

# Economic Inequality, Intergenerational Mobility, and Belief in Meritocracy in the United States\*

Frederick Solt  
[frederick-solt@uiowa.edu](mailto:frederick-solt@uiowa.edu)

December 31, 2015

## Abstract

How does the context in which people live affect their belief in meritocracy, the ability to get ahead through hard work? In a prominent recent study, Newman, Johnston, and Lown (2015) argue that higher levels of local income inequality lead people to become more likely to reject the dominant U.S. ideology of meritocracy, but the this reseach suffers from many flaws and its results are not reproducible, leaving the question open. The present work brings more and better data as well as an improved specification to examine how, if at all, local contexts shape Americans' beliefs that people can get ahead if they are willing to work hard.

---

\*Prepared for the Annual Meeting of the Southern Political Science Association, San Juan, PR, January 7-9, 2016. The most recent version of this paper can be found [here on Github](#).

# Economic Inequality and Political Attitudes

Conflict

Newman, Johnston, and Lown (2015) advocate a rational-actor perspective (Kelly and Enns 2010)

## Data and Method

The contextual unit of analysis used here is the commuting zone (CZ). CZs are aggregations of counties meant to represent the scale of local economic relationships both in metropolitan areas and across the rural United States. They are therefore preferable to the arbitrary borders imposed by counties; indeed, they were explicitly designed to overcome the unrealistic assumption that counties are economically meaningful units and to represent where people actually live and work (see Tolbert and Sizer 1996).

Income inequality is measured using the Gini coefficient of the distribution of total family income within commuting zones 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 whose names appear on any tax form.<sup>1</sup> Within the sample examined here, this variable ranges from a low of .21 to a high of .85; the median value across individual respondents in the sample is .46.

For economic mobility, I use Chetty et al.'s (2014, 1554) data on relative intergenerational mobility, which they contend provide the best available information of the extent to which “a person’s chances of success depend little on his or her family background.” Relative intergenerational mobility is measured as the relationship, in each CZ, between parents’ rank in the national income distribution when their children were in their late teens and the rank of those children when they are approximately age 30. This variable ranges from .07—that is, that a 10 percentile increase in parental income is associated with only a .7 percentile increase in child income—to .51; the median respondent lives in a CZ with a score of .34 on this variable.

A number of other factors might help explain people’s beliefs in meritocracy. At the contextual level, I follow Newman, Johnston, and Lown (2015) in controlling for average income, the black share of the population, the percentage of votes won by George W. Bush in

---

<sup>1</sup>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 income at any geographic scale below the national level is available for the United States Kelly and Witko (see, e.g., 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; though income distributions change only quite slowly over time, one might wish it were more temporally proximate. Despite these shortcomings, it remains the best data available on income inequality within commuting zones.

2004, and the total population size. At the individual level, the analyses include demographic controls for age, education, sex, race, and citizenship.

What is *not* included in these models is perhaps equally worthy of comment. Although measures of party identification, ideology, and church attendance are often reflexively added to analyses, they are inappropriate in an analysis of the relationship between income inequality and meritocratic beliefs. In both the conflict and relative power theories, the relationship between inequality and belief in meritocracy is mediated by just these sorts of variables. Of course, it is well understood 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).<sup>2</sup> For the insistent, models including these variables—along with can be found in the appendix. They do not evince substantially different patterns, although as one would expect the estimated coefficients for income inequality are somewhat attenuated.

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. Because both the conflict and relative power theories suggest that the effect of the context income inequality on meritocratic beliefs depends on an individual’s income, a cross-level interaction between these two variables is included. For individual  $i$  in commuting zone  $j$ , then, the model can be expressed as:

$$\begin{aligned} \text{Meritocracy}_{ij} = & X\gamma + \gamma_{10}\text{Income}_{ij} + \gamma_{01}\text{Inequality}_j \\ & + \gamma_{11}\text{Inequality}_j \times \text{Income}_{ij} \\ & + r_{1j}\text{Income}_{ij} + u_{0j} \end{aligned}$$

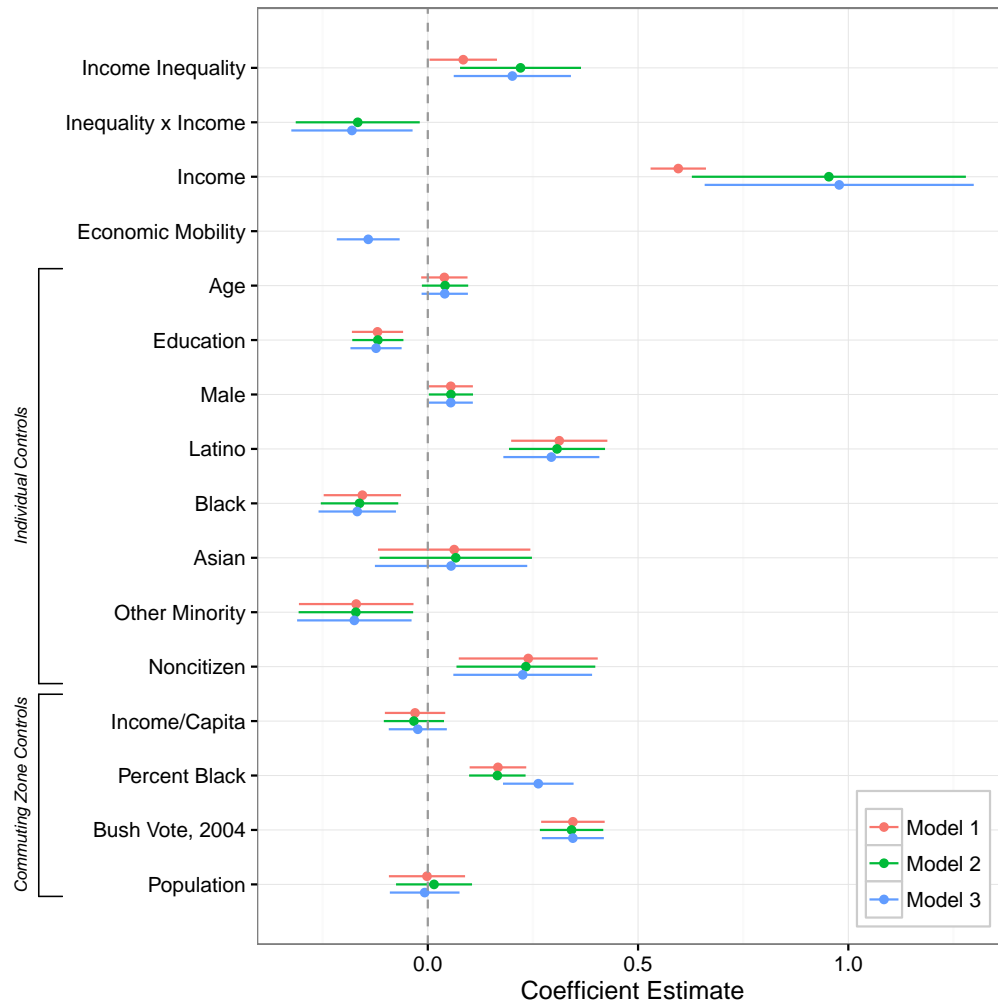
The conflict theory argues that lower-income individuals will become disillusioned with the dominant ideology of meritocracy where inequality is greater but that higher-income individuals will become more likely to uphold it. This, then, yields the predictions that  $\gamma_{01}$ , the coefficient of income inequality, will be negative and  $\gamma_{11}$ , the coefficient of the interaction term, will be positive. Relative power theory maintains that lower-income individuals will be especially more likely to be instilled with the belief in meritocracy in contexts of higher inequality, but that higher-income individuals’ beliefs will be less sensitive to this aspect of context. Its predictions therefore are just the opposite of the conflict theory: that  $\gamma_{01}$  will be positive and  $\gamma_{11}$  will be negative.

## Analysis and Results

---

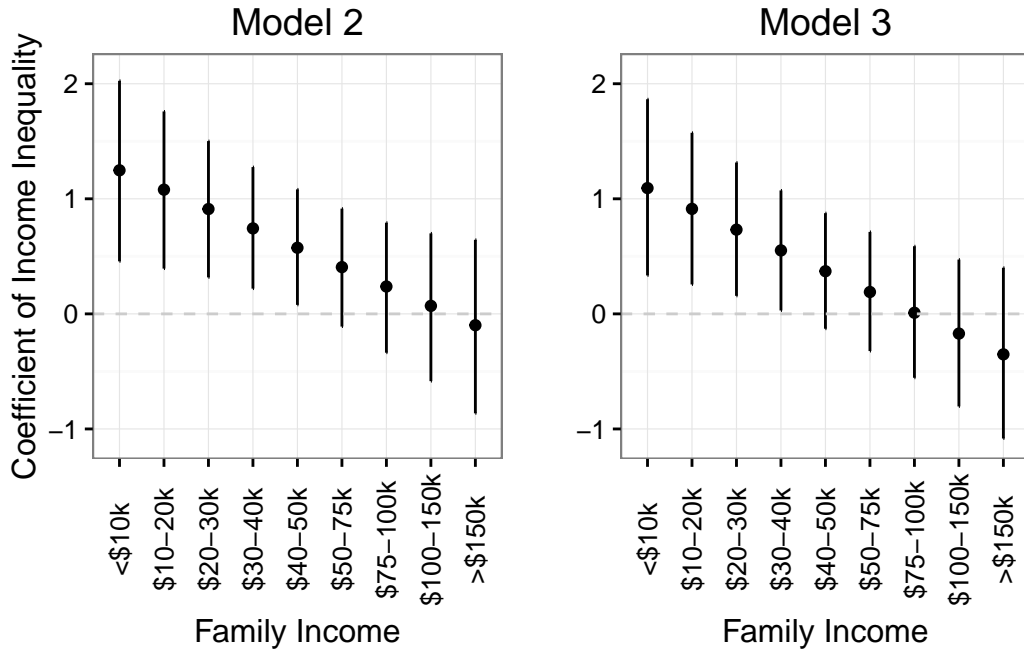
<sup>2</sup>On the powerful relationship between rising income inequality and greater religiosity, for example, Solt, Habel, and Grant (see 2011); Solt (see 2014).

Figure 1: Predicting Belief in Meritocracy



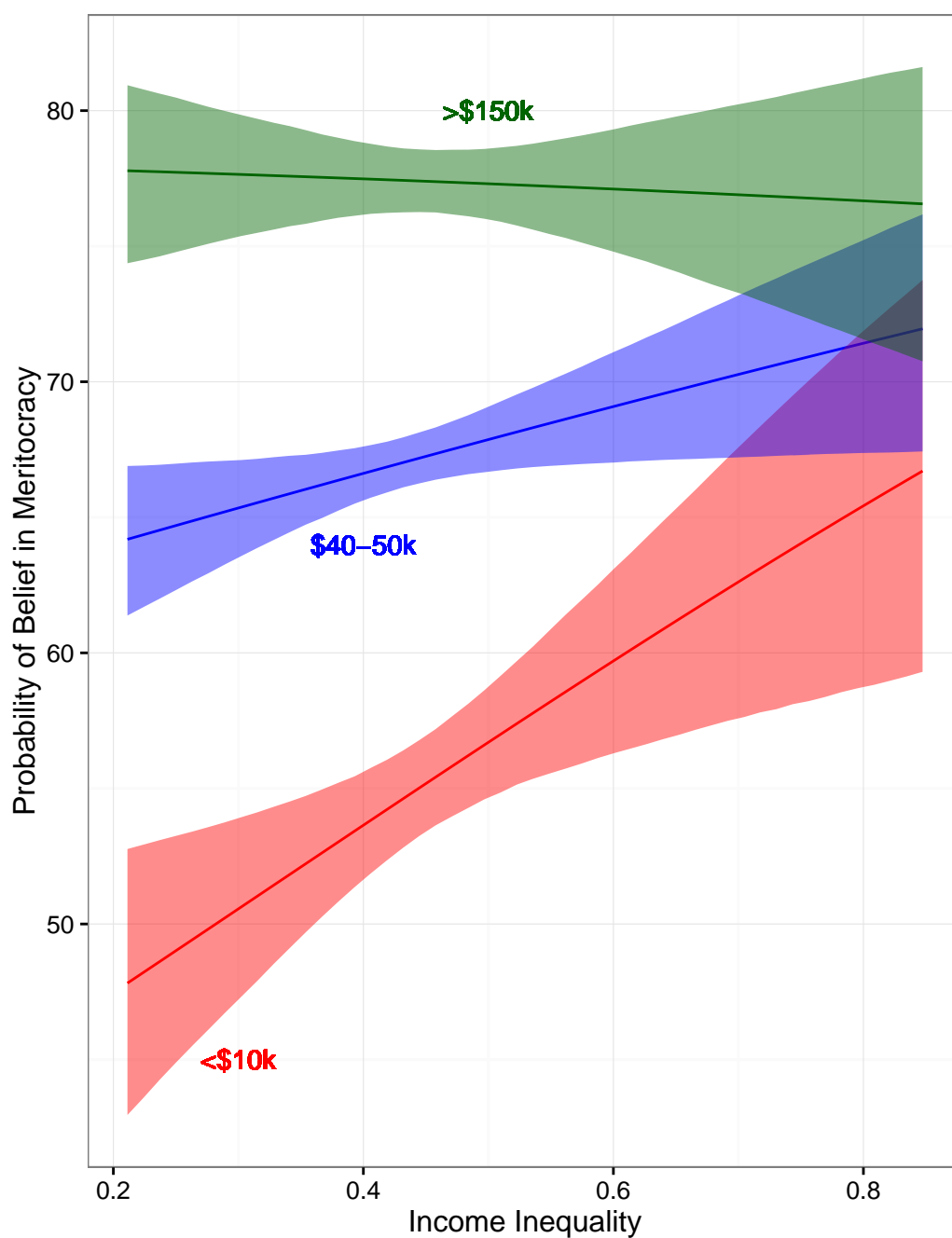
*Note:* The dots represent estimated change in the logged odds of believing in meritocracy for a change of two standard deviations in the independent variable; the whiskers represent the 95% confidence intervals of these estimates. Multilevel logistic regression analyses of 27,756 individual respondents living in 689 commuting zones.

Figure 2: Estimated Coefficients of Income Inequality by Income



*Source:* Analyses presented in Figure 1. The dots represent estimated coefficient of income inequality within respondents' commuting zones on their belief in meritocracy for all values of respondent family income; the whiskers represent the 95% confidence intervals of these estimates. In both models, these estimates are positive and statistically significant for those with lower incomes, while the coefficients for those with higher incomes are not distinguishable from zero.

Figure 3: Predicted Probability of Belief in Meritocracy by Income and Level of Inequality



*Source:* Analyses presented in Figure 1. 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.

## References

- 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.
- Gelman, Andrew, and Jennifer Hill. 2007. *Data Analysis Using Regression and Multi-level/Hierarchical Models*. Cambridge: Cambridge University Press.
- 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., Christopher D. Johnston, and Patrick L. Lown. 2015. “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.
- 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.
- Tolbert, Charles M., and Molly Sizer. 1996. “U.S. Commuting Zones and Labor Market Areas: A 1990 Update.” Economic Research Service Staff Paper 9614.