Observing Unexpected Patterns in Cross-National Research: Blame Data, Theory, or Both? Attitudes toward Redistributive Taxation in Thirty-Three Countries

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Observing Unexpected Patterns in Cross-National Research: Blame Data, Theory, or Both? Attitudes toward Redistributive Taxation in Thirty-Three Countries[1]

Abstract
This article examines the relationships between socioeconomic status and attitudes toward redistributive taxation across 33 countries using the complete International Social Survey Programme (ISSP) 2006 data set. We apply a simple rational-choice-inspired homo-economicus hypothesis proposing that those better off in the socioeconomic hierarchy should have less reason to support state-organized economic redistribution compared to those situated at lower levels in the socioeconomic hierarchy. The empirical results demonstrate substantial cross-country variation regarding the correspondence between empirical observations and theoretical expectations. When faced with such tremendous cross-national variation in response patterns, a common strategy among researchers is to question the quality of the data collection procedures for those countries deviating strongly from theoretical expectations. The strategy chosen in this study is, however, different. The main argument is that an observed lack of fit between theory and empirical observations may be rooted in problems related to theory rather than the quality of data collection procedures. Building on previous research, two "cultural distance" hypotheses are formulated, both of which argue that the correspondence between the homo-economicus theory and empirics should indeed vary systematically across countries. The first focuses on the role of the welfare state and the second on the level of economic affluence and associated scientific dominance. Both hypotheses receive considerable empirical support. The relationship between socioeconomic status and support for redistributive taxation is substantially stronger in the wealthy Western welfare states—particularly among those of Northern Europe—than in the poor non-Western countries lacking any institutional design reminiscent of a welfare state.

Keywords: attitudes; international comparative research; ISSP; latent class analysis; taxation

Introduction
International comparisons are seldom easy; even seemingly straightforward concepts such as income distribution or gross domestic product (GDP) can be very difficult to compare across countries. The difficulties encountered are no less significant when it comes to attitudes and values. This study deals with attitudes toward taxation across 33 countries. A very simple— some may even say "common sense"—rational choice-based theory on the relationships between socioeconomic position and preferences for state-organized economic redistribution says that the higher the socioeconomic position, the lower the probability for supporting redistributive taxation.
Now, let us assume that this hypothesis is empirically tested using data from a fairly large number of countries, and that the results indicate tremendous cross-national variation. In some countries the expected pattern is clearly visible, while in other countries the observed relationship is close to zero, or even worse, inverted. In other words, the predictive power of the theory differs substantially across countries. Faced with such a result, the dilemma to be solved is the following: is the lack of fit between theory and the empirical results that can be observed in some countries rooted in data of insufficient quality or to qualities related to the theory itself, that is, that the theory is more valid in some countries than in others?
While researchers may respond differently to this dilemma, the first step is often to focus on the data. Some may take the easiest way out, simply not using the countries where the most unexpected results appear. In fact, based on informal conversations with scholars involved in comparative attitudinal research, this response is far from uncommon. Another response is to report the statistical properties of the observed associations and basically argue that the data for the deviant countries are of bad quality (Blasius and Thiessen 2006). A third response is to examine the quality of data in-depth by applying different measures,

such as translation checks and sample coverages.[2] Another strategy is to redefine and modify theory. In this study, we will approach the dilemma mainly from this "theory quality" perspective.[3]

Our basic argument is that we should indeed expect that the strength of the relationship between attitudes toward redistributive taxation and socioeconomic position varies systematically across countries. In short, the relationship should be more pronounced in large welfare states compared to small welfare states. In countries lacking any institutional design reminiscent of a welfare state, the discrepancy between empirics and theoretical expectations should be particularly pronounced.

Furthermore, the relationship is expected to be stronger among the wealthy industrialized countries than in the less prosperous countries outside the Western World. These hypotheses are tested on data covering 33 countries collected in 2006 within the framework of the International Social Survey Programme (ISSP).

Socioeconomic Status and Attitudes toward Redistributive Taxation: Why should Relationships Differ Systematically across Countries?

A Western Bias in Cross-National Research?
Wallerstein (1997) argues that the academic field of the social sciences is a product of the modern world-system of which the choice of subject matter, its theorizing, its methodology, and its epistemology reflect the context in which it was born. It is true that all large contemporary international social surveys have their roots in the Western World—Europe or the United States. Therefore, the leading and well-established theories as well as the corresponding measurements tend to be designed from a Western perspective.[4]

Some of the problems associated with applying the same measurements across countries have been recognized by methodologically oriented scholars.[5] Of particular interest in the context of this article is the cultural distance hypothesis formulated by Blasius and Thiessen: "The greater the cultural distance between the origin of a survey instrument and the groups being investigated, the more compromised the data quality and comparability is likely to be" (2012, 5).

We find the concept of cultural distance potentially fruitful. However, there are two issues that need to be discussed. First, while the hypothesis proposes that problems of comparability may be related to data of insufficient quality and/or to nonvalid theoretical assumptions, the research upon which the hypothesis is founded has principally emphasized explanations relating to the quality of data and not on possible errors/fallacies related to theory (Blasius and Thiessen 2006; 2012). Second, "culture" is a notoriously slippery concept. There simply is no general and widely accepted understanding of the concept. However, given the research field within which the cultural distance hypothesis was developed, it seems appropriate to concentrate on theoretically relevant country characteristics that can be seen as "cultural markers," defining the degree of similarity/difference between countries.

In our search for such indicators, we have benefitted from insights provided by the historical institutionalism school (Rothstein and Steinmo 2002; Steinmo, Thelen, and Longstreth 1992) as well as from world-systems theory (Wallerstein 1997), and modernization theory (Wilensky 2002). As will be elaborated below, we have selected two types of country-level indicators: the size of the welfare state and the level of economic development.

Explaining Cross-National Variation: The Roles of the Welfare State and Economic Development
Let us begin with the assumed general negative relationship between socioeconomic status and support for state-organized economic redistribution. Following the theory specified by the power resources approach (Korpi 2006; Korpi and Palme 2003), it is suggested that those in weak bargaining positions in the labor market will prefer to locate societal bargaining in parliamentary politics compared to staying within a market relationship. In terms of power, the democratic principle of "one person–one vote" in politics never did and still does not have a counterpart when it comes to relations between labor and capital in Western societies. Furthermore, if parliamentary representation is obtained, it is expected that those with relatively few market-derived resources will favor redistribution of income by means of state-organized policy, while those in more privileged positions will prefer a larger role for the market–property nexus in distributive processes. From a rational choice point of view, those at the lower end of the socioeconomic status ladder should have

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[2] An example of an empirically generated theory based on a translation mistake was recently reported by Charles Kurzman in the Washington Post (Kurzman 2014; for the translation check procedure, see Mellon 2011).
[3] Having said that, we will of course not completely ignore focusing on measurement errors related to data. However, we will restrict our attention to the countries displaying the most aberrant response patterns.
[4] The attitudinal items used in this study have also been constructed through a Western lens. They actually appeared in the first ISSP survey back in 1985, many years before countries from the non-Western world joined the program.
[5] For a broad overview of methodologically related issues in comparative research, see Harkness et al. (2010a).

stronger reasons for supporting state-organized economic redistribution compared to those located at the upper level. In other words, support for redistribution should come from the poor and resistance from the rich. Corneo and Grüner call this the "homo-economicus effect" (2002, 85), which is also the basic assumption of our first hypothesis (H1).

Hypothesis 1: The lower the socioeconomic status, the stronger the support for redistributive taxation.

Why should we expect that the relationships between socioeconomic position and support for state-organized economic redistribution vary systematically across countries?[6] It is important to recognize the underlying assumptions in the homo-economicus approach: that citizens in general perceive the state-organized systems of taxation and social spending as a class-relevant and efficient apparatus for leveling out market-generated economic inequalities. We propose that the validity of these assumptions differs across countries. In short, the probability that these conditions are fulfilled is significantly higher in a large extensive welfare state context, such as in the encompassing Scandinavian welfare states, compared to in a less extensive welfare state, for example, the American or the Australian welfare states, let alone in countries lacking any institutional setup reminiscent of a welfare state. Why?

The starting point is that the political-institutional framework surrounding citizens in a given context (e.g., country) is of substantial importance for structuring citizens' perceptions, preferences, and behaviors (Mettler and Soss 2004; Soss and Schram 2007; Svallfors 2007). As transmitters of resources and carriers of norms, state policy arrangements can be understood as a filter that delineates both opportunities and constraints, and through which people perceive the world (Öun 2012). In relation to the topic in this study, the following arguments can be applied.

First, the redistributive capacity of the welfare state is determined by the tax system and social spending priorities. The redistributive capacity of the tax system is primarily determined by the size of the total tax revenue. Also, the larger the budget available for social spending, the larger the redistributive capacity of the state (Åberg 1989; Edlund 1999; Edlund and Åberg 2002; OECD 1990).

Empirical evidence clearly shows that the larger the welfare state—irrespective of measures used—the higher the redistributive capacity of the welfare state. Different types of output indicators that have been applied for capturing the size of the welfare state—"total tax revenue/ GDP" or "total social spending/GDP"—are all highly correlated with more direct measures of welfare policy design. The higher the prevalence of universal/encompassing social insurance programs, the higher the levels of taxation and social spending. And, importantly, all of these measures are strongly correlated with the redistributive capacity of the welfare state (Edlund 2007; Edlund and Lindh 2015; Korpi and Palme 1998).

Second, in a large encompassing welfare state, the systems of taxation and social spending involve a comparatively larger proportion of the citizenry—and their resources—than in relatively residual welfare states. Thus, the size of the welfare state determines not only its redistributive capacity but also the extent of its influence on citizens' everyday lives: citizens in more encompassing welfare states pay a larger share of their income in taxes and their livelihood is also more dependent on services and social protection provided by the welfare state (Edlund 2007). For these reasons, citizens in encompassing welfare states are likely to develop a stronger sense of "ownership" of the state and perceive stronger incentives for being politically involved than citizens in meager welfare states (Persson and Rothstein 2015). To put it somewhat differently, rational voters should be interested in both knowing and trying to influence how tax money is collected and spent—and their interests in policy changes (toward a less ambitious or more ambitious welfare state depending on their location in the class structure) should be stronger among citizens living in a large welfare state compared to those living in a small one.

Third, arguments similar to the above apply to the extent to which the welfare state should attract attention from organized interests, such as political parties. Organized interests are important for underpinning collective memories and worldviews among citizens (Rothstein 2000). By framing public debate and by offering citizens mental tools and guidelines for interpretations of "problems of" and "solutions to" any given issue, organized interests attempt to gain public acceptance of and support for needed action and are, therefore, powerful forces in the processes of attitude formation (Edlund 2007; Svallfors 2006).

In sum, the strength of the link between socioeconomic position and attitudes toward state-organized redistribution is shaped by the redistributive capacity of the welfare state as well as the centrality of the welfare state in political articulation both at the level of organized interests and among ordinary citizens— factors that are all influenced by the size of the welfare state. Based on the arguments above, dealing with

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[6] This section builds on arguments and empirical applications provided by Edlund (2007), Edlund and Sevä (2013), and Edlund and Lindh (2015).

institutional feedback effects on public opinion, our second hypothesis (H2) proposes that the predictive power of the above mentioned rational choice-based homo-economicus theory will increase with the size of the welfare state. In countries lacking any institutional design reminiscent of a welfare state, the discrepancy between empirics and theoretical expectations will be particularly pronounced:

Hypothesis 2: The more encompassing the welfare state, the stronger the correlation between socioeconomic status and redistributive taxation in the direction as formulated in H1.

Let us now return to the essential implication of the arguments provided by world-systems theory referred to above, regarding the assumed Western-centered dominance in research (Wallerstein 1997). Using the terminology of Wallerstein, it can be hypothesized that the predictive power of the homo-economicus theory should be stronger among the core countries (the wealthy industrial societies in the Western world) compared to the semiperiphery and periphery countries (the less developed countries located outside the Western world). However, in the perspective of this article, we believe that this three-category classification schema is somewhat too broad and therefore not well-suited as an empirical measure because it is insensitive to systematic variation within the groups of core, semiperiphery, and periphery countries. We find it more fruitful to use a more fine-grained measure of societal development than is offered by the world-systems theory. In our view, it is more appropriate to use the standard indicator of a country's level of industrialization/economic development (Wilensky 2002): GDP per capita. Therefore, the hypothesis is stated as follows:

Hypothesis 3: The higher the level of economic development in a country, the stronger the correlation between socioeconomic status and redistributive taxation in the direction as formulated in H1.

Data, Methods, and Variables

The individual level data come from the 2006 Role of Government module of the International Social Survey Programme (ISSP). Each country has provided a national representative random sample of the adult population with a minimum of 1,000 cases.[7] All countries included in the international ISSP Role of Government IV data file are included in the analysis. They vary greatly in relation to geographical belonging, cultural and historical backgrounds, levels of affluence, and welfare state institutional configurations. The Northern countries of Denmark, Finland, Sweden, and Norway are all characterized by high levels of affluence and encompassing large welfare states. Germany, Switzerland, France, and the Netherlands represent affluent continental West European welfare states. The affluent Anglo-American countries: the United States, Canada, New Zealand, Australia, and Great Britain, are, compared to the above countries, characterized by having rather meager welfare states. While all of the above-mentioned countries are well-known research objects within the field of welfare state research (e.g., Esping-Andersen 1992; Korpi and Palme 1998), our analysis also covers a number of countries that are less often used in comparative research. From the Western part of Europe, we include the less affluent South European countries of Spain and Portugal, as well as Ireland—all characterized by rather limited welfare states and strong influences of the Catholic Church (Ferrera 1996). When it comes to the former communist countries of Eastern Europe, data are available for Poland, Slovenia, the Czech Republic, Latvia, Hungary, Russia, and Croatia; from the South American continent: Chile, Uruguay, the Dominican Republic, and Venezuela; from Asia: South Korea, Japan, the Philippines, Taiwan, and Israel. And finally, the only country from the African continent for which data are available is South Africa.

The measures of attitudes toward taxation are based on the following two items: Generally, how would you describe taxes in [country] today? (We mean all taxes together, including wage deductions, income tax, tax on goods and services, and all the rest.)

For those with high incomes, are taxes …
For those with low incomes, are taxes …
Answer scale: much too high/too high/about right/too low/much too low?

Both variables have been recoded into three response categories: Taxes are too high; Taxes are about right; Taxes are too low.

To make sense of the different combinations of responses that people may give to the two above items, it is appropriate to use a method that has the ability to identify the most common or dominant patterns that exist in the data. For this purpose we have decided to use latent class analysis (LCA). LCA is particularly well-suited for analyzing nonlinear relationships between categorical variables. The assumption of local

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[7] For detailed information on national sampling procedures, data collection, and response rates see the ISSP 2006 Study Monitoring Report (Scholz et al. 2008).

independence is fundamental to LCA: the total associations between observed variables are entirely explained by an unobserved (latent) variable. LCA distinguishes common preference constellations in the data, and all respondents sharing similar preferences-structures will be allocated to a specific cluster (Hagenaars and Halman 1989). If two dominant types exist among citizens—for example, those preferring a more progressive distribution of taxes vis-à-vis those wanting a more regressive distribution of taxes—a two-cluster model will fit the data. If citizens can be divided into three groups, a three-cluster model will be selected, and so on. The number of dominant preference constellations (clusters) can be determined by applying different model-fit statistics. A very desirable feature of LCA is its ability to calculate the probability for each individual to belong to each cluster, making it possible to estimate the impact of various background variables on individual-level cluster membership probabilities (Magidson and Vermunt 2003).[8] These probabilities will be used as continuous dependent variables in forthcoming ordinary least squares (OLS) regressions, where the relationships between socioeconomic status and attitudes toward taxation will be analyzed.

In the first step of the analysis, a series of exploratory models is tested against the weighted data. Each model includes the two manifest tax variables—entered as nominal scale level variables in order to be able to distinguish nonlinear response patterns in the data—and country as a nominal-level covariate. While the effect of country is allowed to vary across clusters, all effects between the covariate "country" and the two manifest indicators are set to zero. This means: (a) that the characteristics of each cluster should be identical across countries, and (b) that cluster membership probabilities can vary across countries.

Moving to the independent variables that will be used in the analysis for testing H1, the main variable is socioeconomic status, which is an additive index standardized to vary between 0 and 100. It is based on three variables: Occupational Status, Education, and Family Income.

The first component in the socioeconomic index is the International Socio-Economic Index of Occupational Status (ISEI) (Ganzeboom, De Graaf, and Treiman 1992), which is based on ISCO88.[9] ISEI is rescaled in order to range between 0 and 100. The second component is education, where we have applied the standardized educational attainment level that is available in the ISSP background variable setup. This variable, containing six categories rescaled to range between 0 and 100, is derived from the national-specific variable asking for the respondents' highest completed level of education. The third component is equivalence income, which is family income weighted by household size, converted into percentiles. The weight equation used was:

Equivalence income = family income/ (household size * 0.73) (DAE 1998).

All three components have the same weight in the constructed index, which is scaled to run between 0 and 100. In cases where information was available for two components only, the index value was based on this information. We applied this strategy in order to decrease the number of missing values on the socioeconomic index.[10] To test whether the internal structure of the index is similar across countries, we conducted a factor analysis for each country. The results showed very little cross-country variation. In all countries, data formed a one-factor solution with similar component loadings (see Appendix Table A1).

The set of independent indicators selected to measure the size of the welfare state for testing H2, contains country-level data of "total tax revenue as percentage of GDP" and "total government spending as percentage of GDP", both collected from the Heritage Foundation online database. As noted above, studies within the Organization for Economic Cooperation and Development (OECD) area of countries show that both of these indicators are strongly correlated with the redistributive capacity of the welfare state.[11] For testing H3—on the role of economic development—we use one indicator: "GDP per capita" (2006 data), collected from the World Bank online database.

Results

Attitudes toward Taxation in Thirty-Three Countries

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[8] The latent class analysis software used in this study is LatentGold 4.5.
[9] Please note that the ISCO-based component of the index is a rather rough measure in the case of South Africa and Venezuela, since the ISCO coding is available only as a one-digit code.
[10] The total number of valid responses for the tax items is 42,162. Out of these, 40,125 have a valid response on the socioeconomic index.
[11] One caveat, however, is that data covering all 33 countries were available only from 2009. However, for the countries where time-series data are available, an analysis shows that the levels of government spending and taxation tend to be rather stable between 2006 and 2009.

Based on the results of the LCA model testing exercise explained before, we selected the five-cluster model as an adequate representation of the data (for details, see Appendix, Table A2). This means that five dominant types of tax preferences exist in the data. What characterizes each of these and how do they differ across countries in popularity? Let us first begin with the characteristics of each of the five tax preference types, as shown in Table 1.

The cell entries in Table 1 are item-response probabilities by cluster membership. For example, among those respondents classified into cluster 1, the probability to respond "for high-income earners … taxes are too low" is 99.8 percent, "taxes are about right" 0.1 percent, and "taxes are too high" 0.1 percent. The probability for cluster 1 respondents to respond "for low-income earners … taxes are too low" is 1.4 percent, "taxes are about right" 16.2 percent, and "taxes are too high" 82.4 percent. In other words, cluster 1 respondents prefer a more progressive distribution of taxes: taxes on low-income earners should be decreased, while taxes on high-income earners should be increased. Respondents in the second cluster also seem to prefer a more progressive distribution of taxes, particularly when it comes to tax cuts for low-income earners. These preference types will be labeled progressive1 (A) and progressive2 (B), respectively. The third cluster, content (C), comes closest to a preference pattern demonstrating contentment with current levels of taxation. The fourth group, called cut all (D), represents respondents favoring tax cuts for all income groups. Finally, the fifth cluster is composed of respondents favoring a higher tax burden for those with low incomes, while indicating that those with high incomes should become financially disburdened. This response pattern is hereafter called regressive (E).

Table 1. Attitudes towards taxation. Characteristics of five types of tax preferences (A-E)

	Cluster 1	*Cluster 2*	*Cluster 3*	*Cluster 4*	*Cluster 5*
	Progressive1 (A)	**Progressive2 (B)**	**Content (C)**	**Cut all (D)**	**Regressive (E)**
For high-income earners…					
Taxes are too high	0.1	23.2	15.4	87.0	58.3
Taxes are about right	0.1	36.5	75.8	12.9	28.9
Taxes are too low	99.8	40.4	8.9	0.1	12.9
For low-income earners…					
Taxes are too high	82.4	99.4	47.3	73.4	14.5
Taxes are about right	16.2	0.0	52.3	25.2	0.4
Taxes are too low	1.4	0.6	0.4	1.4	85.1

Note: Cell entries are response probabilities (%) by cluster membership. (n=42,162)

The empirical results are presented as follows. First, we will show the distribution of the five tax preferences per country. Thereafter follows the central empirical part of the study: the analysis of the relationship between socioeconomic status and attitudes toward redistributive taxation per country. Here, we have performed 33 single-country OLS-regressions for each of the 5 dependent variables (the 5 tax preferences) (in total 33*5=165 regressions). The dependent variables are cluster membership probabilities and each varies between 0 and 100. Apart from socioeconomic status, each regression contains 3 other independent variables: age, gender, and work status. These are used to control for compositional differences and are not of any analytical interest.

Based on the expected patterns according to the homo-economicus theory, a series of predictability measures (PM) is developed. The better the regression results meet the theoretical expectations, the higher the country's score on the predictability measures. These predictability measures are then used to test the extent to which the sizes of the predictability measures co-vary with the size of the welfare state and the level of economic development as specified in H2 and H3, respectively. Finally, we devote special attention to the countries displaying the most deviant attitude patterns. By checking question wording, translation issues, and sample coverage in these countries, the purpose is to analyze the extent to which these aberrant patterns may be caused by measurement errors related to the survey instrument, that is, data collection procedures.

Table 2: Tax Preference Cluster Sizes and Macro Indicators by Country

	Prog 1 (A)	Prog 2 (B)	Content (C)	Cut all (D)	Regressive (E)	(n) (A-E)	GDP/capita	Tax/ GDP	Government spending/GDP
Denmark	18.3	16.0	38.1	27.6	0.0	1,266	52,041	49.5	51.0
Finland	29.9	26.2	37.6	6.0	0.3	1,085	41,119	43.1	47.3
Norway	30.4	31.3	24.4	13.7	0.4	1,218	72,960	43.4	40.9
Sweden	20.7	42.9	20.1	16.3	0.1	1,097	46,256	48.9	52.5
France	42.0	3.4	29.5	20.5	4.7	1,564	36,545	45.0	52.3
Germany	52.8	15.5	25.7	5.5	0.5	1,434	36,400	40.8	44.2
Great Britain	19.9	16.0	42.9	19.5	1.7	830	42,448	37.9	44.0
Ireland	47.6	3.8	28.8	19.3	0.5	952	53,941	32.5	35.7
Netherlands	47.2	3.8	37.7	10.4	0.9	891	44,011	38.0	45.3
Switzerland	57.0	7.7	35.1	0.0	0.1	942	57,347	29.7	32.2
Croatia	19.9	71.6	8.3	0.0	0.2	940	11,360	23.4	42.0
Israel	23.0	29.3	26.7	18.9	2.1	1,177	21,582	37.0	46.4
Portugal	34.0	52.8	11.2	2.0	0.0	1,545	19,820	37.8	45.8
Spain	27.5	43.5	21.6	6.1	1.3	2,078	28,481	37.9	38.8
Czech Rep.	24.6	23.1	32.5	17.5	2.3	1,103	15,159	36.9	42.6
Hungary	60.9	3.7	24.3	4.1	7.0	898	11,343	39.9	49.7
Latvia	40.1	44.2	7.5	8.0	0.2	855	8,986	31.3	37.7
Poland	28.8	53.7	17.1	0.0	0.4	1,115	9,002	33.5	42.1
Slovenia	37.6	47.5	11.1	2.9	0.9	911	19,725	38.4	42.4
Russia	44.8	28.9	23.8	0.0	2.6	1,468	6,948	34.6	33.4
Australia	21.3	12.6	25.5	40.6	0.1	2,511	36,101	30.6	34.2
Canada	34.6	0.1	27.4	34.4	3.6	796	40,245	33.3	39.1
USA	49.5	0.0	33.6	11.5	5.5	1,379	46,437	28.3	37.4
New Zealand	9.2	6.9	34.8	48.6	0.5	1,099	26,336	36.0	40.3
Chile	14.2	63.3	14.7	2.6	5.2	1,331	9,371	18.9	18.6
Dominican Rep.	2.3	85.1	8.1	0.3	4.3	1,992	3,794	15.0	18.1
Uruguay	9.5	69.0	11.1	5.0	5.5	943	5,879	24.0	30.2
Japan	52.5	15.8	16.5	7.5	7.7	963	34,076	27.9	36.0
South Korea	79.7	0.4	12.5	5.5	2.0	1,541	20,917	28.7	28.9
Taiwan	61.7	9.3	26.7	2.0	0.3	1,630	30,084	13.7	17.8
Philippines	0.0	15.6	25.0	43.5	15.9	1,106	1,399	14.0	17.1
South Africa	11.8	0.0	32.3	42.1	13.8	2,469	5,660	26.6	27.8
Venezuela	9.3	27.0	31.1	11.9	20.8	1,033	6,748	17.0	35.7

Note: A-E= Cluster sizes. GDP/capita (in USD); Total tax revenue/GDP; Total government spending/GDP

In Table 2, the size of each of the 5 tax preference clusters (A–E) is shown by country. Speaking about broader patterns across 33 very heterogeneous countries is not an easy task. However, it becomes quite clear that in general, support for progressive taxation (A–B) is rather strong across countries, while support for regressive taxation (E) is generally low.

Focusing on the countries exhibiting the most deviant patterns compared to the majority of countries, we find the Philippines, South Africa, and Venezuela. In these countries, support for regressive taxation (E) is quite pronounced: 14 percent in South Africa, 16 percent in the Philippines, and even 21 percent in Venezuela. In addition, Table 2 shows that in both South Africa and the Philippines, the most common public preference is general tax cuts. Taken together, data suggest that these two citizenries express strong support for a prototypical neoliberal right-wing tax system. Taking into account the great poverty among large parts of the population, the above reported results are, we believe, representative of empirical findings where researchers have reasons to question the quality of data. We will return to this issue later. In the next section, we analyze the relationships between socioeconomic status and attitudes toward redistributive taxation in order to assess the empirical support of H1–H3. When examining the results, we will also pay special attention to the response patterns observed for the above three countries.

Relationships between Socioeconomic Status and Attitudes toward Taxation in Thirty-Three Countries

In Table 3, columns A–E show the effect of socioeconomic status on each of the five dependent variables (standardized regression coefficients) per country. In order to assess the degree of correspondence between the assumptions formulated in H1—a negative relationship between socioeconomic status and support for redistributive taxation—we have constructed a series of predictability measures displayed in the last three columns of Table 3. These measures are based on the regression results presented in columns A–E. Below follows the theoretical rationale for the design of the predictability measures, as well as how they are constructed.

According to the basic homo-economicus theory, those economically less well-off should score high on the progressive taxation preferences (A, B) and low on preferences for general tax cuts (D) as well as on support for regressive taxation (E). For contented respondents (C) it is not fruitful to specify an expected direction of the relationship. In some countries, the "leftist" position may be to defend the current levels of taxation against those arguing for lowered tax rates; whereas in other countries, the dividing line may go between those in favor of increased taxation and those content with taxes as they are. Therefore, the actual sign of the contented preference coefficient is of no interest.

The first predictability measure (PM I), measuring the strength of the association between socio-economic status and preferences for redistributive taxation is therefore specified as:

$$[\text{PM I} = (- beta_a - beta_b + |beta_c| + beta_d + beta_e)*100]$$

However, in order to check the robustness of the results we have designed two complementary measures. The second predictability measure, PM II, includes only significant beta coefficients (10% level) and for PM III, only the three strongest beta coefficients are included. The theoretical rationale underlying PM III is that the number of dominant lines of political conflict over tax policy in most countries is likely to be limited.

Columns A and B in Table 3 display the associations between socioeconomic position and attitudes toward progressive taxation. While it is theoretically expected that both of these relationships should be negative, we find that this "twin pattern" occurs only in 19 out of 33 countries, and in some cases only one relationship is significant. It is, however, worth underlining that virtually all of the North and West European countries display this twin pattern (except Great Britain). In the remaining 14 countries, we find either combinations of positive and negative associations with progressive taxation, or—in a small number of countries: the Philippines, Venezuela, Uruguay, and Hungary—no significant relationships at all.

When it comes to the relationship between socioeconomic position and the likelihood of preferring a smaller welfare state by reducing taxes—and thereby the decreasing redistributive capacity of the state—in a majority of countries the expected positive relationship cannot be observed (column D). In 16 countries, the relationship is nonsignificant and in 4 countries it is significantly negative, that is, the support for general tax cuts comes disproportionally from the lower strata on the socioeconomic ladder. In thirteen countries, however, we can observe the expected significant positive relationship.

In column C, the focus is on those who are content with the income tax. We can observe a predominantly positive relationship between socioeconomic position and tax contentment in most of the countries, although the magnitude of the relationship varies substantially. Most of the pronounced relationships pertain to relatively affluent and advanced welfare states.

Table 3: Attitudes towards taxation by socio-economic status in thirty-three countries

	A	B	C	D	E	PM I*	PM II**	PM III***
	Prog 1	Prog 2	Content	Cut all	Regressive			
Expected direction	**-**	**-**	**‖**	**+**	**+**			
Denmark	**-17.0**	**-21.2**	3.9	**19.8**	0.5	62.4	58.0	58.0
Finland	**-25.3**	**-19.3**	**26.9**	**23.2**	-1.7	93.0	94.7	75.4
Norway	**-10.2**	**-14.7**	**19.1**	1.9	**7.1**	52.9	51.1	44.0
Sweden	**-27.5**	**-13.9**	**12.9**	**31.0**	-2.6	82.8	85.4	72.4
France	**-11.0**	**-19.5**	**6.0**	2.1	**16.1**	54.6	52.5	46.5
Germany	**-10.6**	**-16.4**	**20.6**	1.3	-2.2	46.8	47.7	47.7
Great Britain	0.5	**-19.1**	**8.7**	-4.1	1.7	24.9	27.9	23.7
Ireland	-2.1	**-13.2**	**13.6**	**-11.0**	5.3	23,2	15.8	15.8
Netherlands	**-25.4**	**-19.4**	**20.3**	**18.7**	**7.6**	91.4	91.4	65.1
Switzerland	**-11.9**	-4.4	**13.4**	2.9	**6.6**	39.2	31.9	31.9
Croatia	1.4	**-6.5**	**6.3**	1.7	-4.7	8.4	12.8	8.1
Israel	**-9.9**	**-16.0**	**11.3**	**7.6**	**6.6**	51.3	51.3	37.2
Portugal	-3.0	**-7.6**	**12.6**	0.7	1.2	25.1	20.2	23.2
Spain	**-5.3**	**-9.7**	**15.0**	-0.3	-3.5	26.2	29.9	29.9
Czech Rep.	**-22.5**	**-10.4**	**14.8**	**16.1**	2.9	66.5	63.7	53.3
Hungary	0.0	3.0	-2.0	2.5	1.2	2.7	0.0	1.5
Latvia	1.2	**-7.1**	3.4	3.9	-0.3	12.8	7.1	14.4
Poland	**-20.1**	**6.3**	**14.2**	**15.3**	1.0	44.3	43.2	49.5
Slovenia	**-7.9**	**-7.1**	**15.8**	**17.9**	**-7.4**	41.3	41.3	41.7
Russia	4.4	**-8.7**	1.8	-3.1	-1.8	1.2	8.7	1.2
Australia	0.1	**-12.4**	**11.4**	**-5.6**	1.6	19.6	18.2	18.2
Canada	**-11.4**	**-14.7**	6.0	**6.5**	4.4	43.1	32.7	32.7
USA	0.5	**-21.0**	2.8	**-5.1**	-0.7	17.5	15.9	18.7
New Zealand	**-11.8**	**-17.4**	0.6	**9.9**	0.4	40.0	39.0	39.0
Chile	4.5	**-11.0**	**13.7**	3.0	**-6.1**	17.1	18.6	18.6
Dominican Rep.	**5.0**	-3.2	-0.1	0.9	2.8	2.0	-5.0	1.0
Uruguay	0.5	4.6	-0.7	**6.7**	**-9.2**	-6.9	-2.5	-7.1
Japan	-5.5	**-7.3**	3.0	**6.2**	**6.7**	28.7	20.2	20.2
South Korea	**-8.3**	-2.2	4.1	**9.1**	4.2	27.9	17.4	21.6
Taiwan	**12.3**	**-12.9**	**-9.6**	**-8.0**	1.9	4.2	2.2	10.2
Philippines	1.8	4.9	1.7	4.5	**-9.4**	-9.9	-9.4	-9.9
South Africa	**-4.1**	**-9.4**	**7.5**	1.5	**-6.3**	16.2	14.7	10.6
Venezuela	1.3	3.4	**8.5**	-2.6	**-8.8**	-7.7	-0.4	-3.8

Notes: Cell entries in columns A–E are standardized regression coefficients *100. PM I–III are predictability measures. PM I–III: * = All five beta coefficients included; ** = only significant (10 percent level) beta coefficients are included; *** = only the three strongest beta coefficients are included. Bold coefficients are significant (10 percent level). Age, gender, and work status are included as independent variables but not shown. Numbers in columns A–E are rounded. N=42,125.

Finally, as shown previously in Table 2, the proportion of people supporting a more regressive distribution of taxes is quite small in most countries, which to some extent may explain why the association between socioeconomic position and attitudes toward regressive taxation is nonsignificant in a large number of countries (Table 3, column E). Two findings are worth emphasizing. First, the expected positive relationship is manifested in six countries only. Second, in the three countries where regressive tax preferences have shown to be particularly common—the Philippines, Venezuela, and South Africa—we observe a negative significant relationship: the lower the socioeconomic position the higher the support for a more regressive distribution of taxes.

The empirical results in Table 3 demonstrate that the similarity between the theoretically expected relationship and empirical observations varies extensively across countries. We will now examine the extent to which the size of the welfare state and the level of economic development "explain" this variation.

In Table 4, the correlation coefficients (Pearson's r) between the two indicators of the size of the welfare state, as well as the indicator of economic development, and each of the three predictability measures are displayed. The associations are quite strong and positive indicating that the strength of the expected relationships between socioeconomic position and attitudes toward redistributive taxation co-vary with the size of the welfare state and the level of economic development.

Table 4: Associations between Predictability Measures (PM I-III) and Macro Indicators

	PM I	PM II	PM III
Total tax revenue/GDP	74	75	76
Total government spending/GDP	65	67	66
GDP/capita	58	54	57

Notes: Cell entries are correlation coefficients*100 (Pearson's r)(n=33); All correlations are significant at the 1 percent level.

The results indicate that the expected relationships between socioeconomic position and attitudes toward redistributive taxation are far more often met for the Western, especially the North European countries, than for the less affluent non-Western countries. The predictability score is substantially lower for this latter group of countries. Uruguay, Venezuela, and the Philippines even report a negative score on all three variants of the predictability measure.

Overall, the results suggest that the fit between theory and empirics is much better in affluent Western compared to less affluent non-Western countries. Moreover, within the latter group, the structure of the observed patterns shows a much larger cross-country variation. Arguably, some of the results cause suspicions about the quality of data. This relates in particular to the empirical results for the Philippines, Venezuela, and South Africa. In the next section we take a closer look at these three countries by examining issues related to translation and sample coverage.

Venezuela, South Africa, and the Philippines: Measurement Errors Related to Translation or Sample Coverage?

In this section we focus on the three countries in which preferences toward taxation are strikingly different from those in the other examined countries. In these countries, many respondents believe that the poor should carry a higher share of the tax burden, and that taxes on those with higher incomes should be lowered. Even more peculiar, the data reveal that a surprisingly large share of respondents embracing these views does not belong to the upper classes of society. On the contrary, they are, in fact, rather poor themselves. First, we examine potential errors related to translation. Second, we examine sample coverage focusing on the representation of the poor in the samples.

The translation process of converting the British English ISSP source questionnaire into native languages can produce errors (Harkness, Villar, and Edwards 2010b; Smith 2011; Weisberg 2005; Willis et al. 2010). The used tax items use a five-point scale ranging from [taxes are] "much too high" to "much too low." Although the ISSP Working Principles (ISSP Research Group 2012) state that primary researchers in all participating countries must oversee an appropriate translation into the national language/languages, a simple translation error reversing response categories could produce the observed patterns.[12]

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[12] ISSP Working Principles: "non-literal translations, that is, 'culturally equivalent questions,' are to be notified to the group and indicated in the documentation." Apart from that there are no mandatory rules for the procedure of the translation process.

This seems a plausible source of error especially for the Philippines and South Africa because in both countries the ISSP 2006 survey was conducted in six different languages, with uneven numbers of respondents using the various questionnaires.[13] Reversing the direction of the response scale in a dominant language could be enough to cause outcomes that look like high levels of support for regressive taxation. Moreover, since it is likely that many of those involved in the data processing do not understand all of these languages, possible mistakes may not be easily discovered.

For South Africa and Venezuela this potential error can be excluded on the basis of language checks conducted by native speakers.[14] Thus, the response patterns do not seem to be caused by errors in either translation or wording in these two countries. For examining the Philippines data we obtained a variable from the national data set indicating the language in which the interview was conducted.[15]

An analysis of the response patterns across language groups shows that three of five language groups have a somewhat larger probability of holding nonredistributive tax preferences. However, the probability that a translation error would appear in three languages simultaneously seems unlikely. Besides, if such a massive translation error were true, the support for nonredistributive taxation would most certainly be much stronger than it actually is in the Philippines. In our judgment, the results for Philippines do not seem to depend on translation errors.

Another source of error worth considering is the respondent selection issue, in this case a sample coverage error. Such an error could be responsible for the data outcome (Heeringa and O'Muircheartaigh 2010). Coverage errors generate bias due to the omission of non-covered sample units (Weisberg 2005). The Philippines, South Africa, and Venezuela have large areas of informal settlements with significant numbers of poor people making a living outside the formal economy (Perazzi, Merli, and Paredes 2010; Schneider 2002; Wills 2009). It is easy to imagine that sampling procedures and/or interview situations might be difficult in such areas. If these areas are not covered in the sample, the number of respondents belonging to the poorest classes of society would be severely underestimated; the very same classes that have the strongest reasons for supporting a more redistributive tax policy.

Moving beyond the obligatory methodological report on interview situations in informal settlements, we queried the primary researchers about this issue. We received responses from the Philippines and Venezuela and the researchers assured us that these areas had been covered. Interviewers in the Philippines were given special training on area coverage, and coverage of slum areas was said to not pose much of a problem. In Venezuela a number of people in poor districts were employed as field staff, which facilitated access to the dangerous zones as they lived there themselves and knew how to operate in these areas.

The sample coverage issue was also approached from another angle, using national statistics in order to assess the percentage of the population living below the subsistence level.[16] For each country, the obtained estimate was thereafter compared with the income distribution in the country sample.[17] The national specific family income variable and household size were used to determine the equivalence income.[18]

Beginning with the Philippines, official statistics estimate the subsistence threshold line in 2006 to be PHP835 per month, and 15 percent of the general population is below this line.[19] In the ISSP sample, we

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[13] The languages covered by the Philippine survey are English, Tagalog, Ilocano, Bicolano, Ilonggo, and Cebuano. In South Africa the languages are English, Afrikaans, Venda, Xhosa, Zulu, and Tsonga. According to the ISSP Study Monitoring Report (Scholz et al. 2008), all translations were carried out by trained translators and checked by language experts.

[14] Here we would like to thank Ivet Solanes Ros and Webster Whande for their support.

[15] Thanks to Gerado A. Sandoval from the Social Weather Stations in the Philippines.

[16] The poverty and subsistence thresholds, respectively, are absolute figures, comprising people who cannot afford to buy a national specific minimum basket of goods. The subsistence threshold lies even below the poverty line and indicates the very minimum level of what a person needs to survive. The definitions of these levels are set by the countries.

[17] We are aware that there are additional dimensions of poverty that cannot be comprehended by measuring pure income levels. Furthermore, there exist different income-based measures of poverty as well as poverty lines (see, e.g., Ravallion 2010). Apart from that, in urban economies with large informal sectors, income flows may be erratic. The same is true for agrarian economies where household incomes rely on the harvest cycle (Coudouel, Hentschel, and Wodon 2002). Nevertheless, the comparison of income statistics with the income information in the survey data should be sufficient to figure out whether an entire group of the society might be excluded from the survey.

[18] Incomes tend to be underestimated in surveys, especially with only one income question, because respondents simply forget to include all income sources (DAE 1998). However, that does not account for those respondents living at the existence minimum. Those who have very little, are usually able to keep track of it. Since the age structure of the household members is unknown, the following formula was used: equivalence income ¼ family income / (household size * 0.73). (For further information regarding the construction of equivalence income see DAE [1998].)

[19] National Statistical Coordination Board, Philippines, 2006.

find that 12.5 percent of the sample is below the line. Thus, differences between the two estimates are quite small or at least not large enough to explain the high support for regressive taxation in the Philippines.

For South Africa, we can only apply a quite rough measure of the poverty rate. First, the income information in the South African ISSP sample is available only in the form of income classes. The official subsistence threshold line identifies a specific income value. Second, the ISSP income variable has a high nonresponse rate (27 percent), thus making it difficult to judge the extent to which the sample is representative of the population in terms of income distribution.

Various possible poverty measures for South Africa can be found in the literature. For our purposes, the most suitable measure found was "the necessary amount of money to purchase enough food to meet the basic daily food-energy requirements for an average person in South Africa over one month." In 2005, it was estimated to be ZAR250.[20] Based on these facts, we decided to use the lowest income class available in the ISSP data (ZAR250 per month) as the threshold. Although prerequisites are not ideal, the analysis should reveal whether the poor are severely underrepresented. According to official statistics, the poverty rate in 2006 was 23 percent. Our estimate on the ISSP sample shows a poverty rate close to 25 percent. The ISSP sample thus comes fairly close to representing the poor population of South Africa.

In Venezuela, INE (Instituto Nacional De Estadística) data differentiate between poor and extremely poor people. As done for the Philippines and South Africa we focus on the group of extremely poor. In Venezuela the percentage of the population belonging to this category is calculated on the basis of a basket of goods. Since these data do not contain any specific monetary value, a direct comparison of official statistics and ISSP data is not possible. Nevertheless, to get an idea of the proportions, we applied the World Bank's international poverty line of USD 1.25 per day as a rough estimate. Based on this estimate, the ISSP data underestimate the poverty rate for Venezuela, by four percentage units (8 percent compared to 12 percent). This result also does not suggest that the collected data severely misrepresent the actual socioeconomic structure in Venezuela.

In sum, it seems that the observed aberrant response patterns in Venezuela, South Africa, and the Philippines are not related to obvious translation errors, such as reversed response scales, or to sample coverage.[21]

Conclusion

Beginning with a simple rational choice-inspired homo-economicus hypothesis saying that those who are better off in the socioeconomic hierarchy should have less reason to support state-organized economic redistribution compared to those situated at the lower levels in the socioeconomic hierarchy, this article set out to empirically study the relationships between socioeconomic status and attitudes toward redistributive taxation across 33 countries.

The empirical results demonstrated substantial cross-country variation regarding the correspondence between empirical observations and theoretical expectations. In some countries, the relationships between socioeconomic position and attitudes toward redistributive taxation were clearly in line with expectations. However, in many countries, relationships were weak and in some countries, even inverted.

When faced with such tremendous cross-national variation in response patterns, a common strategy among researchers is to question the quality of the data and data collection procedures for the countries deviating strongly from theoretical expectations. Somewhat bluntly put, this "questioning" can be expressed in two different ideal-typical strategies: implicit questioning (avoiding use of the data) or explicit questioning (using the data, and basically arguing that it is bad data). The strategy chosen in this study was very different and quite uncommon in cross-national attitude research. Our main argument was that cross-national variation in attitudes as a phenomenon may point to theory limitations in terms of generalization, that is, that the chosen theory may be more valid in some countries than in others. In other words, the lack of fit between theory and empirical observations may be rooted in problems related to theory rather than the quality of data collection procedures.

Building on insights and results from previous research we formulated two "cultural distance" hypotheses, both arguing that the correspondence between the homo-economicus theory and empirics should indeed vary systematically across countries. The first one focused on the role of the welfare state and institutional feedback effects on public opinion and suggested that the more encompassing the welfare state, the

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[20] The Presidency of South Africa (2008) Development Indicators 2008: Van der Berg (2007) based on AMPS of various years (1993–2007), Bhorat (2007) based on Statistics SA IES data (1995, 2000, and 2005), and Statistics South Africa and National Treasury (2007:23). ZAR stands for South African Rand.

[21] Further analyses have been done taking into account different regions and therewith different regional subsistence lines for the Philippines and South Africa. The results do not change the cross-regional data outcomes.

stronger the correlation between socioeconomic status and redistributive taxation. The second hypothesis, related more to the level of economic affluence and associated scientific dominance across countries, stated that the higher the level of economic development in a country, the stronger the correlation between socioeconomic status and redistributive taxation. Both of these hypotheses received considerable empirical support. The relationship between socioeconomic status and support for redistributive taxation was found to be substantially stronger in the wealthy Western welfare states—particularly among those of Northern Europe—than in the poor non-Western countries lacking any institutional design reminiscent of a welfare state.

For some countries—the Philippines, Venezuela, and South Africa—the empirical results deviated from theoretical expectations to such an extent that we felt compelled to perform in-depth analyses of some key aspects of the data collection procedures in these countries regarding translation and sample coverage. However, we did not find any clear evidence that the observed results were rooted in measurement errors related to either translation or sample coverage. Moreover, when keeping in mind that the apparent misfit between the homo-economicus theory and empirics relates to virtually all of the rather poor non-Western countries, explanations related to measurement error in the data collection procedures used in the Philippines, South Africa, and Venezuela seem even less plausible.

To conclude, we believe that the results in this study show that socioeconomic indicators such as income, education, and occupational status are relevant factors explaining public support for state-organized economic redistribution in many of the Western countries, but not in the poor non-Western countries. What are the broader implications of this finding? In the context of this study, we would like to stress that theoretically deviant empirical observations in cross-national research may not be related to bad data quality, but to theory generalization limitations. The weak correspondence between the homo-economicus theory and empirics observed in most of the non-Western countries may indicate that Western theoretical assumptions are simply not valid.

References

Åberg, Rune. 1989. "Distributive Mechanism of the Welfare State." European Sociological Review 5:167–182.

Blasius, Jörg, and Victor Thiessen. 2006. "Assessing Data Quality and Construct Comparability in Cross-National Surveys." European Sociological Review 22:229–242.

Blasius, Jörg, and Victor Thiessen. 2012. Assessing the Quality of Survey Data. London: Sage.

Corneo, Giacomo, and Hans-Peter Grüner. 2002. "Individual Preferences for Political Distribution." Journal of Public Economics 83(1):83–107.

Coudouel, Aline, Jesko S. Hentschel, and Quentin T. Wodon. 2002. "Poverty Measurement and Analysis." Pp. 29–74 in The PRSP Sourcebook. Washington, DC: World Bank.

Deutsche Arbeitsgemeinschaft Epidemiologie (DAE). 1998. "Messung und Quantifizierung soziodemographischer Merkmale in epidemiologischen Studien [Measurement and quantification of sociodemographic indicators in epidemiological studies]." Pp. 7–38 in Messung soziodemographischer Merkmale in der Epidemiologie [The measurement of sociodemographic indicators in epidemiology], edited by Wolfgang Ahrens, Bärbel-Maria Bellach, and Karl-Heinz Jöckel. Munich: MMV Medizin Verlag München.

Edlund, Jonas. 1999. "Attitudes to Income Redistribution and Taxation in Social Democratic and Liberal Welfare State Regimes: A Comparison Between Sweden, Great Britain, and the United States." Pp. 13–110 in Modern Society and Values: A Comparative Analysis Based on the ISSP Project, edited by Niko Tos, Peter P. Mohler, and Brina Malnar. Ljubljana: University of Ljubljana and ZUMA.

Edlund, Jonas. 2007. "Class Conflicts and Institutional Feedback Effects in Liberal and Social Democratic Welfare Regimes: Attitudes towards State Redistribution and Welfare Policy in Six western Countries." Pp. 30–79 in The Political Sociology of the Welfare State: Institutions, Cleavages, Orientation, edited by Stefan Svallfors. Stanford, CA: Stanford University Press.

Edlund, Jonas, and Rune Åberg. 2002. "Social Norms and Tax Compliance." Swedish Economic Policy Review 9(1):201–228.

Edlund, Jonas, and Arvid Lindh. 2015. The Democratic Class Struggle Revisited: The Welfare State, Social Cohesion and Political Conflict." Acta Sociologica 58(4):311-328.

Edlund, Jonas, and Ingemar J. Sevä. 2013. "Exploring the 'Something for Nothing' Syndrome: Confused Citizens or Free Riders? Evidence from Sweden." Scandinavian Political Studies 36:293–319.

Esping-Andersen, Gøsta. 1992. "The Three Political Economies of the Welfare State." Pp. 92–123 in The Study of Welfare State Regimes, edited by J.E. Kolberg. Armonk, NY: M.E. Sharpe.

Ferrera, Maurizio. 1996. "Southern Model of Welfare in Social Europe." Journal of European Social Policy 6(1):17–37.

Ganzeboom, Harry B. G., Paul M. De Graaf, and Donald J. Treiman. 1992. "A Standard International Socio-Economic Index of Occupational Status." Social Science Research 21(1):1–56.

Hagenaars, Jacques A., and Loek C. Halman. 1989. "Searching for Ideal Types: The Potentialities of Latent Class Analysis." European Sociological Review 5:81–96.

Harkness, Janet A., Michael Braun, Brad Edwards, Timothy P. Johnson, Lars Lyberg, Peter Ph. Mohler, Beth-Ellen Pennell, and Tom W. Smith. 2010a. Survey Methods in Multinational, Multiregional and Multicultural Contexts. New York: Wiley.

Harkness, Janet A., Ana Villar, and Brad Edwards. 2010b. "Translation, Adaptation and Design." Pp. 117–141 in Survey Methods in Multinational, Multiregional and Multicultural Contexts, edited by Harkness et al. New York: Wiley.

Heeringa, Steven G., and Colm O'Muircheartaigh. 2010. "Sampling Designs for Cross-Cultural and Cross-National Survey Programs." Pp. 251–268 in Survey Methods in Multinational, Multiregional and Multicultural Contexts, edited by Harkness et al. New York: Wiley.

Heritage Foundation. 2009. Online database. Retrieved June 15, 2015 (http://www.heritage.org/index/explore).

Instituto Nacional de Estadística (INE), República Bolivariana de Venezuela. 2006. Retrieved March 14, 2012 (http://www.ine.gov.ve/ index.php?option=com_content&view= category&id=104:pobreza&Itemid=45).

International Social Survey Programme (ISSP) Research Group. 2012. ISSP Working Principles. Retrieved March 1, 2015 (http://www.issp.org/page.php?pageId=170).

Kankaras, Miloš, Guy Moors, and Jeroen K. Vermunt. 2011. "Testing for Measurement Invariance with Latent Class Analysis." Pp. 359–384 in Cross-Cultural Analysis: Methods and Applications, edited by E. Davidov, P. Schmidt, and J. Billiet. New York: Routledge.

Korpi, Walter. 2006. "Power Resources and Employer-Centered Approaches in Explanations of Welfare States and Varieties of Capitalism: Protagonists, Consenters, and Antagonists." World Politics 58:167–206.

Korpi, Walter, and Joakim Palme. 1998. "The Paradox of Redistribution and Strategies of Equality: Welfare State Institutions, Inequality and Poverty in the Western Countries." American Sociological Review 63:661–687.

Korpi, Walter, and Joakim Palme. 2003. "New Politics and Class Politics in the Context of Austerity and Globalizsation: Welfare State Regress in 18 Countries, 1975–95." American Political Science Review 97:425–446.

Kurzman, Charles. 2014. "World Values Lost in Translation." Retrieved April 1, 2015 (http://www.washingtonpost.com/blogs/monkey-cage/wp/2014/09/02/world-values-lost-in-translation/).

Magidson, Jay, and Jeroen K. Vermunt. 2003. "Latent Class Models." In Handbook for Quantitative Methodology, edited by David Kaplan. Newbury Park, CA: Sage.

Mellon, Jonathon. 2011. "Examining Survey Translation Validity Using Corpus Linguistics." Working paper in the Nuffield Working Papers Series in Politics.

Mettler, Suzanne, and Joe Soss. 2004. "The Consequences of Public Policy for Democratic Citizenship: Bridging Policy Studies and Mass Politics." Perspectives on Politics 2:55–73.

National Statistical Coordination Board (NSCB), Philippines. 2006. Annual per Capita Poverty Thresholds, Poverty Incidence and Magnitude of Poor Families: 2000, 2003 and 2006. Retrieved November 14, 2012 (http://www.nscb.gov.ph/poverty/2006_05mar08/ table_1.asp).

Organization for Economic Cooperation and Development (OECD). 1990. The Personal Income Tax Base. Paris.

Öun, Ida. 2012. Conflict and Concord in Work and Family. Family Policies and Individual's Subjective Experiences. Doctoral dissertation. Department of Sociology, Umeå Universitet.

Perazzi, Josefa R., Giampaolo O. Merli, and Laura C. Paredes. 2010. "The Size of the Informal Economy in Venezuela." El Norte-Finnish Journal of Latin American Studies 5:1–12.

Persson, Anna, and Bo Rothstein. 2015. "It's My Money: Why Big Government May Be Good Government." Comparative Politics 47(2):231–249.

Presidency of South Africa. 2008. Development Indicators 2008. Retrieved December 1, 2014 (http://www.info.gov.za/ view/DownloadFileAction?id=85063).

Ravallion, Martin. 2010. "Poverty Lines across the World." World Bank Policy Research Working Paper 5284. Washington, DC. Retrieved March 1, 2015 (http://www.wds.worldbank.org/external/default/WDSContentServer/ IW3P/IB/2010 /04/27/000158349_20100427143536/Rendered/INDEX/WPS5284.txt).

Rothstein, Bo. 2000. "Trust, Social Dilemmas and Collective Memory." Journal of Theoretical Politics 12:477–501.

Rothstein, Bo, and Sven Steinmo. 2002. (eds.). Restructuring the Welfare State: Political Institutions and Policy Change. New York: Palgrave.

Schneider, Friedrich. 2002. Size and Measurement of the Informal Economy in 110 Countries around the World. Washington, DC: Rapid Response Unit, World Bank.

Scholz, Evi, Timo Faaß, Janet Harkness, and Marleen Heller. 2008. ISSP Study Monitoring 2006. Report to the ISSP General Assembly on Monitoring Work Undertaken for the ISSP by Gesis-ZUMA, Gesis Methodenberichte 11. Mannheim: Gesis. Retrieved March 1, 2015 (http://www.gesis.org/issp/issp-modules-profiles/role-of-government/ 2006/).

Smith, Tom W. 2011. "Refining the Total Survey Error Perspective." International Journal of Public Opinion Research 23(4):464–484.

Soss, Joe, and Sanford F. Schram. 2007. "A Public Transformed? Welfare Reform as Policy Feedback." American Political Science Review 101(1):111–127.

Statistics South Africa and National Treasury. 2007. A National Poverty Line for South Africa. Retrieved March 1, 2015 (http://www.treasury.gov.za/publications/other/povertyline /Treasury%20StatsSA%20poverty%20line%20 discussion%20paper.pdf)

Steinmo, Sven, Kathleen Thelen, and Frank Longstreth, eds. 1992. Structuring Politics: Historical Institutionalism in Comparative Analysis. Cambridge: Cambridge University Press.

Svallfors, Stefan. 2006. The Moral Economy of Class. Stanford, CA: Stanford University Press.

Svallfors, Stefan. 2007. "Introductory Chapter." Pp. 1–29 in The Political Sociology of the Welfare State: Institutions, Social Cleavages and Orientations, edited by Stefan Svallfors. Stanford, CA: Stanford University Press.

Wallerstein, Immanuel. 1997. "Eurocentrism and Its Avatars: The Dilemmas of Social Science." New Left Review 226:93–107.

Weisberg, Herbert F. 2005. The Total Survey Error Approach: A Guide to the New Science of Survey Research. Chicago: University of Chicago Press.

Wilensky, Harold L.. 2002. Rich Democracies: Political Economy, Public Policy, and Performance. Los Angeles, CA: University of California Press.

Willis, Gordon B., Martha Stapleton Kudela, Kerry Levin, et al. 2010. "Evaluation of a Multistep Survey Translation Process." Pp. 141–156 in Survey Methods in Multinational, Multiregional and Multicultural Contexts, edited by Harkness et al. New York: Wiley.

Wills, Gabrielle. 2009. "South Africa's Informal Economy: A Statistical Profile." Wiego Working paper (Urban Policies) 6. Retrieved March 1, 2015 (http://wiego.org/sites/wiego.org/files/publications/files/Wills_WIEGO_ WP6.pdf).

World Bank. 2006. Tax revenue (% GDP). Retrieved November 14, 2014 (http://data.worldbank.org/indicator/GC.TAX.TOTL.GD.ZS?page=1&order=wbapi_data_value_2007%20w bapi_data_value%20wbapi_data_value-first& sort=asc).

Appendix

Table A1: Socioeconomic Index: Principal Component Factor Analysis Using Varimax Rotation

Country	Education	Family Income	ISEI	Variance in %
Denmark	0.79	0.70	0.85	61.1
Finland	0.84	0.68	0.85	62.8
Norway	0.77	0.73	0.84	61.1
Sweden	0.79	0.70	0.83	60.0
France	0.79	0.78	0.84	64.4
Germany	0.86	0.70	0.87	66.2
Great Britain	0.79	0.77	0.83	63.3
Ireland	0.84	0.70	0.84	63.6
Netherlands	0.77	0.72	0.83	59.6
Switzerland	0.87	0.63	0.88	64.2
Croatia	0.87	0.74	0.88	69.2
Israel	0.83	0.59	0.85	58.9
Portugal	0.84	0.72	0.86	65.2
Spain	0.83	0.79	0.86	68.7
Czech Rep.	0.89	0.61	0.89	65.3
Hungary	0.87	0.63	0.87	63.6
Latvia	0.82	0.62	0.88	60.9
Poland	0.88	0.73	0.88	69.1
Slovenia	0.87	0.81	0.90	74.2
Russia	0.79	0.62	0.84	57.2
Australia	0.75	0.71	0.78	55.9
Canada	0.71	0.61	0.78	49.5
USA	0.79	0.78	0.82	63.5
New Zealand	0.73	0.67	0.78	53.1
Chile	0.83	0.79	0.86	68.1
Dominican Rep.	0.80	0.72	0.84	62.0
Uruguay	0.86	0.81	0.89	72.8
Japan	0.78	0.73	0.80	58.9
South Korea	0.82	0.79	0.86	67.4
Taiwan	0.82	0.77	0.85	66.7
Philippines	0.78	0.71	0.84	60.1
South Africa	0.85	0.76	0.85	67.5
Venezuela	0.82	0.77	0.68	57.7

Table A2: Model fit statistics (n=42,162)

Model	L^2	CAIC (L^2)	df	L^2 reduction %
1	12679.4	9650.6	260	0.0
2	5536.3	2938.5	223	56.3
3	3316.1	1149.3	186	73.8
4	1834.7	99.0	149	85.5
5	877.7	-427.1	112	93.1
6	452.1	-421.6	75	96.4

Notes: The L^2 value of model 1 (the 1-cluster model), the baseline model, indicates the maximum association between the manifest variables that can be explained by any latent class variable. Judging by the consistent Akaike information criterion statistic (CAIC) (the lower the value, the better the model), the baseline model should be rejected in favor of a more complex model (Kankaras, Moors, and Vermunt 2011). By relying on the CAIC statistic, it is suggested that the five-cluster model should be chosen (model 5). The L^2 value is reduced by 93.1 percent. Furthermore, and very important for a good model fit, the three error correlations (i.e., bivariate residuals that the latent variable does not account for) between the manifest variables are all nonsignificant (table available on request).