Economic Inequality and Democratic Support

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Abstract

Does economic inequality influence citizens' support for democracy? Political economy theory suggests that in a country with high inequality the majority of the population will support democracy as a potential mechanism for redistribution. Much of the survey and area-studies literature, by contrast, suggests that inequality generates political disillusion and regime dissatisfaction. To clarify this disagreement we distinguish between prospective versus retrospective evaluations as well as between egocentric versus sociotropic evaluations. We test the resulting hypotheses in a multi-level analysis conducted in 40 democracies. We find that citizens are retrospective and sociotropic, meaning that higher levels of economic inequality *reduce* support for democracy amongst *all* social classes. We also find a small prospective egocentric effect, in that the reduction in democratic support in highly unequal countries is slightly less severe amongst the poor, suggesting they believe that democracy might increase future redistribution. Keywords: Democracy; democratic support; inequality; multi-level analysis

Following the Third Wave of democratization, and the corresponding explosion in the number of democracies around the globe, scholars increasingly focus on whether citizens have come to accept democracy as "the only game in town" (Linz and Stepan 1996: 5).¹ This literature on *democratic support* consists primarily of survey researchers demonstrating that a wide range of individual-level traits influence individuals' support for democracy (Evans and Whitefield 1995; Gibson, Duch, and Tedin 1992; Rose, Mishler, and Haerpfer 1998).

We argue that the current understanding of democratic support would benefit from incorporating a fundamental political issue in every democratic system, namely national economic inequality. Contemporary theory implicitly provides two contrasting expectations as to the effect that inequality has on democratic support. On the one hand, political economy theory suggests that democracy is a mechanism for redistributing resources from economic elites to (poor) citizens and that citizens will therefore desire democracy more strongly in a country with more economic inequality (Acemoglu and Robinson 2006; Boix 2003; Rueschemeyer, Stephens, and Stephens 1992).

The survey literature and area-studies literatures, by contrast, suggest that economic inequality generates widespread disillusion with democratic politics, hence leading to *lower* levels of regime support (Karl 2000; McKlintock 1999). Other scholars argue that wealthier citizens possess the economic and cognitive resources to pursue the 'luxury good' of democratic governance, and hence support democracy more than the poor (Bratton, Mattes, and Gyimah-Boadi 2005; Welzel and Inglehart 2008).

Theoretically, we argue that the existence of competing literatures, which largely speak past each other, attests to the need for a broader theoretical framework for thinking

about economic inequality and democratic support. Drawing upon the literature on economic voting, we introduce two distinctions. First, we distinguish between citizens who engage in *retrospective* versus *prospective* evaluations. Second, we distinguish between citizens' *sociotropic* versus *egocentric* evaluations of inequality. Empirically, we test four hypotheses that arise from these distinctions. We employ a multi-level model of democratic support, drawing from the third, fourth, and fifth waves of the World Values Survey, examining a sample of 77,642 individuals in 40 countries. We supplement these individual-level responses with national-level data.

Theory

A large literature now exists that attempts to explain variations in citizens' support for democracy. The most prominent explanations revolve around political beliefs and experiences (satisfaction with government's effectiveness and the representation of interests) along with economic evaluations (of both the individual's economic situation and the national economic situation) (e.g., Diamond 1999; Evans and Whitefield 1995; Kitschelt 1992).

A major breakthrough in the survey literature came with the realization that democratic support is not influenced solely by individual-specific attributes but also by the nature of the democratic system itself. Anderson and Guillory (1997) argue that political institutions mediate individuals' responses to political outcomes, while Anderson and Tverdova (2003) focus on the *substance* of democratic politics, arguing that corruption has a negative effect on individuals' support for political institutions.

We find these national-level studies fruitful because they bring 'politics' back into our understanding of democratic support, showing that support is not driven solely by

individuals' personal attributes but also by the performance of the democratic system itself. We advance this agenda by focusing on an even more 'political' element in national politics, namely economic inequality. Arguably, the heart of democratic politics is the struggle over "who gets what, when, and how" (Lasswell 1958). As such, political theorists such as Rousseau, Tocqueville, Mill, and Marx all assumed that the central goal of the masses in a democratic system is the reduction of economic inequalities.² Given this close correspondence between democracy and inequality, we investigate whether inequality influences the extent to which citizens support democratic governance. *Democratic Support: Analogies with Economic Voting*

There exists a surprising diversity of opinion as to how inequality affects democratic support. To structure these views into a single theoretical framework we introduce to the democratic support literature two simple theoretical distinctions from the economic voting literature. First, economic voting studies have long distinguished between 'retrospective' voters who choose parties based on government's past economic performance versus 'prospective' voters who choose parties based on what they expect in the future (e.g., MacKuen, Erikson, and Stimson 1992; Powell 2000). Given the richness of election-specific datasets, the literature explicitly differentiates between survey items that tap *past* evaluations of economic conditions versus *future* expectations of economic conditions, allowing scholars to test which set of attitudes best explain vote shares (e.g., Lewis-Beck 1986; MacKuen, Erikson, and Stimson 1992).

The datasets used in the democratic support literature do not distinguish between citizens' past versus future evaluations of inequality, but we nonetheless argue that it is useful to consider whether citizens evaluate democracy differently depending on whether

they care more about past performance versus future performance. Indeed, we argue below that this distinction is the single most important difference between different theoretical perspectives and leads to diametrically opposed empirical predictions concerning citizens' attitudes in the context of inequality. We illustrate this distinction in Figure 1, where column 1 refers to prospective (future looking) evaluations of democracy while column 2 refers to retrospective (past looking) evaluations of democracy.

[Figure 1]

Second, the economic voting literature commonly distinguishes between survey items asking citizens to evaluate whether *they personally* have benefited from economic conditions (egocentric evaluation) versus evaluating the state of *the overall national performance of the economy* (sociotropic evaluation) (Kinder and Kiewiet 1981; Kramer 1983). Again, democratic support datasets do not provide survey questions that explicitly differentiate between citizen evaluations of how inequality affects them personally versus their evaluation of national inequality, but we possess objective data on personal socio-economic status as well as national inequality, and we argue that it is helpful to distinguish between theories that predict that citizens will evaluate democracy based on how inequality affects them *personally* (egocentric evaluation) versus how citizens evaluate overall *national* inequality statistics in a democracy (sociotropic evaluation). The two rows in Figure 1 therefore distinguish between sociotropic versus egocentric evaluations of democracy.

In conjunction, these two distinctions yield four different ways that citizens might evaluate democracy (the four cells in Figure 1). Our goal is not to argue in favor of any of these four perspectives but rather to demonstrate that this typology brings analytic clarity

to existing literatures. Equally importantly, by clarifying the precise theoretical basis of existing disagreements, we generate well-specified empirical predictions for each of the four perspectives. Figure 2 utilizes exactly the same theoretical distinctions as Figure 1, and summarizes in each cell the associated hypothesis concerning the effect of inequality on democratic support. All hypotheses are stated conditional on inequality being relatively high in a given country.³

[Figure 2]

Prospective Sociotropic Perspectives

We begin with the prospective sociotropic perspective (top-left cell of Figures 1 and 2). Political economy theories exemplify this perspective, and typically assume that, first, citizens seek to maximize their economic self-interest, and second, that democracy is the political system that best empowers the poor to advance their interest. For example, building on Meltzer and Richard (1981), Knack and Keefer argue that democracy, through its majority rule nature, should reduce inequality since the median-voter will ally with the poorer half of citizens to tax the wealthy and redistribute wealth (1997: 323).

Unlike the economic voting literature, which utilizes survey questions to distinguish between prospective versus retrospective evaluations, political economy approaches simply assume that citizens are prospective. This is natural given that political economy approaches developed in the context of understanding democratization, where no democracy yet existed to evaluate retrospectively. The underlying logic is that the poor support democratization because in all *future* policy struggles it gives them a tool to advance their material interests vis-à-vis the wealthy. Given widespread

democratization in recent decades, we can now evaluate whether this prospective perspective explains democratic support in addition to democratization.

Acemoglu and Robinson (2006) provide a particularly explicit statement of the political economy approach. They assume that actors are rational and "naturally prefer more income to less" (19). Political democracy gives the poor more ability to achieve redistribution from the rich; "In democracy, the majority has relatively more *de jure* political power than it does in nondemocracy" (22). Given that the poor majority will benefit, "we expect those individuals to prefer democracy to nondemocracy" (19).

As an extension, political economy theory suggests that when inequality is higher, the potential gain from using democracy as a redistributive mechanism rises, such that citizens should desire democracy more. Inequality is usually proxied by national Gini coefficients, and the standard conclusion is that when Gini coefficients are high, citizens more strongly prefer democracy (Acemoglu and Robinson 2006: 58-9; Boix 2003).

Finally, note that this prospective approach is also a sociotropic approach. Acemoglu and Robinson (2006) adopt a conceptual vocabulary that allows for only two types of individuals in a country: the "citizens" (the bulk of the population, all of whom are relatively poor) and the "elite" (a small number of people, all of whom are rich). In this conception, almost everybody is considered a poor citizen. For instance, at times Acemoglu and Robinson partially qualify their generalization by noting that "the *majority* of citizens want democratic institutions [emphasis added]" and at other times they do not even bother to qualify the statement, stating generally that "citizens want democracy" (23). This vocabulary can be confusing because it is odd to think of almost 'everybody' as poor, but Acemoglu and Robinson underline an important point, namely that in many

countries the vast majority of individuals earn less than the median income and in some countries a mere handful of families may compose the elite. If we think about the limited sample size in surveys, it is possible that few or perhaps none of the respondents are elites, such that almost everybody in the survey might be considered relatively poor.

Assuming for the moment that all 'citizens' are poor, this theoretical framework is analogous to the sociotropic approach in economic voting. Since **all** 'citizens' view high inequality as a bad outcome they do not take into account their *personal* socioeconomic position when thinking about inequality but instead uniformly evaluate *national* inequality statistics, leading to the following hypothesis:

H₁: Citizens living in countries with higher national economic inequality will profess more support for democracy than citizens living in countries with lower national economic inequality.

Prospective Egocentric Perspectives

Staying with prospective approaches, we now shift from a sociotropic perspective to an egocentric perspective (bottom-left cell of Figures 1 and 2). Whereas Acemoglu and Robinson treat all 'citizens' as one homogenous mass, Boix (2003: 19) emphasizes that it is important to "discuss the distributional consequences that different political regimes have on *different types of individuals*" (emphasis added). Income varies substantially within countries, and we might expect poorer citizens to support democracy strongly while relatively richer citizens might be less supportive since politically motivated redistribution is a threat to their economic interests. Rueschemeyer, Stephens, and Stephens (1992: 6), similarly, contrast the working classes with landed elites when assessing evaluations of democracy, and further argue that the middle class occupies an intermediate position.

In this conception, it is not the case that all 'citizens' will uniformly exhibit more support for democracy in highly unequal societies, but rather support will vary across the socio-economic spectrum. This is an egocentric perspective because it assumes that most citizens take into account their *personal* class position when evaluating democracy. This prospective egocentric perspective suggests that:

H₂: Relatively poor citizens' support for democracy will be higher in a context of high inequality. Conversely, democratic support will be lower among wealthier citizens in a context of high inequality.

Our point in formulating the distinction between hypotheses 1 and 2 is that even if one limits oneself to a purely prospective orientation, different scholarly traditions yield sharply different empirical expectations. Specifically, as we test empirically, do citizens uniformly support democracy more when inequality is high (H_1), or alternatively, do the wealthy react differently from the poor, and reject democracy at the same time that the poor support democracy (H_2)?

Retrospective Sociotropic Perspectives

Whereas political economists (implicitly) focus exclusively on citizens' prospective evaluations of inequality, survey researchers and area-studies scholars (implicitly) focus on retrospective evaluations. Many studies, for instance, begin with the idea that it is "widely acknowledged that system outputs—also commonly referred to as system performance—are key to understanding why public support for the political system fluctuates" (Anderson and Tverdova 2003: 92).

Although rarely made explicit, this line of reasoning posits that citizens evaluate only the *past* history of their political system. Indeed, the word "performance" itself implies that a political system has already been tested in some way, and in this sense the

entire performance literature is orientated towards a retrospective logic (top-right cell of Figures 1 and 2). Most of this literature implicitly assumes that most citizens are relatively poor, such that citizens are not seen as evaluating their personal socioeconomic situation but rather homogenously evaluating national inequality as a bad outcome (sociotropic evaluation). Following this logic, if inequality is high, then a retrospective perspective suggests that citizens criticize democracy as having performed badly.

Dahl made this point years ago, noting that democracy's inability to address persistent economic inequalities leads to "resentments and frustrations which weaken allegiance to the regime" (1971:103). More recently, Karl argues that economic inequality vitiated popular control over Latin American government; economic "elites have bent laws to their bidding, enfeebled courts, violated rights, corrupted politicians, and run roughshod over constitutions and contracts" (Karl 2000: 154). High inequality also led the masses to withdraw their support from democratic governance in Brazil and Peru (McKlintock 1999). More generally, Córdova and Seligson (2010) provide quantitative evidence that income inequality reduces democratic support in Latin America and the Caribbean. In short, citizens homogenously dislike inequality, leading to the retrospective sociotropic hypothesis: "where income inequality is greatest, people are more willing to accept authoritarian rule, [and] less likely to be satisfied with the way democracy works" (Karl 2000).⁴ More formally:

H₃: Citizens living in countries with higher national economic inequality will profess less support for democracy than citizens living in countries with lower national economic inequality.

It is interesting to note that an entirely different line of reasoning also yields H₃.

Specifically, some theorists suggest that economic inequality leads to sluggish economic growth, partially due to a threat to property rights, but also because economic disparities lead to political polarization and policy paralysis (Rodrik 1999; Keefer and Knack 2002). In this conception citizens still sociotropically and retrospectively evaluate democracy, but their negative evaluation may not be a normative dislike of inequality per se but rather inequality's perverse effects on political polarization and the economy.

Finally, it is worth emphasizing that H₃ is diametrically opposite to H₁, reflecting our more general point that political economists' *prospective* theorizing runs directly counter to the performance literature's *retrospective* theorizing.

Retrospective Egocentric Perspectives

We noted above that prospective theory can be formulated both sociotropically and egocentrically. This holds equally true for retrospective theory. While H₃ posits that citizens support democracy less when inequality is high, we now relax the assumption that all citizens react homogeneously to national inequality and instead assume that citizens take into account their *personal* socio-economic status (bottom-right cell of Figures 1 and 2). In this line of reasoning, we might expect the rich, unlike the poor, to *support* democracy if inequality is high, given that from their perspective democracy has 'performed' well by preserving their privileged economic status. This retrospective egocentric line of reasoning yields our final hypothesis:

H₄: Relatively poor citizens' support for democracy will be lower in a context of high inequality. Conversely, democratic support will be higher among wealthier citizens in a context of high inequality.

It is worth adding that an entirely different theoretical tradition provides an alternative justification for H₄. Specifically, survey researchers emphasizing political

culture argue that wealth brings about social-psychological change, transforming wealthy citizens such that they favor and adopt democratic norms and practices.

"It is not the have-nots who desire democracy most strongly, as some political economists assume. Instead, when people have relatively ample economic and political resources, and move from emphasizing survival values towards emphasizing self-expression values, they strive more strongly for democratic institutions. Self-expression values reflect a synthesis of interpersonal trust, tolerance, and political activism that plays a crucial role in the emergence and survival of democracy" (Welzel and Inglehart 2008: 138, emphasis added).

If this logic holds, then rich citizens are more supportive of democracy and poor citizens are less supportive of democracy in a country with high national inequality, given that, *ceteris paribus*, inequality makes the rich even richer and the poor even poorer.

In sum, introducing to the democratic support literature some standard distinctions from the economic voting literature not only structure a vast set of literatures, but also yield four distinct and theoretically plausible hypotheses concerning the effect of income inequality on citizens' support for democratic governance. For ease of reference, Figure 2 summarizes our four hypotheses.

Research Design and Measurement

Testing these hypotheses requires combining typical datasets in the survey literature (which contain only individual-level observations) with national datasets (which contain national-level observations). OLS yields biased estimates when data are hierarchically organized, with one level (individual respondents) embedded within another level (countries) (Steenbergen and Jones 2002). We therefore utilize multi-level modeling (MLM), which distinguishes between individual-level analysis and nationallevel analysis (Raudenbush and Bryk 2002; Steenbergen and Jones 2002). We

specifically utilize a random-coefficients model that allows means-as-outcomes, which utilizes the two-level nature of the data to improve upon OLS in three ways.⁵

First, random-coefficient models allow the intercept to vary for each country, thereby acknowledging that individuals in some country may have systematically higher (or lower) levels of democratic support than citizens in other countries, thereby removing an important potential source of bias.⁶ Second, the means-as-outcomes model allows us to utilize a national-level characteristic (inequality) to explain mean individual-level democratic support across countries.⁷ Third, the random-coefficient model allows the *slope* of individual-level variables to vary across countries, and more specifically, allows us to test the interactive hypotheses H₂ and H₄ by examining whether a national characteristic (inequality) predicts individual-level slopes across countries.

Measurement

Our sample begins with all countries included in the third, fourth, and fifth waves of the World Values Survey as long as some data are available for all the variables we employ.⁸ For two reasons we exclude authoritarian countries using a dichotomous measure of democracy (Cheibub, Gandhi, and Vreeland 2010). First, there is a growing consensus that people living in democratic regimes conceptualize democracy differently than people living in non-democratic regimes (e.g. Mattes and Bratton 2007). Second, the two retrospective hypotheses we specified imply that respondents have lived in a democratic country at the time of the survey.

As a result, our national-level sample consists of 40 countries, which constitute all democratic countries for which both the dependent variable and the national-level data exist. For 17 of these countries, we have data for the dependent variable for two different

waves of the World Values Survey, giving us a sample of 57 different country-*periods* rather than just 40 countries. We used multiple imputation to fill any items left unanswered by survey respondents, to avoid the potential bias created by missing data (King et al. 2001). After imputing with AMELIA II (Honacker, King, and Blackwell 2010), our sample is 77,642 individuals in 57 country-years. While this sample is not representative of the world as a whole, and particularly under-represents Africa, it nonetheless provides full use of available data and constitutes a larger sample than previous studies.

Dependent Variable

It is widely recognized that democratic support exists on multiple levels and in multiple dimensions, making it difficult to privilege any one element (Diamond 1999; Rose, Mishler, and Haerpfer 1998; Rose and Shin 2001; Shin 1994). We therefore use a standard multi-faceted index measure of *Democratic Support*, namely "overt support for democracy" (Inglehart and Welzel 2003; Jamal and Nooruddin 2010). This democratic support index draws upon four survey items that correspond to two key components of democracy, asking whether they think democracy is a good or bad way to run a country, and whether democracy is preferable to other forms of government. The next two questions tap anti-authoritarian sentiment, asking if strong leaders who disregard political parties and parliament are good or bad for the country, and whether army rule is good. To construct a measure that begins at 0, we recoded the four individual survey items to range from 0 to 3 rather than 1 to 4, and then added these together to form a 13-point additive index (ranging from 0 to 12) of democratic support.

Independent Variables

Whereas economic voting datasets explicitly distinguish between survey items asking about citizens' prospective versus retrospective economic evaluations as well their sociotropic versus egocentric evaluations, democratic support datasets do not differentiate between these different ways that citizens evaluate inequality. As discussed above, nonetheless, existing theoretical perspectives yield clear empirical predictions concerning how citizens will evaluate *objective* inequality conditions, namely national economic inequality and individual socio-economic position. Our measure of national *Inequality* is the Gini coefficient of income inequality as reported in the Standardized World Income Inequality Database (SWIID), compiled by Solt (2009) and currently the most comprehensive for data coverage.

The other theoretically pertinent independent variable is individuals' relative economic position, given that we want to assess how inequality influences the value of democracy for the poor *relative* to the rich (H₂ and H₄). There is no perfect way to assess a citizen's relative economic position, so we examine three different measures (variables X047, X045, and C006) provided by the World Values Survey that capture *Income*, *Class*, and *Economic Satisfaction* respectively. For *Income*, we employ the "Scale of incomes" variable, which ranges from 1 (lowest) to 10 (highest). For *Class*, we use the "Social Class" variable, which captures the subjective, self-reported perception of each respondent's class. We recoded the variable so that larger values indicate higher social class, ranging from 1 (Lower Class) to 5 (Upper Class). Finally, the "Satisfaction with financial situation of household" variable is used for *Economic Satisfaction*, which ranges from 1 (Dissatisfied) to 10 (Satisfied).

One nuance in multi-level models is whether or not to demean any level-1 independent variables, and if so, how. This decision should be based on theory (Hoffman and Gavin 1998; Kreft, Leeuw, and Aiken 1995). Since we hypothesize that democratic support is driven by *relative* income, we must avoid non-comparable data. For instance, if a "4" income is a relatively low income in one country, and yet a relatively high income in another country, then these values are not meaningfully comparable. We therefore demean all individual-level independent variables using group-mean centering.¹⁰ *Control Variables*

We follow the norm in the survey research literature and include a wide range of personal characteristics and evaluative items as control variables. Among personal characteristics we control for *Age, Gender* and *Education*. Among evaluative items we control for *Institutional Confidence, Interest in Politics, Interpersonal Trust, Prior Regime Evaluation*, and an index measure of *Leftist Ideology*, all of which we draw from the World Values Survey. Since this piece of the analysis is essentially a re-creation of the existing literature, we do not justify each item in detail.¹¹

Results

We jump straight to our most powerful empirical result, namely confirmation of H₃, which is that higher levels of inequality reduce citizens' support for democracy. The result is presented most simply as a bi-variate scatterplot between economic inequality (Gini index) and the national average of our composite index of democratic support for each of the 57 cases in the sample (Figure 3). The x-axis shows the level of inequality, where higher values indicate a more unequal society. The y-axis shows the level of democracy.

[Figure 3]

The fitted line on the scatter-plot has a negative slope and shows that unequal societies are associated with lower levels of democratic support among citizens. Figure 3 runs contrary to what we would expect from political economy theory, (H₁), which would suggest that citizens in a country with high inequality more strongly support democracy than citizens living in a country with low inequality, based on their (prospective) belief that democracy is a tool for reducing inequalities. Conversely, Figure 3 supports the performance literature, which (implicitly) suggests citizens use a retrospective logic, negatively evaluating democracy when inequality is high (H₃).

[Table 1]

Table 1 subjects this bi-variate result to a full range of control variables. As discussed earlier, we control for citizens' relative economic position in three different ways by utilizing individual income, economic satisfaction of individual citizens, and socio-economic class. Models 1, 2, and 3 are non-interaction models while models 4, 5, and 6 test the interactive effect between inequality and socio-economic status.

The results confirm that a wide range of demographic and attitudinal variables affect democratic support. Demographically, older citizens, males, and the educated are more likely to support democracy. Among the evaluative variables, individuals with greater institutional confidence, interest in politics, interpersonal trust, critical attitudes toward the prior regime, and left leaning ideology are more likely to support democracy.

Turning to our variable of interest, the results suggest that income inequality has a significant (p<.001) negative effect on democratic support. Theoretically, these findings disconfirm prospective approaches (H₁) while confirming retrospective approaches (H₃).

Moreover, all three non-interaction models in Table 1 indicate that *Inequality* alone accounts for more than 30% of the level-2 variance in democratic support.¹²

We now turn to our second question: do citizens in high inequality countries evaluate democracy egocentrically or sociotropically? Specifically, does the entire nation sociotropically condemn democracy when inequality is high (H₃), or is this effect egocentric, conditional on citizens' personal economic status (H₂ and H₄)?

Methodologically, H₂ and H₄ require an interaction term. In addition to any average difference in democratic support between rich and poor, which is captured by the beta coefficients for socio-economic status, the existence of a significant interaction term would additionally tell us that rich and poor are reacting *differently* (i.e., egocentrically) to different levels of inequality. Conversely, to the extent that there is no significant interaction term, inequality affects all citizens *equally*, meaning that the findings in models 1-3 reflect a homogenous (sociotropic) effect in which democratic support is equally lower for both rich and poor when inequality is higher.

Table 1, models 4, 5, and 6 provides the appropriate analyses. We again distinguish between three different measures of relative economic position: income (model 4), economic satisfaction (model 5), and socio-economic class (model 6). The coefficient on the interaction term is negative in all three models in Table 1, which means that as national inequality rises the slope on the relationship between economic status and democratic support declines. Put more simply, when inequality is higher, rich people are *relatively more* unhappy with democracy while the poor become *relatively less* unhappy with democracy. Concerning statistical significance, the interaction term for class is

significant (p<.001), as is economic satisfaction (p<.01), but the interaction term for income is not significant.

These results suggest that citizens act somewhat egocentrically, since inequality affects rich and poor citizens differently. Moreover, whereas the sociotropic effect was strongly *retrospective*, citizens' egocentric logic appears to be *prospective*. While rich and poor citizens both support democracy less when inequality is high, the effect is slightly less strong amongst the poor, suggesting that the poor temper their retrospective disillusion with democracy with a prospective calculation that democracy is nonetheless a viable political mechanism for future redistribution.

Substantive Significance

Social scientists sometimes overly fixate on whether a hypothesized relationship exists by focusing exclusively on statistical significance. Zilliak and McCloskey (2008) note that we should care equally about substantive significance, namely whether a variable has a large effect on the dependent variable. We therefore report the effect on democratic support of a 'moderate' change in each independent variable, in which we understand 'moderate' as a one standard deviation increase in the independent variable. This effect is equal to the coefficient for each variable multiplied by its standard deviation, and measures the change in democratic support predicted to occur from a 'moderate' change in each independent variable, holding all else constant.

As illustrated in Table 2, Panel A, three variables have a particularly large substantive effect on democratic support: *Inequality*, *Education*, and *Prior regime evaluation*. Strikingly, *Inequality* has the largest effect of all the variables, with a one standard deviation increase in economic inequality associated with lower democratic

support of about 0.50 points on our 13-point scale. Given that the standard deviation of democratic support is merely 2.26 points around a mean of 8.70, inequality's effect is not only larger than all other variables but also non-trivial.¹³

[Table 2]

Concerning the individual-level variables, education has the largest substantive effect, ranging from 0.28 to 0.32 across the six models, consistent with Lipset's (1959) classic argument that rising education has a positive effect on democracy. Prior regime evaluation also has a strong effect, meaning that citizens' experience under a previous regime influences their support for democracy. Focusing only on variables that matter substantively, then, democracies are supported when citizens are well educated, are critical of the prior regime, and most importantly, when national inequality is low.

Table 2, Panel B assesses the importance of egocentric effects, i.e., the extent to which personal socioeconomic status <u>modifies</u> the strong *Inequality* effect. Table 2, Panel B again examines the effect of a one standard deviation change in *Inequality* on democratic support, but now compares this inequality effect in two different hypothetical citizens. Citizen X is set at the mean for *Class* while citizen Y is set one standard deviation above the mean for *Class*. We already know from the interaction term in Table 1, column 6, that the inequality effect is statistically significantly different across citizens, but Table 2, Panel B goes further by assessing the <u>size</u> of this difference. These differences turn out to be substantively small. An average citizen, X, exhibits 0.50 less democratic support in a high inequality country. *Class* alters *Inequality*'s effect, but only slightly.

Figure 4 generalizes this finding by comparing the effect of higher *Inequality* on democratic support across all *Class* values. Citizens X and Y, just discussed, are included as reference points. What is striking about Figure 4 is that <u>the effect of *Inequality* is</u> <u>negative across the entire range of *Class* values, meaning that both rich and poor citizens evaluate democracy more negatively in contexts of high inequality. Moreover, if anything, Figure 4 exaggerates the mediating effect of personal socioeconomic status. First, column 3 in Table 2, Panel B shows that *Class* is the most powerful conditioning variable, with both *Income* and *Economic Satisfaction* having only half as much conditioning effect. Second, fully 99% of all citizens lie between -2 and 2 of *Class*, such that the effect of *Inequality* of majority of citizens. For *Income* and *Economic Satisfaction*, moreover, 99% of citizens fall between .43 and .56, suggesting that inequality has a remarkably similar effect on democratic support across almost all citizens.</u>

[Figure 4]

In short, even though SES has a statistically significant conditioning effect on inequality's effect on democratic support, from a substantive point of view it is variation in national inequality that most powerfully explains variations in democratic support. The national effect varies across socio-economic groups, but not by much. As such, citizens are primarily responding to inequality sociotropically rather than egocentrically.

We subjected all of these findings to a variety of sensitivity analyses, which are reported in the online appendix. First, we examine each of the four constitutive elements of democratic support separately and find that *Inequality* significantly influence all four constituent elements, indicating a multi-faceted effect on democratic support. Second, we

control for other potentially relevant national level variables, such as GDP growth rate, GDP per capita, age and level of democracy as well as regional dummy variables. Third, we employed alternative measures of Inequality and Democracy. Fourth, we ran models without imputing missing data and other models in which we retained only one survey per country. In all of these models, we find that *Inequality* is a powerful and robust determinant of democratic support.¹⁴

Conclusions

Our work represents a first cut at the inequality/support nexus and we argue that economic inequality should play a central role in theories of democratic support. Indeed, our major finding is that inequality is the single largest determinant of democratic support and that this finding is robust to many alternative specifications. Just as other scholarly traditions have accepted that inequality and democracy are inexorably related, so too should scholars of democratic support.

We find that citizens overwhelmingly use retrospective reasoning when evaluating democracy in the context of inequality. This retrospective finding stands in sharp contrast to the democratization literature, where most previous political economy research on democracy and inequality has assumed forward-looking citizens who view democracy as a tool for future redistribution. While useful for understanding democratization, we find that this theoretical tradition provides little insight into democratic support. High inequality might explain *higher* demands for democratization, but it leads to *lower* levels of democratic support.

Our finding, however, is consistent with performance theories, which implicitly adopt the retrospective assumption that citizens view existing inequality as a referendum

on democracy. From a policy perspective, this retrospective finding is important because it implies that the most important determinant of whether a nation supports democracy is the extent of economic inequality in that nation, suggesting that nations that successfully lower economic inequality might also enjoy more robust democratic consolidation.

Our empirical results further suggest that this effect is primarily sociotropic. While the negative evaluation of democracy is slightly weaker for poorer citizens, this egocentric effect is small and fragile. What is most striking is that rich and poor alike condemn democracy when inequality is high.

While our research introduces the importance of inequality, and adjudicates between competing theoretical perspectives, considerable work remains to be done. One particularly important task is to adjudicate between the two very different theories we presented above that might explain a sociotropic retrospective finding. Do most citizens feel relatively poor and hence homogenously dislike democracy when inequality is high? Or does this class-invariant effect reflect a more general societal recognition that higher inequality leads to policy polarization and lower economic growth? A fruitful approach for resolving this question would be to utilize future surveys to gather individual-level evidence on the inequality/democratic support nexus.

More generally, analogous to what already exists in the economic voting literature, surveys could directly tap citizen attitudes concerning whether democracy has alleviated past national inequality, is an efficacious tool for alleviating future national inequality, has helped citizens *personally* in the past, and finally, *will* help them personally in the future.

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Endnotes

¹ An online appendix with supplementary material for this article will be available at <u>http://journals.cambridge.org/jop</u>. Data and supporting materials necessary to reproduce the numerical results will be made available at http://web.missouri.edu/~krieckhausj/ no later than August 2013.
² For useful discussions of 19th century political thought, as it relates to democracy and inequality, see Przeworski and Limongi (1993) and Rueschmeyer, Stephens, and Stephens (1992).
³ Conversely, if inequality is low, then each prediction in Figure 2 would be reversed.
⁴ Solt (2012) does not directly engage retrospective or prospective citizen evaluations, but provides an interesting complementary perspective where he argues that inequality is positively associated with authoritarianism because the hierarchical social order instills respect for authority among citizens.
⁵ We ran all analyses using the 'xtmixed' command of STATA (version 12). See Bryk and Raudenbush

(1992, Chapter 2) for a fuller discussion of the random-coefficients and means-as-outcomes models.

⁶ The error term for each individual has an individual-specific component and a country-specific component. Removing the country-specific component makes more plausible the assumption of independently distributed errors, and hence unbiased inferences.

⁷ With means-as-outcomes, national-level variables are used to predict the country-specific intercepts,

thereby allowing national characteristics to explain mean democratic support in each country.

⁸ New Zealand, however, is the only country in the Fifth Wave for which all variables exist.

⁹ See Appendix A in the online appendix.

¹⁰ This entails generating the mean of each independent variable *within* each level 2 observation (i.e., each country-survey) and then subtracting this mean from each individual's value for that variable.

¹¹ Diamond (1999) and Rose, Mishler, and Haerpfer (1998) discuss the effect of these variables on support.

¹² The proportion of variance explained, R^2 , is calculated as per Rabe-Hesketh and Skrondal (2012: 101).

¹³ Similar results were obtained in the interaction models.

¹⁴ The interactions of socio-economic status and inequality vary in significance across the sensitivity analyses, but generally mirror the results in Table 1, namely that approximately two-thirds of the interaction terms are statistically significant.

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| | (1) | (2) | (3) | (4) | (5) | (6) |
|--|----------------|----------------|----------------|----------------|----------------|----------------|
| Inequality | -0.058*** | -0.058*** | -0.058*** | -0.058*** | -0.058*** | -0.058*** |
| inequality | (0.014) | (0.014) | (0.014) | (0.014) | (0.014) | (0.014) |
| Income | 0.050*** | (0.014) | (0.014) | 0.091** | (0.014) | (0.014) |
| meonie | (0.003) | | | (0.031) | | |
| Economic Satisfaction | (0.005) | 0.008** | | (0.055) | 0.073** | |
| Leononne Sutistaetion | | (0.003) | | | (0.028) | |
| Class | | (0.005) | 0.017* | | (0.020) | 0.292*** |
| | | | (0.009) | | | (0.082) |
| Inequality*Socio-Economic Status | | | (0.00)) | -0.001 | -0.002** | -0.007*** |
| | | | | (0.001) | (0.001) | (0.002) |
| Age | 0.006*** | 0.006*** | 0.006*** | 0.007*** | 0.006*** | 0.006*** |
| 5 | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) | (0.001) |
| Gender | 0.027* | 0.032** | 0.034** | 0.025 | 0.031* | 0.035** |
| | (0.016) | (0.016) | (0.016) | (0.016) | (0.016) | (0.016) |
| Institutional Confidence | 0.012*** | 0.011*** | 0.011*** | 0.012*** | 0.010*** | 0.011*** |
| | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) |
| Interest in Politics | 0.171*** | 0.178*** | 0.177*** | 0.170*** | 0.178*** | 0.175*** |
| | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) | (0.009) |
| Interpersonal Trust | 0.231*** | 0.242*** | 0.244*** | 0.225*** | 0.237*** | 0.235*** |
| | (0.018) | (0.018) | (0.018) | (0.018) | (0.018) | (0.018) |
| Education | 0.131*** | 0.147*** | 0.146*** | 0.130*** | 0.148*** | 0.146*** |
| | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) |
| Leftist Ideology | 0.025*** | 0.025*** | 0.025*** | 0.025*** | 0.025*** | 0.026*** |
| | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) | (0.004) |
| Prior Regime Evaluation | -0.093*** | -0.094*** | -0.093*** | -0.093*** | -0.093*** | -0.093*** |
| | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) | (0.003) |
| Constant | 10.771** | 10.771** | 10.771** | 10.771** | 10.771** | 10.771*** |
| | (0.483) | (0.483) | (0.483) | (0.483) | (0.483) | (0.483) |
| Marginal Effects | | | | | | |
| Inequality | | | | -0.058*** | -0.058*** | -0.058*** |
| T | | | | (0.014) | (0.014) | (0.014) |
| Income | | | | 0.047*** | | |
| | | | | (0.007) | 0.000 | |
| Economic Satisfaction | | | | | 0.009 | |
| Class | | | | | (0.006) | 0.022 |
| Class | | | | | | 0.032 |
| Level 1 \mathbb{D}^2 | 0.107 | 0.100 | 0.000 | 0.110 | 0.102 | (0.018) |
| Level 1 R ² Level 2 R ² | 0.107 0.320 | 0.106 0.328 | 0.090 0.315 | 0.118 0.325 | 0.102 0.323 | 0.099 0.325 |
| Number of Countries | 0.320 57 | 0.328 57 | 0.315 57 | 0.325 57 | 0.323 57 | 0.325 57 |
| Number of Observations | 57 77,642 | 57 77,642 | 57 77,642 | 37 77,642 | 57 77,642 | 57 77,642 |
| | 11,042 | 11,042 | 11,042 | //,042 | 11,042 | 11,042 |

Table 1: Effects of Inequality on Democratic Support

Note: Cell entries are linear mixed model coefficients and standard errors in parentheses. 'Marginal Effects' are the sum of each variables' coefficient and the interactive coefficient of each variable when the conditioning variable is set at its mean level, following Brambor, Clark, and Golder (2006). *** p < 0.001, ** p < 0.01, * p < 0.05.

Table 2: Substantive Effects

| ranel A: Non-Conditional Effects | | | | | | |
|----------------------------------|----------|----------|----------|----------|----------|----------|
| | (1) | (2) | (3) | (4) | (5) | (6) |
| Inequality | -0.49762 | -0.49762 | -0.49761 | -0.50162 | -0.50152 | -0.50151 |
| Income | 0.113301 | | | 0.105379 | | |
| Economic Satisfaction | | 0.019242 | | | 0.02169 | |
| Class | | | 0.016077 | | | 0.0305 |
| Age | 0.090194 | 0.090194 | 0.090194 | 0.105226 | 0.090194 | 0.090194 |
| Gender | 0.013459 | 0.015952 | 0.016949 | 0.012462 | 0.015453 | 0.017447 |
| Institutional Confidence | 0.031853 | 0.029199 | 0.029199 | 0.031853 | 0.026545 | 0.029199 |
| Interest in Politics | 0.15636 | 0.162761 | 0.161847 | 0.155446 | 0.162761 | 0.160018 |
| Interpersonal Trust | 0.097952 | 0.102616 | 0.103465 | 0.095408 | 0.100496 | 0.099648 |
| Education | 0.282654 | 0.317177 | 0.315019 | 0.280496 | 0.319334 | 0.315019 |
| Leftist Ideology | 0.058296 | 0.058296 | 0.058296 | 0.058296 | 0.058296 | 0.060628 |
| Prior Regime Evaluation | -0.23647 | -0.23901 | -0.23647 | -0.23647 | -0.23647 | -0.23647 |

Panel A: Non-Conditional Effects

Note: Cell entries are based on the models in Table 1, and assess the effect of a one standard deviation increase in the independent variable on democratic support when other variables are set at their mean values. The substantive effects of Inequality and Economic Status variables in models 4, 5, and 6 are the "marginal effects" in Table 1, and hence assess the effect (including interactive effects) of one standard deviation change in each variable when the conditioning variable is set at its mean level.

| Panel B: Conditional Effect of SES variables on the Effect of Inequality | | | | |
|--|-------------|-------------|-----------|--|
| | Citizen (X) | Citizen (Y) | (X) - (Y) | |
| Income | -0.50162 | -0.52336 | 0.02174 | |
| Economic Satisfaction | -0.50152 | -0.53283 | 0.03131 | |
| Class | -0.50151 | -0.56107 | 0.05956 | |

Note: Cell entries for the first column, Citizen (X), are the effect of a one standard deviation increase in inequality on democratic support when each of the socioeconomic status variables are set at their mean, and is therefore taken directly from the Marginal Effects in Table 1. Cell entries for the second column, Citizen (Y), are the effect of a one standard deviation increase in inequality *accompanied* by a one standard deviation increase in the SES variable, and therefore measures the total effect on democratic support from moving *both* interactive variables by one standard deviation. The third column indicates the difference between these two effects, and hence measures how much differently inequality influences citizens in different SES positions. Finally, note that our reference to Citizens X and Y is merely to *illustrate* substantive effects; the values themselves represent predicted effects as described in this note.

| | Prospective | Retrospective | | |
|-------------|-------------------------|---------------------------|--|--|
| Sociotropic | Prospective Sociotropic | Retrospective Sociotropic | | |
| Egocentric | Prospective Egocentric | Retrospective Egocentric | | |

Figure 1: Distinct Theoretical Perspectives

Figure 2: Four Hypotheses (stated as the effect when national inequality is *high*)

| | Prospective | Retrospective | | |
|-------------|--|--|--|--|
| Sociotropic | H ₁ All citizens support more | H ₃ All citizens support less | | |
| Egocentric | H ₂ Poor citizens support more Rich citizens support less | H ₄ Poor citizens support less Rich citizens support more | | |

Note: as discussed in the text, "all citizens" refers to the fact that sociotropic perspectives view the vast majority of citizens as an undifferentiated mass of relatively poor people. In this conception, the rich are viewed as too small a group to warrant consideration in surveys, and there is no attempt to disaggregate levels of income within the 'poor.'

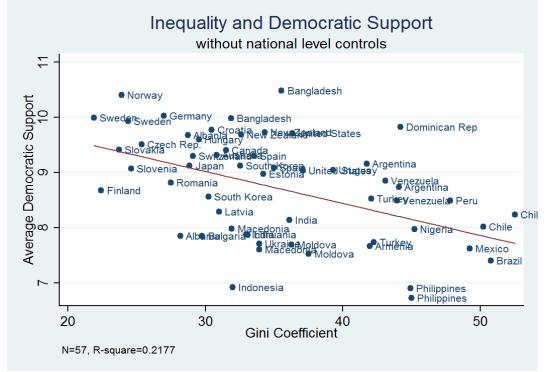


Figure 3: Correlation between Economic Inequality and Democratic Support

Note: Vertical axis is the country-average of Democratic Support and Horizontal axis is the Gini index. A country name can appear more than once if the WVS was conducted in multiple years for that country.

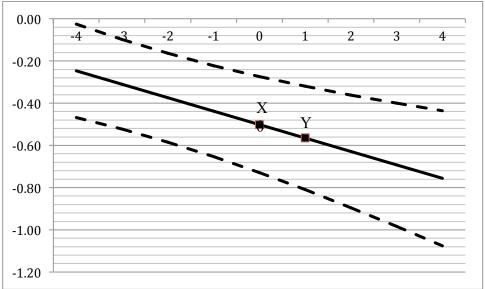


Figure 4: Substantive Effect of Inequality on Democratic Support Across Different Levels of Class

Note: With one exception this figure is identical to a traditional "marginal effects" graph, showing the effect of a one unit change in *Inequality* on democratic support across the entire range of *Class* values. Given that marginal effects graphs do not adjust for units of measurement, however, our vertical axis transforms these 'marginal effects' into substantive effects by multiplying the scale by 8.58 (1 standard deviation of Inequality) in precisely the same manner that Table 2 transforms the marginal effects of Table 1 into the substantive effects of Table 2. Point 'X' represents a hypothetical citizens whose social class is at the mean while point 'Y' represents a citizen whose social class is the mean plus one standard deviation, as discussed in the text and Table 2, Panel B.