Economic Inequality and Belief in Meritocracy in the United States*

Frederick Solt
frederick-solt@uiowa.edu

Yue Hu
yue-hu-1@uiowa.edu

Kevan Hudson
kevan-hudson@uiowa.edu

Jungmin Song
jungmin-song@uiowa.edu

Dong 'Erico' Yu
dong-yu@uiowa.edu

June 7, 2016

Abstract

How does the context of income inequality in which people live affect their belief in meritocracy, the ability to get ahead through hard work? One prominent recent study, Newman, Johnston, and Lown (2015*a*), argues that exposure to higher levels of local income inequality lead low-income people to become more likely to reject the dominant U.S. ideology of meritocracy. Here, we show that this sanguine conclusion is not supported by the study's own empirical results and further that analysis of more and better data yields precisely the opposite conclusion. Consistent with relative power theory, among those with lower incomes, local contexts of greater inequality are associated with more widespread belief that people can get ahead if they are willing to work hard.

*Earlier versions of this work were presented the 2016 Annual Meeting of the Southern Political Science Association and the 2016 Annual Meeting of the Midwest Political Science Association. We thank Larry Bartels and Amber Wichowsky for helpful comments. The paper's revision history and the materials needed to reproduce its analyses can be found on Github here.

Meritocracy—the idea that if one works hard, one can get ahead—is a core tenet of the American Dream (see, e.g., Hochschild 1995, 21-23). How belief in meritocracy, and in turn the country's dominant ideology, fares in the face of the stark economic inequality that has come to characterize life in the United States is therefore crucial to understanding not only support for redistributive policies to address this inequality but also the continuing legitimacy of the U.S. economic system as a whole.[1] Not surprisingly, this question and related ones regarding the relationship between economic inequality and political attitudes and beliefs have attracted considerable scholarly attention of late.

In contrast to a range of earlier studies that found that greater inequality tends to be associated with attitudes that reinforce the status quo, Newman, Johnston, and Lown (2015*a*, hereafter NJL) advances the argument that inequality in the United States activates class conflict, leading poorer individuals in local contexts of higher inequality to reject meritocracy and become more class conscious. We demonstrate here, however, that that article crucially misinterprets the interaction term in its model (see, e.g., Brambor, Clark, and Golder 2006). Correcting this error reveals that there is no support for the paper's conclusion that mere exposure to high levels of inequality stimulates a rejection of meritocracy.

Further, in reproducing the above result from the materials the authors provide (Newman, Johnston, and Lown 2015*b*), we uncovered other problems. We therefore present here a full, independent replication, bringing more and better data as well as an improved specification to examine how, if at all, local contexts across the United States shape beliefs about whether people can get ahead if they are willing to work hard. This analysis finds no ev-

[1] On the negative relationship between belief in the American Dream and preferences for redistributive policies, see, e.g., Brooks and Manza (2014).

idence for the argument advanced by NJL (p.329) that high levels of economic inequality work to activate an "oppositional consciousness" among lower-income individuals and so are ultimately self-correcting. To the contrary, but consistent with previous research, the results indicate that lower-income individuals are *less* likely to reject the meritocratic ideal where economic inequality is greater.

A Review of the Theories at Stake

The crucial relationship between economic inequality and system-supporting beliefs like meritocracy is the subject of two diametrically opposed theories: the conflict theory and the relative power theory. We briefly review these two theories in this section.

As noted above, NJL advocates the conflict theory. This theory maintains that, for lower-income individuals, being confronted with higher levels of inequality locally "increases the salience of their disadvantaged position within a conspicuous local economic hierarchy" (NJL, p.327), promotes class consciousness, and, in turn, increases demand for redistribution. Higher-income individuals in high inequality contexts, on the other hand, are expected to avoid guilt while simultaneously and self-interestedly protecting their privilege by becoming even more likely to believe in the importance of individual effort to the distribution of economic rewards. Accordingly, the conflict theory expects that low and high income citizens' views about meritocracy will be more polarized as inequality increases. The conflict theory has received sustained attention, particularly in studies of political participation, but empirical support has been at best mixed (on the U.S. case, see Oliver 2001; Brady 2004; Solt 2010).

The relative power theory, on the other hand, starts with the proposition that money is a political resource: that is, that it can be used to influence others. Therefore, the theory contends, where the rich are richer relative to the poor, they will also be more powerful relative to the poor (Goodin and Dryzek 1980). With regard to attitudes and beliefs like meritocracy, this theory suggests that the greater power imbalance that results from higher levels of economic inequality provides higher-income people with more resources to spread their views in the public sphere while depriving poorer people to a greater degree of the resources needed to resist these efforts. This gives poorer people "a greater susceptibility to the internalization of the values, beliefs, or rules of the game of the powerful as a further adaptive response—i.e., as a means of escaping the subjective sense of powerlessness, if not its objective condition" (Gaventa 1980, 17). Patterns of religiosity (Solt, Habel, and Grant 2011; Solt 2014), respect for authority (Solt 2012), and policy mood (Kelly and Enns 2010) have provided support for this theory.

As Huber and Stephens (2012, 37) summarize, relative power theory can be seen as a straightforward implication of "the usual assumption of sociology, political science, and anthropology . . . that social structures reproduce themselves," while conflict theory is grounded in the seemingly implausible premise that social structures are self-negating. From these theoretical grounds, the relative power theory predicts that low and high income citizens' views about meritocracy will be less polarized as inequality increases. In high-inequality contexts, all individuals regardless of income will be more likely to support meritocracy than before.

Reproduced Results and Corrected Interpretation

Using the data files and R commands provided (Newman, Johnston, and Lown 2015*b*), we were able to reproduce a close approximation of the article's main results.[2] As these files note that the authors are themselves unable to reproduce the published estimates exactly, and the differences are indeed quite small, we proceed to interpretation.

NJL (p.334) claims that its analysis "reveals that among low-income citizens, those residing in highly unequal contexts are significantly more likely to reject meritocratic ideals than those in relatively equal contexts [and] indicates that as we move from those with the lowest to highest incomes, the effect of increasing county inequality reverses and is associated with a decrease in the probability of rejecting meritocracy." This claim is incorrect.

The error lies in the interpretation of the multiplicative interaction term. It is worth to notice that the error discussed here is not about about whether 0.05 p-value should be the criterion of significant result, but a query about whether the interpretation represents what the interaction term truely means. The enduring efforts of political methodologists have manifested that multiplicative interaction terms require particular care in interpretation and it is *impossible* to interpret interactions merely with coefficient esimates on either base terms or interaction term (see, e.g., Golder 2003; Braumoeller 2004; Brambor, Clark, and Golder 2006). However, in NJL's interpretations, an error almost all the methodological discussions about interaction term warn to avoid appears and serves as the evidence of the

[2] We were not able to reproduce the auxiliary analysis on class consciousness presented in Table 3 at all, however, as the number of random effects to be estimated in the model, 1322, exceeds the number of observations in the data, 1067 (see NJL, p.336). We restrict our focus here, though, to the article's main analysis of the rejection of meritocracy as presented in Table 1, Model 1 ("White Rs").

main theoretical argument.

In NJL's logit model, the logged odds of rejecting meritocracy for individual i in local context j are estimated as follows:

$$\begin{aligned} Reject\,Meritocracy_{ij} = {} & X\gamma + \gamma_{10} Income_{ij} + \gamma_{01} Inequality_j \\ & + \gamma_{11} Inequality_j \times Income_{ij} \\ & + r_{1j} Income_{ij} + u_{ij} \end{aligned} \tag{1}$$

NJL (p.334) offers two pieces of evidence as support for its claim: first, that the coefficient for local income inequality (that is, γ_{01}) is estimated to be positive and statistically significant, and second, that the coefficient for the interaction between inequality and respondents' incomes (γ_{11}) is negative and statistically significant (NJL, 334).

Neither provide support for the claims advanced by the authors. First, the coefficient γ_{01} indicates only the effect of *Inequality* when the other variable in the interaction, *Income*, takes on the value of zero (see, e.g. Brambor, Clark, and Golder 2006, 72). Nonetheless, the nine categories of income the article employs ranges from .21 to 1 (see Newman, Johnston, and Lown 2015*b*). Because this income variable never actually equals zero, γ_{01} is not directly interpretable. Even regarding this coefficient can represent the effect on the group of people with the lowest income (which actually cannot!), those people are only 10% of the sample. For the effect of inequality on the rest 90%, the coefficient of the interaction term provides not any information at all.

Second, Brambor, Clark, and Golder (2006, 74) specifically advise that one "cannot even infer whether X has a meaningful conditional effect on Y from the magnitude and significance of the coefficient on the interaction term." Nor is respectively presenting the effect of X in different categories (as in Figure 3 of NJL) helpful, even regardless that it may mislead the understanding. Figure 3 of NJL was used to visualiz the conditional effect of inequality aggregating difference between low and hign income people. However, a closer look of each line in the figure, the confidence intervals are overlapped from the low inequality to high, wihch suggest the influence of inequality on either group of people's class identity is no different from zero. Stated differently, the seemingly increasing difference between low and high income people are illusionary without taking acount of the uncertainty in inferential statistics.

A more reliable and proper way to interprete is through marginal effects with respect to inequality, according to Berry, Golder, and Milton (2012):

$$\frac{\partial \, Reject\, Meritocracy}{\partial \, Inequality} = \gamma_{01} + \gamma_{11} \times Income_{ij} \tag{2}$$

We plot the conditional effect of *Inequality* at each value of *Income* in Figure 1 using the R package `interplot` (Solt and Hu 2015*b*). Contrary to the interpretation offered in NJL (p.334), this plot reveals that the coefficient for county income inequality fails to reach statistical significance at any observed level of respondent income. The article's own results do not provide evidence for its conclusion that poorer people are more likely to reject and richer people more likely to embrace meritocracy where local income inequality is greater.

[Figure 1 about here.]

Replication

In reproducing the above analysis, our attention was drawn to three additional issues that led us to pursue an independent replication. The most serious of these issues regards measurement of the dependent variable. To amass observations from a sufficient range of local contexts, NJL (p.330-331) combines in a single analysis data from four surveys using three different measures of its dependent variable, rejection of meritocracy. Version 1 was drawn from 2005 and 2006 surveys that asked respondents which of two statements came closest to their own opinion: "Most people who want to get ahead can make it if they're willing to work hard" or "Hard work and determination are no guarantee of success for most people." Those who chose the latter were coded as rejecting meritocracy. The 2007 and 2009 surveys employed did not include this item. Instead, they asked respondents to assess on a four-point agree-disagree scale two separate statements: (1) "Hard work offers little guarantee of success" and (2) "Success in life is pretty much determined by forces outside our control." In Version 2, used with data from the 2007 survey, those who mostly or completely agreed with both statements were coded as rejecting meritocracy. Though the 2009 survey included these same two statements, respondents to that survey were coded in yet a third manner: in Version 3, those who mostly or completely agreed with statement (1) were coded as rejecting meritocracy regardless of how they responded to statement (2).[3]

To assess whether these three very different measures are in fact comparable, we collected Pew surveys conducted between 1999 and 2012 that asked any of the items just described and plot the estimated percentage of the population to reject meritocracy according each of three versions of the dependent variable in Figure 2. The figure reveals that Version 2 results in much lower levels of rejection of meritocracy than either of the others and that Version 3 often yields considerably higher levels than Version 1. In light of their evident lack of comparability, we conclude that pooling them in a single analysis cannot be justified.

[3]For another example of uncritically mixing these three measures, see Newman (forthcoming). Of the five Pew surveys listed in Table 1 and pooled in the article's analysis, Measure 1 is used in the 2011 Political Typology Survey, Measure 2 is used in the 2009 and 2012 Values Surveys, and Measure 3 is used in the 2008 and 2012 Middle Class Surveys.

[Figure 2 about here.]

In our replication, we instead employ the U.S. Religious Landscape Survey (RLS) conducted by the Pew Forum on Religion and Public Life in 2007, which includes Version 1 of the dependent variable. Further, with more than ten times the number of respondents of the much smaller Pew surveys examined in NJL, the RLS was designed to provide a particularly fine-grained picture of geographic variation in attitudes and beliefs across the continental United States; it is therefore perfectly suited to providing observations across a broad range of local contexts. To make use of all of the available data, we analyze the entire sample of survey respondents, rather than only non-Latino white respondents; as NJL (p.330) notes, this should be expected to bias the results toward the expectations of the conflict theory.

The second additional issue with the NJL (p.331-332) analysis regards the contextual unit of analysis: the respondent's county of residence. Counties have long been criticized as only poorly reflecting local economic conditions. To overcome this, we use commuting zones (CZs) to define respondents' local context. CZs are aggregations of counties that represent the scope of local economic relationships across the United States. They were explicitly designed to represent where people actually live and work and overcome the unrealistic assumption that counties are economically meaningful units (Tolbert and Sizer 1996). CZs better capture local economic conditions than counties due in part to the fact that they are based on economic geography rather than factors such as county lines or minimum populations (**?**)

The final issue regards appropriate attitudinal controls. Measures of party identification, ideology, and church attendance are often added to analyses somewhat reflexively, but they are inappropriate in a study of the relationship between income inequality and meritocracy.

In both the conflict and relative power theories, the relationship between inequality and rejection of meritocracy is mediated by just these sorts of variables (on the powerful relationship between income inequality and religiosity, for example, see Solt, Habel, and Grant (2011); Solt (2014)). It is well known that controlling for variables that are causally downstream from an independent variable "messes up" the estimates of that independent variable's effect on the dependent variable (Gelman and Hill 2007, 188). Models including these variables are presented in the appendix; they do not evince substantially different patterns, although as expected the estimated coefficients for income inequality are somewhat attentuated.

With these important exceptions, we otherwise adopt the approach employed in NJL. Local income inequality is measured using the Gini coefficient of the distribution of total family income within each CZ for the years 1996 to 2000 as calculated by Chetty et al. (2014) from the IRS Databank, which provides de-identified income and location information for all individuals living in the United States who appear on any tax form.[4] As in the other Pew surveys, respondents' incomes are measured in the RLS on a nine-point scale ranging from less than \$10,000 to over \$150,000, straightforwardly coded here with values 1 to 9.

[4]This measure is not perfect. Its welfare definition is income after government transfers but before taxes. Because much redistribution occurs through the tax code, an after-tax measure would be preferable; unfortunately, virtually no data on the distribution of after-tax income at any geographic scale below the national level is available for the United States (see, e.g., Kelly and Witko 2012, 420). Further, it examines differences in incomes across families, which means those without children are excluded. It is based on tax records, so it suffers from potential underreporting, particularly among those with very high incomes, though because the topcode for incomes is \$10 million dollars, the downward bias is likely smaller than that found in similar Census data which is topcoded at considerably lower amounts. Finally, it measures inequality about a decade before the Pew survey; income distributions change only quite slowly over time, but nevertheless one might wish it were more temporally proximate. Despite these shortcomings, it remains the best data available on income inequality within commuting zones.

At the contextual level, we follow NJL in controlling for average income, the black share of the population, the percentage of votes won by George W. Bush in 2004, and the total population size.[5] At the individual level, the analyses include controls for age, education, sex, race, and citizenship. The models are estimated using multilevel logistic regression of individuals nested in CZs, with both the intercept and the coefficient for income allowed to vary across the CZs. Model 1 assesses the average effect of inequality across people of all incomes, but because both conflict and relative power theories suggest that the effect of income inequality on meritocratic beliefs depends on an individual's income, a cross-level interaction between these two variables is included in Model 2, as in Equation 1 above.

Figure 3 displays a dot-and-whisker plot of the results: the dots represent the estimated change in the logged odds of rejecting meritocracy for a change of two standard deviations in each variable in the model, and the whiskers represent the 95% confidence intervals of these estimates (see Kastellec and Leoni 2007; Solt and Hu 2015*a*). According to Model 1, which lacks a multiplicative interaction term, the average effect of the local context of income inequality across individuals of all incomes is negative and statistically significant: on average, where inequality is greater, people are *less* likely to reject meritocracy.

[Figure 3 about here.]

It is Model 2, however, that directly addresses the conflicting expectations of the conflict and relative power theories. The coefficient of income inequality is negative and the coefficient of the interaction term is positive. Both are statistically significant, but as income

[5] Additional analyses adding controls for two contextual variables not considered in NJL, objective economic mobility and residential income segregation, are presented in the Appendix. The results of these analyses are substantively similar to those presented in the text.

never takes on a value of zero and the coefficient of the interaction term is only part of the conditional effect, these results do not reveal much. Figure 4 plots conditional effects for inequality at each observed value of income. It shows that inequality's estimated marginal effects on rejecting meritocracy are negative and statistically significant for those with incomes of up to $50,000; they are not distinguishable from zero for those with higher incomes.

[Figure 4 about here.]

Of course, given the dichotomous dependent variable, these estimates are in logits and so their magnitudes are not easily interpretable directly. Figure 5 presents the predicted probability of rejecting meritocracy according to Model 2 across the observed range of local income inequality at various incomes when all other variables are assumed to take on their median values. Given that assumption, those with the lowest incomes living where the context of income inequality is at the highest observed level are 20 percentage points (plus or minus 9 points) *less* likely to reject meritocracy than similarly low-income people living where inequality is at its lowest observed level. For people with incomes between $40,000 to $50,000 and otherwise median characteristics, the predicted probability of rejecting meritocracy declines from $38 \pm 2\%$ to $29 \pm 4\%$ over the observed range of inequality. For those with the highest incomes, the predicted probability of rejecting meritocracy is essentially flat regardless of the level of local income inequality. These results are contrary to the predictions of conflict theory, but consistent with those of the relative power theory.

[Figure 5 about here.]

Conclusions

One of the most important questions underlying recent research on economic inequality and democracy is whether inequality is self-correcting or instead self-reinforcing. Newman, Johnston, and Lown (2015*a*) argues in favor of the former, more optimistic view. It contends that mere exposure to high levels of local income inequality prompt those with lower incomes to become more likely to reject an important ideological prop of persistent inequality, the idea that those who work hard can get ahead. However, the article's own reported results do not support this conclusion, and its analysis suffers from additional issues that render even those results untrustworthy. Our independent replication using more and better data, in fact, yields the opposite result: lower-income people living where local levels of income inequality are higher are less likely to reject meritocracy than those living where the income distribution is more egalitarian.

References

Berry, William D., Matt Golder, and Daniel Milton. 2012. "Improving Tests of Theories Positing Interaction." *Journal of Politics* 74(3):653–671.

Brady, Henry E. 2004. An Analytical Perspective on Participatory Inequality and Income Inequality. In *Social Inequality*, ed. Kathryn M. Neckerman. New York: Russell Sage Foundation pp. 667–702.

Brambor, Thomas, William Roberts Clark, and Matt Golder. 2006. "Understanding Interaction Models: Improving Empirical Analyses." *Political Analysis* 14(1):63–82.

Braumoeller, Bear F. 2004. "Hypothesis Testing and Multiplicative Interaction Terms." *International Organization* 58(4):807–820.

Brooks, Clem, and Jeff Manza. 2014. "Prisoners of the American Dream? Americans' Attitudes Towards Taxes and Inequality in a New Gilded Age." Working paper.

Chetty, Raj, Nathaniel Hendren, Patrick Kline, and Emmanuel Saez. 2014. "Where Is the Land of Opportunity? The Geography of Intergenerational Mobility in the United States." *Quarterly Journal of Economics* 129(4):1553–1623.

Gaventa, John. 1980. *Power and Powerlessness: Quiescence and Rebellion in an Appalachian Valley*. Urbana: University of Illinois Press.

Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multilevel/Hierarchical Models*. Cambridge: Cambridge University Press.

Golder, Matt. 2003. "Explaining Variation in the Success of Extreme Right Parties in Western Europe." *Comparative Political Studies* 36(4):432–466.

Goodin, Robert, and John Dryzek. 1980. "Rational Participation: The Politics of Relative Power." *British Journal of Political Science* 10(3):273–292.

Hochschild, Jennifer L. 1995. *Facing Up to the American Dream: Race, Class, and the Soul of the Nation*. Princeton, N.J.: Princeton University Press.

Huber, Evelyne, and John D. Stephens. 2012. *Democracy and the Left: Social Policy and Inequality in Latin America*. Chicago: University of Chicago Press.

Kastellec, Jonathan P., and Eduardo L. Leoni. 2007. "Using Graphs Instead of Tables in Political Science." *Perspectives on Politics* 5(4):755–771.

Kelly, Nathan J., and Christopher Witko. 2012. "Federalism and American Inequality." *Journal of Politics* 74(2):414–426.

Kelly, Nathan J., and Peter K. Enns. 2010. "Inequality and the Dynamics of Public Opinion: The Self-Reinforcing Link Between Economic Inequality and Mass Preferences." *American Journal of Political Science* 54(4):855–870.

Newman, Benjamin J. forthcoming. "Breaking the Glass Ceiling: Local Gender-Based Earnings Inequality and Women's Belief in the American Dream." *American Journal of Political Science* .

Newman, Benjamin J., Christopher D. Johnston, and Patrick L. Lown. 2015*a*. "False Consciousness or Class Awareness? Local Income Inequality, Personal Economic Position, and Belief in American Meritocracy." *American Journal of Political Science* 59(2):326–340.

Newman, Benjamin J., Christopher D. Johnston, and Patrick L. Lown. 2015*b*. "Replication data for: False Consciousness or Class Awareness? Local Income Inequality, Personal Economic Position, and Belief in American Meritocracy." http://dx.doi.org/10.7910/DVN/26584, Harvard Dataverse, V2.

Oliver, J. Eric. 2001. *Democracy in Suburbia.* Princeton: Princeton University Press.

Solt, Frederick. 2010. "Does Economic Inequality Depress Electoral Participation? Testing the Schattschneider Hypothesis." *Political Behavior* 32(2):285–301.

Solt, Frederick. 2012. "The Social Origins of Authoritarianism." *Political Research Quarterly* 65(4):703–713.

Solt, Frederick. 2014. Reversing the Arrow? Economic Inequality's Effect on Religiosity. In *Religion and Inequality in America: Research and Theory on Religion's Role in Stratification.* Cambridge University Press pp. 337–353.

Solt, Frederick, Philip Habel, and J. Tobin Grant. 2011. "Economic Inequality, Relative Power, and Religiosity." *Social Science Quarterly* 92(2):447–465.

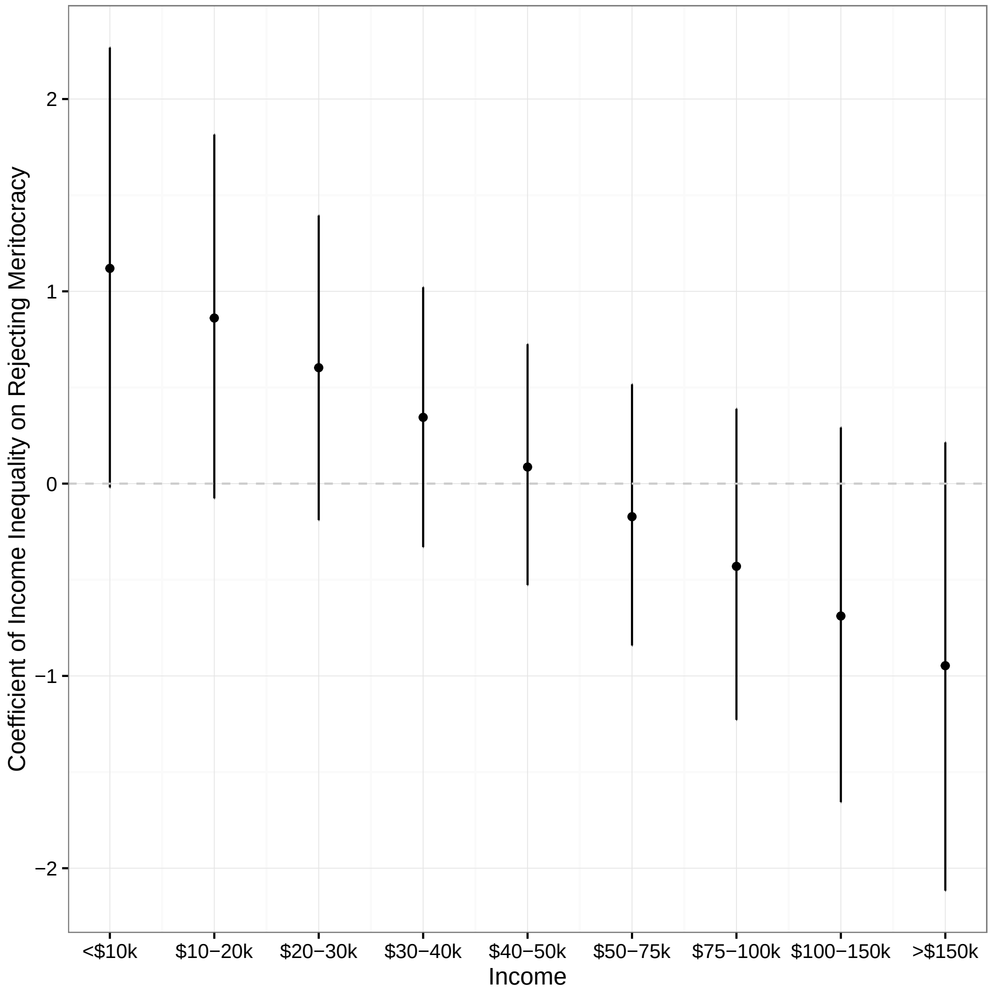
Solt, Frederick, and Yue Hu. 2015*a*. "dotwhisker: Dot-and-Whisker Plots of Regression Results." Available at the Comprehensive R Archive Network (CRAN).

Solt, Frederick, and Yue Hu. 2015*b*. "interplot: Plot the Effects of Variables in Interaction Terms." Available at the Comprehensive R Archive Network (CRAN).

Tolbert, Charles M., and Molly Sizer. 1996. "U.S. Commuting Zones and Labor Market Areas: A 1990 Update." Economic Research Service Staff Paper 9614.

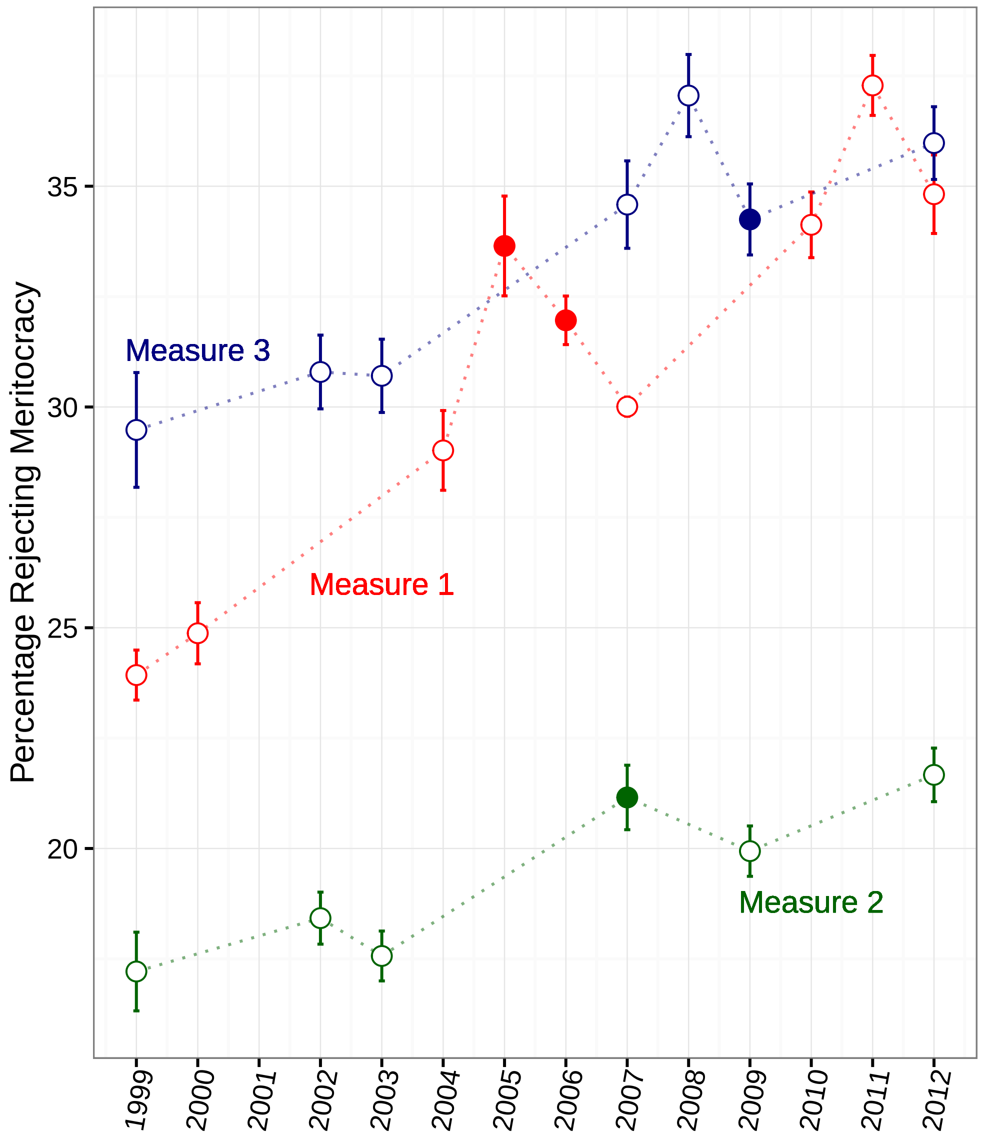
Figures

Figure 1: Logit Coefficients of Local Income Inequality on Rejection of Meritocracy by Income, Newman, Johnston, and Lown (2015*a*), Table 1, Model 1, From Replication Data



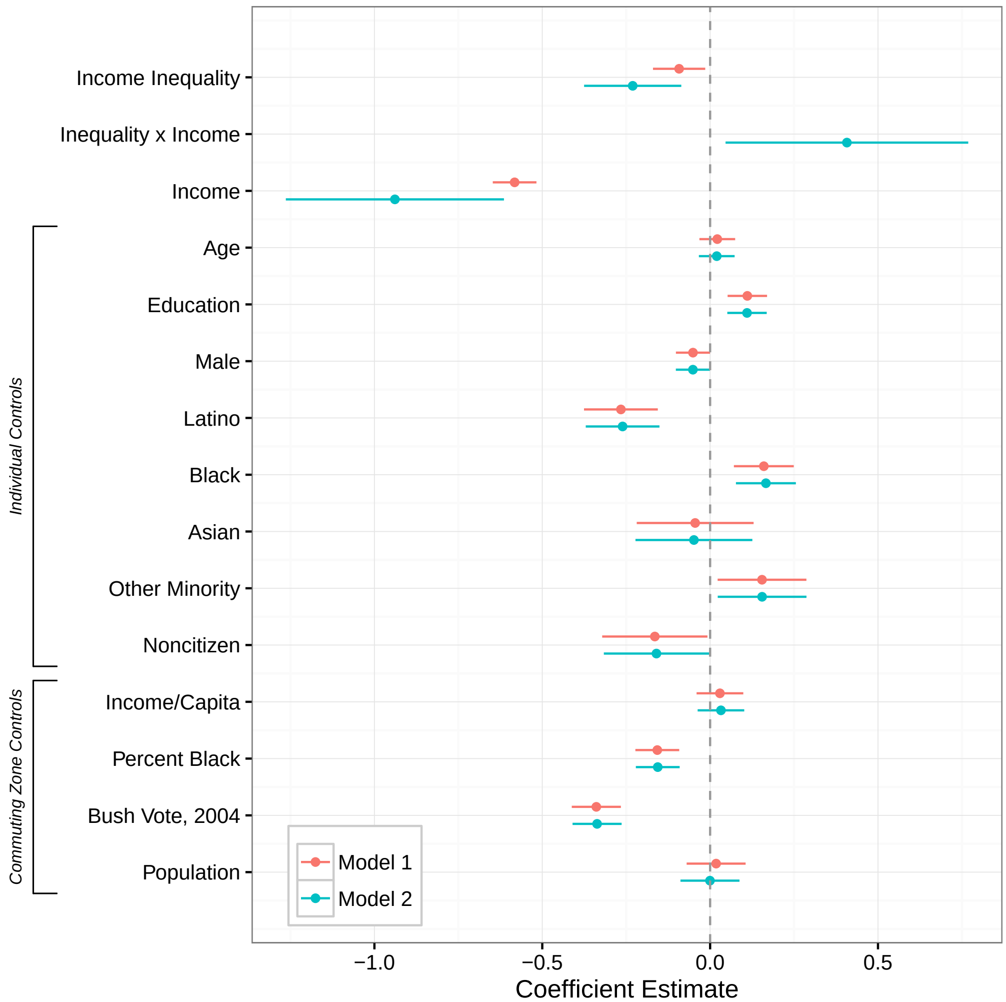
Notes: The dots represent coefficients of income inequality within respondents' county on their rejection of meritocracy for all values of respondent income, estimated from the data and model provided in Newman, Johnston, and Lown (2015*b*); the whiskers represent the 95% confidence intervals of these estimates. Contrary to the interpretation offered in Newman, Johnston, and Lown (2015*a*, 334), the coefficient for county income inequality fails to reach statistical significance at any observed level of respondent family income.

Figure 2: Comparing Three Measures of Rejection of Meritocracy Pooled by Newman, Johnston, and Lown (2015*a*)



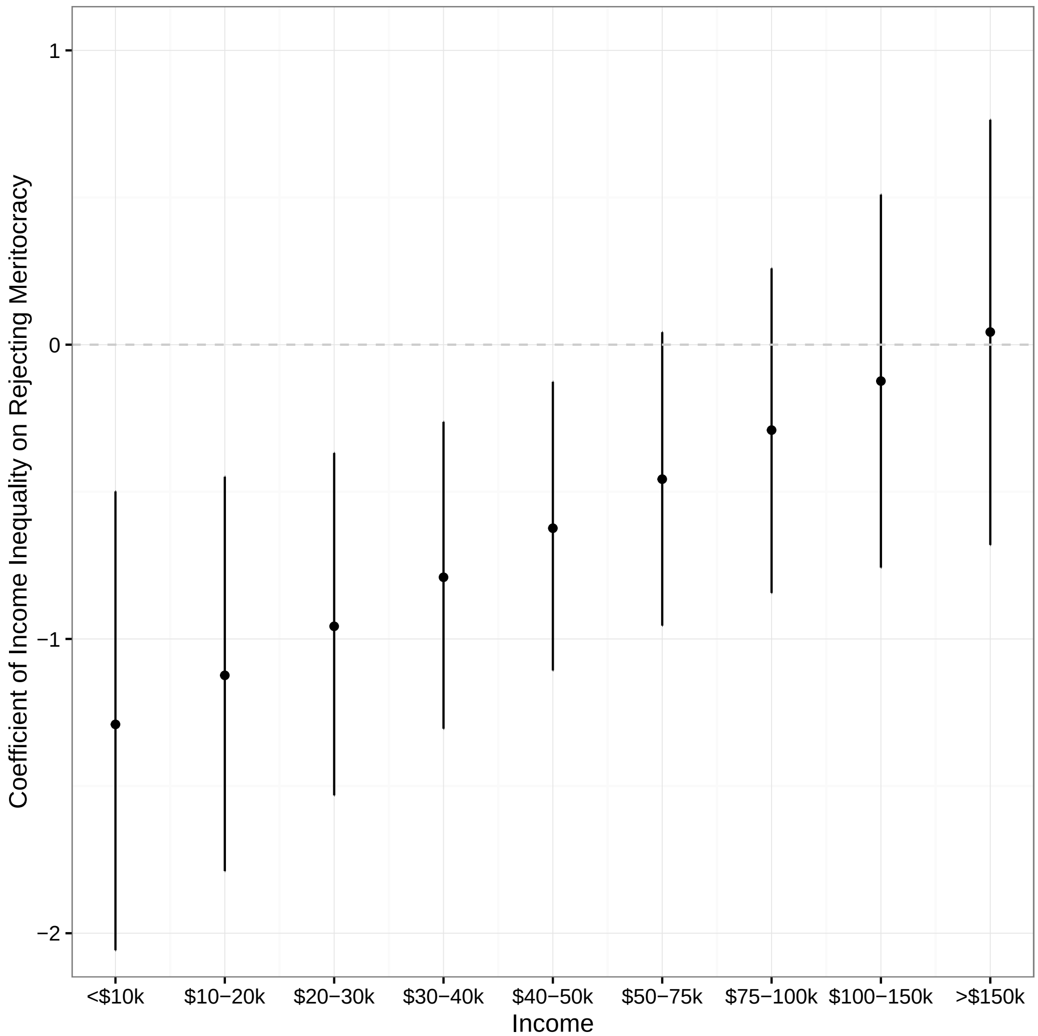
Notes: The analyses presented in Table 1 of Newman, Johnston, and Lown (2015*a*, 333) were conducted on pooled observations with the dependent variable, rejection of meritocracy, measured in one of three different ways (see Newman, Johnston, and Lown 2015*a*, 331). Here, solid circles represent the data used by Newman, Johnston, and Lown (2015*a*); hollow circles represent data in other available Pew surveys. The whiskers are 95% confidence intervals for each estimate. Plotting the weighted percentage of respondents to reject meritocracy by each of these measures reveals that the second measure results in much lower levels of rejection of meritocracy than either of the others and the third often yields considerably higher levels than the first. In light of the evident lack of comparability of these three measures, pooling them into a single analysis cannot be justified.

Figure 3: Predicting Rejection of Meritocracy



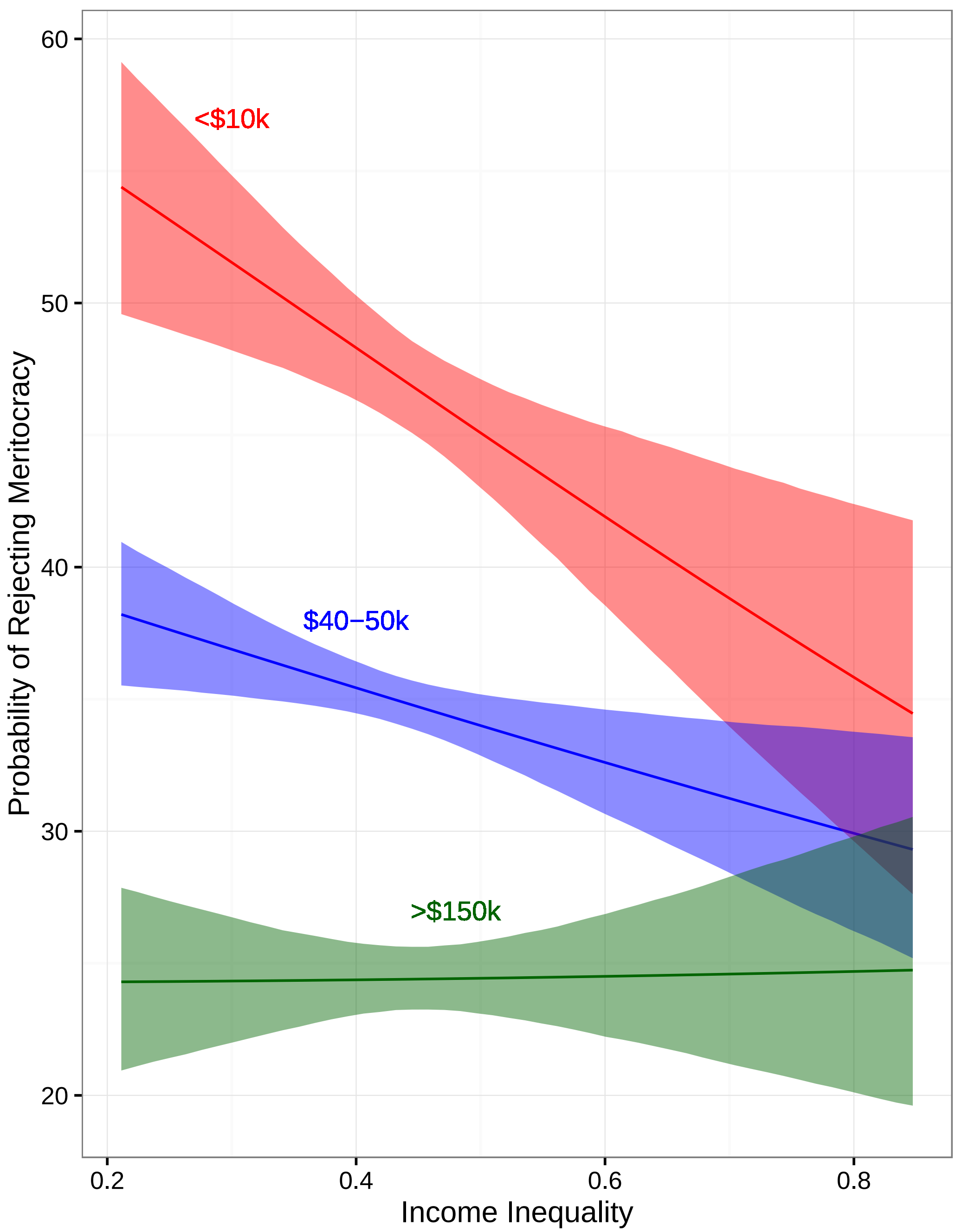
Note: The dots represent the estimated change in the logged odds of rejecting meritocracy for a change of two standard deviations in the independent variable; the whiskers represent the 95% confidence intervals of these estimates. Multilevel logistic regression analyses of 28,633 individual respondents living in 691 commuting zones.

Figure 4: Estimated Coefficients of Income Inequality by Income



Source: Model 2, as presented in Figure 3. The dots represent estimated coefficients of income inequality within respondents' commuting zones on their rejection of meritocracy for all values of respondent family income; the whiskers represent the 95% confidence intervals of these estimates. The estimates are negative and statistically significant for those with lower incomes, while the coefficients for those with higher incomes are not distinguishable from zero.

Figure 5: Predicted Probability of Rejecting Meritocracy by Income and Level of Inequality



Source: Model 2, as presented in Figure 3. Solid lines represent predicted probabilities and shaded regions represent the 95% confidence intervals of these predictions. The predicted probabilities were generated by fixing all other variables at their median values.