less solidarity with Latino arrivals than with black arrivals is assumptions about the immigration and citizenship status—Latinos may be more different because they were born in another country and may not be citizens, or even legal residents of the United States.

It could be argued, therefore, that our finding of an empirical association between ethnic composition and the structure of tax systems is being confounded by assumptions about the immigration or legal status of new residents. In other words, it may not be the ethnicity of new arrivals that is driving preferences for regressive tax systems but instead their immigrant status. In addition to including a control for percent foreign born in our regression models, we further

tested for this potential confounding explanation directly in our experiment by asking respondents both how likely it is that the new arrivals were foreign born and how likely the new arrivals were citizens or legal residents. Although respondents in the Latino condition were more likely to report the new arrivals were foreign born and noncitizens than those in the white or black conditions, this measure *was not* associated with respondent's tax preferences and did not serve to mediate the association between the increase in minorities and tax preferences (see Table C in the appendix).

These analytic techniques provide evidence that our results are not driven by a pure "immigrant" effect. At the same time, attitudes towards Latinos in the contemporary United States are certainly influenced by notional assumptions about immigrants and non-citizens. Indeed, the content of the racialized category of Latinos in the U.S. has evolved and continues to be shaped within discourses of immigration, foreignness and citizenship. Nevertheless, we posit that our findings suggest a more complex mechanism for how changing Latino presence may be influencing tax preferences and tax policies than simply a generalized response to immigrants.

Race and Assumptions of Public Spending

Taxation and spending are inherently related; therefore, we might expect individual preferences for how governments should tax to be strongly influenced by preferences for how government should spend. One could therefore argue that the relationship between race and tax progressivity documented in this investigation is merely an artifact of the already established link between race and social spending, i.e. individual support for increased taxes or progressive tax structures is driven by race-based assumptions for how that money will be spent. In other words,

it may be that that racial composition shapes tax preferences by shifting assumptions about what the money will be spent on, which in turn has consequences for individual's preferences for taxation. Individuals may prefer to use progressive tax instruments to fund education and regressive tax instruments for highways, for example. Given that minority status is often conflated with poverty and further associated with welfare dependency and criminality (Gilens 1999), it could therefore be argued that our finding is actually being driven by attitudes towards certain types of spending that are typically associated with minority populations.

We attempted to account for this potential feedback loop between race, assumptions about government spending and preferences for taxation in a variety of ways. First, our experimental study was designed to prevent the conflation of minority status with welfare dependence—and the conflation of race and class more generally—by explicitly noting that the new arrivals were generally low-income irrespective of race conditions. Moreover, in follow up questions respondents were asked how likely it was that the county needed additional revenue in order to increase spending in each of the following areas: health & hospitals, welfare & income assistance, parks & recreation, police & public safety, and education. Notably, we found no evidence of a difference in expectations for how the tax revenue would be spent across the three race conditions; respondents in the black and Latino condition were no more likely to report that they believed the county needed revenue to increase spending on welfare, policy, parks, education, or health than respondents in the white condition (results available upon request). This null finding suggests that attitudes towards redistributive taxation are being shaped directly by attitudes towards race, not by differential expectations about what the race of the new arrivals may mean for how the new tax dollars are spent.

Finding no difference in the expected use of tax revenue by race provides additional support for the argument that our finding is being driven by a more basic notion of solidarity with the new arrivals than by assumptions about their deservingness for redistribution, at least in terms of criminality and welfare dependence. Although it may be a stretch to conclude that respondent's believed blacks and Latinos were no more likely than whites to rely on welfare or be involved in criminal activity, the results are suggestive and raise a number of interesting questions for future research.

CONCLUSION

Understanding the social determinants of taxation is essential to understanding the social determinants of redistribution. Beyond highlighting this imperative, this study offers three contributions to the existing literature on race and redistribution. First, it demonstrates that changing racial composition, specifically the increasing proportion of Latinos in a state, is associated with more regressive tax systems, including higher taxes on the poor. Second, in so doing, the analyses above demonstrate that racial change, and not simply the level of diversity, is a key driver of tax policy and preferences. Third, evidence from the survey experiment highlights one mechanism through which changing racial composition may influence preferences for taxation: lower feelings of solidarity towards new arrivals of color. This mechanism, motivated by Tilly's notion of opportunity hoarding, may prove to be more useful than conflict-based theories of race prejudice in future explorations of the relationship between race and redistribution.

Although the conclusions of this study are broadly consistent with the existing literature, the particular impact of increasing Latino presence on tax preferences and tax outcomes and the gendered differences in sensitivity to racial change warrant further exploration in studies of

social spending. Moreover, given the limitations inherent to using state as the unit of analyses, future work should explore the link between racial change and the distribution of tax burden at lower levels of government, e.g. counties or municipalities. This would permit more detailed exploration of whether and how preferences for redistribution are influenced by different forms of racial change and possibly facilitate testing of how the specific content of stereotypes toward specific groups (e.g., Mexicans immigrants or African-Americans moving from adjacent city) influences policy preferences. Local level analyses may also provide more analytic leverage for parsing how racial change is shaping public discourse as well as the political and policymaking processes that lead to reduced social spending and more regressive tax systems.

The structure of a tax system has important consequences for inequality within and between groups. Net of social spending, taxes can serve to ameliorate or exacerbate existing inequalities by reducing the real income of some households through taxation while increasing the income of others through tax transfers. Future work must consider both taxes and social spending when estimating the net effect of redistributive policy on everything from measures of individual and household well-being to aggregate levels of inequality. In tandem with efforts to better integrate analyses of taxation into studies of redistribution, more work must be done to quantify and contextualize the structure of tax systems in contemporary societies. The study of taxation—from level and structure to voter preferences, social movements, policy debates and policymaking processes—is fertile territory for future sociological research.

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Appendix:

Vignette from Survey Experiment

Imagine you are a longtime resident of Chestnut County. Chestnut County is mid-sized county on the outskirts of a large American city. The county has experienced rapid population growth in recent years and most of the people moving to the area are [white/black/Latino] and generally low-income. Recent changes in the county have placed increased demands on the county's finances. Therefore, the county council has decided it needs to raise additional revenue by increasing taxes. Next are a series of questions designed to better understand how you, a longtime resident of Chestnut County, would prefer to see the county raise taxes.

Table 1. OLS Regression Predicting Suits Index of State and Local Tax Progressivity and Tax Burden on 1st Quintile by State: 1995, 2002, 2007

	M1: Suits Index (Std) State Random Effects	M2: Suits Index (Std) State Fixed Effects	M3: Q1 Total Tax Burden (0-100) State Random Effects	M4: Q1 Total Tax Burden (0-100) State Fixed Effects
Percent Latino (0-100)	-.049*	-.077*	.024	.263*
	(.022)	(.037)	(.053)	(.110)
Percent Black (0-100)	-.003	.024	-.020	.174
	(.013)	(.034)	(.044)	(.164)
Percent Asian (0-100)	-.002	-.005	.005	-.068
	(.009)	(.013)	(.020)	(.058)
Percent Foreign Born (0-100)	.069	.079	.026	.014
	(.042)	(.043)	(.088)	(.198)
Gini Index (0-100)	.002	.00`	.121	.034
	(.016)	(.017)	(.100)	(.099)
Total Income Per Capita (Logged)	-4.472**	-5.525**	4.664	11.011+
	(1.291)	(1.623)	(3.349)	(6.136)
Percent Unemployed (0-100)	.083+	.053	.224	.348
	(.042)	(.054)	(.251)	(.303)
Percent in Poverty (0-100)	-.039	.001	.085	.065
	(.039)	(.055)	(.160)	(.190)
Percent in Labor Force (0-100)	.045+	.039	-.134	-.096
	(.024))	(.035)	(.084)	(.136)
State House	-.056	-.057	.053	.328
	(0.038)	(.042)	(.116)	(.202)
Constant	43.140**	53.956**	-35.686	-103.286
	(13.539)	(16.545)	(37.308)	(67.872)
Year Fixed Effects	Yes	Yes	Yes	Yes
N	150	150	150	150
R-Squared	0.152	0.923	0.138	0.758

Notes: ***p<.001; **p<.01; *p<.05; two-tailed tests; Standard errors clustered at the state level.

Table 2. OLS Regression Predicting Support for Tax Increase by Race Condition

Experimental Condition (ref: White)	
Black Condition	-.228
	(.165)
Latino Condition	-.369*
	(.169)
Household Income (Log)	.027
	(.093)
Male	.116
	(.134)
Age	-.090**
	(.034)
Age-Squared	.001**
	(.0003)
Never Been Married	.103
	(.176)
Education (ref=High School)	
Less than High School	.335
	(.428)
Some College	.321+
	(.181)
College	.254
	(.192)
More than College	.336
	(.245)
Constant	4.724***
	(1.215)
N	473
R-Squared	0.043

Notes: ***p<.001; **p<.01; *p<.05; +p<.10; Robust Standard Errors in Parentheses (Two-tailed Tests)

Table 3. OLS Regression Predicting Preference for Progressive Tax by Race Condition

	Full Sample	Men	Women
Experimental Condition (ref: White)			
Black Condition	-.118	-.568+	.478
	(.231)	(.320)	(.325)
Latino Condition	-.323	-.780*	.237
	(.231)	(.323)	(.328)
Household Income (Log)	-.444***	-.382*	-.518**
	(.123)	(.166)	(.177)
Male	-.289	---	---
	(.185)		
Age	-.019	-.074	-.010
	(.045)	(.067)	(.061)
Age-Squared	.0002	.0008	.0002
	(.0004)	(.0007)	(.0006)
Never Been Married	.090	.450	-.340
	(.247)	(.360)	(.321)
Education (ref=High School)			
Less than High School	-.019	-1.267+	.991
	(.677)	(.645)	(.953)
Some College	.244	.199	.249
	(.251)	(.399)	(.320)
College	-.007	-.038	.092
	(.270)	(.405)	(.359)
More than College	.328	.198	.796
	(.352)	(.488)	(.561)
Constant	8.676***	9.430***	8.725***
	(1.642)	(2.381)	(2.241)
N	473	244	229
R-Squared	0.058	0.087	0.073

Notes: ***p<.001; **p<.01; *p<.05; +p<.10; Robust Standard Errors in Parentheses (Two-tailed Tests)

Table 4. OLS Regression Predicting Solidarity with New Arrivals by Race Condition

Experimental Condition (ref: White)	
Black Condition	-.597***
	(.152)
Latino Condition	-1.057***
	(.141)
Household Income (Log)	-.198*
	(.086)
Male	.003
	(.127)
Age	-.005
	(.029)
Age-Squared	.0001
	(.0003)
Never Been Married	-.298+
	(.156)
Education (ref=High School)	
Less than High School	-.230
	(.577)
Some College	.067
	(.177)
College	-.064
	(.184)
More than College	-.339
	(.246)
Constant	5.959***
	(1.084)
N	473
R-Squared	0.125

Notes: ***p<.001; **p<.01; *p<.05; +p<.10; Robust Standard Errors in Parentheses (Two-tailed Tests)

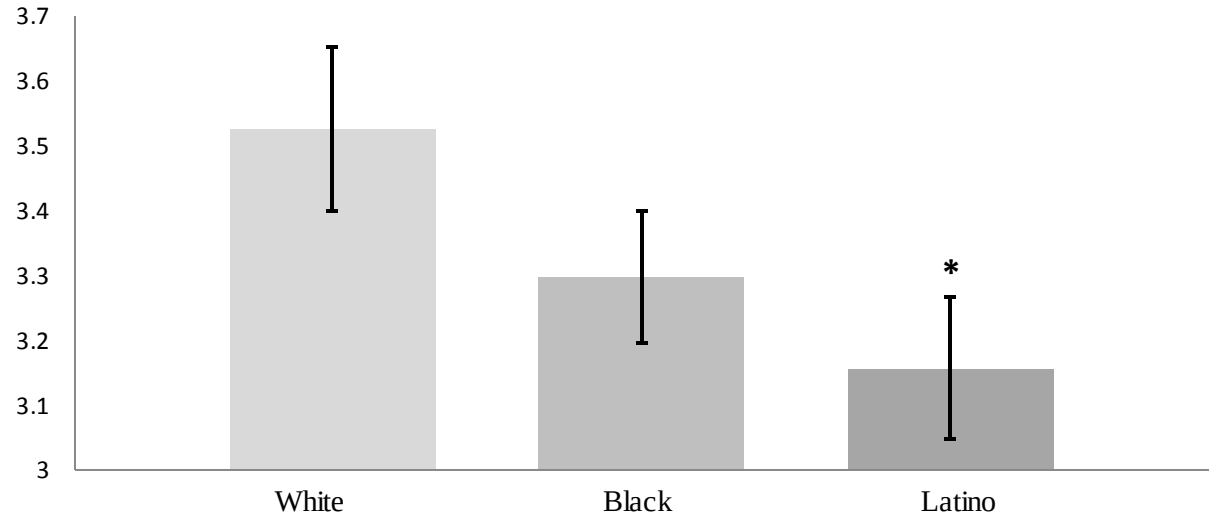
Table 5. Solidarity as Mediator of Preferences for Taxation Across Race Conditions (OLS Regression)

	Support for Taxes (Full Sample)		Preference for Progressive Tax (Men Only)	
	Model A	Model B	Model C	Model D
Solidarity	---	.201***	---	.260**
		(.057)		(.100)
Experimental Condition (ref: White)				
Black Condition	-.228	-.108	-.568+	-.408
	(.165)	(.165)	(.320)	(.321)
Latino Condition	-.369*	-.157	-.780*	-.496
	(.169)	(.178)	(.323)	(.340)
Household Income (Log)	.027	.066	-.382*	-.343
	(.093)	(.091)	(.166)	(.165)
Male	.116	.115	---	---
	(.134)	(.132)		
Age	-.090**	-.089**	-.074	-.079
	(.034)	(.033)	(.067)	(.066)
Age-Squared	.001**	.001**	.0008	.0008
	(.0003)	(.0003)	(.0007)	(.0007)
Never Been Married	.103	.163	.450	.488
	(.176)	(.171)	(.360)	(.354)
Education (ref=High School)				
Less than High School	.335	.381	-1.267+	-1.300+
	(.428)	(.495)	(.645)	(.767)
Some College	.321+	.307+	.199	.201
	(.181)	(.179)	(.399)	(.390)
College	.254	.267	-.038	.015
	(.192)	(.190)	(.405)	(.391)
More than College	.336	.404+	.198	.326
	(.245)	(.238)	(.488)	(.475)
Constant	4.724***	3.528***	9.430***	8.188***
	(1.215)	(1.221)	(2.381)	(2.351)
N	473	473	244	244
R-Squared	0.043	0.076	0.087	0.115

Notes: ***p<.001; **p<.01; *p<.05; +p<.10; Robust Standard Errors in Parentheses (Two-tailed Tests)

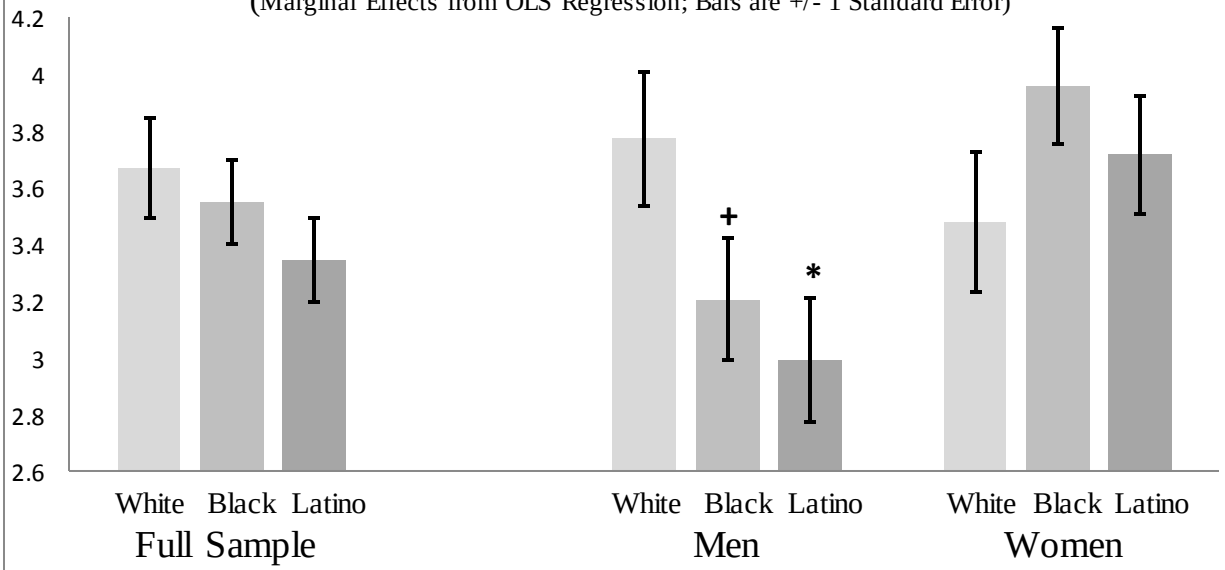
FIGURES

Figure 1: Support for Tax Increase by Race Condition
(Marginal Effects from OLS Regression; Bars are +/- 1 Standard Error)



Note: *p<.05; +p<.10 denote statistically different from White Condition

Figure 2: Preference for Progressive Taxation by Race Condition
(Marginal Effects from OLS Regression; Bars are +/- 1 Standard Error)



Note: *p<.05; +p<.10 denote statistically different from White Condition

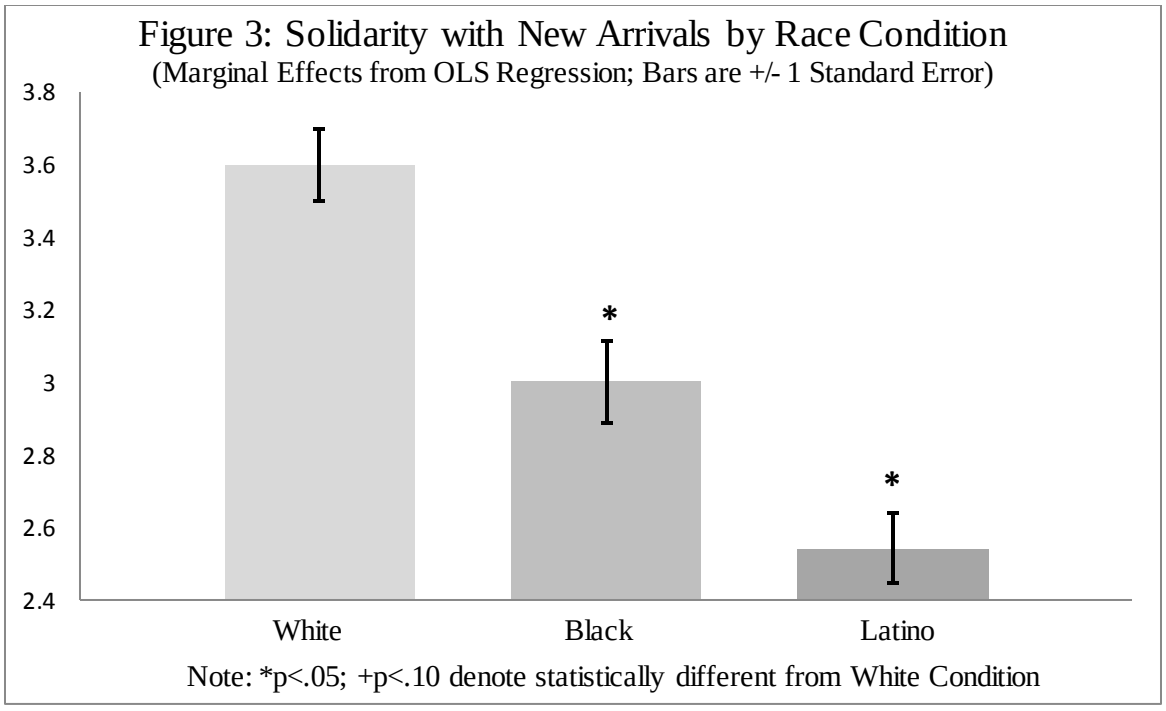


Figure 3: Solidarity with New Arrivals by Race Condition
(Marginal Effects from OLS Regression; Bars are +/- 1 Standard Error)
3.8
3.6
3.4
3.2
3
2.8
2.6
2.4
*
*
White
Black
Latino
Note: *p<.05; +p<.10 denote statistically different from White Condition

Table A. Suits Index of State and Local Tax Progressivty: 1995, 2002, 2007

State	1995	2002	2007
AK	-0.07761	-0.04013	-0.10782
AL	-0.10277	-0.11845	-0.13139
AR	-0.0637	-0.06403	-0.09527
AZ	-0.06891	-0.1041	-0.1285
CA	-0.02323	-0.05095	-0.01919
CO	-0.06741	-0.10423	-0.11215
CT	-0.09974	-0.13529	-0.11876
DE	-0.02767	-0.00752	-0.03799
FL	-0.15898	-0.17808	-0.26756
GA	-0.06473	-0.09524	-0.08997
HI	-0.05287	-0.07405	-0.0856
IA	-0.05597	-0.06604	-0.05943
ID	-0.0338	-0.05008	-0.04522
IL	-0.10519	-0.12453	-0.14609
IN	-0.08099	-0.09103	-0.09339
KS	-0.05841	-0.07495	-0.05514
KY	-0.05837	-0.06562	-0.07078
LA	-0.09443	-0.08739	-0.094
MA	-0.05881	-0.08784	-0.11379
MD	-0.07159	-0.07295	-0.06535
ME	-0.03422	-0.03491	-0.04034
MI	-0.08527	-0.09719	-0.0731
MN	-0.04096	-0.05803	-0.05878
MO	-0.06923	-0.06567	-0.07541
MS	-0.06631	-0.07546	-0.08634
MT	-0.02332	-0.02787	-0.03979
NC	-0.05156	-0.06707	-0.04833
ND	-0.05668	-0.06367	-0.08325
NE	-0.06519	-0.05317	-0.07318
NH	-0.09113	-0.13025	-0.15337
NJ	-0.0699	-0.07332	-0.02635
NM	-0.06519	-0.0671	-0.10585
NV	-0.15943	-0.18232	-0.23988
NY	-0.06865	-0.09632	-0.07443
OH	-0.05547	-0.05099	-0.07058
OK	-0.06895	-0.07422	-0.10238
OR	-0.03563	-0.04179	-0.03484
PA	-0.09328	-0.11829	-0.11541
RI	-0.05452	-0.06909	-0.07471
SC	-0.02908	-0.04942	-0.04396
SD	-0.12109	-0.15071	-0.18265
TN	-0.12306	-0.1516	-0.17453
TX	-0.11265	-0.14579	-0.17637
UT	-0.07123	-0.08882	-0.08955
VA	-0.06263	-0.07316	-0.06632
VT	-0.03325	-0.03534	-0.02739
WA	-0.1276	-0.21342	-0.21047
WI	-0.06607	-0.03777	-0.05785
WV	-0.04461	-0.04285	-0.04241
WY	-0.11016	-0.17203	-0.24944

Source: Author's Calculation Based on ITEP Data

Table B. Multinomial Logistic Regression Predicting Assignment to Race Condition in Survey Experiment (Reference Category: White Condition)

	Black Condition	Latino Condition
Household Income (Log)	0.116	-.006
	(.160)	(.158)
Male	-.249	-.199
	(.250)	(.249)
Age	.028	.000
	(.061)	(.061)
Age-Squared	.000	.000
	(.001)	(.001)
Never Been Married	.538	.380
	(.326)	(.328)
Education (ref=High School)		
Less than High School	-.232	-.118
	(.965)	(.967)
Some College	.343	.521
	(.323)	(.328)
College	.201	.398
	(.342)	(.346)
More than College	-.078	.203
	(.441)	(.439)
Constant	-2.268	-.580
	(2.162)	(2.137)

Notes: N=473; ***p<.001; **p<.01; *p<.05; +p<.10; Pseudo R-Squared=.014

Table C. Immigrant and Legal Status as Mediators of Preferences for Taxation Across Race Conditions (OLS Regression)

	Support for Taxes (Full Sample)		Preference for Progressive Tax (Men Only)	
	Model E	Model F	Model G	Model H
Likely Foreign Born	---	.09	---	.049
		(.100)		(.171)
Likely "Illegal"	---	-.003	---	-.059
		(.096)		(.159)
Experimental Condition (ref: White)				
Black Condition	-.228	-.212	-.568+	-.562+
	(.165)	(.162)	(.320)	(.324)
Latino Condition	-.369*	-.486*	-.780*	-.776*
	(.169)	(.194)	(.323)	(.369)
Constant	4.724***	4.508***	9.430***	9.432***
	(1.215)	(1.231)	(2.381)	(2.416)
N	473	473	244	244
R-Squared	0.043	0.048	0.087	0.0875

Notes: ***p<.001; **p<.01; *p<.05; +p<.10; Robust Standard Errors in Parentheses (Two-tailed Tests)