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How Social Class Shapes Attitudes on Economic Inequality: The Competing Forces of Self-Interest and Legitimation

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Abstract: Using survey data from the World Values Survey (WVS) and national-level statistics from various official sources, we explore how attitudes toward economic inequality are shaped by economic conditions across 24 Organization for Economic Cooperation and Development (OECD). Consistent with the economic self-interest thesis, we find that where income inequality is low, those in lower economic positions tend to be less likely than those in higher economic positions to favor it being increased. On the other hand, where economic resources are highly unequally distributed, the adverse effects of inequality climb the class ladder, resulting in the middle classes being just as likely as the working class to favor a reduction in inequality. Our results further suggest that people tend to see current levels of inequality as legitimate, regardless of their own economic position, but nonetheless desire economic change—i.e., they would like to see inequality reduced—if they perceive it could improve their own economic situation.

Keywords: Social Class, Public Opinion, Economic Inequality, Class Awareness

1 Introduction

It is widely held that people in modern democracies tend to hold enduring attitudes related to equality, income redistribution, government intervention, and the collective provision of public goods (Joakim and Svallfors, 2013; Finseraas, 2009; Lupu and Pontusson, 2011; Svallfors 1993; 1997). These 'Left-Right' issues are closely tied to social class interests (Bengtsson et al., 2013; Evans and Heath, 1995; Evans et al., 1996; Heath et al. 1994) and thus are important indicators of class awareness. Nevertheless, many argue that economic development and modernization, increased affluence of the working class, and competing social identities, have reduced the importance of social class and related economic issues for politics in postindustrial societies (Clark and Lipset, 1991; Inglehart, 1977; Kingston, 2000; Pakulski and Waters, 1996).

Most evidence regarding the lessening importance of social class pertains to the period between World War II and the mid-1990s. This was a period characterized by both vast economic growth and an historic decline in economic inequality (Moller et al., 2009; Neckermann and Torche, 2007; Shultz, 1998; Firebaugh, 2000). Since the 1990s, however, inequality has rebounded in most countries to levels not seen since the early twentieth century (Alderson et al., 2005; Piketty and Saez, 2003; Reardon and Bischoff, 2011; Wilkinson and Pickett, 2010; McCall and Percheski 2010). New evidence is thus needed in order to shed light on this issue. It is possible that the apparent lessening significance of social class and related Left-Right issues for politics in the late 20th century had less to do with economic development than it did with a decline in economic inequality. In other words, with the vast rise in inequality since the 1990s, class divisions in policy preferences may have also increased.

In fact, more recent cross-national evidence suggests that class identification and awareness tend to be strongest when inequality is high (Andersen and Curtis, 2012; Curtis, 2013). It has also been demonstrated that support for redistribution and other social policies related to equality increases with inequality (Finseraas, 2009; Lupu and Pontusson, 2011; Joakim and Svallfors, 2013;

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Andersen and Curtis, 2013). Other evidence indicates that inequality and social class interact to influence many attitudes and behaviours considered important to liberal democracy (Andersen and Fetner, 2008; Andersen 2012). Taken together, this research suggests that inequality may have profound implications for social class polarization in economic policy preferences, especially those directly related to economic inequality.

The present article builds on this research by investigating the extent to which household income and social class interact with national-level inequality to influence attitudes toward economic inequality. We start with the premise that policy preferences tend to have a rational economic basis. That is, people are most likely to favor economic equality and redistribution if they are likely to benefit from it. However, we argue that preferences are also influenced by levels of inequality in the society in which people live. That is, while people tend to see current levels of inequality as legitimate, they nevertheless desire change that could improve their own economic situation. We investigate these ideas using World Values Survey (WVS) data and national-level statistics from various official sources.

2 Economic Values

2.1 Social Class and Left-Right Issues

Political sociologists commonly argue that 'core values' shape political orientations and party preferences (Evans et al., 1996; Feldman, 1988; Heath et al., 1994; McClosky and Zaller, 1984; Rokeach, 1973). For example, Left-Right political beliefs—or principles of 'socialism' versus 'laissez-faire' (Evans and, Heath 1995; Heath et al., 1994) —are used to explain similarities among people within social classes in terms of attitudes toward collectivism, government control, and economic and political equality. Until the past few decades, it was widely accepted that values polarized around economic issues in most modern societies, with the lower classes tending to hold Left attitudes and the higher classes holding Right attitudes. In other words, people tended to be 'class aware', i.e. they recognized how their own class position and related inequalities affected their personal life chances.

In recent decades, however, considerable doubt has been cast on the role of social class in shaping attitudes. Some commentators have advocated that new social divisions have become politicized, and in the process have become more important than traditional social class cleavages. Competing ideologies related to other social identities, such as race, ethnicity, language, and gender are considered to have increased in importance as societies became increasingly economically homogeneous (Kingston, 2000; Pakulski and Waters, 1996). For many, class plays a relatively less important role than it did in the past because rising prosperity in advanced societies has allowed people to shift their attention from material to 'post-material' concerns (Inglehart, 1977; Inglehart and Abramson, 1994). In short, this 'declining importance of social class' thesis suggests that class identities have been weakened because the economic divisions that drive these identities have less consequence for living conditions than they did in the past.

Others argue that social class continues to be an important social identity, but that its impact is largely limited by political factors (Andersen et al., 2006; the edited volume by Evans and DeGraff, 2013). For example, political parties cater less to class issues than they once did largely because of the declining size of the traditional manual working class, where trade unionism was strongest and most politicized (Heath et al., 2001). In other words, catering to the working class is unlikely to get politicians elected in postindustrial societies, especially those with first-past-the-post electoral systems, simply because the 'have nots' have become less powerful in terms of numbers.

There is also good reason to believe that even if class is not as important for social identities as it once was, its relevance may soon rise again. Cross-national studies have found that national-level economic and political conditions strongly influence class awareness (Andersen and Curtis, 2012; Curtis, 2013; Evans and Kelley, 2004; Kelley and Evans, 1993; Robinson and Kelley, 1979; Vanneman, 1980; Wright, 1989). Of particular importance in this regard is the drastic rise in income inequality over the past two decades. Recent evidence demonstrates that people are much more likely to identify with their position in the class structure if the distance between social classes is large (Andersen and Curtis, 2012; Curtis, 2013). It follows, then, that increasing inequality might also encourage people to be more likely to think along class lines in terms of economic issues.

2.2 Income Inequality and Class Polarization in Attitudes

It is widely accepted that self-interest plays an important role in determining preferences for inequality (Meltzer and Richard, 1981; Jaeger, 2006; Lübker, 2007; Weakliem, Andersen and Heath, 2005; Jaeger, 2013; Andersen and Yaish, 2012). Specifically, people from higher social classes and with higher incomes tend to be more accepting of inequality than others because they are both less affected by it, and they gain little from policies geared towards reducing it (Rueda and Pontusson, 2010; Svallfors, 2004). On the other hand, people from lower social classes are much less accepting of inequality because it affects them directly—i.e., they have fewer economic resources than others—and hence they benefit from policies geared towards income redistribution.

Other research indicates that attitudes toward acceptable levels of inequality are partially explained by national context (Lübker, 2007; Andersen and Yaish, 2012; Niedzwiedz and Kandlik-Eltanani, 2014). For example, public opinion is generally most favorable of redistribution, an opinion closely related to income inequality, when inequality is high. In this regard, Meltzer and Richard's (1981) classic theory suggests that utility maximization leads to stronger support for government spending as inequality rises simply because more people benefit from redistributive policies. Several recent cross-national studies of European countries (Rueda and Pontusson 2010; Jaeger 2013; Finseraas 2009) provide empirical support for this theory. It is important to note, however, that most findings in this regard pertain to questionnaire items that ask respondents whether change is needed. That is, when asked if more redistribution is needed, people in societies characterized by high inequality are more likely to support change than are people in societies with low inequality. On the other hand, research that explicitly asks people about what they think is a fair level of inequality—i.e., they're not asked about their opinions on change— demonstrates that those living in unequal societies are more supportive of inequality than are people living in equal societies (Andersen and Yaish, 2012). In other words, people's views of acceptable inequality have a propensity to coincide fairly closely to the actual level of inequality in the society in which they live.

The social cohesion argument also has implications for class identity and class-related values. This argument contends that society is generally less cohesive when inequality is high, causing people to withdraw, participate less in both politics and civil society, become apathetic toward politics, and have less concern for fellow citizens. This theory is supported by research on social trust and civic engagement (Uslaner, 2002; Uslaner and Brown, 2005), tolerance (Andersen and Fetner, 2008) and support for democracy (Andersen, 2012). These results suggest that a lack of social cohesion associated with high inequality results in people being more likely to see those who differ from themselves as the 'other'. The implications for class identity are obvious: In times of high inequality, the middle classes may be less likely to favor policies that primarily help the working classes—such as redistributive policies—unless they also benefit themselves. In other words, consistent with the self-interest thesis, high inequality could lead to greater social divisions between classes that result in greater polarization in values generally.

2.3 Research Questions and Hypotheses

Building on the results from the research discussed above, several theoretical insights with respect to the relationship between income, social class and income inequality can be made. First, perceptions of inequality are strongly influenced by the actual level of inequality in the society in which people live. Second, people in low economic positions tend to be most supportive of economic equality because they stand to gain most from it, regardless of the level of income inequality. Even at very low levels of income inequality, those in the lowest economic positions tend to have much to gain from increasing redistribution, where as those in middle and higher economic positions could pay out more than they receive under such conditions. Third, those at the very top of the income distribution and class structure benefit from large income differences and thus tend to be least supportive of equality, regardless of how high it rises.

We have quite different expectations for views of the middle class. Specifically, in contrast to the situation for those in high or low economic positions, the interests of the middle classes change depending on the level of income inequality. The middle classes are much more likely to feel the negative consequences of inequality at a personal level when inequality is high than when it is low, and hence the differences in their interests compared with those of the working class erode as inequality rises. On the other hand, if inequality is very low, the middle class is more likely to feel that they are not being justly rewarded for their work. This results, then, in greater differences in attitudes towards inequality between those in lower class and middle class positions when inequality is low.

Using the theoretical insights discussed above as our driving force, we derive and test three hypotheses:

Hypothesis 1: Following from the economic self-interest thesis, people in lower economic positions—i.e., those most likely on the losing end of inequality—are generally less likely than people in higher economic positions to favor economic inequality. We expect this relationship to hold at all levels of national-level inequality.

Hypothesis 2: Overall support for inequality is highest in countries where inequality is high. The rationale for this hypothesis is quite simple: people are predisposed to accept the conditions of the society in which they live. We expect this to hold regardless of individual-level economic position.

Hypothesis 3: Desire for a change in inequality is most polarized along the lines of economic position—i.e., income and social class— in countries with low income inequality. In other words, economic position and national-level income inequality interact in their effects on attitudes. This hypothesis rests on the idea that what people perceive as their fair share of economic resources is largely determined by their own economic position and how economic resources are distributed:

(a) Any increase in inequality would worsen the relative position of those in lower economic positions, so they are equally unlikely to favor change regardless of the level of inequality.

(b) The situation is quite different for people in middle to higher economic positions, however. They are more likely to desire an increase in inequality when it is low than when it is high because they are aware that equality comes partly at their expense (i.e., it is largely achieved by redistribution through taxes that they contribute much more to than do people in lower economic positions). When inequality is high, however, the middle classes tend to benefit more, resulting in them being less likely to see the need for it to increase.

3 Data and Methods

To test our hypotheses, we use individual-level data from the World Values Survey (WVS) combined with national-level economic and political indicators from the Organisation for Economic Co-operation and Development (OECD), the Standardized World Income Inequality Database (SWIID), the Luxembourg Income Study (LIS) and the CIA Factbook. The WVS consists of nationally representative samples of adults (18 years or older) administered over five waves in 87 countries during a 30 year period. We restrict our analysis to OECD countries for which relevant information were available. Our analysis thus utilizes data collected on 24 countries (16 of which were measured at more than one time) in 1990, 1995 and 2005. After removing observations with missing information, our analytic sample includes 48,232

Table 1: Descriptive information for each country by survey. Countries are listed in alphabetical order.

			Mean Dependent Variable Scores		Contextual Variables			
Country	Year	N	Desire for change in Income Inequality	Fairness of Wealth Inequality	Gini coefficient	Economic Development	Fractionalization	Former Communist
Australia	1995	1,780	5.42	4.93	0.308	18,267	0.821	No
	2005	1,266	5.34	4.87	0.312	23,031	0.821	
Canada	2006	1,736	5.35	4.25	0.318	25,894	0.712	No
Chile	1990	1,416	5.01	3.55	0.520	3,093	0.186	No
	1996	915	5.98	4.11	0.520	4,543	0.186	
	2006	900	6.24	4.57	0.480	5,896	0.186	
Czech Republic	1990	916	2.98	4.88	0.207	5,336	0.322	Yes
	1998	892	4.82	5.87	0.253	5,245	0.322	
Estonia	1996	957	5.47	3.69	0.372	3,164	0.526	Yes
Finland	1996	881	6.79	4.61	0.219	19,532	0.132	No
	2005	913	6.08	4.90	0.252	26,329	0.132	
France	2006	875	5.93	4.85	0.279	23,970	0.103	No
Germany	1997	1,647	6.07	4.66	0.263	21,553	0.168	No
	2006	1,709	6.67	4.84	0.278	24,475	0.168	
Italy	2005	636	5.02	4.47	0.338	19,380	0.115	No
Japan	1990	610	5.24	4.98	0.320	33,369	0.012	No
	1995	662	5.45	4.84	0.291	35,439	0.012	
	2005	802	4.85	4.93	0.310	38,962	0.012	
S. Korea	1990	1,168	5.83	4.76	0.320	6,615	0.002	Yes
	1996	1,225	4.31	4.33	0.290	9,707	0.002	
Mexico	1990	1,342	5.05	4.81	0.466	4,966	0.542	No
	1996	1,998	5.08	4.76	0.477	5,064	0.542	

continued **Table 1:** Descriptive information for each country by survey. Countries are listed in alphabetical order.

			Mean Dependent Variable Scores		Contextual Variables			
Country	**Year**	**N**	**Desire for change in Income Inequality**	**Fairness of Wealth Inequality**	**Gini coefficient**	**Economic Development**	**Fractionalization**	**Former Communist**
	2005	1,365	4.91	3.44	0.458	6,163	0.542	
Netherlands	2006	763	5.40	5.24	0.270	25,678	0.105	No
New Zealand	1998	973	5.63	4.83	0.330	12,842	0.397	No
	2004	1,558	5.78	4.70	0.330	14,971	0.397	
Norway	1996	1,031	5.69	4.71	0.250	33,694	0.059	No
	2007	934	5.92	4.47	0.256	41,446	0.059	
Poland	1989	866	3.04	3.35	0.266	2,985	0.118	Yes
	1997	990	4.26	4.72	0.307	3,875	0.118	
	2005	834	4.21	4.79	0.320	5,225	0.118	
Slovakia	1990	460	4.24	5.41	0.170	3,736	0.254	Yes
	1998	909	5.45	6.03	0.238	3,741	0.254	
Slovenia	2005	908	6.2	5.34	0.240	11,432	0.222	Yes
Spain	1990	987	6.03	5.36	0.303	11,346	0.417	No
	1995	807	5.44	4.85	0.353	12,056	0.417	
Sweden	1996	895	5.08	5.42	0.217	23,656	0.06	No
	2006	900	4.95	4.42	0.237	31,178	0.06	
Switzerland	1996	888	6.22	4.82	0.280	31,631	0.531	
Turkey	1990	968	6.41	4.93	0.430	2,503	0.32	No
	1996	1,766	5.91	4.37	0.420	2,801	0.32	No
	2007	1,238	5.93	5.48	0.450	3,619	0.32	
U.K.	2005	774	5.58	4.99	0.345	27,033	0.121	No
United States	1995	1,310	5.51	4.28	0.363	29,942	0.49	No
	2006	1,132	4.8	4.82	0.372	37,791	0.49	
All surveys		**45**	5.4	4.69				
All individuals		**48,232**						

respondents nested within 44 national surveys. Details on sample sizes and other descriptive information for each country are provided in Table 1.

3.1 Dependent Variables

Our goal is to determine both how people perceive inequality generally and whether or not they feel it should be changed. We thus explore the effects of economic conditions on two quite different dependent variables. Both questions measure attitudes on a 10-point scale ranging from one to 10. Low scores reflect 'Left' values and high scores reflect 'Right' values. The first dependent variable, taps '*desire for change in income inequality*'. Respondents were asked to choose from the following alternatives:

Incomes should be made more equal.	We need larger income differences as incentives.

1 2 3 4 5 6 7 8 9 10

The second dependent variable taps perceptions of the "*fairness of wealth inequality*" by asking respondents how they feel wealth inequality is generated. Respondents were asked to choose between the following options:

People can only get rich at the expense of others.	Wealth can grow so there's enough for everyone.

1 2 3 4 5 6 7 8 9 10

While wealth and income are somewhat different things, we expect that most respondents consider them as synonymous, especially when it comes to considering overall levels of inequality in their society. We thus see differences in responses to these two measures as reflecting more general differences in how much inequality people would like there to be versus how much they perceive inequality as legitimate.

3.2 Individual-level Variables

3.2.1 Economic position

We employ two measures of individual-level economic conditions: income *and* occupational social class. Although the WVS does not include raw incomes it provides a relative measure of household income coded into deciles for the respective country. We also use occupational social class as an alternative measure of individual-level economic conditions. Social class is coded into four categories: (1) managers/self-employed, (2) professionals, (3) routine non-manual, and (4) manual working class[1].

3.2.2 Individual-level control variables

Our analysis controls for age, gender, and religion. Age enters the statistical models as a continuous variable.[2] Religion is divided into six categories: (1) practicing Catholic, (2) non-practicing Catholic, (3) practicing Protestant, (4) non-practicing Protestant, (5) other, and (6) none (the reference category in our statistical models). Given that 16 of the countries were surveyed at two points in time, we also include dummy regressors for year of survey in the statistical models.

3.3 National-level Variables

Income inequality is measured by the Gini coefficient for equivalized household incomes after transfers. It ranges from a theoretical value of zero (all households have equal income) and one (one household has all the income). Data were obtained from the Luxembourg Income Study (LIS, 2005) for all but five countries. We encountered missing data for Chile, Estonia, Poland, Slovakia, and Slovenia, and thus obtained the Gini for these countries from Solt's (2009) Standardized World Income Inequality Database (SWIID), which uses the LIS data as a baseline from which to standardize data for countries when LIS data do not exist.

3.3.1 National-level control variables

We also control for three important contextual factors because previous research indicates their importance for both class identification and public opinion: economic prosperity, former Communist rule, and ethnic heterogeneity. Economic prosperity is measured by gross domestic product (GDP) per capita standardized to 2005 US dollars. The OECD statistical database was our primary source. We again encountered missing data for Chile, Estonia, Slovakia, and Slovenia. Data for these countries was taken from The World Bank.

Previous comparative research demonstrates the importance of controlling for former Communist rule (Andersen, 2012; Curtis, 2013) because experiencing life under a communist regime strongly shapes economic and political values and former communist countries tend to have rather high levels of income inequality. A country that has experienced a communist majority government since the 1980s is classified as "former communist", whereas all other countries are coded as "never communist".

To account for the possible impact of a competing ethnic cleavage (Lijphart 1979; Andersen and Heath, 2003), we also control for Alesina et al.'s (2003) measure of ethnic heterogeneity, which has a theoretical range from zero (complete homogeneity) to one (complete heterogeneity). Unfortunately, data was not available for each survey period, and thus for nearly all countries the measure was calculated using 1998 data.

3.4 Statistical Methods

We begin our analysis by fitting separate OLS regressions predicting both of the dependent variables to data from each of the 24 countries separately. This allows us to assess how individual-level economic conditions affect attitudes in each country. We then proceed to our main analysis, which employs multilevel models fitted to the pooled data from the 44 surveys. For both dependent variables, our final multilevel models include a random component for the intercept that accounts for the clustering within the 44 national contexts, and random effects for social class and household income. As well as all predictors discussed above, the final model also includes a cross-level interaction between social class and inequality in their effects on *desire for change* in income inequality. This interaction was not statistically significant for the model predicting attitudes towards *fairness of inequality* (i.e., how wealth inequality is generated), however, so it

1 Managers and self-employed were necessarily collapsed into a single category due to data limitations. Specifically, three countries (South Korea, New Zealand, and Poland) were missing data on self-employed individuals. Although not reported in the tables, the statistical models also include an "other" category for respondents who did not report their social class.

2 We tested for nonlinear effects for age using polynomials and regression splines. These tests indicated that a linear specification was most appropriate.

was not included in the final model for this dependent variable. Tables A1 and A2 display information on model fit and tests for cross-level interaction effects for a set of preliminary models. Coefficients for the final models are presented in Table 2.

4 Results

We start by testing our first hypothesis that economic self-interest results in a positive relationship between individual-level economic position and preference for inequality. Figure 1 displays the 95 percent confidence intervals for the effects of social class on attitudes from OLS regressions fitted to the data for each country separately. The first row demonstrates the relationship between social class and attitudes toward whether change is needed in the income distribution; the second row shows the relationship between social class and perceptions regarding the fairness of inequality (i.e., the attitude that 'wealth can grow so there is enough for everyone'). Countries are ordered by the Gini coefficient for household income inequality. For each dependent variable there are three panels that contrast differences in attitudes between the working class (the reference category in the statistical models) and managers/self-employed, professionals, and routine non-manual workers.[3]

Starting with the first row in Figure 1, we see that in nearly all countries, people in the working class are much more likely than others to believe that incomes should be made more equal. Consistent with the economic self-interest thesis, differences in opinions are generally strongest for the contrast between managers/self-employed. The figure also gives some preliminary evidence that the magnitude of these effects is related to national-level income inequality. That is, countries with higher levels of income inequality tend to have smaller class effects.

The second row of Figure 1 displays the effects of social class on perceptions of the fairness of inequality. Overall, compared to the working class, all other classes are generally more likely to feel that there is enough wealth for everyone to spread around versus the attitude that one can only get rich at the expense of others. More importantly, in contrast to what can be seen in the top row of the figure, there is no clear relationship between national-level inequality and attitudes towards inequality. We thus have preliminary evidence that national context may differently influence attitudes toward what is considered fair inequality and the extent to which change is desired.

Figure 2 explores the relationship between household income and the two dependent variables. Similar to Figure 1, countries have also been rank ordered by level of income inequality. We start with panel (a), which focuses on the *desire for change* dependent variable. The household income effect is positive and statistically significant in all 24 countries. As income rises, people tend to have more favorable opinions toward increasing inequality. A very different pattern holds for perceptions of the *fairness of inequality*, however. Although in most countries there is the positive effect we expected, the effects tend to be weaker than for the model predicting desire for change in the income distribution, and for nearly half the countries, the coefficients are not statistically significant (for three of these countries—Japan, Canada, and Norway—the effect is negative). Finally, while there is some indication that income inequality might play a role in shaping the relationship between income and attitudes toward income inequality, there is no evidence that these variables interact to influence perceptions of the fairness of inequality.

At this point, we have clear evidence to support our first hypothesis that opinions on inequality are affected by social class and income. The higher people's economic position, the more likely they are to feel that inequality is justified and that more is needed. In order to test our second and third hypotheses regarding how national-level income inequality influences attitudes, we turn to the multilevel models.

Table 2 displays the coefficients for the final multilevel models. We begin by discussing the results from Model A, which explores preferences for changes to the income distribution. Consistent with the findings from the models fitted to data from each country separately, this model also indicates that those with high household incomes are much more likely than those with low household incomes to hold right-wing attitudes toward income inequality. That is, those with higher incomes are generally less likely to hold the opinion that something should be done to equalize the income distribution. This income effect is similar regardless of the level of income inequality. Preliminary models indicated that income and income inequality did not interact to affect attitudes, only their main effects are included in the model. The results are somewhat different for social class, however. Here we find a statistically significant interaction between social class and income inequality (see table A2). In other words, the

3 Although not reported in the tables, we also include in the statistical models a category for all occupations not covered by these categories.

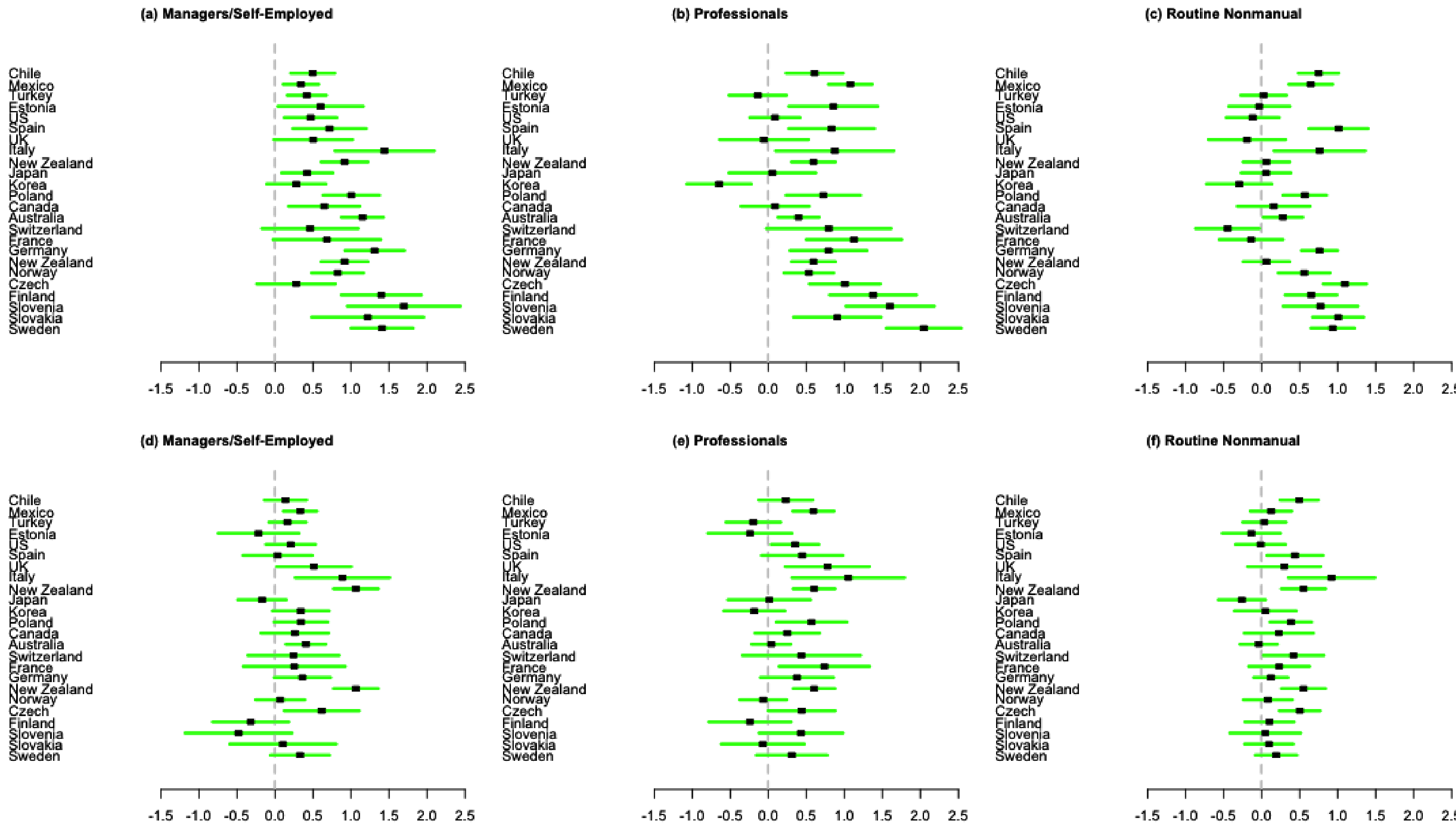

Figure 1: The effect of occupation on attitudes toward *desire for change in income inequality* (top row, panels a-c) and *fairness of wealth inequality* (bottom row, panels d-f). The effects are from linear models fitted to each country separately. The horizontal lines reflect 95 percent confidence intervals for the estimates.

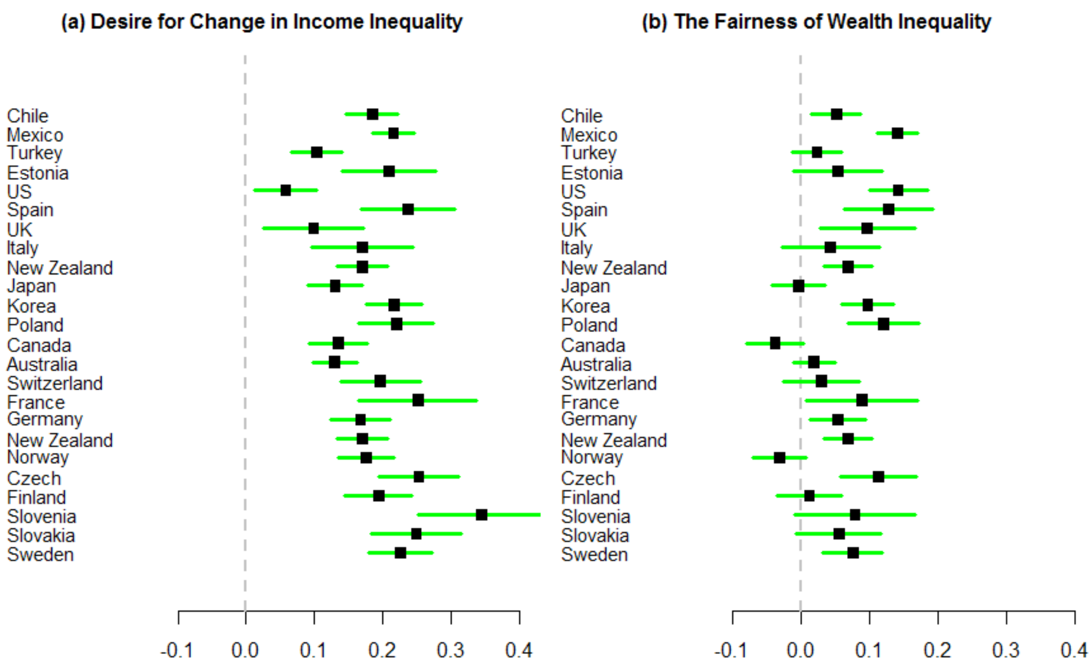

Figure 2: The effect of household income on attitudes towards (a) *desire for change in income inequality* and (b) *the fairness of wealth inequality*. The effects are from linear models fitted to each country separately. The horizontal lines reflect 95 percent confidence intervals for the estimates.

Table 2: Final multilevel models predicting attitudes towards (a) income inequality, and (b) wealth inequality in 24 modern democracies (standard errors in parentheses)

	Attitudes Towards Economic Inequality	
	Desire for change in Income inequality	*Fairness of wealth inequality*
	Model A	**Model B**
Individual-level variables		
Intercept	4.396***	3.387***
	(2.146)	(1.637)
Gender (men= 1)	-0.200***	-0.162***
	(0.026)	(0.024)
Age	-0.003***	0.008***
	(0.001)	(0.001)
Religion		
Practicing Catholic	0	0
Non-practicing Catholic	-0.010	-0.133***
	(0.044)	(0.042)
Practicing Protestant	0.051	0.046
	(0.053)	(0.051)
Non-practicing Protestant	-0.060	-0.174***
	(0.046)	(0.044)
Other religion	0.046	-0.052
	(0.073)	(0.070)
No religion	-0.148**	-0.197***
	(0.052)	(0.049)
Social Class		
Working class	0	0

continued **Table 2:** Final multilevel models predicting attitudes towards (a) income inequality, and (b) wealth inequality in 24 modern democracies (standard errors in parentheses)

	Attitudes Towards Economic Inequality		
	Desire for change in Income inequality		*Fairness of wealth inequality*
Routine non-manual	0.402***		0.062***
	(0.132)		(0.043)
Professionals	0.751***		0.112
	(0.172)		(0.055)**
Managers/Self-Employed	1.020***		0.181
	(0.125)		(0.056)
Income	0.151***		0.057***
	(0.009)		(0.009)
Survey Year			
Wave 1 (1990)	0		0
Wave 2 (1995)	-0.552**		-0.234
	(0.259)		(0.197)
Wave 3 (2005)	-0.500*		-0.258
	(0.287)		(0.219)
Country-level variables			
Gini coefficient (squared)	1.757		5.209**
	(2.709)		(1.962)
GDP per capita (log)	-0.041		-0.204
	(0.204)		(0.156)
Former Communist	1.142*		0.241
	(0.400)		(0.290)
Ethnic Fractionalization	0.038		-0.018
	(0.080)		(0.064)
Class*Gini interaction			
Working Class	0		0
Routine non-manual	-1.235		-------
	(1.036)		
Professionals	-3.085**		-------
	(1.322)		
Managers/Self-employed	-3.917***		-------
	(0.921)		
Random Components			
Cross-country variance			
Intercept	0.634		0.463
Social Class			
Working class	0		0
Routine non-manual	0.126***		0.027***
Professionals	0.197***		0.046***
Managers/Self-employed	0.073***		0.070***
Income	0.002***		0.002***
AIC	231,511		226,960
BIC	231,888		227,303
n (countries)		24	
n (surveys)		45	
N (individuals)		48,232	

*P-value <0.05; **P-value <0.01; ***P-value < 0.001

effects of social class are dependent on the level of income inequality in a particular society. Likewise, the effects of income inequality depend on social class.

We turn to Figure 3, which plots fitted values for each of the social classes through the range of income inequality. In support of our third hypothesis, we now see very clearly that differences in desire for change among the various social classes are most polarized when inequality is low. At low levels of inequality, the middle classes are strongly of the opinion that greater income differences are needed in society. Not surprisingly, the working class is least likely to favor income differences. As inequality rises, more people across the class structure lean towards the Left, and average attitudes for the different social classes converge. Nevertheless, attitudes of the working class remain similar regardless of the level of inequality. This implies that the working class is aware of its relative position in the class structure, and recognizes the benefits of income redistribution, regardless of the level of inequality. The middle classes are also aware of their relative economic position. As income inequality rises, its effects are more likely to impact people in the middles classes, and thus they become less favorable of it (see also Curtis, 2013). An alternative, but compatible, interpretation holds that the middle classes are less likely to feel that they are getting their share of income when inequality is low, and thus are also more likely to respond that more inequality is needed.

The results are quite different for attitudes regarding perception of the fairness of inequality. Before interpreting the difference in these results we must remember that the questionnaire item for income inequality was relative in nature—i.e., it asked respondents the degree to which they felt change was needed. The fairness of inequality question, on the other hand, asked respondents more generally about how they perceive the way wealth is generated in the world in which they live. This question does not elicit opinions about change. This fundamental difference in question framing results in quite different findings. In contrast to the findings for attitudes toward income inequality, Model B (see Table 2) indicates that both income and social class have a positive effect on attitudes regarding the fairness of inequality, and these effects are similar regardless of national-level income inequality. To demonstrate how the impacts of social class and income inequality differ for this attitude compared with attitudes towards change in income inequality, we have plotted fitted values in Figure 4.

Figure 4 demonstrates the consistent, though somewhat weak, class differences in attitudes throughout

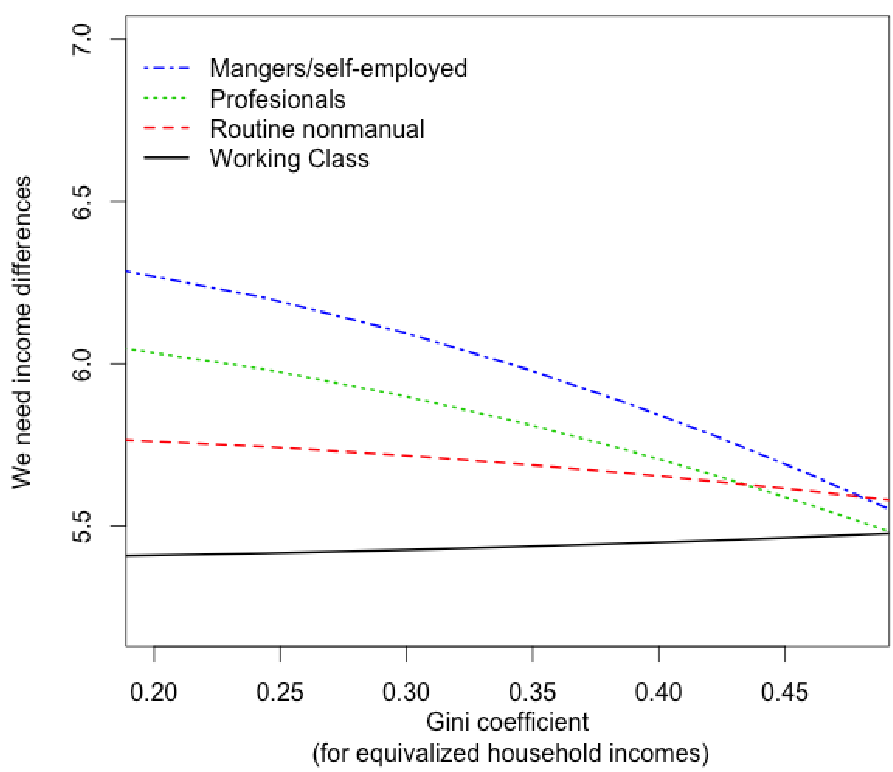

Figure 3: Effects display showing the effects of social class and income inequality on attitudes toward *desire for change* in income inequality. Fitted values were derived from the final statistical models.

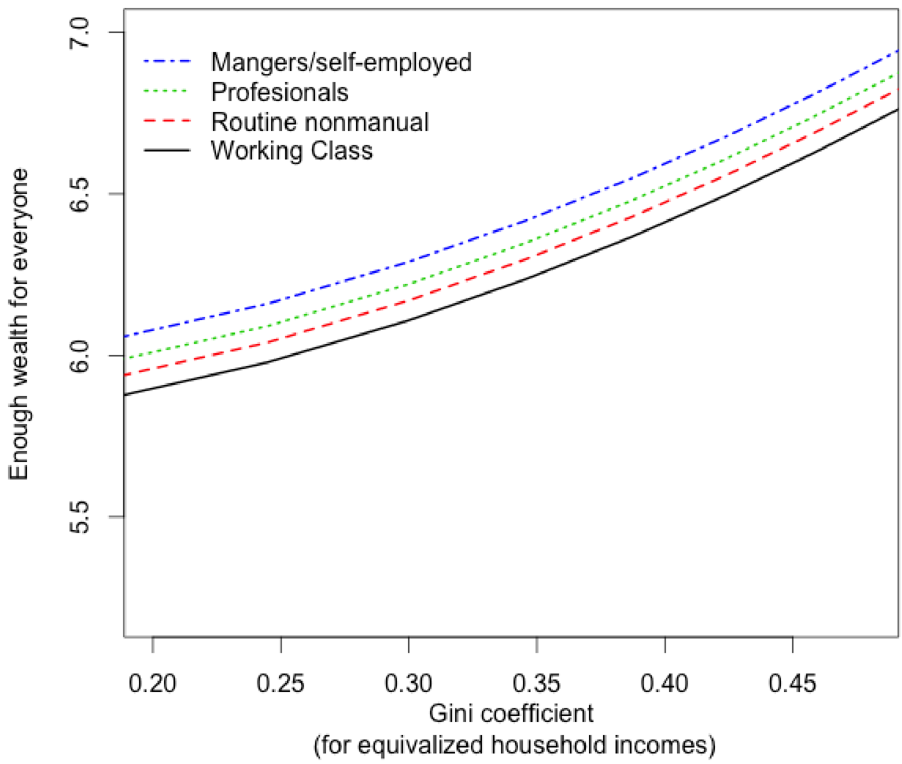

Figure 4: Effects display showing the effects of social class and income inequality on attitudes toward the *fairness of wealth inequality*. Fitted values were derived from the final statistical models.

the range of income inequality. In both equal and unequal societies, those in the middle and higher social classes are more likely than those in the working class to hold the opinion that there is enough wealth for everyone. In other words, they are more likely to perceive inequality as fair. At low levels of inequality, people from all class positions are less likely to believe there is enough wealth for everyone. As society becomes less equal, however, people from all classes tend to become more accepting of inequality, and believe there is enough wealth for everyone. Contrary to Hypothesis 3, then, we find no evidence that low levels of inequality leads to greater polarization in attitudes among the social classes for attitudes toward the fairness of inequality. Consistent with findings of Andersen and Yaish (2012), we conclude that people's perceptions of the fairness of inequality tend to reflect the conditions in which they live.

To ensure that our findings, especially with respect to attitudes toward wealth inequality, were not affected by the omission of wealth inequality as a predictor, we carried out some supplementary analyses. Although we could not obtain wealth inequality data for all country-year surveys employed in our main analysis, Davies et al.'s (2008) had suitable wealth inequality data for 2000 for all 24 countries in our analysis. The correlation between the Gini coefficient for wealth inequality and the Gini coefficient for income inequality was small (0.135[4]) and statistically insignificant (see Figure A1).[5] Moreover, neither the main effect of wealth inequality, nor its interaction with occupational social class and income, was statistically significant when included in models extending from our final models, though fitted only to the 2000 data. These models also produced substantively similar results to the final models that we report. We are thus confident that our findings were not affected by excluding the role of wealth inequality.

5 Discussion

For social class to have a significant impact on politics, people must be aware of their class position and have a

4 However, both Mexico and Chile were identified as jointly influential outliers. They were thus excluded for the calculation of the correlation coefficient.

5 Unfortunately, few measures of comparative wealth inequality exist over time. After an extensive search, we were limited to data from 2000 for each of the countries in our sample (see Davies et al., 2008). For each country, we selected an individual-level survey, which was closest to the year 2000.

basic understanding of the causes and consequences of economic inequality (Sosnaud et al., 2013; Weakliem, 1993Sosnaud et al., 2013). Consistent with this argument, we find that people's preferences for inequality strongly reflect their class position. Those who are most likely to benefit from inequality tend to be most likely to favor it. Our evidence also suggests, however, that even if current levels of inequality are considered legitimate, this does not necessarily mean that people are happy with the status quo. Instead, people tend to prefer inequality to be reduced if their own economic position might be improved, even if they perceive the existing overall level of inequality as fair.

We start by discussing how income inequality moderates the relationship between occupational social class and desire for change in income inequality. When inequality is low, the middle class tends to feel that greater income differences are needed as incentives. We argue that this reflects how the middle class perceives what is fair given their own position. That is, people in the middle class are more likely to feel that they are not getting their fair share of the income distribution when inequality is low. The interests of the middle class change as inequality rises, however, because they become more likely to be adversely affected by inequality, and thus they become less supportive of greater income differences.

On the other hand, average working class attitudes are strikingly similar regardless of the level of income inequality. To explain this, we must keep in mind that the relative economic position of the working class compared to others is always low. From a self-interest perspective, then, the working class should always be more likely than those from other classes to favor redistribution, regardless of the level of inequality. While it is theoretically possible that the working class would not desire any change in a perfectly equal society—on the grounds that they would not be disadvantaged—no such society exists.

Turning to how income inequality and individual-level economic position affect attitudes toward the fairness of inequality, specifically whether or not people hold the opinion that enough wealth can be generated for all to benefit, we find quite different results. Consistent with the self-interest thesis, compared to those in high economic positions, those in lower economic positions are much less likely to perceive the generation of inequality as fair. This pattern holds regardless of the level of income inequality. We also found that income inequality has a strong effect on attitudes toward perceptions of the fairness of inequality, though it is in the opposite direction than for attitudes toward change in income inequality. To understand these seemingly contradictory findings, it is important to remember that the survey question used to tap fairness of inequality pertains to views on the *actual* levels of inequality that exist in society. Specifically, it asks people to comment on their views of whether there is enough wealth to spread around or whether people can only get ahead at the expense of others. It does not ask respondents their opinions on change. Given that people tend to be most familiar with the country in which they live, we suspect that respondents anchored their responses to experiences of their own society.

In equal societies, people are less likely to hold the opinion that there is enough wealth for everyone. We argue this reflects that more people have an equal share of the income distribution—i.e., wages are more equal across social classes—and thus people are more likely to believe that becoming wealthy is done at the expense of others. In highly unequal societies, on the other hand, people from all social classes are more likely than those living in relatively equal societies to report that wealth and affluence can be attained by all members of society. This finding suggests, then, that people in equal societies understand that most people do not attain vast wealth, and those who do are an exceptional case. As society becomes more unequal, however, people from all classes accept wealth inequality and believe that becoming wealthy is fair and achievable. We suspect that greater exposure to wealthy people functions to legitimize inequality.

We have one last important general finding: Simply because people feel the current level of inequality is just, does not necessarily mean that they will not desire change if it would be to their own benefit. In fact, our findings on the relative measure of income inequality suggest that this is precisely what happens. As inequality rises it tends to be seen as legitimate even among those who are negatively affected by it, though this group is likely to desire change on the grounds that it might improve their own situation. Of course, we would need data specifically on people's perceptions of the extent to which obtaining high wealth and income is possible to properly test this conjecture. Unfortunately the WVS did not have such a measure, so we must leave that endeavor for future research using different data.

In concluding, it is interesting to ponder the possible policy implications of our results. We argue that class awareness drives the relationship between rising income inequality, social class, and public opinion. The fact that the differences in attitudes on income inequality between classes diminishes as inequality rises reflects the fact that class differences in living conditions also diminish. Simply put, more people feel the adverse effects of inequality as it rises. Given that most modern democracies have witnessed a significant rise in income inequality (Alderson et al., 2005; Reardon and Bischoff, 2011; Wilkinson and Pickett, 2010; McCall and Percheski, 2010) and substantial cuts to social spending (see the edited volume by Nolan et al., 2014) over the past couple decades, it seems likely that if the present pattern continues, public opinion will turn back against inequality. If governments respond to public opinion, we may soon witness a greater emphasis on redistributive policies in many modern democracies. Nevertheless, our findings suggest that the tide will turn not because people feel inequality has reached unjust levels, but rather because a large proportion of the population has been adversely affected and acts in self-interest to remedy the situation.

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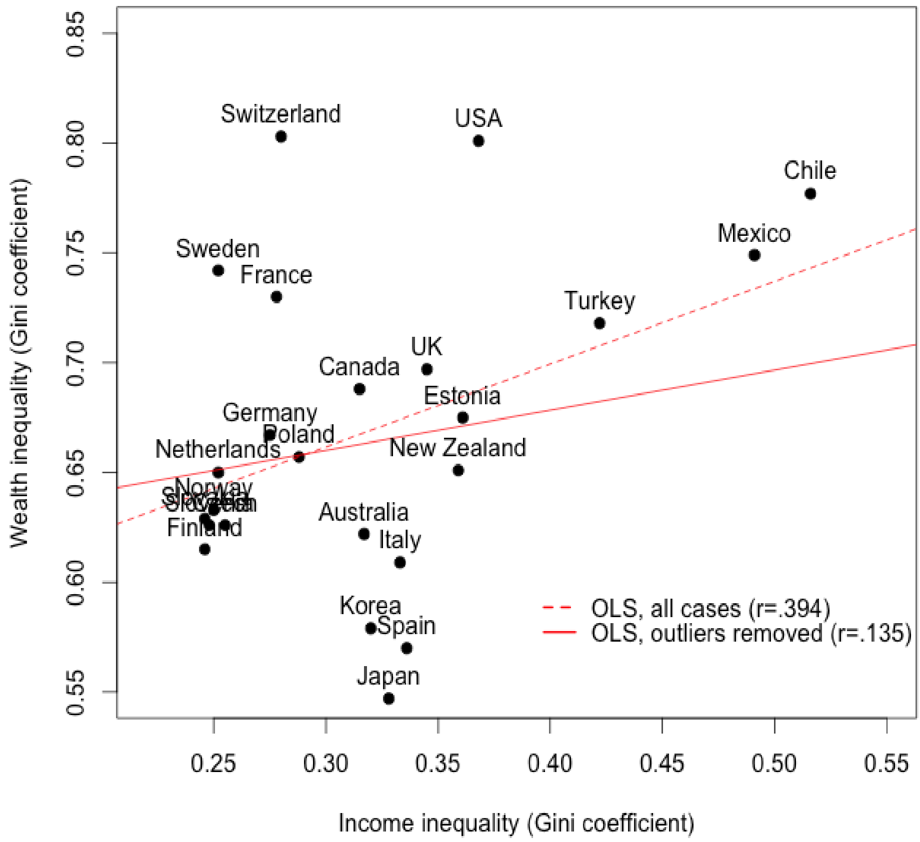

Figure A1: Scatterplot displaying the relationship between national-level income inequality and national-level wealth inequality, 2000 data. The broken lines represents the linear regression of wealth inequality on income inequality using all countries; the broken line is the linear regression with two jointly influential outliers (Mexico and Chile) removed.

Table A1: AIC and BIC values for various preliminary multilevel models

Model	Terms*	Random components	Desire for change in income inequality		Fairness of wealth inequality	
			AIC	BIC	AIC	BIC
1	class, income	intercept	231700	231867	227022	227189
2	class, income	class	231552	231842	226987	227277
3	class, income	income	231647	231832	226975	227159
4	class, income	class, income	231526	231868	226960	227303
5	class×Gini, income	class, income	231510	231888	226957	227335
6	class, income×Gini,	class, income	231528	231880	226959	227310
7	class×Gini, income×Gini	class, income	231513	231900	226960	227347

*All models includes all control variables and contextual-level variables

Table A2: Type II Chi-square tests for cross-level interactions

Model	Interaction	Desire for changes in income inequality			Fairness of wealth inequality		
		Chi-square	*df*	*P-value*	*Chi-square*	*df*	*P-value*
5	class × Gini	22.770	4	0.001	2.360	4	0.670
6	income × Gini	1.728	1	0.098	1.717	1	0.190
7	class × Gini	20.680	4	0.001	2.240	4	0.692
	income × Gini	0.646	1	0.421	1.550	1	0.213