Social Class, Economic Inequality, and the Convergence of Policy Preferences: Evidence from 24 Modern Democracies

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Using data from the World Values Survey and national-level indicators for 24 modern democracies, we assess the influence of social class and economic inequality on preferences for government responsibility. We improve on previous research by using multilevel models that account for differences in attitudes both within (i.e., over time) and across countries. Our findings are consistent with the economic self-interest hypothesis. Specifically, working class individuals, who tend to gain the most from government intervention because of their low and often more precarious economic position, are more likely than others to support government intervention. We also find a positive relationship between national-level income inequality and support for government intervention. As income inequality rises, its social ills tend to be more pervasive, resulting in public opinion becoming more supportive of governments taking responsibility for their citizens. We further demonstrate that inequality moderates the relationship between social class and attitudes. Although the effect of income inequality is positive for all social classes, attitudes across social classes become more similar as inequality rises.

Utilisant les données de World Values Survey et indicateurs de niveau national, nous évaluons l'influence de la classe sociale et l'inégalité économique sur les préférences en matière de responsabilité du gouvernement dans 24 démocraties modernes. Notre analyse se améliore sur la recherche précédente en utilisant des modèles à plusieurs niveaux qui tiennent compte des différences dans les attitudes au sein (ce est à dire, au fil du temps) et entre les pays. Nos résultats sont cohérents avec l'hypothèse d'auto- intérêt économique. Par exemple, les travailleurs - qui ont tendance à bénéficier plus quand le gouvernement intervient dans l'économie en raison de leurs faibles revenus et souvent position plus précaire - sont plus susceptibles que d'autres à un soutien responsabilité du gouvernement. Nous constatons également une relation positive entre

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l'inégalité des revenus au niveau national et le soutien à l'intervention du gouvernement. Comme l'inégalité des revenus se élève—et ses maux sociaux ont tendance à être plus répandue—l'opinion publique devient plus favorable des gouvernements assument la responsabilité de citoyens. Tout aussi important, cependant, nous démontrons également que la relation entre la social classe et les préférences pour la responsabilisation du gouvernement diffèrent par la quantité de l'inégalité des revenus dans un pays. Bien que l'effet de l'inégalité des revenus est positif pour toutes les classes sociales, les différences dans les attitudes de la classes sociale convergent que l'inégalité augmente.

IT IS CLEAR THAT ECONOMIC CONDITIONS influence social and political attitudes (Andersen 2012; Andersen and Curtis 2012; Andersen and Fetner 2008; Kenworthy and McCall 2008). A large body of research demonstrates that this relationship is driven by economic self-interest, especially with respect to preferences for government intervention (Durr 1993; Jæger 2006, 2013; Lübker 2007; Meltzer and Richard 1981). The mechanism for the self-interest hypothesis is straightforward; people are more likely to support government intervention if they stand to benefit from it (Blekesuane 2007; Durr 1993; Jæger 2013). Consistent with this argument, it has often been shown that support for redistribution is greatest among those in lower socioeconomic positions (Derks 2004; Fraile and Ferrer 2005: Svallfors 1997, 2008). Although far from conclusive, there is also evidence that public opinion is most supportive of an increase in government intervention when society is highly unequal (Finseraas 2009: Joakim and Svallfors 2013; Kelly and Enns 2010; Lupu and Pontusson 2011). This relationship is apparently driven by the fact that more people tend to benefit from government intervention if inequality is high, which in turn, results in more people supporting it.

While we accept that economic self-interest plays an important role for the development of policy preferences, we argue that some qualification is needed. We do not dispute the idea that support for government intervention is highest among those in low economic positions. We also find merit in the argument that support for intervention is highest when inequality is high. Nevertheless, a careful consideration of the way self-interest operates suggests that inequality also moderates the relationship between economic position and policy preferences. We start with the premise that those with low economic standing have the most to gain from supporting government intervention, regardless of the level of inequality in society. The motivation for those of higher economic standing to support government intervention is far weaker in relatively equal societies because it typically results in them paying higher taxes. At high levels of inequality, however, people of relatively high economic standing are more likely to both experience the direct personal effects of inequality and to suffer the general consequences of a wide array of social ills associated with it (Wilkinson and Pickett 2010). This implies, then, that as inequality rises, people of all economic conditions tend to become increasingly more likely to support intervention to alleviate its consequences (see Rueda and Pontusson 2010). In short, differences in support for government intervention between social classes converge at high levels of income inequality.

Using World Values Survey data and national-level data from various official sources, we present evidence from 24 democracies to support the theory outlined above. Our analysis is unique in two main ways. First, we simultaneously explore the relationship between public opinion on government responsibility for citizens and micro- and macro-level economic conditions, both within (i.e., over time) and across countries. No previous research on this topic has simultaneously accounted for both cross-national differences and longitudinal patterns within many countries. Second, this is also the first cross-national research to consider how individual-level economic conditions, measured by social class, and national-level income inequality interact to influence policy preferences.

Our findings demonstrate that social class has a negative effect on support for government responsibility. We also find that national-level income inequality has a positive influence on support for government responsibility. Most important, however, differences in opinions between classes become much smaller as inequality rises. At low levels of income inequality, the working class stands apart in its relatively high support for government intervention. On the other hand, at very high levels of income inequality there is little difference in opinion among all social classes.

ECONOMIC SELF-INTEREST AND ATTITUDES TOWARD GOVERNMENT INTERVENTION

According to Svallfors (2004), the welfare state regulates risk stemming from market dependency, intervening in "the processes that connect class position with social outcomes" (p. 119). Although most people are at least indirectly affected by the welfare state, not all benefit equally from it. In this regard, the "economic-utilitarian" or "self-interest" hypothesis provides a basic but compelling explanation for support for social spending and other related government policies.

This thesis holds that people are motivated by economic self-interest, and thus are most likely to support government intervention if they feel they will benefit from it (Durr 1993; Jæger 2006, 2013; Kelly and Enns 2010; Lübker 2007; Meltzer and Richard 1981). In other words, those in low economic positions are more likely than those in high economic positions to support government intervention in the market because they are more likely to gain from it. Empirical research provides widespread support for this thesis. For example, the unemployed and low income earners (Bean and Papadakis 1998; Lino and West 2003; Luo 1998) tend to be most supportive of government intervention. Empirical research also demonstrates that income (Finseraas 2009; Jæger 2013; Kelly and Enns 2010; Lupu and Pontusson 2011) and social class (Derks 2004; Joakim and Svallfors 2013; Rueda and Pontusson 2010; Svallfors 2004) are negatively related to support for government intervention and related welfare state policies (Blekesuane and Quadagno 2003).

Meltzer and Richard's (1981) classic work builds on the economic selfinterest hypothesis by applying it to the relationship between nationallevel income inequality and aggregate public opinion on redistribution. They start with the notion that people seek to maximize their utility, resulting in preferences for redistribution being inversely related to income. These preferences, they argued, shaped attitudes toward policy, which in turn influence government spending. Though Meltzer and Richard (1981) did not discuss the role of social class directly, their theory holds that differences in average public opinion hinge largely upon the middle class-or average citizens-and how they fare relative to the median income of their society. As income inequality rises, the middle classes stand to benefit more from redistribution, and therefore average public opinion becomes more supportive. According to this theory, inequality in pretax income drives the desire for greater income redistribution.¹ Empirical findings from studies testing this theory are mixed, however. Some studies have found support for Meltzer and Richard's (1981) self-interest model, but most have argued strongly against it.

Using cross-sectional data on 22 European countries, Finseraas (2009) found the expected pattern of a positive relationship between inequality and demand for government intervention. Jæger (2013) similarly demonstrates this relationship with more recent European data. Focusing on 15 democratic Western European countries, Rueda and Pontusson (2010) also found a positive relationship between income inequality and public demand for redistribution and suggested that income and class differences in attitudes tend to be larger when societies are more equal (see also Kaltenthaler and Ceccoli 2008; Svallfors, Kulin, and Schnabel 2012; Weakliem, Andersen, and Heath 2005). On the other hand, others have found little relationship between inequality and attitudes toward government intervention (Haggard, Kaufman, and Long 2010; Kenworthy and McCall 2008: Lübker 2007). Kenworthy and McCall's (2008) examination of eight Organisation for Economic Co-operation and Development (OECD) countries ascertains that inequality matters in some countries but not others. Lübker (2007) argues that inequality has no effect across a sample of 26 societies from North America, Europe, and Asia. In both cases, however, the analyses examined the role of income inequality alone, paying no attention to other contextual factors. Last, from a different perspective,

^{1.} Although it has become common practice to assess this relationship using the Gini coefficient for household incomes after taxes and transfers, Meltzer and Richard (1981) were specifically concerned with productivity, which reflects pretax earnings.

Dion and Birchfield (2010) demonstrate that income differences do not systematically explain support for redistribution in less economically developed societies that also have high income inequality.

Those most critical of Meltzer and Richard's thesis argue that the relationship is actually in the opposite direction—that is, as inequality rises, support for government intervention declines (see, e.g., Benabou 2000; Bowles and Gintis 2000; Dallinger 2010; Haggard et al. 2010; Kelly and Enns 2010; Kenworthy and Pontusson 2005). According to Bowles and Gintis (2000), this result reflects the fact that policy preferences are more likely to mirror redistributive ethics and social justice, rather than self-interest driven by income inequality. Along similar lines, Benabou (2000) and Kelly and Enns (2010) find that rising inequality is associated with more conservative attitudes toward redistribution. In short, this line of research suggests that public opinion and inequality move in tandem. This further implies that public opinion reflects policy, or vice versa. Put another way, people tend to accept the conditions in which they live (Andersen and Yaish 2012; Curtis and Andersen 2015).

Given the discrepancy in the literature discussed above, it is clear that more work is needed in order to understand the role of self-interest in the relationship between economic conditions and policy preferences. Some of the differences in findings can be attributed to the data and methods employed. In fact, much of this research is marred by limitations in this regard. Most studies have either explored trends only within a single country or cross-national patterns without exploring change within countries. This literature is also limited in that it fails to explore how income inequality moderates the relationship between individual-level economic context and attitudes toward government intervention.

Building on previous research, we offer new theoretical and empirical insight on the link between self-interest and attitudes toward government intervention. Our findings reinforce Meltzer and Richard's (1981) seminal, yet commonly criticized argument that income inequality leads to greater demand for government intervention. We also build on this thesis. In our view, if self-interest motivates preferences, the effect of income inequality should vary by social class. Similar to others (see, e.g., Dion and Birchfield 2010: Rueda and Pontusson 2010: Svallfors et al. 2012), we suggest that public support for government intervention will become stronger as income inequality rises, but differences in opinions between social classes will be largest when income inequality is low. When inequality is low, only those with very low economic positions are noticeably affected by inequality. On the other hand, as income inequality rises, people from other classes become increasingly affected and thus also become much more likely to support government intervention. In other words, the effects of inequality "climb up" the class ladder as inequality grows.

HYPOTHESES

Following from the literature review above and our new theoretical insights, our research is driven by three hypotheses:

- **Hypothesis 1:** Social class has a strong effect on support for government responsibility. Although we expect there to be crossnational differences in this relationship, we anticipate that support for government responsibility is generally most favorable in the lower classes. We argue that selfinterest drives this relationship: those in low economic positions have more to gain from equality than do those in high economic positions.
- **Hypothesis 2:** National-level income inequality is positively related to support for government responsibility. The rationale for this hypothesis is twofold: (1) the detrimental effects of inequality on a personal level rise up the class ladder as inequality grows, meaning that more people are affected, and (2) high levels of inequality are associated with ills that affect all members of society, regardless of one's relative position in the stratification system.
- **Hypothesis 3:** Class differences in attitudes are moderated by nationallevel income inequality. Specifically, class differences in attitudes will be highest at low levels of income inequality. The rationale for this interaction between social class and income inequality again rests on self-interest. At low levels of income inequality, government intervention tends to largely benefit those at the bottom of the class structure, while at high levels of income inequality people of all classes, except perhaps those at the very top, tend to gain from government intervention.

We test these hypotheses using survey data collected in 24 countries and a multilevel framework that simultaneously accounts for within country change and across country differences in attitudes.

DATA AND METHODS

We utilize data from the *World Values Survey* (WVS 2015) collected between 1990 and 2005 to assess individual preferences for government responsibility. Our analysis was restricted to this time period because the dependent variable we employed was not asked in other waves of the study. To account for the diversity of national contexts, we have included all 24 countries for which relevant data are available. These countries have widely varied levels of income inequality. Sixteen of these countries were surveyed at more than one point in time. We limit our sample to people over the age of 18. After removing all respondents with missing information, we were left with a final sample of 48,502 respondents from Australia (3,046), Canada (1,736), Chile (3,231), Czech Republic (1,808), Estonia (957), Finland (1,794), France (875), Germany (3,356), Italy (636), Japan (2,074), South Korea (2,393), Mexico (4,705), the Netherlands (763), New Zealand (2,531), Norway (1,965), Poland (2,690), Slovakia (1,369), Slovenia (908), Spain (1,794), Sweden (1,795), Switzerland (888), Turkey (3,972), the United Kingdom (774), and the United States (2,442). For information on the years for which data were employed for each country, and the sample sizes for each year, see Table 1.

At the national-level, we extracted data for various official sources. For our economic indicators, we use the OECD, the *World Bank*, the *Luxembourg Income Study* (LIS), and the *Standardized World Income Inequality Database* (SWIID). We also consulted the *CIA Factbook* for information on former Communist rule. More details on the context variables are given later.

Dependent Variable

To measure support for government intervention, we use a single questionnaire item:

How would you place your views on this scale? 1 means you agree completely with the statement on the left, 10 means you agree completely with the statement on the right, and if your views fall somewhere in between, you can choose any number in between:

People should take					The government should take				
more responsibility to					more responsibility to ensure				
provide for themselves					that everyone is provided for				
1	2	3	4	5	6	7	8	9	10

Thus, attitudes were measured on a 10-point scale ranging from 1 (completely unsupportive of government intervention) to 10 (completely supportive of government intervention). The mean score for the entire sample (i.e., for all surveys combined) is 5.69; mean scores for each survey are shown in Table 1.

Individual-Level Variables

Our interest is in the influence of economic conditions on attitudes toward government intervention. While income is an alternative measure of

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Descriptive Information for Each Country by Survey

coefficient Gini $\begin{array}{c} 3.12\\ 3.12\\ 5.520\\ 5.520\\ 2.52\\ 3.72\\ 3.72\\ 2.55\\ 3.72\\ 2.55\\ 3.72\\ 3.7$ $466 \\ 477$ 458308 self-employed Managers/ $\begin{array}{c} 6.35\\ 6.35\\ 6.32\\ 5.51\\ 2.94\\ 4.07\\ 5.32\\$ 1.15 1.454.795.07 5.64 5.41 Professionals Mean government responsibility $5.16 \\ 6.37$ 6.326.083.895.716.766.765.716.765.385.385.3865.965.965.965.965.3867.007.797.797.704.448.04 $5.12 \\ 5.70 \\ 5.18$ 5.50 **1**.89 nonmanual Routine 5.29 $4.90 \\ 6.51$ $\begin{array}{c} 6.16\\ 6.32\\ 6.32\\ 6.44\\ 4.94\\ 6.44\\ 4.97\\ 7.18\\ 7.18\\ 5.75\\ 5.19\\ 6.40\\ 6.22\\ 6.22\\ 6.22\\ 6.24\\ 6.94\\ 6.94\end{array}$ $7.07 \\ 4.11$ 5.325.02 8.06 5.65 5.43 Working class $\begin{array}{c} 5.19\\ 6.64\\ 6.50\\ 6.50\\ 6.50\\ 6.20\\ 5.62\\ 7.72\\ 7.23\\ 5.64\\ 6.85\\ 6.74\\ 6.85\\ 6.93\\ 6.74\\ 6.93\\ 7.09\\ 6.85\\ 3.73\\ 3.73 \end{array}$ 5.567.275.25 5.31 6.15 5.44 Complete sample $\begin{array}{c} 6.19\\ 5.23\\ 6.73\\ 5.22\\ 5.02\\ 5.07\\ 5.02\\ 6.66\\ 6.86\\ 6.86\\ 6.86\\ 6.86\\ 6.90\\ 6.24\\ 6.24\\ 6.26\\ 6.90\\ 6.26\\ 5.08\\ 6.90\\ 6.28\\ 6.26\\ 6.28\\ 6.26\\ 6.28\\ 6.26\\ 6.28\\$ 5.185.086.575.00 6.41 $\begin{array}{c} 1,647\\ 1,709\\ 636\\ 610\\ 662\\ 802\\ 802 \end{array}$,266,736 $\begin{array}{c} 900\\ 916\\ 892\\ 957\\ 957\\ 913\\ 875\\ 875 \end{array}$,168915 225342998365.780 Z Year 966 990 996 3995 Czech Republic South Korea Australia Germany Country Canada Finland Estonia France Mexico Italy Japan Chile

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coefficient Gini 345 363 372 self-employed Managers/ $\begin{array}{c} 5.39\\ 3.75\\ 5.28\\ 8.80\\ 6.44\\ 5.30\end{array}$ 5.593.273.772.625.355.896.154.314.945.116.344.43 $3.71 \\ 4.72 \\ 5.30$ 5.07 1.41sionals Mean government responsibility Profes- $\begin{array}{c} 4.82\\ 5.59\\ 5.72\\ 4.48\\ 5.72\\ 5.28\\ 5.28\\ 5.85\\ 5.98\\ 5.98\end{array}$ $\begin{array}{c} 6.13 \\ 6.02 \\ 3.27 \\ 4.90 \end{array}$ $6.28 \\ 6.26$ 2.676.43 $3.99 \\ 4.85 \\ 5.27$ 5.05 5.045.04nonmanual Routine $\begin{array}{c} 5.95 \\ 4.77 \\ 5.20 \\ 5.40 \\ 6.40 \\ 6.40 \\ 6.40 \\ 6.29 \\ 8.29 \\ 3.69 \\ 3.69 \\ 4.49 \end{array}$ 5.635.024.755.28 $3.26 \\ 6.52 \\ 5.70$ $\begin{array}{c} 4.83 \\ 3.80 \\ 4.95 \\ 5.53 \end{array}$ 5.91Working class 6.42 7.68 6.60 6.146.83 $\begin{array}{c} 4.06 \\ 4.83 \\ 3.99 \\ 6.59 \\ 6.12 \\ 6.12 \end{array}$ 4.935.34 $5.99 \\ 5.53 \\ 6.21 \\ 6.20$ 5.325.46 $3.90 \\ 5.37 \\ 5.95$ Complete sample $\begin{array}{c} 5.06\\ 4.73\\ 5.36\end{array}$ $\begin{array}{c} 5.90\\ 5.34\\ 5.72\\ 5.72\\ 5.97\\ 6.23\\ 6.23\\ 6.23\\ 6.43\\ 6.23\\ 6.23\\ 8.75\\ 2.98\\ 3.75\\ 3.39\\ 9.520\\ 6.20\\ 6.20\\ 5.81\end{array}$ 6.195.68 $\begin{array}{c} 4.98\\ 3.88\\ 4.98\\ 4.98\\ 5.69\end{array}$ $45 \\ 48,502$ 763 973 L,558 L,031 1,766 1,238 774 1,3101,132 968934866990990909909909987807807807807807807807807807807805900888 Z Year 1989 1997 2005 1990 1998 2005 1990 1995 1996 2006 1996 004 996 2007 1990 1996 2007 1995 2006 000 998 2005 United Kingdom the Netherlands All individuals United States New Zealand Switzerland All surveys Slovakia Country Slovenia Norway Sweden Turkey Poland Spain

Note: Countries listed in alphabetical order.

economic conditions, we use social class because it tends to vary less than income does from year to year. Social class thus provides a more stable measure of living conditions. Following common practice, we divide social class into four categories: (1) managers/self-employed,² (2) professionals, (3) routine nonmanual, and (4) manual working class.

Our statistical models also control for age, gender, and religious identification. Religious identification was coded into six categories: (1) practicing Catholic (the reference category), (2) nonpracticing Catholic, (3) practicing Protestant, (4) nonpracticing Protestant, (5) other, and (6) no religion.

National-Level Variables

Income inequality. Following common practice, income inequality was measured using the *Gini* coefficient for household incomes. This measure has a theoretical range between 0 (where all households have equal income) and 1 (indicating complete income inequality, where one household has all of the income). Gini measures were obtained from the LIS (2005). However, data on Chile, Estonia, Poland, Slovakia, and Slovenia were missing. Data for these countries were obtained from the SWIID, which attempts to standardize different Gini measures so that they are comparable to the LIS values (Solt 2009). The Gini coefficient for each country-year survey is shown in Table 1.

National Context Control Variables. To limit the chance of coming to spurious conclusions, we control for three important contextual factors: economic prosperity, former Communist rule, and ethnic heterogeneity. Economic development is measured by gross domestic product (GDP) per capita, standardized to 2005 U.S. dollars for each survey year. These data were primarily obtained from the OECD statistical database (http://www.oecd.org). Four countries were not represented by the OECD, however: Chile, Estonia, Slovakia, and Slovenia. We extracted data for these countries from the World Bank (http://www.worldbank.org).

Some analysts argue that general ideological and class differences between established democracies and former Communist states are so different that the experience of Communism continues to shape people's attitudes decades after the transition to democracy (Andersen 2012; Curtis 2013; Gerber and Hout 2004; Kelley and Zagorski 2005). Given that former Communist countries also tend to be poorer and less equal than more established democracies, it is important that we control for these factors. We classify a country as "former Communist" if it has experienced Communist

^{2.} It was necessary to combine the "manager" and "self-employed" categories, because of missing data in some of the national surveys. Also, although not reported in the tables, our statistical models also include an "other" category for respondents who did not report their social class

rule since 1980. All other countries are coded as never having experienced Communist rule. 3

We control for ethnic heterogeneity both because it can function as an important competing cleavage working against social class identities (Andersen and Heath 2003; Lijphart 1979; Lipset and Rokkan 1967), and because much recent research suggests that heterogeneity affects political attitudes and behaviors (Andersen and Milligan 2011; Putnam 2007; Rueda and Pontusson 2010), including support for redistribution and government intervention (Alesina and Glaeser 2004; Finseraas 2012). Our analysis employs Alesina et al.'s (2003) widely used measure of ethnolinguistic fractionalization (ELF), which indicates the probability that two individuals, chosen at random, belong to different ethnolinguistic groups. The measure ranges from 0 (complete homogeneity) to 1 (complete heterogeneity). Due to data limitations, the ELF measure we employ was calculated on 1998 data only. In other words, the measure is fixed over time for each country.⁴

STATISTICAL METHODS

We start by graphically exploring the relationship between public opinion and national economic conditions within and across countries. This analysis allows us to visualize the role of national context and helps inform the specification of our statistical models. Our main analyses, however, consists of a set of three-level multilevel models, predicting attitudes toward government responsibility. These models assess variation in the dependent variable systematically, both within and across countries, while controlling for the correlated errors and unequal error variance associated with within-country and within-survey clustering of respondents (Raudenbush and Bryk 2002). To take into account that individuals are nested within surveys, and surveys (i.e., time periods) are nested within countries, the models specify a variance component (i.e., random intercept) for each national context⁵ and random components for the years in which the survey was administered.⁶ In other words, the models allow trends in attitudes

^{3.} This definition for former Communist excludes countries for which a Communist Party once formed part of coalition government but never held control. Chile was the only such country in our data. Preliminary models indicated that our substantive findings results were similar regardless of how Chile was coded.

^{4.} The Alesina et al.'s (2003) ELF index is calculated as follows: $\text{ELF}_j = 1 - \sum_{i=1}^N S_{ij}^2$, where S_{ij} is the share of group i ($i = 1 \ldots N$) in country j. Ideally the statistical models would include a measure of ELF for each survey—that is, it would change with time. Unfortunately we did not have access to such data. It is important to note that the results with respect to the role of the other contextual variables are relatively unaffected whether or not the FLF measure is included in the final models.

^{5.} Each of the national context variables was centered before entering the statistical models.

^{6.} Similar modeling techniques have been employed in previous cross-national research (see, e.g., Andersen and Curtis 2013; Andersen and Fetner 2008; Andersen and Milligan 2011). Fairbrother (2014) also describes this modeling procedure.

across time to differ by national context. Model 1 includes all four national context variables but does not account for possible differences in the class effects across countries. In other words, class effects are fixed. Model 2 extends this model to include random components for the effect of social class on attitudes, allowing for the effects of social class to differ by national context. Model 3 specifies social class and national-level income inequality to interact in their effects on attitudes. All models were estimated using restricted maximum likelihood.

RESULTS

Returning to Table 1, we explore the mean scores for the government responsibility measure by social class, country, and survey year. These scores clearly indicate temporal and cross-national differences in class preferences for government intervention. In nearly every country for which overtime data were available, public opinion toward government intervention increased as inequality rose. This pattern holds for all social classes. We also noticed substantial cross-national differences in preferences that may suggest a positive relationship between inequality and public opinion. For example, countries with less inequality (e.g., Sweden and Switzerland), tend to have less support for "more" government intervention than countries with high inequality (e.g., Chile and Turkey), though the pattern is not overwhelmingly clear. Of course, these results should be interpreted cautiously, given that other economic conditions at the individual and contextual levels have not been controlled for.

We now turn to Figure 1 to explore the within- and across-country patterns in the relationship between public opinion on government responsibility and national-level economic conditions. Each point on the graph represents the mean score on the attitudes toward government responsibility measure for a single country at one point in time. The thin lines connecting the data points indicate the relationship between economic inequality and public opinion over time within a particular country. The thick gray line is a lowess smooth of the relationship between the two variables when each point is treated as an independent observation (i.e., we ignore that some countries were surveyed more than once).

The virtue of considering within-country trends is evident in Figure 1. Here, we see very little evidence of a relationship between public opinion and income inequality when the surveys are treated as independent (see the thick gray line). In other words, by looking at the cross-national relationship alone, we conclude that income inequality has no impact on public opinion. The conclusion changes drastically when we consider withincountry change over time. Now, we see that the relationship between public opinion and income inequality is positive in 11 of the countries of the 16 countries for which we have overtime data. In fact, the relationship is negative in only four countries (Finland, Japan, South Korea, and Switzerland).





Income Inequality and Mean Score for the "Government Responsibility" Measure for Each Survey

Notes: The thin black lines connect surveys from the same country. The gray line represents a lowess smooth of the relationship between mean government responsibility score and inequality with survey (not country) as the unit of analysis.

Income inequality was constant over time in New Zealand, so there was not enough information to assess the temporal relationship in that country.

Having shown the importance of considering the overtime relationship within countries for cross-national research on the effects of economic context on public opinion, we now turn to Table 2, which shows the results of the multilevel models. Recall that these models take into account both between- and within-country differences. Model 1 provides the first rigorous test of our first hypothesis regarding the effects of social class. In support of our first hypothesis, the results indicate that social class has a

Table 2

Individual-level variables Model 1 Model 2 Model 3 1.306 -0.929Intercept -0.717(2.403)(2.501)(2.386) -0.165^{***} -0.175^{***} -0.176^{***} Gender (men = 1) (0.026)(0.026) (0.026) -0.002^{***} -0.003^{***} -0.003^{***} Age (0.001)(0.001)(0.001)Religion **Practicing Catholic** (omitted category) Nonpracticing Catholic 0.0500.057 0.057 (0.045)(0.045)(0.045)**Practicing Protestant** -0.093^{*} -0.09*-0.091*(0.054)(0.054)(0.054)Nonpracticing Protestant 0.12^{*} 0.119*0.12*(0.047)(0.047)(0.047)Other religion 0.0286 0.053 0.054(0.075)(0.075)(0.075)0.148** 0.157^{**} 0.157^{**} No religion (0.053)(0.053)(0.053)Social class Working class (omitted category) Routine nonmanual -0.381^{***} -0.350 *** -0.482^{***} (0.036)(0.052)(0.104)Professionals -0.394 *** -0.478^{***} -0.808*** (0.036)(0.094)(0.187) -0.650^{***} -1.190^{***} Managers/self-employed -0.733^{***} (0.041)(0.088)(0.169)Country-level variables 13.265*11.156** Gini coefficient (squared) 9.730^{*} (3.490)(3.463)(3.321)GDP per capita (log) 0.3640.561** 0.564** (0.227)(0215)(0.214)Former Communist 1.401*1.510* 1.493^{*} (0.0.550)(0.548)(0.545)Ethnic fractionalization -0.249-0.302-0.304(0.159)(0.155)(0.155)Class × Gini interaction Routine nonmanual 1.221(0.819)Professionals 3.107*(1.447)

Estimates from Three-Level Hierarchical Linear Models Predicting Attitudes toward Government Responsibility in 24 Modern Democracies (Standard Errors in Parentheses)

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Individual-level variables	Model 1	Model 2	Model 3				
Self-employed			5.038**				
Managers			(1.411) -0.804 (1.482)				
Working class(omitted category)			(1.102)				
Random components							
Level-2							
Within-country temporal variance							
1990		0.538	0.521				
1995		1.559	0.521				
2005		0.910	0.922				
Level-3							
Cross-country variance							
Intercept		0.226^{***}	0.146^{***}				
Social class							
Working class (omitted category)		_	_				
Routine nonmanual		0.062^{***}	0.057^{***}				
Professionals		0.287^{***}	0.257^{***}				
Managers/self-employed		0.262^{***}	0.240^{***}				
AIC		232,974	248,309				
n (countries)		24					
n (surveys)		48					
N (individuals)		$51,\!553$					

Table 2

Note: *p-value < .05; **p-value < .01; ***p-value < .001.

strong influence on policy preferences. There is much stronger support for government responsibility among the lower and working classes than there is among the professional and manager/self-employed categories. Specifically, compared to the working class, scores on the 10-point scale for the dependent variable are .38, .39 and .65 points lower for those in routine nonmanual, professional, and managerial/self-employed positions.

Model 1 also lends support to our second hypothesis concerning the influence of income inequality; attitudes toward government responsibility become increasingly favorable as income inequality rises.⁷ Holding everything else constant in the model, on average, average score on the government responsibility scale is about 1.36 points higher in a hypothetical

^{7.} We assessed various nonlinear specifications for the effects of the Gini coefficient in preliminary statistical models. The AIC and Bayesian information criterion measures suggested that the best fit was provided when the Gini coefficient was squared before entering the model. This specification is thus used in the final models. Similarly, preliminary models determined that the best model fit was given when GPD per capita was logged. The final models thus include the logged GDP per capita variable.

country with a Gini coefficient of .45 than it is in a country with a Gini coefficient of .25 (9.730 \times .45² – 9.730 \times .25² = 1.36). This is not the end of the story, however. We will return to the role of income inequality when discussing Model 3, which assesses how it interacts with social class to affect attitudes.

We now turn to the effects of the three contextual control variables. Consistent with other recent research (see Andersen and Curtis 2013), we see that economic prosperity has a positive effect. We also uncover the expected relationship between a Communist past and attitudes. Consistent with previous research on post-Communist rule and social attitudes (Andersen 2012; Gerber and Hout 2004), we find that a Communist past has a strong positive influence on attitudes toward government responsibility. Public opinion is 1.4 points more in favor of government intervention in former Communist societies than it is in countries that have never experienced Communist rule. Finally, although the effect of ethnic heterogeneity is in the expected negative direction, it is not statistically significant.

Our final hypothesis holds that social class and income inequality interact in their effects on attitudes. Our first step is to test whether class has a different effect across societies. To do so, Model 2 includes random components for the effects of social class across countries. As Table 2 indicates, the random components for class are statistically significant, suggesting that class has different effects across countries. An analysis of deviance and the change in Akaike information criterion (AIC) from Model 1 also indicates that their inclusion substantially improves the fit of the model. It is clear, then, that national contextual factors influence the role of social class. Our goal now is to assess the extent to which income inequality is one of these factors.

Model 3 provides a formal test of the hypotheses that class differences in attitudes are greatest when income inequality is low. The interaction between social class and income inequality is in the expected direction and statistically significant at conventional levels. Its inclusion also substantially improves the fit of the model. We have thus found support for our final hypothesis that inequality moderates the impact of social class on policy preferences. To better understand how social class and income inequality interact to affect attitudes, we have plotted fitted values derived from Model 3 in Figure 2. These fitted values were calculated with all predictors except social class and income inequality set to their means. In other words, they show the effect of social class across the range of income inequality for a "typical" respondent with average values on all control variables (see Fox and Andersen 2006).

Figure 2 clearly demonstrates the overall positive effect of income inequality on attitudes. This relationship holds for all social classes. Just as important, however, the difference between classes is greatest at very low levels of inequality, where the working class is significantly more likely than other classes to support government intervention. On other hand, at Figure 2

Effect display showing the interactive effects of social class and income inequality on attitudes toward government responsibility



Note: Fitted values derived from Model 3.

very high levels of income inequality, all classes are equally likely to support government intervention. In other words, attitudes converge toward a desire for government intervention. We argue, then, that regardless of one's own personal situation, individuals feel adversely affected in highly unequal societies and thus are more likely than in equal societies to desire government intervention to alleviate the situation.

DISCUSSION AND CONCLUSIONS

Our goal was to assess the relationship between economic inequality and attitudes toward government responsibility for citizens in cross-national

perspective. We started from the widely accepted premise that self-interest largely determines preferences for government responsibility. We also provided some new insight, however. Consistent with the Meltzer and Richard's (1981) thesis, we argued that public opinion is most supportive of increasing government intervention when inequality is high. We further argued, however, that national-level economic inequality and individuallevel economic position interact to affect attitudes. As inequality grows, it adversely impacts more people up the class ladder, resulting in overall public opinion becoming more amenable to government intervention. We further argued that the fact that inequality affects more people as it grows also implies that different class-attitudes become more similar as inequality increases.

Corroborating the Meltzer and Richard (1981) thesis, we found a positive relationship between income inequality and support for government responsibility. In general, public opinion is more supportive of the government taking more responsibility for citizens if there is a wide disparity in incomes. In other words, our findings support the self-interest argument that public opinion favors government intervention in times when more people are likely to need it. On its own, as some have previously suggested, this finding could be interpreted as reflecting altruistic values. That is, if income inequality becomes increasingly pervasive, even those who gain little economic benefit from government intervention begin to desire more. Rueda and Pontusson (2010) label this as positive inequity aversion (see also Fehr and Schmidt 1999). In essence, they argue that deeply seated social norms—that is, the perception that everybody should be provided for in a society—can trump self-interested behavior. We argue that altruism is likely only a small part of the story, however.

In fact, our findings suggest that self-interest provides a more convincing explanation. As inequality rises, people are more likely to notice and understand its consequences for society as a whole—for example, poor educational attainment, high crime rates, and mental health problems become more prevalent (Blau and Blau 1982; Huisman and Oldehinkel 2009; Neckerman and Torch 2007; Western and Pettit 2005; Wilkinson and Pickett 2010)—and thus become increasingly likely to support government intervention to alleviate the problems associated with it because they could have noneconomic consequences for themselves. As a concrete example, when inequality is high, crime also tends to be high, which could result in people feeling less safe in their everyday lives. These feelings of being unsafe could affect people regardless of their own economic situation. This interpretation is even more compelling when we consider the moderating effect of inequality on the class-attitudes relationship.

Recall that attitudes are most polarized by social class when income inequality is low. On the other hand, consistent with Dion and Birchfield (2010), we found that class differences do not explain support for redistribution in societies with high income inequality. If we consider when inequality is high, nearly everyone gains from government intervention. The social ills associated with inequality become unbearable regardless of one's own economic situation. On the other hand, at low levels of income inequality, its consequences for society as a whole are far less noticeable. In such cases, only the lower classes have much to gain from government intervention. Again, self-interest plays an important role. At low income inequality, the working class is aware that government intervention has helped their situation. The middle and upper classes, however, are just as aware that low income inequality has come largely at their expense—a larger part of their market incomes have been redistributed to those with low incomes.

There are also some interesting findings unrelated to our hypotheses. For example, like previous research, we found that the experience of a Communist past appears to result in greater support for government intervention (Andersen 2012: Curtis 2013). Given that income inequality was included in the models simultaneously, this effect more likely reflects political and cultural differences rather than economic differences between former Communist societies and more established democracies. On the other hand, when controlling for economic development and income inequality over time, we found no obvious effect of ethnic fractionalization. While the effect was in the expected negative direction (see Alesina et al. 2003; Putnam 2007; Finseraas 2012), it was not statistically significant. Given that we had data on heterogeneity for only one point in time for each country, it is possible that our analysis missed important changes over time that, if considered, could have produced a different result. Unfortunately, we were unable to obtain measures to match all years of the study. Still, our finding is consistent with other recent research that finds no evidence to support the claim that immigration and ethnic diversity influence support for social policy (see, e.g., Brady and Finnigan 2013).

When considering the possible implications of our findings for social policy, we must keep in mind that our dependent variable was relative in nature. That is, respondents were asked whether or not the government should take "more" responsibility for its citizens. The findings are clear that as times get tough, people desire more intervention. When inequality is low, however, people are less likely to desire further intervention. This suggests two things: (1) people respond to the level of inequality that they experience, and (2) there is an equilibrium for the level of inequality a society desires. Although we did not tackle this issue directly, previous research supports this conjecture (Alesina and Angeletos 2005; Soroka and Wlezien 2004). If true, the consequences for governments hoping to secure popular support are clear: allowing income inequality to rise too high or to change drastically could lead to a decline in popular support. Of course, these findings bode well for those who hope to see the tide turn back against the rising trend of increasing inequality over the past few decades

In conclusion, our findings demonstrate that economic inequality plays a crucial role for attitudes toward government intervention. People are influenced not only by their own economic situation, but also by national context. They are more likely to hold the view that the government should take responsibility for citizens when income inequality within their country increases. As income inequality rises, its consequences climb the social class ladder and thus increasingly affect a larger proportion of the population, resulting in increased public support for government intervention.

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