

ELECTORAL CONSEQUENCES OF RACIALISM
FOR REDISTRIBUTION IN THE UNITED STATES:
1972-1992

FEBRUARY 2002

WOJIN LEE
Department of Economics

Northern Illinois University
DeKalb, IL 60115

wojinlee@niu.edu

JOHN ROEMER
Departments of Political Science
and Economics

Yale University
New Haven, CT 06520-8301

john.roemer@yale.edu

1. Introduction

It is an old theme of the Left that racism divides the American working class, thus blocking their attempt to redistribute national income away from capital towards labor (see McWilliams[1939] for a classical study of how growers used racism to prevent farm labor from organizing). Traditionally, the mechanism indicated has been that racism among workers weakens unions, which shifts revenues of firms towards profits and away from wages. Another mechanism, of more social-democratic origins, locates the problem in electoral politics. Racism reduces ‘altruism’ among citizens -- particularly, in the United States, among whites towards blacks; whites consequently vote against redistribution, as they do not want to redistribute to blacks. The more fundamental view of the white racist voter may be that blacks are undeserving, and society should not redistribute to the undeserving.

In this proposal, when we describe a voter as *racialist*, we mean that he favors what are conventionally viewed as conservative policies on the race issue, ranging from opposition to affirmative action to support for prison construction. We are not here engaged in opprobrium, which is to say that we need not associate these views with *prejudice* -- by definition, a term of opprobrium -- or racism. For this reason, we prefer the adjective *racialist* to *racist* when describing these preferences or policies, which leaves open the question of *why* the voter in question has the preferences he does.

Recently, Alesina et al (2001) have provided some econometric evidence for the latter view, of a purely circumstantial nature. They regress, for a panel of countries, the degree of redistribution against the size of the poor ethnic minority in the country, and

find a strong negative relationship. The US has the most significant, poor minority of any country in the panel, and the least redistribution.

The weakness in any purely econometric exercise, like the one performed by Alesina et al, is that no mechanism is identified: there could be many causes for the observed phenomenon. The effect that Alesina et al think they are capturing is one in which citizens vote against redistribution because they have preferences which place a low value on equality, due to their wish not to redistribute to poor minorities. But there is a second effect, quite different from this one, which may also be at play. Political parties in fact put forth policies on many issues – in particular, on redistribution *and* on racial matters. (Think of the latter as policy on civil rights, affirmative action, ‘law and order,’ prison funding, and so on.) Racialist citizens who *desire* redistribution, because they themselves are poor, may vote for the Right party (in the US, the Republicans), because the Right has the policy they prefer on the race issue -- even though the Right also advocates less redistribution than these voters would like. This phenomenon is studied in Roemer (1998), although -- in that article -- primarily at the theoretical level.

In this project, we will attempt to measure these two effects on redistribution in the US. We call the two effects the *non-altruism effect* and the *policy bundle effect*. Due to the non-altruism effect, some voters are less inclined to redistribute to the poor, because the poor are substantially minority, and racialist voters view minorities as undeserving. The non-altruism effect will cause both parties of the Right and Left to offer less redistributive policies. Due to the policy bundle effect, some citizens may vote for the party that is anti-redistribution, even if they themselves want redistribution, because it is more important to them that that party advocates a position on the racial

issue consonant with their own. Thus the policy bundle effect will strengthen the Right party, independently of what occurs due to the non-altruism effect.

It is worth remarking that the policy bundle effect exists because there does not exist a third party in the US which offers voters a ‘portfolio’ of significant redistribution *and* racist policy: if there were, then poor racist voters could vote for it, instead of voting Republican. The disappeared southern Democrats represented such views; when these racist (and here, we may say racist) politicians were in the Democratic Party, southern whites could vote Democratic *and* support racist policy. The policy bundle effect, we conjecture, would have been either nil or very small during this period. One may therefore conjecture that the demise of the southern Democrat has reduced redistribution in the US – a historical conjecture we might be interested in testing at a later time.

Thus, the policy bundle effect is a *political portfolio effect*: it exists because of the limited portfolio of policy combinations available to the voter in a system with only two parties.

Luttmer (2001) has recently provided strong evidence for the existence of a non-altruism effect, but he has not investigated its implications for voting behavior.

Unlike Alesina et al, we will propose a model of political competition between parties. We will assume that the competition between the Democratic and Republican parties in the US is described by that model. We will use observations on voting behavior and fiscal policy to estimate the model; we will then perform some counterfactual experiments that will enable us to compute the magnitude of the two effects of racialism on redistribution in the US. We will, in effect, attempt to provide

micro-political foundations for the observation that racism reduces redistribution, and to put ‘costs’ on racialism in the US – costs in terms of redistribution foregone.

2. *The model*

What we need to carry out the project is a model of equilibrium in political competition between two parties where the policy space is *two dimensional*; one dimension of competition concerns redistribution, and the other concerns racial policy. Parties will propose, in their platforms, both a fiscal policy and a policy on the race issue. The model of multi-dimensional political competition that we use is that developed recently by Roemer (2001), called *party unanimity Nash equilibrium with endogenous parties* (PUNE, for short).

We will not describe that model in detail here: the reader is referred to Roemer (1998,1999, 2001). We hope that our plan will be clear if we describe in qualitative terms what the model does. It takes as *data* the distribution of voter preferences over an issue space, and produces as its *output* : (1) a partition of the polity into two parties, (2) two policies that the parties propose in competitive political equilibrium, and (3) the probability that each party wins the election. Formally, we take as data a set of voter *types* H , a probability measure \mathbf{F} on H , a policy space T , and a profile of voter preferences on T given by a function $v(t,h)$, where $v(\cdot,h)$ is the utility function of a voter of type h on T . Roemer’s theory produces, given $\{\mathbf{F},H,v\}$ a two dimensional manifold of equilibria, which we will denote $\{\mathbf{D}(i),\mathbf{R}(i),t^{\mathbf{D}}(i),t^{\mathbf{R}}(i) \mid i \in S \subset \mathbf{R}^2\}$. Each i indexes one equilibrium; in the i^{th} equilibrium, $\mathbf{D}(i)$ is the set of voter types who belong to and vote for the Left (Democratic) party, $\mathbf{R}(i)$ is the set of voter types who belong to and vote

for the Right (Republican) party, $t^D(i)$ is the platform of the Left party in this equilibrium, and $t^R(i)$ is the platform of the Right party in the equilibrium.

It is important to remark that both the party memberships and the parties' platforms emerge endogenously as part of the game whose equilibrium they describe. The payoff functions of the parties are themselves closely related to the preferences of the types who vote for the respective parties (their 'members') at the equilibrium. Thus, to the extent that a party's support comes from racist voters, it too will put forth racist policy. The parties' policies, however, are not *simple* reflections of their constituents' preferences, as they are the outcome of the interaction between their payoff functions and the political competition between them, as in any Nash equilibrium.

We proceed to discuss our application to the present project. We postulate a polity composed of citizens of various types, where a type is specified by an ordered quadruple $(s, w_M, w_F, \rho) \in R_+^2$, where s is the individual's sex, w_M (w_F) is the wage rate of the male (female) adult member of the household of which the individual is a member, and ρ is the individual's position on the race issue. The distribution of types is given by a probability measure \mathbf{F} . Thus, we assume that every voter is a member of a conventional household with one male and one female adult worker. Call this household the *family*.

A voter has direct preferences over vectors (x, L, E, R) where x is the post-fisc income of the family, L is the vector of working hours of the two working-age family members, E is a measure of equality in the distribution of income or consumption, and R is the position of the government on the race issue¹.

¹ We apologize to the reader for the following notational ambiguity: the symbol R stands both for the racial policy announced by a party, and, occasionally, for the Right or Republican Party.

The ‘pre-fisc’ family income of an individual is his/her income plus his/her spouse’s income plus the family’s non-wage income. Hence $W = w_M L_M + w_F L_F + O$, where O is the other (non-wage) family income (usually consisting of asset income). The fiscal policy is applied at the family (household) level. Hence a voter whose pre-fisc family income is W will have a post-fisc family income (which we also call *consumption*) of $(1-t)W + b$, where t is the (constant) tax rate on income and b is the (constant) net transfer per family.

The direct utility function of an individual which we will work with is:

$$U(x, L_M, L_F, E, R) = \text{Log} x + \sum_{s=M,F} \alpha_s \text{Log}(\lambda_s - L_s) - \frac{\gamma}{2} (R - \rho)^2 + (\delta_0 - \delta_1 w_m - \delta_2 \rho) E, \quad (1)$$

where x is consumption, L_s is labor supplied by the worker of sex s , R is the government’s position on the race issue, and E is a measure of equality in the distribution of post-fisc income, which we take to be given by

$$E = \frac{\text{Log} x_{0.1}}{\text{Log} x_{0.9}},$$

where x_a is the consumption of the family at the a^{th} quantile of the income distribution. Thus, E is the ratio of log consumption of the first decile family to the ninth decile family. ρ is the racial view of the voter in question.

Our utility function is thus logarithmic in consumption and leisure, Euclidean (quadratic) in the racial policy, and linear in the equality-loving term. This utility function is unconventional in two respects: it exhibits the preferences of individuals over the race issue, and preferences for equality.

We assume that the *relative salience* of the race issue is the same for all voters (γ). To understand the coefficient on E , we note that, to reduce the dimension of the space of types, we estimate the empirical dependence of wives’ wages to husbands’ wages, and thereafter drop the wife’s wage from the definition of type. Hence, we will be able to characterize a family’s labor response as a function of only the wage w_M . The negative dependence of preferences for equality on the husband’s wage therefore captures the negative dependence of the preference for equality on the family’s income, which we

assume to find. (We are conjecturing that δ_1 is non-negative – thus, that richer families are less altruistic in the precise sense that they do not value equality as highly as poorer families.) Finally, larger ρ means a more racist voter, and so the non-altruism effect of racialism is embodied in the parameter δ_2 (the more positive the coefficient δ_2 , the stronger the non-altruism effect).

We interpret this as the utility function of an individual who cares about family consumption and labor participation of his/her family members. The justification for our sub-utility function over income and labor supply is threefold:

First, labor supply behavior is different for males and females, and our functional form permits this.

Second, many tax and benefit policies in US are applied at the family level, not at the individual level. Consumption and labor participation behavior of an individual can be properly understood only within the family framework.

Third, voting behavior on the tax rate will depend on family income, not individual income, but preferences on the race issue may differ across family members (although there is in fact a strong empirical correlation among family members on racial views). For instance, non-working wives living with rich husbands may vote like rich individuals on tax rates, although their individual incomes are almost zero. Simultaneously, the wife may be more liberal than her husband on the race issue. Our utility function permits this.

The policy space T consists of vectors (t, b, R) , where t is the marginal income tax rate, b is the net transfer payment, and R is the government's position on race. A government budget constraint will relate the transfer payment to the tax rate, and hence our policy space is *two-dimensional*.

The first two terms on the right-hand side of equation (1) constitute the sub-utility function concerned with labor supply and income. We can estimate the parameter vector $(\alpha_M, \alpha_F, \lambda_F, \lambda_M)$ by regressions, using the PSID, and taking into account the observed tax rate and transfer (t, b) . (That is, we assume the agent optimizes his sub-utility function facing the fiscal policy, and we compute his/her labor supply. This gives us an affine relationship between labor supply and the inverse of the wage rate, where the coefficients are functions of the unknown parameters. We regress observed labor supply against the reciprocals of observed wage rates, and then solve for the unknown

parameters using the observed affine relationship.) As we said earlier, we also regress wives' wage rates upon husbands' wage rates, and use the observed relationship to re-define types without reference to the wife's wage rate.

After these two moves, we can compute the individual's indirect sub-utility function over family income and family labor supply as a function of the policy vector (t, b) . Call this function $\varphi(t, b; w_M)$. Thus, we can write the full indirect utility function of a voter type on the policy space as²:

$$v(t, b, R; w_M, \rho) = \varphi(t, b; w_M) - \frac{\gamma}{2}(R - \rho)^2 + (\delta_0 - \delta_1 w_M - \delta_2 \rho)E(t, b), \quad (2)$$

noting that E is, as well, a function of the fiscal policy. This is the function v referred to in the second paragraph in this section, and so we now have the data necessary to compute PUNEs -- once the remaining parameters $(\gamma, \delta_0, \delta_1, \delta_2)$ are specified and the distribution of types is computed.

We will omit the details of how the manifold of PUNEs is computed: the procedure is described at length in Roemer (2001). We have no survey data (or behavioral data) that permit us to estimate directly the parameter vector $p = (\gamma, \delta_0, \delta_1, \delta_2)$. Consequently, we shall estimate these parameters structurally, by taking values of $(\gamma, \delta_0, \delta_1, \delta_2)$ which give a good fit of the model's prediction to the observed policy.

We elaborate on this procedure. We can, for any proposed parameter vector $p = (\gamma, \delta_0, \delta_1, \delta_2)$, compute a one dimensional family of PUNEs.³ By observing the actual tax policy (t, b) , which we deduce by regressing pre-fisc against post-fisc income in the

² We do not display the sex of the individual because it plays no role at this point. Sex determines whether the individual controls L_M or L_F , but each household member cares about the labor expended by both household members.

³ We reduce the dimensional of the set of PUNEs from two to one by taking from observation the fraction of voters who voted Democratic in the election at hand. This adds one equation to our equilibrium model, and hence reduces the dimensionality of the equilibrium manifold by one.

PSID, we test whether p gives a good fit of the model to observation. To be an *admissible* vector – that is, one that could describe our polity – p must pass two tests. The first is that the manifold of PUNEs it predicts should contain the observed policy. This means not only that the observed tax policy should be related to the tax policies of the two parties in the PUNE at hand, in a way to be described below, but that the race policies of the two parties be those we have observed (as we describe below).

The second test is that the partition of the set of types into two parties in the PUNE at hand should be ‘close’ to the observed partition of types into Democratic and Republican voters, which we take from the American National Election Studies (ANES). We create a measure of closeness as follows. Any PUNE gives a partition of types into the two parties: we define, for that PUNE:

$$g(s, w_M, \rho) = \begin{cases} 1, & \text{if } (s, w_M, \rho) \in \textit{Left} \\ 0, & \text{if } (s, w_M, \rho) \in \textit{Right} \end{cases},$$

and we define:

$$\hat{g}(s, w_M, \rho) = \text{fraction of voters of type } (s, w_M, \rho) \text{ who voted Democratic,}$$

from the ANES. Our measure of goodness of fit for a particular PUNE is $1 - \epsilon$ where:

$$\epsilon = \int (\hat{g}(s, w_M, \rho) - g(s, w_M, \rho))^2 d\mathbf{F}.$$

Of course, we want ϵ to be small.

Using these two tests, we then generate a set of admissible vectors $p = (\gamma, \delta_0, \delta_1, \delta_2)$, which produce a model that conforms well to observation. Call this set Δ .

Thus, to summarize, we do not produce point estimates for the parameter vector p , but rather a *set* of point estimates, each of which is, as far as we know, a possible description of reality.

We have now estimated our model, and we are ready to compute the effect of racialism on redistribution.

We add a methodological comment on our structural estimation of the parameter vector p . Some might say we should try to glean information on p from experiments, or from survey data. On the contrary, we would not put much confidence in such experiments or surveys even if they existed. Survey respondents would be notoriously poor at estimating how much they would be willing to sacrifice in personal consumption to lower the Gini coefficient by 10%, which is the kind of question that would be necessary to elicit values of the coefficient on E in the utility function. It is much better to deduce what those preferences are by taking *observed voting behavior* as revealing preferences, just as we take *observed economic (labor-supply) behavior* as revealing preferences over economic magnitudes (leisure and income).

It should be noted that the authors have a good deal of experience in computing the manifold of PUNEs from other models: see Roemer (2001) for several examples. See below for some preliminary results that we have for the present proposal.

3. *Computing the effect of racialism on distribution*

In real political competition, parties propose both a tax policy and a race policy. We have estimated our model using observations from actual party and electoral behavior. Our first computation is to assume, counterfactually, that *the race issue is not a dimension of policy*. Thus, suppose parties were to compete *only* on redistribution: a policy vector would be a pair (t,b) instead of a triple (t,b,R) . For each admissible parameter vector $p \in \Delta$, we now compute the 1-manifold of PUNEs on this smaller

dimensional policy space. In this experiment, the phenomenon of poor, racist voters voting Republican because the Republicans put forth racist positions (i.e., the policy bundle effect) *will not exist*, because no party puts forth a position on race. However, voters will still be equipped with their non-altruistic preferences, which are, in part, a consequence of racist attitudes.

The difference between the tax rates in the equilibria of this counterfactual and the observed tax policy is the *policy bundle effect* of racialism. Since we cannot identify which $p \in \Delta$ is the correct one, we will simply report the computed policy bundle effect for all $p \in \Delta$. If we assume a uniform distribution of p on Δ , for example, as representing our uncertainty about what the true vector p is, then we will be able to compute a confidence interval for the true policy bundle effect.

We next run a second experiment in which we continue to assume that the race issue is not a policy issue; we also now counterfactually assume that all voters have non-racist preferences with regard to the altruistic term -- that is, we set $\delta_2 = 0$. We now again compute PUNEs for every $p \in \Delta$, where we alter each p by setting $\delta_2 = 0$. The tax policies in these PUNEs are what we predict taxes would be if racist attitudes were *neither* reducing altruism among citizens *nor* were the policy bundle effect active.

Thus we will have computed the total effect of racialism on redistribution in the US. One could say that the degree of redistribution *sans* the non-altruism effect and the policy bundle effect is what democratic politics would produce in the United States if the country were as homogeneous as, let us say, Norway. Of course, we can run other experiments, such as computing the non-altruism effect by assuming that δ_2 has the average value in the population for all voters, instead of a value of zero. And we could

compute the two effects the other way around, computing the non-altruism effect first and the policy bundle effect second. There are a variety of options.

4. *On estimation*

We will use two data sets, the PSID and the ANES. Our intention is to carry out the computation for a series of years in the last two decades.

We use the PSID to estimate the parameters of the labor supply functions of men and women. Our model assumes, for simplicity, that every voter is a member of a heterosexual marriage, and so we will restrict ourselves to such families in the PSID. We also use the PSID to compute the effective fiscal policy: we regress pre-fisc against post-fisc income to give us the observed marginal tax rate and net transfer payment. These linear regressions have a very high R^2 ; very little is lost by assuming an affine fiscal policy.

In the ANES, only family income is reported. However, given the observed fiscal policy, we can compute the mapping from wage rates into family income, once we have estimated the parameters of the sub-utility function from the PSID. Thus we can impute to every family income in the PSID a male wage rate (and, by hypothesis, a female wage rate). We now code the racial parameter ρ of the individual's utility function as the response to one of the questions in the ANES on racial preferences ("Government should help minority groups/blacks, or "Minority groups/blacks should help themselves"). Thus, we finally use the ANES to compute the distribution of voter types.

We will also take from the ANES the distribution of voter types into those who

voted Democratic and those who voted Republican. Finally, we use the ANES to estimate the policy positions of the two parties on the race question, as follows. ANES contains a question querying respondents on their view of the position on race of the two parties: we will take the average response of respondents as the observed race positions of the two parties.

We come next to the observed fiscal policies in the parties' platforms: this is too complex to 'observe'. Instead, we *assume* that the observed fiscal policy in a given year is some average of the policies that the two parties ran on, several years prior. (A variant would be to assume that the observed tax policy is the fiscal policy of the party that won the election. This, however, is probably not the best move, because of divided government in the US, and so we prefer the more general 'averaging' approach.) Thus, in estimating our model – we refer now to deciding which vectors $p \in \Delta$ are admissible – we will say that a particular PUNE gives a good prediction if the policies of the two parties in that PUNE conform to observation. Such conformity requires, first, that the observed race policies of the parties (coded from the ANES) are the policies in the PUNE; second, that the observed fiscal policy several years after the election is some average of the tax policies of the two parties in the PUNE; and third, that the observed partition of voters into D's and R's from the ANES is close to the predicted partition of types into D and R voters in the PUNE. We believe that these tests will suffice to give us a fairly small set of admissible parameter vectors Δ , and so our model will be quite sharply estimated.

5. *Preliminary results*

We have in fact written the computer program for computing PUNEs, and estimated the model with 1984 data. We have found some parameter vectors p that give political equilibria in the right ball park, but we have not yet conducted the kind of search for the entire set Δ that we described above. Preliminary results indicate that both the policy bundle effect and the non-altruism effect are between five and 10 percent (that is, the tax rate would be higher by those amounts, absent the effects). The effects appear to be approximately the same size. Thus, we conjecture that we will conclude that racialism reduces redistribution in the United States somewhere between ten and twenty percent, as measured by the average income tax rate.

6. *Conclusion*

Our project will contribute, we hope, to a better understanding of that great historical topic, American exceptionalism. Why does the US have so little redistribution compared to most of the OECD countries? We conjecture that an important part of the explanation is the American history of slavery, with its consequences of a large group of poor, black citizens, and the racist views towards them held by many in the majority group⁴. Much has been written on the role that racialism played in the labor movement in the US, but very little on the effect of racialism on redistribution through voting: our aim is to redress this lacuna.

Conceptually, our approach is novel in distinguishing the two effects that racialism can have on redistribution through the electoral mechanism, what we call the non-altruism and policy bundle effects. Given this understanding of the problem, a

⁴ It has become a virtual truism that Nordic egalitarian fiscal policy is a consequence of homogeneous societies.

correctly specified econometric model must have, at its foundation, a model of political competition on a multi-dimensional policy space. Roemer's model of PUNE is the natural one for this purpose.

There is a possibility of extending our work to European countries, where the counterpart of American racism is anti-immigrant feeling. This, however, would have to be approached with caution, because the experience of significant immigration of poor and less educated minorities occurred, in most European countries, after the welfare state had been well established.

References

Alesina, Alberto, E. Glaeser, and B. Sacerdote, 2001. "Why doesn't the US have a European-style welfare state?" NBER Discussion paper, September (<http://www.wcfia.harvard.edu/conferences/piep/piep11172001/>)

Luttmer, Erzo. 2001. "Group loyalty and the taste for redistribution," *Journal of Political Economy* 109, 500-528

McWilliams, Carey, 1939. *Factories in the field; the story of migratory farm labor in California*, Boston: Little, Brown and Company

Roemer, J.E. 1998. "Why the poor don't expropriate the rich: An old argument in new garb," *Journal of Public Economics* 70, 399-442

-- 1999. "The democratic political economy of progressive taxation," *Econometrica* 67, 1-19

-- 2001. *Political Competition: Theory and Applications*. Harvard University Press