MISPERCEIVING INEQUALITY

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ABSTRACT

A vast literature suggests that economic inequality has important consequences for politics and public policy. Higher inequality is thought to increase demand for income redistribution in democracies and to discourage democratization and promote class conflict and revolution in dictatorships. Most such arguments crucially assume that ordinary people know how high inequality is, how it has been changing, and where they fit in the income distribution. Using a variety of large, cross-national surveys, we show that, in recent years, ordinary people have had little idea about such things. What they think they know is often wrong. Widespread ignorance and misperceptions emerge robustly, regardless of data source, operationalization, and measurement method. Moreover, perceived inequality-not the actual level-correlates strongly with demand for redistribution and reported conflict between rich and poor. "\¥e suggest that most theories about political effects of inequality need to be reframed as theories about effects of perceived inequality.

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1 Introduction

Economic inequality is believed to have important consequences for politics and public policy. In democracies, where the poor majority can vote to tax the rich, higher inequality is thought to produce more generous social spending. *Ceteris paribus, unequal democracies should redistribute more than equal ones.* In dictatorships, the greater the income gap, the more the poor can gain by overthrowing and expropriating their rulers. *Unequal autocracies should be more prone to revolution.* Similarly, the more skewed are the distributions of property and income, the more elites should fear to extend the franchise. *High inequality should discourage democratization.*

These arguments—familiar from the works of Aristotle, Marx, and many more recent scholars—seem plausible. But what if most citizens do not *know* whether they are relatively rich or poor? Everyone knows his own income, but not necessarily the distribution into which it fits. Ordinary people may have little idea how much wealth elites have accumulated and whether the gap is growing or shrinking. Even the rich may fail to gauge how strong the motive is for the poor to revolt. In such cases, the neat link between actual inequality and political outcomes evaporates.

We provide evidence that such uncertainty and misperception are extremely widespread. Results from a number of large, cross-national surveys suggest that in recent years ordinary people have known little about the extent of income inequality in their societies, its rate and direction of change, and where they fit into the distribution. What they think they know is often wrong.[1] This finding is robust to data sources, definitions, and measurement instruments. For instance, perceptions of inequality are no more accurate if reinterpreted as being about wealth rather than income.

A strange inconsistency underlies much recent scholarship. On one hand, theories assume that individuals know the income distribution. On the other, scholars complain that data available to test these theories—even in developed democracies—are "dubious" (Ahlquist and Wibbels 2012) and "massively unreliable" (Cramer 2005). If experts despair at the quality of data, it seems odd to assume the public is perfectly informed. And if analysts fault the figures available today—despite the most sophisticated statistical agencies in history—quality must have been worse during the nineteenth century heyday of revolution and democratization.

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[1] And since beliefs will correlate among those who interact or use the same media, the "wisdom of crowds" will not ensure average estimates are unbiased.

The implications for theories of redistribution, revolution, and democratization are potentially far-reaching. To be convincing, these must be reformulated as theories about not actual inequality but beliefs about it, with no presumption the two coincide. Although actual inequality—as captured by the best current estimates—is not related to preferences for redistribution, we show that perceived inequality is. Actual poverty correlates only weakly with reported tension between rich and poor, but the perceived poverty rate strongly predicts such inter-class conflict.

A number of previous papers have noted inconsistencies in perceptions of inequality, using surveys and experiments, mostly within a single country (Norton and Ariely 2011; Chambers, Swan and Heesacker 2014; Cruces, Perez-Truglia and Tetaz 2013; Kuhn 2011, 2016; Niehues 2014). We build on these works. Our contribution is to provide the most general and comprehensive investigation of the topic to date, using nine cross-national surveys, comparing multiple countries, exploring numerous aspects of income and wealth inequality, and developing the implications for influential arguments about the politics of redistribution, revolution, and democratization.

We believe the accumulation of evidence from the multiple surveys we consider is more compelling than any individual piece. Although one can—by assuming respondents misunderstood a question or interpreted it idiosyncratically—construct scenarios in which the respondents were better informed on a particular point than might appear, it would require a huge number of ad hoc rationalizations to eliminate all the anomalies we document. And an assumption that rationalizes answers in one setting would often make those in other settings more puzzling.

The next section reviews major theories relating inequality to politics. Section 3 uses cross-national surveys to demonstrate widespread misperceptions of the income distribution, the respondent's place in it, and recent trends in inequality. Section 4 shows that preferences for redistribution and perceptions of political and social tension correlate more strongly with beliefs about inequality than with actual levels. Section 5 concludes.

2 Inequality and politics

Various theories associate countries' levels of economic inequality with important political outcomes.

Such outcomes include the extent of income redistribution (in democracies); the incidence of revolution and other political violence (in non-democracies); and changes in regime type.

One argument contends that democracies with greater market-generated inequality redistribute more. In a stylized model, Meltzer and Richard (1981) showed that the larger is the gap between median and mean incomes, the greater the fiscal transfer from rich to poor produced by majority-rule voting. Subsequent papers built this mechanism into models aiming to explain the pace of economic growth, the fiscal consequences of decentralization, and the extent of government debt (Persson and Tabellini 1994a,b; Cukierman and Meltzer 1989).

A second literature blames inequality for revolutions, coups, civil wars, and other political violence. The greater the incomes and land-holdings of the rich, the more the poor can gain by expropriating them (Huntington 1968, p.375). "A large group of impoverished citizens, facing a small and very rich group of well-off individuals, is likely to become dissatisfied with the existing socioeconomic status quo and demand radical changes," write Alesina and Perotti (1994, p.362). "As a result, mass violence and illegal seizures of power are more likely the more unequal the distribution of income is." One review called it "almost a universal assumption that an inequitable distribution of resources and wealth will provoke violent rebellion" (Cramer 2005; Goldstone 2014, p.11).

A third related approach links inequality to the evolution of political regimes. Since elites in unequal autocracies anticipate high redistribution under democracy, they fight to prevent it. Boix (2003), therefore, predicts a negative relationship between inequality and democratization, unless elites are protected from expropriation, for instance by mobility of their assets. Acemoglu and Robinson (2006) agree but add that the poor have weak incentives to seek democracy if inequality is low (taxing the rich yields little). Thus, odds of democratization should trace an inverted U: it is unlikely at either high or low inequality, but more probable at intermediate levels. Both theories crucially assume that poor citizens know the extent of inequality.

Despite their appeal, all three sets of theories have proved hard to substantiate empirically. Reviewing recent literature, Lupu and Pontusson (2011, p.316) report a "current consensus… that inequality does not matter for the politics of redistribution, at least not in any direct and particularly significant way." Ansell and Samuels (2011, pp.2-3) concur that: "results have consistently called into

question... that pressures for redistribution increase with inequality."[2] Does economic inequality prompt political violence? "For almost half a century," writes Ostby (2013, p.206), "scholars have tried to test this assumption, finding little empirical support for a statistical relationship between the two variables." What about regime type? The search for a connection has yielded only "mixed results" say both Houle (2009, p.598) and Haggard and Kaufmann (2012, p.495). A sophisticated statistical inquiry found "no evidence that domestic inequality is related to regime outcomes once spatial correlation is accounted for" (Ahlquist and Wibbels 2012, p.461).

Scholars have suggested several reasons why the simple relationship might not hold—from conditional effects to non-linear functional forms. Inequality might not prompt redistribution because attitudes towards it are mediated by: beliefs about the fairness of the distribution (Alesina and Angeletos, 2005a, 2005b; Alesina, Cozzi, and Mantovan 2012), beliefs about social mobility (Piketty 1995, Benabou and Ok 2001, Alesina and Ferrara 2005; Ravallion and Lokshin 2000), or other societal norms (Alesina and Giuliano 2009). Religious organizations might build multi-class coalitions, alleviating conflict (Huber and Stanig 2011). Inequality might not produce civil unrest if the poor cannot mobilize or if assets are in forms hard to expropriate (Boix 2003).

While these factors may indeed matter, we suggest a simpler explanation. All theories discussed so far assume key actors accurately perceive the degree of income inequality. Yet, given how hard it is to estimate distributions of income and property—for skilled professionals, let alone statistically unsophisticated citizens—this assumption is implausible. People may not respond to inequality as posited because, quite simply, they do not know how high it is.

A few papers have explored misperception of the income distribution, but usually in a single country. Norton and Ariely (2011) found respondents underestimated wealth inequality in the US. Americans also assessed change poorly: respondents "overestimated the rise of income inequality over time" since 1960, and beliefs about this varied systematically between political liberals and conservatives (Chambers, Swan, and Heesacker 2013; see also Bartels 2008). Using a survey experiment in Argentina, Cruces, Perez-Truglia, and Tetaz (2013) found "biases in individuals' perceptions of aggregate income distributions" as well as in assessments of their own relative position. Where respondents thought they

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[2] See also Neckerman and Torche (2007) and Lenz (2004), who finds only mixed evidence of a relationship between inequality and redistribution across American states.

stood in the national distribution turned out to correlate strongly with their place in the local income distribution, or in some other reference group. Obviously using small, non-representative samples produces bias. Among respondents in Spain, only 14 percent could correctly identify their decile in the national income distribution (Fernandez-Albertos and Kuo 2013, p.16).

In an important paper, Niehues (2014) used the International Social Survey Project (ISSP 2009) to estimate average perceptions of inequality in 23 European countries plus the USA. She demonstrated systematic errors and noted a correlation between perceived inequality and the belief that it was too high, as well as with preferences for redistribution.[3] Engelhardt and Wagener (2014) also noted a correlation between perceived inequality and redistribution preferences. They distinguished between a measure of perceived social mobility and actual mobility and found that perceived mobility reconciled people better to inequality than actual mobility.

3   Misperceiving the income distribution
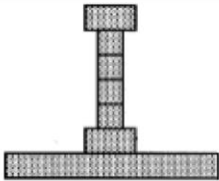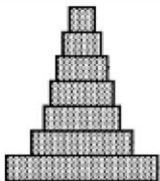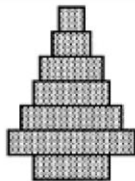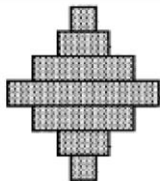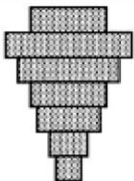
3.1   Do people understand the level of inequality?

The ISSP survey, conducted in 2009 in 40 countries, focused on social inequality. One question (14a) showed respondents five diagrams, accompanied by verbal descriptions, of different "types of society." Respondents were asked which diagram and description best fit their country. While the question does not explicitly refer to income or wealth, the previous questions asked about "pay" and "earnings," so an interpretation in terms of income is the most natural one.

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[3] We accept as a starting point the idea, suggested first by Niehues, of estimating subjective Gini coefficients. However, where she examined a truncated sample from one survey, we document systematic misperceptions using nine cross-national surveys and multiple questions, together covering a total of 110 countries of all types. We examine: (a) perceptions of the level of inequality, (b) individuals' beliefs about their place in the distribution—including their belief about the average income, the key variable for theories such as Meltzer Richard (1981), and (c) perceptions of recent changes in inequality. Besides the relationship between perceptions and demand for redistribution, we analyze how inequality perceptions relate to perceived conflict between rich and poor, examining these relationships at the individual as well as cross-national level. We derive implications for theories of politics and public policy, which remain unexplored in previous papers.

Responses varied greatly across the 40 countries (see Table A1 in appendix). While in Latvia 68 percent chose the steep pyramid (Type A), in Denmark fewer than 2 percent picked this option; 56 percent of Danes saw their country as a diamond, with most people in the middle (Type D).

Figure 1: Characterizing the type of society

Source: International Social Survey Project survey (2009) questionnaire.

How often were respondents right? A simple point emerges directly from the distribution of answers. Barring exact ties—in which case the correct answer would surely be "don't know"—only one of the five diagrams can "best describe" each country. It follows that in 29 of the 40 countries *a majority of respondents who ventured a guess guessed wrong*. For a majority to guess right, they must all pick the same diagram—but in 29 countries, the leading choice attracted fewer than 50 percent of those who guessed. (Another 5 percent on average chose "don't know" and 1 percent refused to answer.) So, in almost three quarters of countries, most respondents who thought they could identify the general pattern of inequality got it wrong.[4] This conclusion does not require any assumptions about the actual distributions.

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[4] Even if we combine diagrams D and E since they are quite similar, this only raises the maximum number of countries where the majority could have been right to 12.

To explore further, we estimate Gini coefficients corresponding to each diagram. We assume each of the seven bars represents an income class and—initially—that the income gap between each two adjacent categories is the same (we code average income in the bottom bar as 1 and that in the top bar as 7).[5] Taking the area of each bar (in cm²) to represent the population share in that income class, we calculate the Gini using the standard formula: $G_n = 2\sum_{i=1}^{n} y_i (\frac{i-1/2}{n}) / \sum_{i=1}^{n} y_i - 1$, where n is the number of observations (i.e. the total area of the figure), and y_i is the income of the i'th observation. Since the number of groups is small (seven), we correct for the bias associated with calculating the Gini from grouped data, as recommended by Van Ourti and Clarke (2011).[6] The resulting Gini coefficients for the five diagrams are: (A) .42, (B) .35, (C) .30, (D) .20, (E) .21.

Next, we calculated what proportion of respondents chose the diagram with the Gini coefficient closest to their country's actual Gini (we call this the "correct" diagram). For actual Ginis, we refer to those for equivalized household disposable income from the Standardized World Income Inequality Database (SWIID, version 5.0; see Solt 2009, 2014). This standardizes observations from a variety of sources, including the United Nations University's World Income Inequality Database, the OECD Income Distribution Database, Eurostat, and the World Bank, and employs multiple imputation to fill in certain missing data points.[7] We use data for 2009, the ISSP survey year, and, since the questionnaire did not specify whether diagrams referred to pre- or post-tax-and-transfer incomes, we consider the Gini coefficients for both. Since the Ginis for diagrams D and E are almost identical, we combine them to avoid penalizing respondents who pick one rather than the other.[8]

Respondents turn out to pick the wrong diagram most of the time. Worldwide, 29 percent chose "correctly" if we use their country's post-tax-and-transfer Gini and 24 percent were right if we use the

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[5] This might, at first, seem an arbitrary assumption, but in fact the diagrams are meaningless if one does *not* assume this or something similar. If, instead, income gaps between the seven bands were allowed to vary, then each diagram could be made to fit almost *any* distribution simply by adjusting the cutoffs. We also tried a variety of other assumptions about the values (see below).

[6] The correction is to multiply the Gini by $k^2(n^2-1)/n^2(k^2-1)$, where k is the number of groups, seven in this case.

[7] The database provides 100 imputations for each data point; we use the average.

[8] Even fewer guess corectly if types D and E remain separate.

pre-tax-and-transfer measure. For reference, a purely random choice among the five answers would be correct 22.5 percent of the time for post-tax-and-transfer incomes and 20 percent of the time for pre-tax-and-transfer incomes.[9] In other words, respondents picked correctly only slightly more often than they would have by chance. The percentage correct varied across countries (Table 1). Assuming post-tax-and-transfer incomes, the proportion correct ranged from 5 percent in Ukraine—where almost all overestimated inequality—to 61 percent in Norway. In only five of the 40 countries did a majority guess correctly. In five countries—Estonia, Slovakia, Croatia, Hungary, and Ukraine—90 percent or more picked the wrong distribution.[10] (Using pre-redistribution incomes, a majority guessed right in only *three* countries.)

In some countries, errors were not just widespread but extreme. Ukraine had one of the most equal income distributions in 2009: it came first (out of 114 countries with data) for pre-redistribution equality and 14th for post-redistribution equality. Its Gini, for either, was around .28, less than that for Diagram C. Yet fewer than 5 percent of Ukrainians chose C, while 63 percent picked the steep pyramid of Diagram A. Many respondents in some countries simply said they did not know—11 percent in Austria, 13 percent in Russia, 16 percent in Portugal, and 24 percent in the US—while up to 7 percent refused to answer.

Were most people at least close? We checked what proportion were within one diagram of the correct one (for instance, if B was correct, how many picked A, B, or C). With only five options, getting within one place of the right one is not very difficult. Choosing randomly, respondents should achieve this 68 percent of the time for post-tax-and-transfer income and 43 percent of the time for pre-tax-and-

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[9] The rate is not simply 20 percent in the first case because Ginis for options D and E are combined. Denote the frequencies with which (A), (B), (C), and (D or E) are correct as, respectively, a, b, c, and d. The proportion correct under random choice is: .2a + .2b + .2c + .4d. Using pre-tax-and-transfers Ginis, for this group of countries: a = .875, b = .1 , c = .025, and d = 0; for post-tax-and-transfers Ginis: a = .15, b = .3 , c = .45, and d = .125. So the expected proportion of answers correct is 20 percent for pre-tax-and-transfer Ginis and 22.5 percent for post-tax-and-transfer Ginis.

[10] This assumes post-redistribution incomes; using pre-redistribution incomes, 90 percent answered incorrectly in 11 countries.

Table 1: Percentage choosing the diagram with Gini coefficient closest to "correct" one, 2009

| | *if question refers to:* | |
	Post-tax-and-transfer income	Pre-tax-and-transfer income
Norway	61	2
Denmark	59	2
Cyprus	54	4
Israel	51	17
Iceland	51	18
South Africa	49	49
Argentina	45	45
United Kingdom	40	13
Italy	39	32
Sweden	38	7
Spain	37	15
Venezuela	35	30
Russia	34	34
Belgium	33	7
Turkey	32	36
Finland	32	6
Philippines	32	32
New Zealand	30	6
Portugal	30	34
United States	29	12
Austria	28	15
Australia	28	6
Bulgaria	26	26
South Korea	26	35
Taiwan	25	36
Switzerland	24	6
Japan	24	10
Chile	23	23
China	21	21
Germany	21	17
Latvia	20	68
France	17	17
Czech Republic	16	28
Slovenia	13	23
Poland	13	34
Estonia	10	30
Slovak Republic	8	39
Croatia	6	51
Hungary	6	52
Ukraine	5	5
Total	*29*	*24*
Expected percent correct if random	*22.5*	*20*

Source: Authors' calculations from ISSP (2009, Question 14a) and SWIID database (Solt 2014).
Note: Diagrams D and E combined. If these kept separate, expected percent correct is 20 in both columns, and total percent correct is 24 for both. The two columns correlate at r = -.34: since the pre-tax-and-transfer Gini is almost always substantially above the post-tax-and-transfer Gini, the diagram that is "right" for pre-tax-and-transfer income tends to be "wrong" for post-tax-and-transfer income.

transfer income.[11] In fact, for post-tax-and-transfer income, 69 percent were within one diagram of the right one, just 1 percentage point better than random. For pre-tax-and-transfer income, 58 percent were within one diagram, 15 percentage points better than random. Still, 42 percent were very far from the correct choice. And the errors were highest in countries where one might expect people to be best informed. If focusing on pre-tax-and-transfer income, more than 70 percent missed by at least two places in Denmark, Norway, Finland, Sweden, and—perhaps less surprisingly—Ukraine.

Might we be exaggerating respondents' ignorance because we do not know whether they had pre- or post-tax-and-transfer income in mind? To check, we tried coding respondents correct if they picked *either* the diagram that was "right" assuming pre-tax-and-transfer income *or* the diagram that was "right" assuming post-tax-and-transfer income. The probability of picking one or other of these purely by chance was .39 in the average country.[12] In fact, on average 45 percent got the "correct" answer, thus-defined. Even giving respondents generous benefit of the doubt, they only slightly out-performed chance.

Assigning values 1 to 7 to the bars is probably the most natural interpretation. But results are almost identical if we make different assumptions. We tried using one tighter distribution, with the bars representing incomes of 1, 1.5, 2, 2.5, 3, 3.5, and 4, and two more spread-out distributions: (A) bars equalling 1, 3, 5, 7, 9, 11, and 13, and (B) bars valued 1, 2, 4, 7, 11, 16, and 22. We even tried assuming that respondents in more genuinely unequal societies supposed the bars to be more widely spaced— specifically, we used the values (1, 2, 3, 4, 5, 6, 7) for countries with actual Gini coefficients in the bottom third of the sample; (1, 3, 5, 7, 9, 11, 13) for countries in the middle third; and (1, 2, 4, 7, 11, 16, 22) for those in the third with the highest actual inequality. Re-doing the analysis under these four alternative

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[11] Again, denote frequencies with which (A), (B), (C), and (D or E) are correct as, respectively, a, b, c, and d. The proportion within one diagram of the correct one under random choice will be: .4a + .6b + .8c + .6d. Again, for pre-tax-and-transfers income, a = .875, b = .1 , c = .025, and d = 0, while for post-tax-and-transfers income, a = .15, b = .3 , c = .45, and d = .125. So the expected proportion correct is .43 for pre-tax-and-transfer Ginis and .68 for post-tax-and-transfer Ginis.

[12] In 27 countries, the two "right" answers were different options from among A, B, and C; the probability for a respondent to pick one or other of these at random is .4. For eight countries, the same option (from among A, B, and C) was right for both pre- and post-tax-and-transfer income; for these, the probability of guessing right by chance is .2. For the remaining five countries, the two "right" answers were A and "D or E"; the probability of being right by chance in these cases is .6. So on average the probability of being right is .385.

assumptions, and using Ginis for both post-tax and pre-tax incomes, results proved remarkably consistent. Across all eight permutations, the share choosing the "right" diagram ranged between 22 and 26 percent.

Figure A1 (see appendix) plots *perceived* inequality in the 40 countries against their *actual* post-tax-and-transfer inequality. The measure of perceived inequality, G_{PI}, is simply an average of the Gini coefficients for diagrams (A) to (E), weighted by the proportion of respondents who chose that diagram. The G_{PI}'s thus calculated range from just under .25 for Denmark and Norway to .39 for Ukraine. Perceived and actual inequality turn out to be quite weakly correlated (r = .37).[13] By construction, the G_{PI}'s cannot exceed the Gini for the most unequal diagram, .42. In four countries—the Philippines, Chile, China, and South Africa—the actual Ginis were higher than this. Yet even dropping these countries, the correlation is only r = .41.[14] Some countries where respondents perceived the greatest inequality—such as Ukraine—had among the lowest levels. In others—such as the US—respondents underestimated inequality.

Another way to explore this is to examine people's beliefs about salaries in their country. The ISSP asked respondents how much they thought employees in five occupations—from "unskilled factory worker" to "chairman of a large national corporation" —typically earned.[15] Comparing respondents' answers to information on actual average earnings, we found guesses were often far off the mark (Table A3). Out of 45 cases with information on actual salaries, the average respondent guessed within ± 10 percent of the correct answer in only nine. In the Philippines, the typical general practice doctor earned about $5,500 in 2008, according to a World Bank survey; Filipino respondents guessed $144,000. South

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[13] Although it is reassuring that the correlation is not zero, this suggests distortions in individuals' perceptions produce significant distortion in the crossnational pattern. (Whereas correlations in the .2 to .4 range might seem adequate to establish an association between two *different* variables, r = .37 suggests an abnormally weak relationship between two supposed measures of the same thing.) As we will see, these distortions are enough to eliminate correlation between the crossnational pattern of inequality and demand for redistribution.

[14] The Spearman correlation coefficient (between countries' *ranks* in actual and perceived inequality) — $\rho = .41$—is also low.

[15] Unfortunately, the question's wording sometimes referenced *pre*-tax and sometimes *post*-tax income. We focus on countries for which it referred to *pre*-tax income since media accounts, the most likely source, usually report gross pay for different professions.

Africans surveyed thought the typical CEO earned $77,000; in fact, the average across 56 major South African companies was $1.7 million (for sources, see Table A2). Not only were average guesses often wrong, the dispersion was sometimes extreme. Almost all respondents missed by more than ± 33 percent when guessing top CEOs' salaries. Inequality between doctors (or cabinet ministers) and factory workers (or shop assistants) was overestimated in most countries. But the gap between corporate executives and low-paid occupations was massively *underestimated* everywhere we had data.[16]

A third question is whether people know how rich the rich are. This is important if citizens are to judge how much could be expropriated by redistributive policies or revolution. In 2015, the polling firm Ipsos MORI asked about 1,000 residents in each of 29 countries what proportion of total household wealth in their country they thought the wealthiest 1 percent owned (Ipsos MORI 2015). We compared the answers to estimates of the correct figures calculated by the investment bank Credit Suisse (CS), using household balance sheet and other data (Credit Suisse 2010, pp.84-7). In the average country, the average repondent's guess was 17 percentage points off—usually an overestimate. In the UK, for instance, respondents thought the wealthiest percentile owned 59 percent of total household wealth, compared to CS's estimate of 23 percent. In only eight of the 29 countries was the average guess within ± 10 percentage points of the correct answer (Table A4).

A fourth source of evidence relates to poverty. Ordinary people might know more about the underclass than about the top wealth-holders. In fact, ignorance and misconceptions were common here too. A 2010 Eurobarometer survey asked respondents what proportion of people in their country were poor. Of course, respondents might have their own definitions of poverty, but using either the EU-favored or the national definition (usually very close), almost one third of respondents in the average country guessed more than 10 percentage points above or below the true level (Table A5). In Cyprus, Hungary, Poland, Malta, and Spain, a *majority* of those who answered were more than 10 percentage points off.[17]

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[16] Does such misperception matter for policy preferences? One 2015 US poll suggests it does. When respondents were asked to guess the average public school teacher's salary in their state, the average was $38,294. In fact, nationwide the average was $57,379 (https://nces.ed.gov/programs/digest/d15/tables/dt15_211.50.asp?current=yes). Among those not given more information, 63 percent favored increasing teachers' salaries. Among those who *were* told the correct figure for their state, support for raising salaries was only 45 percent (http://educationnext.org/2015-ednext-poll-school-reform-opt-out-common-core-unions/).

[17] Aalberg (2003, p.97) found that, in 1991, German, Dutch, British, and US respondents all overestimated poverty.

Even if individuals are often wrong about their society's level of inequality, average perceptions might still correlate cross-nationally with the actual levels. In fact, as already noted, the correlation between perceived and actual inequality is low (r = .37). Still, that might be because of the particular measures we used or because of the assumptions we had to make to construct Gini coefficients for the perceived distributions. To check, Table 2 shows the correlation coefficients between five alternative measures of actual economic inequality and four measures of perceived inequality. It is possible respondents were thinking about wealth—not income—inequality (Bagchi and Svejnar 2013). So we include CS's estimates of of the wealth share of the top 10 percent (for 2009) and the Gini for wealth (for 2010, the first year available).[18] We also include another common indicator of income inequality, the 90/10 ratio (i.e. the ratio between incomes at the 90th and 10th percentiles). For perceived inequality, we add three other measures derived from the ISSP survey. First, to miminize assumptions, we simply use the percentage of respondents who selected diagram (A), the most unequal. Second, we constructed a measure of the average choice among the diagrams where (A), the most unequal, was scored 5 and (E), the least unequal, was scored 1. Finally, we calculated the ratio of perceived earnings of a CEO in a large national company to those of an unskilled factory worker, averaging in each country across all respondents who gave estimates for both. As Table 2 shows, no pair of these measures of objective and perceived inequality correlated at higher than r = .40; many were not correlated at all.

In sum, respondents only slightly outperform chance when asked to identify the shape of the income distribution in their country. They are often quite wrong about what various occupations pay and what share of total wealth belongs to the top one percent. Many European respondents think poverty is either much higher or lower than it is. And, measured in various ways, actual and perceived levels of inequality correlate at most weakly.

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[18] Estimated Ginis for wealth ranged from .57 in Spain to .88 in Switzerland (Credit Suisse 2010).

Table 2: Correlation coefficients between objective and subjective inequality measures

		---------------------Objective measures---------------------				
		Gini for pre-tax-and-transfer income	Gini for post-tax-and-transfer income	90/10 ratio for post-tax income	Gini for wealth, 2010	Wealth share of top 10%, 2009
Subj-	Average perceived Gini, constructed					
ective	from survey answers	0.01	0.37	0.36	-0.17	0.09
meas-	Percent choosing diagram A	-0.04	0.28	0.37	-0.08	0.23
ures	Average diagram choice	-0.01	0.40	0.39	-0.15	-0.02
	Average ratio of perceived earnings of					
	CEO and unskilled factory worker	0.32	0.25	0.05	0.16	0.02

Sources: SWIID database (Solt 2014), OECD, SEDLAC, Eurostat, LIS, Credit Suisse (2010), ISSP (2009), and authors' calculations.
Note: estimates for 2009 where possible, 2008 or 2010 when 2009 not available.

3.2 Do people know their place in the distribution?

According to Meltzer and Richard (1981), the median voter will favor redistribution if his income is below the mean. But does the median voter *know* whether his income is below the mean?

In its 2015 survey, Ipsos MORI asked respondents: "What do you think the average annual wage for a full-time worker is in [country]?"[19] The results were surprising. Comparing the answers in each country to our best estimate of the actual average wage, we found that in all countries except New Zealand people underestimated the average wage, often by a lot.[20] For instance, the average US respondent thought the average annual wage was about $26,000; in fact, the OECD estimated it was $57,000. In only one of 27 cases was the average guess within 30 percentage points of the correct level (Table 3).

If the median voter in each country had the average belief about the mean wage in his country, his estimate would almost always be wrong. Would it at least be on the right side of the median wage?

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[19] See Ipsos MORI (2015). We are very grateful to Bobby Duffy and James Stannard for sharing data from this poll; any interpretations offered here are ours and not those of Ipsos MORI.

[20] In the interest of consistency, we used the OECD's estimates from national accounts where available, and figures from national statistical offices or the ILO where not.

That is, would he still support redistribution when Meltzer-Richard logic suggests he should, and oppose it when that was in his self-interest? Among the 22 countries for which official estimates of the median wage were available, it turns out he would have been right in only two.

Table 3: Did people know the average annual wage in their country (early 2015, local currency units)?

Country	Average guess of respondents	Actual average wage, 2014	Actual median wage, 2014	Was average guess about the mean on right side of median?
New Zealand	50,210	48,737	44,876	YES
Great Britain	20,802	32,453	26,909	NO
Australia	48,845	78,715	63,651	NO
Sweden	232,380	378,907	336,000	NO
China	32,821	56,360	n.a.	n.a.
Canada	33,320	62,551	56,032	NO
Belgium	21,965	42,687	36,432	NO
Japan	2,045,037	4,033,913	3,505,045	NO
South Africa	50,040	98,328 [a]	36,396 [a]	YES
Germany	16,680	36,556	n.a.	n.a.
US	26,092	57,417	41,616	NO
Israel	53,243	128,400	93,962	NO
Hungary	1,213,809	2,889,151	2,166,863	NO
Turkey	10,200	33,627	19,185	NO
Poland	13,350	45,139	36,057	NO
Russia	105,082	389,940	278,766	NO
Spain	6,799	27,408	22,972	NO
Italy	6,050	28,647	n.a.	n.a.
France	6,260	36,018	29,180	NO
Brazil	3,084	25,616	n.a.	n.a.
Saudi Arabia	9,069	73,188	n.a.	n.a.
Argentina	6,942	70,365	60,000	NO
South Korea	2,092,564	33,224,208	25,897,472	NO
Colombia	758,605	12,734,700	7,392,000	NO
Peru	1,003	14,759	11,957	NO
Mexico	3,822	137,844	105,497	NO
Chile	316,782	9,610,671	6,397,636	NO
India	108,345	n.a.	n.a.	n.a.

Sources: Ipsos MORI (2015); see Table A6 for sources and notes on actual figures.
Notes: Respondents were asked: "What do you think the average annual wage for a full-time worker is in [country]?"
[a] 2013.

Errors were so large in some cases that we wondered if respondents might have misunderstood the question. So we tried to adjust for possible misinterpretations. For instance, in some countries it is common to discuss monthly rather than annual salaries. Although the pollsters' question explicitly asks about the *annual* wage, we nevertheless tried multiplying the average guess by 12 whenever that produced something closer to the correct answer. It is also possible some respondents took the question to refer to *post*-tax rather than pre-tax wages. We therefore adjusted again, using OECD estimates of the total tax rate on labor income to convert the guess from post-tax to pre-tax, whenever this rendered it more accurate (Table A7).

Reinterpreting respondents' answers in these ways reduces the errors, but not by much. Even adjusting in either or both of these ways when that helped, the average guess about mean income remained about one third too high or too low in the average country. And still respondents placed the average income on the right side of the median in only seven out of 17 countries (41 percent). With these misperceptions, following Meltzer-Richard logic would achieve the "wrong" result more often than not.

A final possibility is that respondents misunderstood the word "worker" in the question to mean an industrial worker, not just an employee. Using data from Eurostat, the ILO, and national statistical agencies on the average wages of "machine operators," the category in common use that seemed closest to "industrial worker," we checked whether this could make sense of respondents' estimates. Among the 14 countries for which we found data, the average guess was 53 percentage points above or below the actual average wage of machine operators (Table A8). And even if we adjust as before—multiplying by 12 and/or adjusting for taxes if that helps—the average guess still misses the actual average wage for machine operators by 30 percentage points. In sum, people in many countries appear to have extremely unreliable ideas about the average wage.[21] Were they to act politically on the basis of these ideas, they would very often do the opposite of what influential theories predict.

More generally, do people know where in the national income distribution they fall? To examine this, we exploit data from the 2010 Life in Transition Survey (LiTS 2010). LiTS includes 30 emerging (mostly transition) economies and five advanced European economies. The ideal survey to answer this

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[21] Although the average wage is not average per capita income, we see no reason perceptions of the latter would be more accurate.

question would record: (A) respondents' own income, and (B) their beliefs about their place in the national distribution. Using the country's true distribution, one could then judge how often respondents were right. However, neither LiTS nor any other crossnational survey we know collects data on both (A) and (B). We therefore present indirect evidence.

LiTS asked respondents into which decile in the national income distribution they thought they fell. Assuming the survey samples were as representative as intended and as subsequent scrutiny confirmed (Cojocaru and Diagne 2015), one tenth of respondents should fall within each of the 10 deciles. A histogram of responses should resemble the uniform distribution: a flat line at 10 percent, with no hills or valleys. That is not what one sees (Figure A2). In most countries, the two central deciles (5th and 6th) together capture not 20 percent but more than 40 percent of respondents. Many seem to believe they are relatively richer or poorer than they are.[22]

Although the LiTS samples have withstood critical examination, it remains possible they do not adequately represent all income groups. If they oversampled the middle of the distribution, that would explain why respondents disproportionately placed themselves in the middle. To address this, we adopt a different tactic. From respondents' answers to other questions, we identify some who are almost certainly among the richest in their societies and others almost certainly among the poorest, and see where they placed themselves in the distribution.

LiTS surveys ownership of various consumer durables, including cars. Of course, in developed countries car ownership is common, but in six of those sampled—Azerbaijan, Belarus, Kazakhstan, Kyrgyzstan, Moldova, and Ukraine—one third of households or fewer owned cars, according to national statistics (Table A10). Given the expense of automobile ownership, one might expect car-owning households to be among the richest. In Azerbaijan, the average car cost $13,300 at the time of the survey—almost four times per capita income.[23] However, if car-owners in these countries belonged in the

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[22] We also examined a similar question in the fifth wave of the World Values Survey (WVS). The histograms for this survey also tend to bunch in the center, and for a few countries towards the bottom of the scale. However, Donnelly and Pop-Eleches (2012) raise questions about the representativeness of the WVS samples.

[23] From www.stat.gov.az., converted from Manats at 1.245M/$.

top income deciles, they did not realize this. More than 60 percent of them in all six countries thought they earned less than the median income (Table A10).

Owning two houses usually indicates wealth. In all 35 LiTS countries, at most one in four respondents said her family owned a second residence, and in all but three it was less than one in six. However, most secondary residence owners did not think themselves particularly rich (Table A11). On average, 60 percent placed themselves in the bottom half of the income distribution. In Uzbekistan, only 3 percent of respondents lived in households with a second residence, yet almost two thirds of these thought their incomes were *below* the national median. Developed countries had fewer such anomalies. Still, in France, Italy, and Great Britain, 40 percent or more of second home owners placed themselves in their country's bottom half.

Neither of these indicators is perfect. Even clearer evidence of high income might be owning *both* a car and a second home. In the average LiTS country, about 7 percent of respondents fit this description (Table A12). But, again, most did not consider themselves rich. On average, 57 percent of such property-owners thought they belonged in the bottom half of the distribution, and only 3 percent put themselves in the top two deciles. Similar patterns emerge for other consumer durables.

In these cases, many respondents who were almost certainly among the wealthiest in their country thought their incomes below average. Their guesses ranged widely, suggesting considerable doubt. Might they have been answering insincerely out of embarrassment or even fear? If so, they would surely not have admitted to owning a second home—an even clearer indication of wealth than their self-placement in a high income decile. Acknowledging possession of expensive property while claiming to be relatively poor is more consistent with confusion than with deliberate deception.

Do *the poor* understand their relative position? By design, it is the poor who receive targeted income support from the state. In the five developed LiTS countries, national statistics suggest very few received such aid—about 6 percent of households in France and Sweden and less than 1 percent in Germany. Yet among those who said that they had been approved to receive "targeted social assistance/guaranteed minimum income" in the previous year, only a few thought they belonged right at the bottom of the distribution (Table A13). Most aid recipients in all five countries located themselves above the bottom fifth.

Going hungry is another sign of poverty. Strapped for cash, some LiTS respondents reported having recently "reduced consumption of staple foods such as milk, fruits, vegetables, or bread." In the developed European countries, the share saying this ranged from 3 percent in Sweden to 20 percent in Italy. We might expect such food-deprived respondents to fall in the bottom two deciles. Again, they thought otherwise. In Italy, more than half of those cutting food purchases placed themselves in the fifth decile or higher, and in France and Sweden more than one third did so (Table A14, Panel A). Similarly, in the sixth round of the World Values Survey (2010-14), very few respondents in the richest countries said that they had "gone without enough food to eat" during the previous year. Yet in most such countries, many who confessed to having gone hungry nevertheless placed themselves in the top six of ten income groups (Table A14, Panel B). In short, these surveys suggest the rich often think they are poorer—and the poor think they are richer—than they actually are. Both think they are closer to the median than is, in fact, the case.

3.3   Do people know how inequality is changing?

Perhaps ordinary people do not know the level of inequality or their place in the distribution but can still sense when the gap between rich and poor is growing. If so, the dynamics of inequality might still drive political behavior. To measure such change, we use the Gini coefficient for pre-tax-and-transfers income from SWIID 5.0. Between 2007 and 2012, change in the Gini ranged from a fall of 7.7 percentage points in Bolivia to a rise of 6.5 points in Spain. Among the 61 countries with SWIID data for both 2007 and 2012, inequality increased in 32 and decreased in 29.

Could citizens detect the trend? To check, we exploit a survey taken in spring 2013 by the Pew Global Attitudes project. Respondents in 39 countries were asked: "Do you think the gap between the rich and the poor in (survey country) has increased, decreased, or stayed the same in the last five years?" For 22 countries, we had data on actual changes in the Gini coefficient.

We categorize countries where the Gini changed by less than ± 1 percentage point as having "stayed the same." With this classification, the Gini fell in eight of these 22 countries, increased in six, and stayed the same in eight. If respondents chose randomly between these three options, they would be right about one third of the time. In fact, the average percentage correct was just slightly higher—34.6

percent (Table A15).[24] In more than 90 percent of countries, a plurality of respondents—usually a large majority—believed the gap between rich and poor had grown in the previous five years. The only exceptions were Malaysia, El Salvador, and Bolivia, where a plurality said it had "stayed the same."

Perhaps repondents focused on wealth rather than income inequality. If we use Credit Suisse's wealth estimates, a larger share were right. This is simply because wealth inequality rose in more countries than did income inequality between 2007 and 2012, so the tendency to assume rising inequality was more often correct.[25] But whereas the proportion of respondents that thought inequality was rising at least correlated cross-nationally with actual change in the Gini for income (r = .58), there was no correlation with the actual change in wealth inequality. In other words, although most respondents worldwide thought inequality had risen, respondents were not more likely to believe this in countries that actually experienced the biggest increases in wealth inequality.[26]

People appear equally ignorant of trends in poverty. In 2010, Eurobarometer asked respondents how poverty had changed in their country in the previous three years. Again coding change of less than ±1 percent as "stayed the same," actual poverty had increased in just eight of the 27 countries. Yet in all 27, more than 65 percent of respondents thought it had risen. Moreover, the percentage who thought poverty had increased correlated *negatively* with the actual change (r = -.23; Figure A3). In Romania, where poverty had fallen almost four percentage points, 89 percent thought it had risen.

In short, in recent years respondents worldwide have assumed that inequality and poverty were rising. If focusing on the income distribution, they guessed the trend only slightly better than chance. If focusing on wealth, they were right more often because inequality *did* increase in more countries. However, the proportion convinced that inequality was rising bore no relation to the actual change in the

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[24] Using post-tax-and-transfer income Ginis, the percentage correct was lower. For another nine of the 39 countries, change in the Gini between 2007 and 2011 (but not 2012) was available. Including these countries, the average percentage right increases to 38.7 percent. Might people be more sensitized to change *at the top* of the distribution? Using the income share of the top decile instead of the Gini to measure the "gap between rich and poor," only 29 percent got the trend right—fewer than would have done so by chance (Table A17).

[25] We use the change in the share of wealth of the top 10 percent to assess the trend since CS provides Ginis only from 2010.

[26] In a similar Pew survey for 2002, the proportion correctly identifying the direction of change averaged 36.6 percent, again only slightly better than chance (Table A16).

wealth gap. Even where the wealth share of the top 10 percent and top 1 percent fell slightly in 2007-12—e.g., in Canada and the US—two thirds or more believed it had risen.

4 Perceived inequality, demand for redistribution, and class conflict

If people do not know how high inequality is, we should not expect actual inequality to predict public preferences and behavior. But *perceived* inequality could still matter. The evidence we can offer here is only suggestive; we do not take a strong position on causality. Still, results of various surveys suggest it is perceptions—not the reality—of inequality that shapes political outcomes.[27]

First, consider preferences over redistribution. In one question, the ISSP asked whether it was "the responsibility of the government to reduce the differences in income between people with high incomes and those with low incomes." Respondents could choose among the options: "strongly agree," "agree," "neither agree nor disagree," "disagree," "strongly disagree," and "can't choose." Since the first five of these represent ordinal categories, we constructed a dependent variable measuring support for government redistribution that takes the values one to five.

We then explored how support for redistribution related to both actual and perceived inequality. For actual inequality, we used the country's Gini for income; for perceived inequality, we used the perceived Gini (G_{PI}, based on answers to Question 14a, as described earlier).[28] We conducted analysis at both the country and individual level (see Table 4). At the country level, we regressed (by OLS) the average level of support for redistribution on the country's actual Gini and the perceived Gini (G_{PI}). At the individual level, we regressed (by ordered probit) the individual's support for redistribution (on the 5-point scale) on her country's actual Gini and on that individual's perceived Gini. In fact, in the individual case we could distinguish between the effect of the average perception of inequality in the country (G_{PI}) and the individual's idiosyncratic perception (the Gini of her chosen diagram, controlling for G_{PI}) (Table

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[27] Using a different method to estimate perceived wage inequality, Kuhn (2016) finds this is related to belief in the degree of meritocracy in labor markets.

[28] This question came after the one about attitudes towards redistribution in the questionnaire, so the perceived inequality question can not have primed respondents' attitudes towards redistribution.

4, columns 9-11). The former may measure common perceptions based on shared cultural or media stimuli, while the latter captures the individual's particular impressions.

Neither the pre-tax nor the post-tax actual income Ginis are related to support for redistribution at either the country or individual level. However, perceived inequality is highly significant in both cases. Where inequality was believed to be high, more people supported government redistribution. Given beliefs about inequality, higher actual inequality was in fact associated with *lower* demand for redistribution (columns 4, 5, 10, and 11). Breaking down perceptions into their general and idiosyncratic components, we found a stronger effect of the general perception than of the individual's idiosyncratic perceptions (columns 9-11). Still, both seemed to matter.

What about the idea that greater inequality prompts class conflict and even revolution? One ISSP question asked respondents how much conflict existed in their country "between poor people and rich people." The four possible answers (besides "can't choose") ranged from "no conflicts" to "very strong conflicts." Again, we created an ordinal scale and ran probit regressions to analyze relationships at the individual level; we used OLS to measure country level relationships.

At the country level, post-tax-and-transfer inequality was significantly associated with greater reported inter-class tension, although pre-tax-and-transfer inequality was not (Table 5, panel A). However, the effect of perceived inequality was about three times larger than that of actual inequality. Moreover, controlling for income and population rendered actual inequality insignificant (column 5). At the individual level, results are similar: the post-tax-and-transfer Gini and individual perceptions are both significant; but perceptions have a much larger effect, and that of actual inequality disappears controlling for income and population.

Tables 4 and 5 use measures of perceived inequality and redistributive preferences from the same survey. As noted, we do not make strong claims about causality. Inequality perceptions might affect demand for redistribution. But it also could be that advocates of redistribution "perceive" more inequality than there is, to rationalize their preferences; or both might result from some third factor. We defer systematic examination to a future paper.

Table 4: Inequality perceptions and support for government redistribution

	Dependent variable: Government should reduce differences in income.										
	(A) Country level, OLS: average response where 5 = "strongly agree," 1 = "strongly disagree."					(B) Individual level, ordered probit: 5 = "strongly agree," 1 = "strongly disagree."					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Gini (pre-tax-and-transfers)	-.57 (.84)					-.61 (.75)					
Gini (post-tax-and-transfers)		-.03 (.58)		-1.51* (.60)	-1.52** (.55)		-.15 (.42)			-1.42** (.46)	-1.68** (.40)
Perceived Gini (country average)			7.35** (.96)	8.52** (.98)	8.17** (1.07)				5.56** (1.12)	7.13** (.93)	6.91** (.99)
Perceived Gini (respondent)								3.11** (.35)	1.92** (.19)	1.94** (.19)	1.86** (.18)
Ln GDP per capita					-.04 (.09)						-.02 (.08)
Ln population					-.01 (.05)						.01 (.04)
Constant	4.12** (.39)	3.87** (.20)	1.46** (.33)	1.57** (.29)	2.03 (1.20)						
N	40	40	40	40	40	53,633	53,633	50,632	50,632	50,632	50,212
R^2	.01	.00	.45	.52	.53						
Pseudo R^2						.00	.00	.02	.03	.03	.04

Sources: ISSP 2009, SWIID 5.0. Penn World Tables 8.0 for GDP per capita, World Bank WDI for population.

Notes: Robust standard errors, clustered by country in panel B. Column 11 also includes controls for sex, age, marital status, and higher education (coefficients not shown). * $p < .05$, ** $p < .01$.

Table 5: Inequality perceptions and perceived conflict between rich and poor

	Dependent variable: Perception of conflict between rich and poor.										
	(A) Country level, OLS: average response where 4 = "very strong conflicts," 1 = "no conflicts"					(B) Individual level, ordered probit: 4 = "very strong conflicts," 1 = "no conflicts"					
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)
Gini (pre-tax-and-transfers)	.63 (.77)					.74 (.74)					
Gini (post-tax-and-transfers)		1.77** (.56)		1.16 (.62)	.41 (.57)		1.69** (.57)			1.15 (.61)	.33 (.50)
Perceived Gini (country average)			4.42** (1.29)	3.52* (1.53)	4.60** (1.53)				3.98** (1.36)	2.80 (1.50)	4.03** (1.48)
Perceived Gini (respondent)								1.99** (.40)	1.13** (.19)	1.14** (.19)	1.18** (.19)
Ln GDP per capita					.15* (.06)						.19** (.06)
Ln population					.11** (.03)						.14** (.03)
Constant	2.17** (.37)	1.87** (.20)	1.01* (.40)	.93* (.39)	-1.44 (.87)						
N	40	40	40	40	40	52,196	52,196	49,517	49,517	49,517	49,108
R²	.01	.14	.19	25	.47						
Pseudo R²						.00	.01	.01	.01	.02	.04

Sources: ISSP 2009, SWIID 5.0. Penn World Tables 8.0 for GDP per capita, World Bank WDI for population.

Notes: Robust standard errors, clustered by country in panel B. Column 11 also includes controls for sex, age, marital status, and higher education (coefficients not shown). * p < .05, ** p < .01.

Still, we used data from other surveys to assess robustness. In 2009, Eurobarometer asked respondents how much tension existed in their countries: A) between poor and rich, and B) between managers and workers. The limited overlap between the Eurobarometer and ISSP surveys reduces our sample to just 17 countries. But among them, perceived inequality (from ISSP) related strongly and positively to perceived tension between rich and poor and between managers and workers (from Eurobarometer); actual inequality was either insignificant or *negatively* related to reported class conflict (Table A18).

Finally, how do beliefs about *poverty* relate to preferences over social policy and perceptions of inter-class tensions? As Tables A19 and A20 demonstrate, using Eurobarometer data from 2010, both the actual poverty rate and the belief that it was high correlated with the demand for government anti-poverty measures. However, only perceived—not actual—poverty was positively associated with reported tension between rich and poor.

In sum, we found little evidence of a link between actual inequality and citizens' demands for government redistribution or perceptions of class conflict. However, the levels of inequality and poverty that citizens *imagined* to exist correlated strongly and robustly with such demands and perceptions. Although we cannot make strong causal claims, the patterns are consistent with the notion that beliefs about inequality—rather than the actual phenomenon—drive political outcomes.

5 Conclusion

Various theories contend that economic inequality influences the characteristics and policies of governments. Most assume that citizens accurately observe the level of inequality, at least on average. The evidence presented here casts doubt on this assumption.

Meltzer and Richard (1981) showed that, under majority rule, redistribution should rise with the gap between median and average incomes. However, when respondents around the world were asked to guess their country's average wage, a large proportion placed it on the wrong side of the median wage. Respondents were confused about their relative incomes. Many who could not afford enough to eat thought they belonged in the middle or even upper half of the distribution. Others whose assets

suggested relative wealth thought their incomes below average. Given such confusion, it seems doubtful the median voter generally *knows* whether she would gain or lose from redistribution. And, in fact, demand for redistribution appears to vary with not actual inequality but the perception of it.[29]

Acemoglu and Robinson (2006, p.36) argued that, ceteris paribus, more "inter-group inequality makes revolution more attractive for the citizens" of a dictatorship. If they revolt, the poor "get a chance to share the entire income of the economy (minus what is destroyed in revolution)." The rich should respond with repression (if inequality is high) or by democratizing (if inequality is intermediate). Yet, as we saw, citizens often have little idea about the income and wealth of the rich. They hardly outperform chance when guessing how income is distributed. And, on average, they missed by 17 percentage points when guessing the share of wealth owned by the top 1 percent. Revolution, repression, and democratization might relate to predominant beliefs about inequality, and perceptions of class conflict appear to vary with those beliefs. But if potential revolutionaries know so little about actual inequality levels, these are unlikely to predict revolution.[30]

Not all arguments about inequality assume individuals perceive it accurately. The claim that concentration of wealth enables elites to dominate politics, depressing participation, presupposes no widespread knowledge of the Gini coefficient (Goodin and Dryzek 1980, Solt 2008). Nor does the point that inequality can lead the poor to underinvest in human capital if their borrowing is constrained (Galor and Zeira 1993). Ansell and Samuels' (2010) argument that inequality motivates the rich to seek democracy as a defense against state expropriation could still work even if rich and poor are uncertain of

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[29] The Meltzer Richard (1981, p.941) model assumes "fully informed" voters. Even if voters are misinformed about inequality, in some versions of the political game parties might nevertheless converge on the policy the median voter *should* prefer if correctly informed (we thank John Huber for this point). However, for this to hold we must assume that parties can only propose policies that genuinely balance the budget (rather than those voters *believe* are feasible) and that they compete by offering voters a vector of net transfers. If, by contrast, parties compete by proposing a tax rate (as in Meltzer Richard, pp.920-21) and voters infer—based on perhaps incorrect beliefs about the income distribution—what the equal lump sum transfers will be, then, at least in a one-shot model, parties should converge on the tax rate the median voter *believes* he prefers. The transfers feasible at that rate may not be what voters expect. However, if a party offers a different tax rate, the other party can win by offering the rate the median voter thinks he prefers. In this case, higher inequality will *not* necessarily produce higher redistribution.

[30] Could it be that the public is poorly informed about inequality in "ordinary times" but is educated by elites and media at times of economic or social crisis? In fact, most of our survey data came from 2009 and 2010, years of serious economic crisis in which inequality was globally salient.

the distribution.

A growing literature argues that belief in high social mobility or the fairness of the economic system, as well as various norms, may reconcile people to large income gaps (Alesina and Giuliano 2009, Bénabou and Tirole 2006). We find these arguments plausible and intuitive—with one modification. What such beliefs and norms reconcile people to is not actual inequality but the level they *believe* to exist.

In making this argument, we do not assume offical inequality statistics are necessarily accurate. For many reasons, inequality is difficult to measure. But that does not invalidate our main point: it makes it in another way. If experts cannot gauge inequality, how can the man in the street? And the accuracy of official measures does not affect our second point: that perceptions of inequality—whether accurate or not—*do* correlate with political preferences. The strength of this link is significant in its own right, even though establishing causal priority is difficult.

A few possible objections are worth considering. First, some might argue that all models—including that of Meltzer and Richard—are simplifications and not meant to be taken too literally. Friedman (1953) famously contended that the realism of assumptions is beside the point if a theory yields accurate predictions. The problem is that the arguments we critique have not yielded accurate predictions, and the implausibility of their assumptions might explain why. That models are simplifications does not mean that all simplifications are useful.

Second, it could be that people have accurate intuitions about inequality but that the polls fail to elicit these. Certainly, the polls we cite are imperfect in various ways, and, therefore, we use different surveys and different instruments to measure perceptions in different country contexts. However, if people understand the true level of inequality—and influential theories get the logic right—we should expect these theories to do a better job of explaining the crossnational and over-time variation in behavior. We should then see a strong link between high inequality and, respectively, revolution, resistance to democratization (in autocracies), and demand for redistribution (in democracies). At the same time, we should *not* expect to see such a strong correlation between inaccurate "perceptions of inequality" derived from polls and support for government redistribution. Occam's Razor would suggest that if people respond as if they do not know something and act as if they do not know it, that may well be because—they do not know it.

A third objection might be that detailed factual knowledge is unnecessary if informational shortcuts can achieve the same result. Lupia (2015) rightly urges scholars to stop equating competence with the recall of obscure facts. "Low information rationality" is often enough. While this point is absolutely valid in many contexts, it is unclear what informational shortcuts or heuristics could enable peasants to identify correctly when the benefits of revolution exceed the costs. Perhaps professional revolutionaries—if they themselves know—might signal when inequality is high and the authorities when it is low. But, of course, both have an incentive to lie: revolutionaries have a stake in revolution and the authorities in the status quo. In a democracy, might competition lead parties to propose redistributive policies that are optimal for their voters, sparing voters the need for detailed information? This is far from clear. As noted (footnote 29), the Meltzer Richard model—and, thus, others based on it—assumes that voters have full and accurate information. Assuming only candidates and not voters know the true median income can radically change the results (fn. 29). In short, it might be possible to adapt the theories discussed here to a world of poorly informed citizens, but only with considerable theoretical creativity and effort the need for which has not been widely recognized.

We defer to future research the question what causes perceptions of inequality.[31] But several hypotheses seem plausible. First, individuals may over-generalize from their immediate reference group, thus making biased inferences (Cruces, Perez-Truglia, and Tetaz 2013, Xu and Garand 2010). Since, in everyday life, most people tend to see some around them who are richer and some who are poorer, it is natural to think they belong in the middle of the distribution. This would be consistent with the tendency we noted for respondents to disproportionately place themselves around the center. People may also—wrongly—take the range they observe in day-to-day interactions as a measure of the range nationwide. Inhabitants of villages where incomes and property are relatively equal may underestimate their country's gap between rich and poor. Those in professions with large earnings variation may think inequality is higher than those with uniform wages.

A second likely influence is the media, and television in particular.[32] Globalization of media

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[31] For an interesting theory of how information about inequality is spread, see Iversen and Soskice (2015).

[32] The strong effect of the average perception of inequality in the country in Tables 4 and 5 is consistent with media influences.

might cause people in poor countries to compare their consumption to that glimpsed in rich states, generating impressions of relative deprivation (Pop-Eleches 2009). Sensationalistic and celebrity-focused television may foster perceptions of extreme wealth. Meanwhile, greater travel—domestic and international—could broaden the reference group.

A third possible determinant is ideology, which may predispose people to "see" the level of inequality their beliefs and values convince them must exist (Alesina and Fuchs-Schundeln 2007). Citizens in post-socialist countries appear particularly sensitive to inequality, perhaps reflecting the ideological legacy of communism (Corneo and Gruner 2002). Socialists everywhere may exaggerate income gaps, while conservatives may underestimate them. A Marxist may see capital concentrating, while a free marketeer sees wealth trickling down. Shocks experienced early in life can also leave lasting scars in values and perceptions (Guiliano and Spilimbergo 2014).

Fourth, other psychological effects could matter. A desire to blend in may cause individuals to think their income close to average; "self-enhancement bias" might lead them to overestimate their standing (Loughnan et al 2011). Some may conflate reports of high inequality worldwide with assessments of their own country. They may confuse changes in the trend with information about the level: hearing inequality is rising, they may assume it is high, and vice versa. They may suppose that recession—which reduces incomes of the poor—must increase inequality, when in fact recessions often shrink the capital income of the rich more than the wage income. On the other hand, reports of rapid growth that arouse unrealistic expectations could generate suspicions that income has been diverted to the wealthy (Verme 2014).

Whatever the causes, the gap between perceptions and reality—or, at least, statisticians' best estimates of reality—is clear. And misperceptions were probably even greater in less data-rich and scientifically sophisticated eras. Besides inequality, we suspect misperceptions affect how people respond to inflation, unemployment, and other economic phenomena (Gimpelson and Oshchepkov 2012). More generally, respondents misperceive facts about various social phenomena (Hochschild 2001) and resist changing their views and policy preferences even when confronted with accurate information (Kuklinski et al. 2000, Lawrence and Sides 2014, Kuziemko et al. 2015).

References

Aalberg, Toril. 2003. *Achieving Justice: Comparative Public Opinions on Income Distribution.* Leiden, Netherlands: Brill.

Acemoglu, Daron and James A. Robinson. 2006. *Economic Origins of Dictatorship and Demcoracy.* New York: Cambridge University Press.

Ahlquist, John S., and Erik Wibbels. 2012. "Riding the Wave: World Trade and Factor-Based Models of Democratization." *American Journal of Political Science* 56(2): 447-464.

Alesina, Alberto, and George-Marios Angeletos. 2005a. "Fairness and Redistribution." *American Economic Review* 95(4): 960-980.

Alesina, Alberto, and George-Marios Angeletos. 2005b. "Corruption, Inequality, and Fairness." *Journal of Monetary Economics* 52(7): 1227–1244.

Alesina, Alberto, Guido Cozzi, and Noemi Mantovan. 2012. "The Evolution of Ideology, Fairness and Redistribution." *The Economic Journal* 122: 1244–1261.

Alesina, Alberto, Nichola Fuchs-Schundeln. 2007. "Good-Bye, Lenin, or Not?" *American Economic Review* 97: 1507-1528.

Alesina, Alberto, and Paola Giuliano. 2009. "Preferences for redistribution." National Bureau of Economic Research, working paper w14825.

Alesina, Alberto and Eliana La Ferrara. 2005. "Preferences for redistribution in the land of opportunities." *Journal of Public Economics*: 897-931.

Alesina, Alberto, and Roberto Perotti. 1994. "The political economy of growth: a critical survey of the recent literature." *The World Bank Economic Review* 8(3): 351-371.

Ansell, Ben, and David Samuels. 2010. "Inequality and democratization: A contractarian approach." *Comparative Political Studies* 43(12): 1543-1574.

Bagchi Sutirtha, and Jan Svejnar. 2013. "Does Wealth Inequality Matter for Growth? The Effect of Billionaire Wealth, Income Distribution, and Poverty" IZA DP No. 7733.

Bénabou, Roland, and Efe Ok. 2001. "Social mobility and the demand for redistribution: the POUM hypothesis." *Quarterly Journal of Economics* 116(2): 447– 487.

Bénabou, Roland and Jean Tirole. 2006. "Belief in a Just World and Redistributive Politics." *Quarterly Journal of Economics* 121(2): 699-746.

Boix, Carles. 2003. *Democracy and Redistribution.* New York: Cambridge University Press.

Chambers, John, Lawton Swan and Martin Heesacker. 2014. "Better Off Than We Know: Distorted
      Perceptions of Incomes and Income Inequality in America." *Psychological Science* 25(2):
      613–618.

CIS Statistical Committee. 2012. *Statistika SNG. Statisticheskii' biulleten'* 9, September.

Cojocaru, Alexandru, and Mame Fatou Diagne. 2015. "How reliable and consistent are subjective
      measures of welfare in Europe and Central Asia? Evidence from the second Life in
      Transition Survey." *Economics of Transition* 23(1):75–103. DOI: 10.1111/ecot.12056.

Corneo Giacomo, and Hans-Peter Gruner. 2002. "Individual Preferences for Political
      Redistribution." *Journal of Public Economics* 83: 83-107.

Credit Suisse. 2010, 2014, 2015. *Credit Suisse Global Wealth Databook.* Credit Suisse Research Institute.

Cruces, Guillermo, Ricardo Perez-Truglia, and Martin Tetaz. 2013. "Biased perceptions of income
      distribution and preferences for redistribution: Evidence from a survey experiment." *Journal
      of Public Economics* 98: 100-112.

Cukierman, Alex, and Allan Meltzer. 1989. "A political theory of government debt and deficits in a
      neo-Ricardian framework." *American Economic Review*: 713-732.

Donnelly, Michael and Grigore Pop-Eleches. 2012. "The Questionable Validity of Income Measures
      in the World Values Survey," Princeton University: unpublished.

Engelhardt, Carina and Andreas Wagener. 2014. "Biased Perceptions of Income Inequality and
      Redistribution." University of Hannover, DP no.526.

Food and Agriculture Organization. 2012. *Statistical Yearbook,* Rome: FAO.

Fernandez-Albertos, Jose and Alexander Kuo. 2013. "Relative Income, Information, and Progressive
      Taxation: Evidence from a Survey Experiment." Cornell University: unpublished.

Friedman, Milton. 1953. "The methodology of positive economics." In Milton Friedman, ed. *Essays in
      Positive Economics.* University of Chicago Press, 3–43.

Galor, Oded, and Joseph Zeira. 1993. "Income Distribution and Macroeconomics." *The Review of
      Economic Studies* 60: 35-52.

Gimpelson, Vladimir, and Aleksei Oshchepkov. 2012. "Does more unemployment cause more fear
      of unemployment?" *IZA Journal of Labor & Development* 1(1): 1-26.

Goldstone, Jack. 2014. *Revolutions: A Very Short Introduction,* New York: Oxford University Press.

Goodin, Robert, and John Dryzek. 1980. "Rational Participation: The Politics of Relative Power."

British Journal of Political Science 10(3): 273-92.

Haggard, Stephan, and Robert Kaufman. 2012. "Inequality and Regime Change: Democratic

   Transitions and the Stability of Democratic Rule." *American Political Science Review*

   106(3): 495-516.

Hochschild, Jennifer. 2001. "Where You Stand Depends on What You See: Connections Among

   Values, Perceptions of Fact, and Political Prescriptions." In James Kuklinski, ed., *Citizens*

   and Politics: Perspectives from Political Psychology. New York: Cambridge University

   Press, 313-340.

Houle, Christian. 2009. "Inequality and democracy: Why inequality harms consolidation but does

   not affect democratization." *World Politics* 61(4): 589-622.

Huber, John and Piero Stanig. 2011. "Church-State Separation and Redistribution." *Journal of*

   Public Economics 95: 828-836.

Iversen, Torben, and David Soskice. 2015. "Information, Inequality, and Mass Polarization: Ideology in

   Advanced Democracies," *Comparative Political Studies,* forthcoming.

Ipsos MORI. 2015. *Perils of Perception.* https://www.ipsos-mori.com/ assets/sri/perils/.

Kiatpongsan, Sorapop, and Michael I. Norton. 2014. "How much (more) should CEOs make? A

   universal desire for more equal pay." *Perspectives on Psychological Science* 9(6): 587-593.

Kuhn, Andreas. 2011. "In the eye of the beholder: Subjective inequality measures and individuals' assessment

   of market justice." *European Journal of Political Economy* 27: 625-41.

Kuhn, Andreas. 2016. "The Subversive Nature of Inequality: Subjective Inequality Perceptions and Attitudes

   to Social Inequality." CesIFO Working Paper No. 6023.

Kuklinski, James , Paul Quirk, Jennifer Jerit, David Schwieder, and Robert Rich. 2000. "Misinf-

   ormation and the currency of democratic citizenship." *Journal of Politics* 62(3): 790-816.

Kuziemko, Ilyana, Michael I. Norton, Emmanuel Saez, and Stefanie Stantcheva. 2015. "How Elastic

   Are Preferences for Redistribution? Evidence from Randomized Survey Experiments."

   American Economic Review, 105(4): 1478-1508.

Lawrence, Eric D., and John Sides. 2014. "The consequences of political innumeracy." *Research &*

   Politics 1(2): 1-8.

Loughnan, Steve et al. 2011. "Economic Inequality Is Linked to Biased Self-Perception."

   Psychological Science 22(10): 1254–1258.

Lenz, Gabriel S. 2004. "The Consequences of Income Inequality for Redistributive Policy in the
    United States." In: Neckerman Kathryn, ed. *Social Inequality*. New York, NY: Russell Sage
    Foundation, 797-820.

Lupia, Arthur. 2015. *Uninformed: Why People Know So Little About Politics And What We Can Do About
    It*. Oxford University Press.

Lupu, Noam, and Jonas Pontusson. 2011. "The structure of inequality and the politics of
    redistribution." *American Political Science Review* 105(02): 316-336.

Meltzer, Alan H., and Scott F. Richard. 1981. "A rational theory of the size of government." *Journal
    of Political Economy*: 914-927.

Neckerman, Kathryn M., and Florencia Torche. 2007. "Inequality: Causes and consequences."
    Annual Review of Sociology 33: 335-357.

Niehues, Judith. 2014. "Subjective Perceptions of Inequality and Redistributive Preferences: An
    International Comparison," Cologne Institute for Economic Research: unpublished.

Norton, Michael, and Dan Ariely. 2011. "Building a better America—one wealth quintile at a time"
    Perspectives on Psychological Science 6: 9-12.

Oostendorp, Remco. 2012. "The Occupational Wages around the World (OWW) Database: Update
    for 1983-2008)." World Bank: World Development Report 2013 Background paper.

Ostby, Gudrun. 2013. "Inequality and political violence: A review of the literature." *International
    Area Studies Review* 16(2): 206-231.

Persson, Torsten, and Guido Tabellini. 1994a. "Does centralization increase the size of
    government?" *European Economic Review* 38(3): 765-773.

Persson, Torsten, and Guido Tabellini. 1994b. "Is Inequality Harmful for Growth?" *American
    Economic Review* 84: 600-621.

Piketty, Thomas. 1995. "Social Mobility and Redistributive Politics." *Quarterly Journal of
    Economics* 110: 551–584.

Pop-Eleches, Grigore. 2009. "Economic Reference Group Salience in Post-Communist Eastern
    Europe: Causes and Consequences." Princeton University: unpublished. *URL: https://www.
    princeton. edu/~ gpop/PC% 20ref% 20groups% 20GPE% 20Dec09. pdf.*

Ravallion, Martin, and Michael Lokshin. 2000. "Who wants to redistribute? The tunnel effect in
    1990s Russia." *Journal of Public Economics* 76(1): 87-104.

Solt, Frederick. 2008. "Economic inequality and democratic political engagement." *American Journal of Political Science* 52(1): 48-60.

Solt, Frederick. 2009. "Standardizing the World Income Inequality Database." *Social Science Quarterly* 90(2): 231-242.

Solt, Frederick. 2014. "The Standardized World Income Inequality Database." Working paper. SWIID Version 5.0, October 2014.

Van Ourti, Tom, and Philip Clarke. 2011. "A simple correction to remove the bias of the Gini coefficient due to grouping." *Review of Economics and Statistics* 93(3): 982-994.

Verme, Paolo. 2014. "Explaining the Gap Between Facts and Perceptions of Inequality." *Inequality in Focus* 2(4): 5-8.

Xu, Ping, and James C. Garand. 2010. "Economic Context and Americans' Perceptions of Income Inequality." *Social Science Quarterly* 91(5): 1220-1241.

Appendix

Table A1: Perceived Type of Society, 2009

	Type A: Steep pyramid: A small elite at the top, very few people in the middle and the great mass of people at the bottom.	Type B: Regular pyramid: A society like a pyramid with a small elite at the top, more people in the middle, and most at the bottom.	Type C: Pyramid with few poor: A pyramid except that just a few people are at the bottom.	Type D: Diam- ond: A society with most people in the middle.	Type E: upside down type C: Many people near the top, and only a few near the bottom.	Can't Choose	No Answer	N
Latvia	67.6	20.0	5.3	2.3	3.7	1.0	0.0	1,069
Ukraine	62.9	20.0	4.5	2.3	1.5	8.4	0.3	2,012
Bulgaria	59.5	25.9	5.0	3.0	0.5	5.8	0.3	1,000
Hungary	52.0	30.7	5.7	3.4	1.2	5.0	2.0	1,010
Croatia	51.4	25.8	5.8	4.9	1.7	9.9	0.6	1,201
South Africa	49.4	29.2	8.0	7.8	2.6	2.7	0.4	3,305
Argentina	44.7	35.3	9.2	6.9	1.9	2.1	0.0	1,133
Slovak Rep.	39.1	35.9	8.2	6.3	1.5	7.8	1.3	1,159
Turkey	36.0	32.3	10.8	8.0	2.9	2.9	7.1	1,569
Poland	34.4	30.7	12.9	11.9	3.5	6.5	0.1	1,263
Russia	34.3	31.2	11.0	7.7	3.0	12.9	0.0	1,603
Portugal	33.9	29.5	9.9	6.1	3.9	15.7	1.0	1,000
Italy	32.0	39.0	11.7	10.6	1.9	3.6	1.2	1,084
Philippines	31.6	38.9	11.1	10.0	6.4	2.0	0.0	1,200
Estonia	30.5	44.7	10.0	9.2	1.6	4.0	0.0	1,005
Venezuela	29.9	34.7	16.6	10.3	4.5	2.5	1.6	999
Czech Rep.	28.2	34.3	17.6	13.7	2.2	4.0	0.0	1,205
Chile	23.2	45.9	12.7	12.6	2.7	2.6	0.3	1,505
Slovenia	23.0	27.4	23.7	10.7	2.4	9.5	3.4	1,065
China	21.1	45.9	12.7	14.0	3.3	3.0	0.0	3,010
South Korea	19.0	34.8	25.6	15.0	4.9	0.8	0.0	1,599
Taiwan	18.3	36.5	25.4	15.7	2.4	1.8	0.0	2,026
France	17.5	49.0	16.5	12.1	1.6	1.3	2.0	2,817
Israel	17.1	51.4	14.1	8.6	1.0	6.2	1.7	1,193
Germany	16.9	31.8	20.7	16.7	3.8	10.0	0.0	1,395
Spain	15.2	37.3	19.6	15.5	3.3	4.7	4.5	1,215
Austria	15.0	22.5	28.1	20.5	2.8	11.2	0.0	1,019
UK	13.4	40.2	18.2	21.1	3.4	2.8	1.0	958
USA	12.3	29.3	10.8	19.6	2.1	23.5	2.5	1,581
Japan	10.0	34.9	23.9	18.1	3.6	8.9	0.5	1,296
Iceland	9.5	18.3	19.1	46.7	4.4	1.4	0.6	947
Belgium	7.0	31.6	20.8	29.8	2.8	5.9	2.2	1,115
Sweden	6.8	22.1	28.2	36.0	1.8	3.2	2.0	1,137
Australia	6.4	27.6	22.5	36.9	2.5	1.2	2.9	1,525
Switzerland	6.4	23.8	24.5	38.3	4.4	2.6	0.0	1,229
New Zealand	6.3	30.1	25.4	33.9	1.6	1.5	1.3	935
Finland	6.2	20.6	32.1	35.3	1.3	2.5	2.1	880
Cyprus	4.3	22.7	54.4	12.3	1.0	5.3	0.0	1,000
Norway	2.0	10.4	22.9	54.6	6.9	1.9	1.3	1,456
Denmark	1.5	10.1	24.2	55.8	3.4	3.2	1.8	1,518
Total	25.6	31.9	16.5	17.0	2.8	5.1	1.1	55.23

Source: ISSP 2009.

Figure A1: Inequality--Perceptions and Reality, 2009
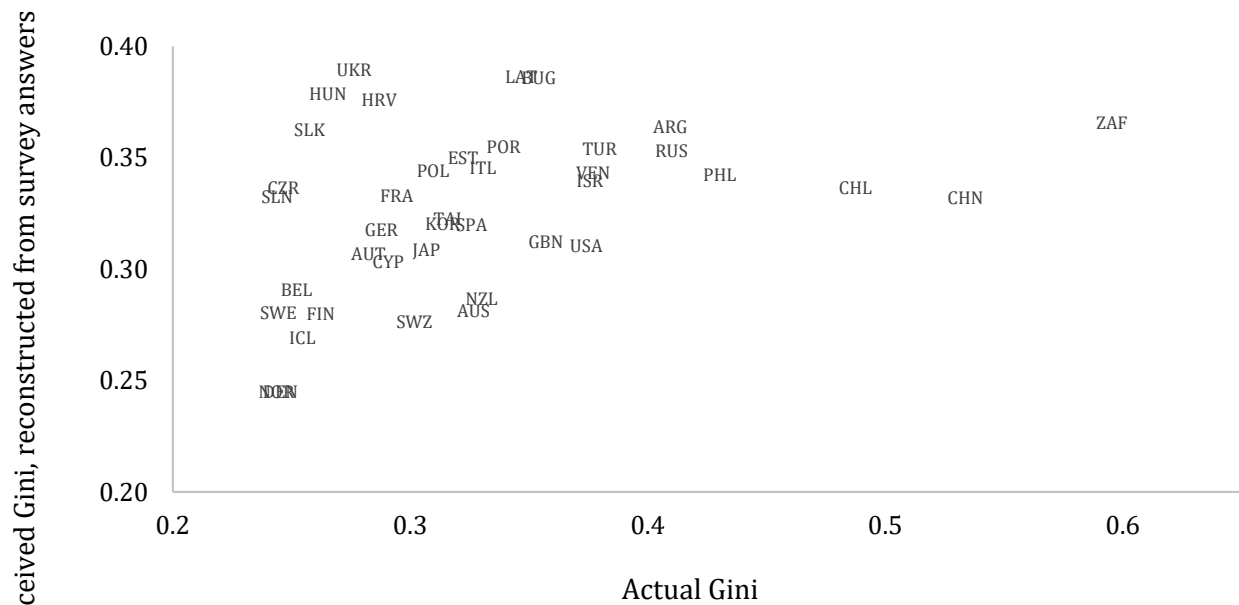
Sources: SWIID (Solt 2014) and ISSP (2009).
Note: Actual Gini is for post-tax-and-transfer income. Perceived Gini is reconstructed from responses to ISSP question 14a. Correlation: r = .37.

Table A2:   Estimated actual average earnings (US dollars, 2009 or year close to it)

	Doctor (GP)	Chairman of large national company	Shop assistant	Unskilled factory worker	Cabinet minister
Australia		2,400,000 v			170,199 i
Austria					334,524 s
Bulgaria			3,306 b		
Cyprus	66,247 c		19,472 b	16,690 c	
Denmark	138,137 d		49,830 d	59,287 d	160,189 d
Finland					175,907 t
Germany	120,926 a	3,627,291 u			196,412 j
Hungary	17,159 c			7,099 c	
Iceland			27,980 c		88,800 k
New Zealand	68,202 p				167,639 m
Norway	114,277 h	1,700,000 v	48,076 h	51,320 h	210,000 l
Philippines	5,452 c			2,056 c	
South Africa		1,700,000 v			190,325 g
Sweden	88,154 e	1,771,889 u	36,863 e	34,980 e	169,412 f
UK	135,915 r	2,806,070 u	17,757 r	32,576 r	111,939 r
United States	168,550 n	5,266,950 u	24,630 n	28,840 n	199,700 o

Note: unless otherwise noted converted to dollars at average exchange rate for year (from WDI).

Sources: a German Statistical Agency, for 2010:
https://www.destatis.de/EN/FactsFigures/NationalEconomyEnvironment/EarningsLabourCosts/EarningsEarningsDifferences/Tables/Flyer_VSE2006.html
b average annual earnings for service and sales employees in wholesale, retail, and repair of motor vehicles in 2010, from Eurostat.
c OWW Database of World Bank for latest year from 2006-08; See Remco Oostendorp, 2012, "The Occupational Wages around the World (OWW) Database: Update for 1983-2008)." World Development Report 2013 Background paper.
d   Senior govt officials, central govt sector; medical doctors; shop sales assistants; manufacturing laborers; standardized monthly salary in DKK, 2010, from Statbank Denmark, http://www.statbank.dk/statbank5a/SelectVarVal/saveselections.asp
e directors and chief executives, private sector; medical doctors; shop salesperson; manufacturing labourers; from Statistics Sweden, for 2009, http: //www.statistikdatabasen.scb.se.
f: http://www.swedishwire.com/politics/364-swedish-ministers-gets-pay-raise
g http://www.iol.co.za/news/south-africa/salary-hikes-for-politicians-1.420367#.VKoo1HtbjsA
h from Statistics Norway, for 2009, physicians; elementary occupations in wholesale and retail; elementary occupations in manufacturing;   https://www.ssb.no/statistikkbanken/selectvarval/saveselections.asp
i http://www.dailytelegraph.com.au/prime-minister-kevin-rudd-gives-mps-a-3-pay-rise/story-e6freuy9-1225779054052?nk=749a3e046eca9261ddecc253d64394ce
j as of early 2012, from http://www.thelocal.de/20120516/42579.
k for PM http://icelandreview.com/news/2009/05/12/no-government-salaries-exceed-pm, 2009
l   2010, PM; http://www.newsinenglish.no/2010/03/09/blasted-bureaucrats-earn-more-than-the-prime-minister/
m including expense account, http://www.legislation.govt.nz/regulation/public/2009/0340/latest/DLM2508218.html
n US Bureau of Labor Statistics for 2009, for unskilled factory worker "team assembler"; "retail salesperson"; http://www.bls.gov/oes/2009/may/oes_stru.htm
o from January 2010.
p OECD for 2008 (New Zealand 2007), http://www.oecd-ilibrary.org/sites/gov_glance-2011-en/06/02/index.html?contentType=%2Fns%2FChapter%2C%2Fns%2FStatisticalPublication&itemId=%2Fcontent%2Fchapter%2Fgov_glance-2011-32-en&mimeType=text%2Fhtml&containerItemId=%2Fcontent%2Fserial%2F22214399&accessItemIds=
r from Annual Survey of Hours and Earnings, 2010 (for 2009) Results, http://www.ons.gov.uk/ons/publications/re-reference-tables.html?edition=tcm%3A77-210656; for cabinet ministers: "senior officials in national government".
s http://www.wien-konkret.at/politik/politikergehaelter/   from July 2008
t for 2011, not including extra salary if member of parliament as well: http://valtioneuvosto.fi/tietoa-valtioneuvostosta/perustietoa/en.jsp
u Conyon, Martin, Nuno Fernandes, Miguel Ferreira, Pedro Matos, and Kevin Murphy. 2011. *The executive compensation controversy: A transatlantic analysis.* http://digitalcommons.ilr.cornell.edu/ics/5/, p.42, for 2008; converted from Euros at 1 E = $1.3919, end of 2008 rate quoted by Conyon et al.
v Fernandes, Nuno, Miguel A. Ferreira, Pedro Matos, and Kevin J. Murphy. 2013. "Are US CEOs paid more? New international evidence." *Review of Financial Studies* 26(2): 323-367), for 2006.

Table A3:   Respondents' average estimate of average pre-tax income in different occupations proportion of *actual* average pre-tax income, 2009 or year close to it)

	(1) Shop Assistant	(2) Unskilled factory worker	(3) Doctor (GP)	(4) Cabinet minister	(5) Chairman of large national company
Australia				1.54 [52]	0.78 [86]
Austria				0.76 [64]	
Bulgaria	1.00 [29]				
Cyprus	0.73 [32]	1.03 [13]	2.40 [89]		
Denmark	1.09 [13]	0.96 [32]	1.43 [40]	1.66 [36]	
Finland				1.25 [56]	
Germany			1.11 [56]	1.43 [46]	0.73 [94]
Hungary		0.75 [58]	1.04 [43]		
Iceland	0.82 [30]			1.11 [22]	
New Zealand			1.24 [47]	0.72 [58]	
Norway	1.54 [13]	1.54 [15]	1.90 [36]	0.92 [79]	0.25 [97]
Philippines		0.85 [59]	26.48 [67]		
South Africa				0.74 [85]	0.05 [100]
Sweden	0.79 [14]	0.93 [6]	0.84 [34]	6.83 [55]	0.18 [96]
United	1.30 [25]	0.70 [63]	0.99 [44]	1.82 [55]	0.23 [98]
United States	1.17 [40]	0.93 [42]	2.08 [60]	2.21 [64]	0.82 [95]

Sources: See Table A2.
Note: Percent of respondents whose guess was off by more than plus or minus 33 percent in square brackets. Note that the table shows figures for the average guess of respondents. The median guess tends to be closer to the actual level. But still, on average more than 50 percent of respondents gave a guess that was more than 33 percent above or below the correct answer, suggesting a high level of ignorance (the average of the percentages in square brackets in Table A3 is 52 percent).

Table A4: Wealth share of wealthiest 1%: average guess and actual percentage

	Average guess, percent	Actual share, percent	Error, percentage points
Great Britain	59	23	36
Germany	59	30	29
United States	57	37	20
China	56	39	17
France	56	23	33
Spain	56	27	29
Canada	55	25	30
Australia	54	21	33
Chile	54	43	11
Russia	53	70	-17
Turkey	53	54	-1
Belgium	50	18	32
New Zealand	50	18	32
South Africa	49	43	6
South Korea	49	34	15
Argentina	46	44	2
Italy	46	23	23
Sweden	46	32	14
Norway	45	25	20
Colombia	43	34	9
Japan	41	19	22
Brazil	40	48	-8
India	40	53	-13
Ireland	40	27	13
Netherlands	40	24	16
Poland	38	34	4
Mexico	36	36	0
Israel	32	39	-7
Peru	32	47	-15

Source: Ipsos MORI, "Perils of Perception" Poll, 2015; Credit Suisse (2015, 2014).

Table A5:   Percentage of respondents that got the poverty rate wrong by more than 10 percentage points, 2010

Cyprus	59	Slovakia	25
Hungary	56	France	25
Poland	52	Lithuania	24
Malta	52	Latvia	24
Spain	51	Belgium	19
Italy	46	Bulgaria	18
Portugal	45	Romania	12
Ireland	45	Luxembourg	8
United Kingdom	43	Finland	6
Estonia	42	Austria	6
Germany	42	Netherlands	5
Greece	37	Sweden	4
Czech Republic	36	Denmark	3
Slovenia	35	*Total*	*30*

Sources: Eurobarometer 2010, Eurostat 2010.
Notes: Percent of those who offered a guess. In the average country, another five percent said they did not know. Guesses are compared to the poverty rate under the EU-favored definition (income of less than 60 percent of the median equivalized income after social transfers). Results very similar using the national definitions of the poverty line (usually identical to the EU-favored definition or within a percentage point or two of it). Actual poverty rates in Europe in 2010 ranged between 9 and 27 percent by the EU definition (10 and 27 percent using national poverty lines). In most cases, respondents overestimated poverty, but in Spain, where the poverty rate was actually 21.4 percent, about half of those respondents who hazarded a guess thought it was around 10 percent or less.

Table A6: Additional sources and notes for Table 3

Country	**Sources**	**Notes**
New Zealand	Statistics New Zealand, Average: http://www.stats.govt.nz/infoshare/ViewTable.aspx?pxID=c20e972f-f6a1-4e85-bd84-d3f60363a81a), Median: http://www.stats.govt.nz/browse_for_stats/income-and-work/Income/NZIncomeSurvey_HOTPJun14qtr.aspx.	Average: Average weekly earnings, total, all industries, seasonally adjusted, averaged for 4 quarters, x 52; Median: median weekly income from wages and salaries, June Qtr 2014 x 52.
Colombia	Gomez-Lievano, A., Tellez, J., & Lora, E. (2015). *New Insights About Wage Inequality in Colombia,* Center for International Development. https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=58&ved=0ahUKEwjYyeKM9uzMAhUP2WMKHVN9AVw4MhAWCEswBw&url=http%3A%2F%2Fgrowthlab.cid.harvard.edu%2Ffiles%2Fgrowthlab%2Ffiles%2Fwage_inequality_colombia_wp_66.pdf&usg=AFQjCNGDSUi-78afPtsFJibE6HLEJ-zsQQ&sig2=GnyeVLwPzijyeScKB_b2Bw&cad=rja	Monthly x 12 for both average and median.
Great Britain	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers".
Australia	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and

	relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers".
Sweden	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: Statistics Sweden: Data downloaded at http://www.statistikdatabasen.scb.se/pxweb/en/ssd/START___AM___AM0 110___AM0110A/LoneSpridSektorYrk4A/table/tableViewLayout1/?rxid=841 263ea-1c85-4603-8d48-7ba57fec0e25#, Aug 7, 2016.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: monthly median salary, 2014.
China	National Bureau of Statistics of China, http://www.stats.gov.cn/tjsj/ndsj/2015/indexeh.htm.	Average: average wage of employed persons in urban units, 2014.
Canada	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
Belgium	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
Japan	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
Germany	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
US	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
Israel	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage

		"Minimum relative to average wages of full-time workers."
Hungary		Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers".
	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	
Turkey	Turkish Statistical Institute, http://www.turkstat.gov.tr/PreIstatistikTablo.do?istab_id=1065.	Average and median annual gross earnings of employees who worked and were paid for the whole year (12 months).
Poland		Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estinates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	
Russia	Average: Rosstat, http://www.gks.ru/free_doc/new_site/population/trud/sr-zarplata/t1.docx; Median: Rosstat, http://www.gks.ru/free_doc/new_site/population/bednost/tabl/3-2-5.doc.	Average: 2014, average for year. Median: average wage in middle quintile, average of figures for 2013 and 2015 since no figure available for 2014; monthly x 12.
Spain		Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estinates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	
Italy	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016).	Average: average annual wages per full-time and full-year equivalent employee in the total economy.
France		Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	
Brazil	Average: IBGE, ftp://ftp.ibge.gov.br/Trabalho_e_Rendimento/Pesquisa_Mensal_de_Empre go/Tabelas/2016/tab116022016.xls.	Average: average nominal income from the main job, actually received in the reference month , for people 10 years or older; monthly totals summed for the year.
Saudi Arabia	Average: ILO, http://www.ilo.org/ilostat/faces/home/statisticaldata/ContryProfileId?_afrL oop=739573349553730#!%40%40%3F_afrLoop%3D739573349553730%26_adf .ctrl-state%3D1214c3b4ap_547.	Average: average monthly earnings of employees x 12.
Argentina	INDEC, www.indec.gov.ar/uploads/informesdeprensa/ingresos1trim_14.pdf, www.indec.gov.ar/uploads/informesdeprensa/ingresos2trim_14.pdf, www.indec.gov.ar/uploads/informesdeprensa/ingresos3trim_14.pdf, www.indec.gov.ar/uploads/informesdeprensa/ingresos4trim_14.pdf.	Average: average monthly earnings of employees, averaged across 4 quarters, x 12, urban; Median: median monthly earnings of employees, averaged across 4 quarters, x 12, urban.
South Korea	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed	Average: average annual wages per full-time and full-year equivalent employee in

	Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers".
Peru	Average: Instituto Nacional de Estadística e Informática - Encuesta Nacional de Hogares, see https://www.google.com/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwjNnpL49K_OAhVPyGMKHQTXDScQFggcMAA&url=https%3A%2F%2Fwww.inei.gob.pe%2Fmedia%2FMenuRecursivo%2Fpublicaciones_digitales%2FEst%2FLib1294%2Flibro.pdf&usg=AFQjCNH1PYOMvXKhzTBFPryMdaDqmEmNlg, p.420.	Average: average monthly income from work x 12; Median: average monthly income from work for middle quintile x12.
Mexico	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
Chile	Average: OECD data download, Average annual wages, (http://stats.oecd.org/Index.aspx?DatasetCode=AV_AN_WAGE, accessed Aug 6, 2016). Median: calculated from OECD data download, "Minimum relative to average wages of full-time workers" http://stats.oecd.org/viewhtml.aspx?datasetcode=MIN2AVE&lang=en#.	Average: average annual wages per full-time and full-year equivalent employee in the total economy; Median: calculated from OECD estimate of average wage and OECD estimates of minimum wage as percent of median and of average wage "Minimum relative to average wages of full-time workers."
South Africa	Average: ILO, http://www.ilo.org/ilostat/faces/home/statisticaldata/ContryProfileId?_adf.ctrl-state=1214c3b4ap_547.&_afrLoop=755748208759559#!%40%40%3F_afrLoop%3D755748208759559%26_adf.ctrl-state%3Dtn4o454gm_4. Median: Statistics South Africa, http://www.statssa.gov.za/?p=4445.	Average: average monthly earnings of employees, 2013. Median: Median monthly earnings for employees x 12, 2013 but this is same in 2014.

Table A7: Do people know the average wage in their country? Adjusting for possible respondent misinterpretations

Country	(1) Actual average wage as percent of median	(2) Mean guess as percent of median (MGPM)	(3) MGPM x12 when that helps	(4) Mean guess now on "right" side of median	(5) MGPM x12 and adjusted from post-tax to pre-tax when that helps	(6) Mean guess now on "right" side of median
New Zealand	109	112	112	YES	112	YES
Great Britain	121	77	77	NO	112	YES
Australia	124	77	77	NO	106	YES
Sweden	113	69	69	NO	120	YES
China	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Canada	112	59	59	NO	87	NO
Belgium	117	60	60	NO	136	YES
Japan	115	58	58	NO	86	NO
Germany	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
US	138	63	63	NO	92	NO
Israel	137	57	57	NO	72	NO
Hungary	133	56	56	NO	110	YES
Turkey	175	53	53	NO	86	NO
Poland	125	37	37	NO	57	NO
Russia	140	38	38	NO	n.a.	n.a.
Spain	119	30	30	NO	50	NO
Italy	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
France	123	21	21	NO	42	NO
Brazil	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Saudi Arabia	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
Argentina	117	12	139	YES	n.a.	n.a.
South Korea	128	8	97	NO	124	YES
Colombia	172	10	123	YES	n.a.	n.a.
Peru	123	8	101	YES	n.a.	n.a.
Mexico	131	4	43	NO	54	NO
Chile	150	5	59	NO	64	NO
India	n.a.	n.a.	n.a.	n.a.	n.a.	n.a.
South Africa [a]	270	137	137	YES	n.a.	n.a.
Percent of countries with mean guess on right side of median				23%		41%

Sources: Ipsos MORI (2015); see Table A6 for sources and notes on "actual" figures.

Notes: Respondents were asked: "What do you think the average annual wage for a full-time worker is in [country]?"   [a] 2013. Column 5: OECD estimates of tax wedge (for single person at 100% of average earnings, no child) used to adjust guess from post-tax to pre-tax amount when that brings the guess closer to the actual average wage.

Table A8: What if respondents thought the question referred to "industrial workers"?

Country	(1) Respondents' average guess of average wage	(2) Actual average wage of machine operator, 2014, LCUs	(3) Error, percentage points	(4) Average guess x12 and adjusted from post-tax to pre-tax when than helps	(5) Error (adjusted guesses), percentage points
New Zealand	50,210	48,100	4.39	50,210	4.39
Great Britain	20,802	23,124	10.04	20,802	10.04
Australia	48,845	70,169	30.39	67,523	3.77
Sweden	232,380	348,969	33.41	403,879	15.70
China	32,821				
Canada	33,320				
Belgium	21,965	39,765	44.76	49,463	24.40
Japan	2,045,037				
South Africa	50,040				
Germany	16,680	33,094	49.60	32,868	0.68
US	26,092				
Israel	53,243				
Hungary	1,213,809	2,397,826	49.38	2,381,278	0.69
Turkey	10,200	20,926	51.26	16,474	21.27
Poland	13,350	39,496	66.20	20,406	48.33
Russia	105,082				
Spain	6,799	25,101	72.91	11,469	54.31
Italy	6,050	28,762	78.97	11,680	59.39
France	6,260	29,046	78.45	12,134	58.23
Brazil	3,084	16,270	81.04	3,084	81.04
Saudi Arabia	9,069				
Argentina	6,942				
South Korea	2,092,564	34,470,840	93.93	32,071,994	6.96
Colombia	758,605				
Peru	1,003				
Mexico	3,822				
Chile	316,782				
India	108,345				
Average error, % points			53		30

Sources: Ipsos MORI (2015); see Table A9 for sources and notes on actual figures.
Notes: Respondents were asked: "What do you think the average annual wage for a full-time worker is in [country]?"
Column 4: OECD estimates of tax wedge (for single person at 100% of average earnings, no child) used to adjust guess from post-tax to pre-tax amount when that brings the guess closer to the actual average wage.

Table A9: Additional sources and notes for Table A8

Country	Sources	Notes
New Zealand	New Zealand Statistics, http://nzdotstat.stats.govt.nz/wbos/Index.aspx?DataSetCode=TABLECODE7452#, downloaded Auagust 7, 2016.	Machinery operators and drivers, average weekly earnings x 52.
Great Britain	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Australia	Australian Bureau of Statistics, for May 2014, http://www.abs.gov.au/ausstats/subscriber.nsf/log?openagent&63060do001_201405.xls&6306.0&Data%20Cubes&579D9C93BCEDC1A3CA257DD400758DF6&0&May%202014&22.01.2015&Latest	Machinery operators and drivers; May 2014
Sweden	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Belgium	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Germany	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Hungary	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Turkey	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers
Poland	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers; Elementary occupations
Spain	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers; Elementary occupations
Italy	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers; Elementary occupations
France	Eurostat, Structure of Earnings Survey, 2014, http://ec.europa.eu/eurostat/web/labour-market/earnings/database#, downloaded August 7, 2016.	Plant and machine operators and assemblers; Elementary occupations
Brazil	ILO	Plant and machine operators, and assemblers
South Korea	ILO	Plant and machine operators, and assemblers, private sector only

Figure A2: **Respondents' Self-Placement into Income Deciles, LiTS 2010**

Graphs by countryname
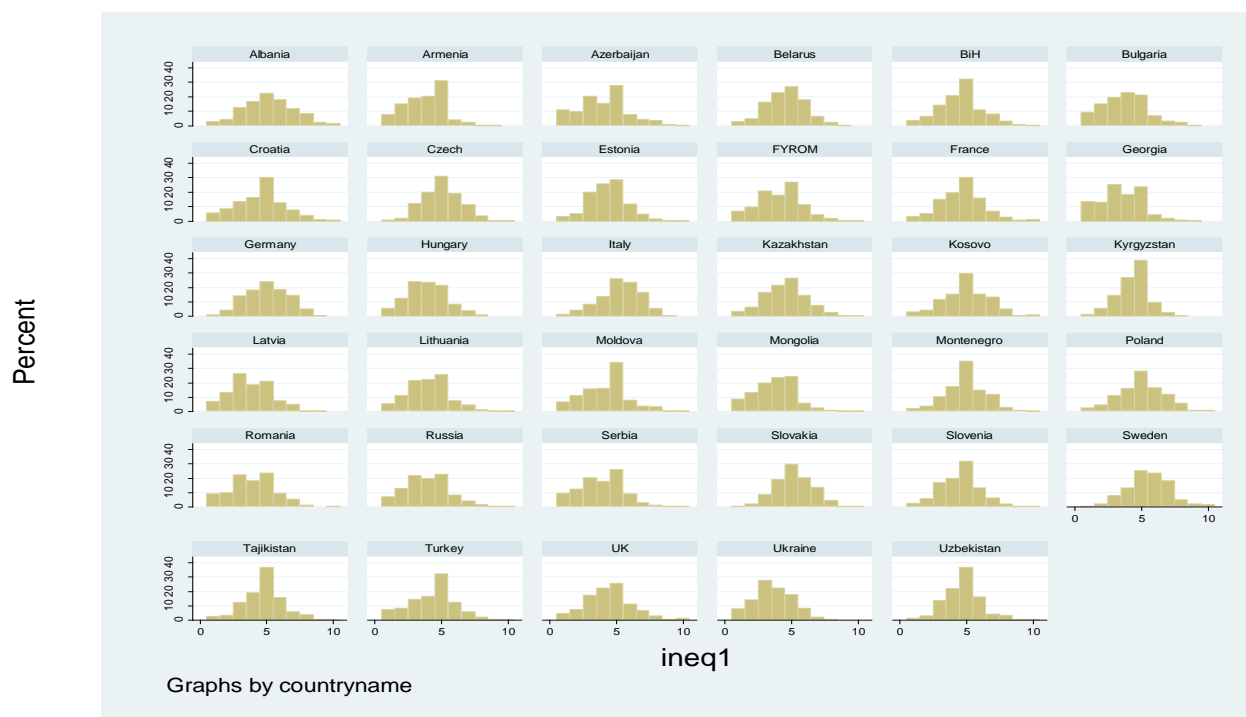
Table A10: **Car owners' self-placement in the income distribution**

	Percent of households that owned a car, 2010		Percent of those reporting a car in the household who placed themselves in the following deciles:										Percent who placed themselves in bottom half	
	National statistics	LiTS survey	Lowest	2	3	4	5	6	7	8	9	highest		s.e.
Azerbaijan	23	28	7	7	16	15	34	11	6	3	1	0	79	(2.4)
Belarus	33	44	1	4	11	17	28	23	8	4	1	0	61	(2.3)
Kazakhstan	28	36	1	3	14	18	27	20	9	4	1	1	63	(2.6)
Kyrgyzstan	17	34	1	1	6	19	49	15	6	2	0	0	77	(2.3)
Moldova	19	30	4	5	10	13	46	9	6	5	1	0	77	(2.5)
Ukraine	20	25	4	8	20	27	23	12	4	0	0	0	82	(2.0)

Sources: LiTS 2010; CIS Statistical Committee (2012, p.80); Moldovan National Bureau of Statistics.

Table A11: Owners of second home, self-placement in the income distribution

	Percent that said someone in their household owned a secondary residence (LiTS 2010)	*Percent of those reporting a secondary residence who placed themselves in the following deciles:*										*Percent who placed themselves in bottom half of distribution*	*s.e.*
		lowest	*2*	*3*	*4*	*5*	*6*	*7*	*8*	*9*	*highest*		
Albania	5	0	0	3	5	14	17	12	29	7	13	23	(5.8)
Armenia	6	0	3	5	29	45	11	5	0	2	0	81	(5.1)
Azerbaijan	3	0	4	7	13	35	15	7	12	0	7	59	(9.3)
Belarus	10	4	4	6	16	30	21	9	6	1	0	60	(5.0)
Bosnia	5	2	0	5	14	37	8	17	15	0	0	58	(6.6)
Bulgaria	12	6	6	16	22	30	11	7	2	0	0	80	(3.7)
Croatia	19	3	5	7	14	31	19	11	6	2	1	61	(3.4)
Czech Republic	5	0	0	5	8	28	28	23	5	2	0	41	(6.6)
Estonia	16	1	4	19	30	24	16	3	2	1	0	78	(3.4)
France	10	1	0	5	11	26	25	14	8	2	3	43	(4.8)
Georgia	6	5	5	16	8	52	5	3	2	2	0	86	(4.7)
Germany	6	0	0	3	5	20	24	34	6	0	0	28	(6.1)
Great Britain	5	2	0	8	12	19	23	15	14	6	3	40	(5.4)
Hungary	2	4	6	7	14	33	14	17	4	0	0	64	(10.0)
Italy	13	0	0	4	9	29	27	17	11	1	0	42	(4.1)
Kazakhstan	3	0	0	3	15	32	19	16	9	6	0	50	(8.8)
Kosovo	7	0	0	8	15	31	23	7	10	3	3	54	(5.6)
Kyrgyzstan	5	0	8	8	16	42	12	6	8	0	0	74	(6.3)
Latvia	10	6	6	24	18	27	9	7	0	1	0	81	(3.7)
Lithuania	9	3	9	13	25	31	12	3	1	2	0	81	(4.0)
Macedonia	12	3	6	21	18	29	11	8	3	0	2	77	(3.8)
Moldova	4	2	4	23	13	24	16	14	4	0	0	66	(7.3)
Mongolia	18	6	10	15	18	36	6	3	1	0	1	85	(2.7)
Montenegro	14	0	2	7	8	28	15	22	11	6	1	45	(4.1)
Poland	4	0	7	11	13	20	21	17	7	0	2	51	(6.6)
Romania	7	4	4	10	13	29	18	18	4	0	0	60	(5.6)
Russia	5	6	6	16	13	29	13	10	4	0	0	70	(5.3)
Serbia	14	2	7	16	21	29	12	7	4	0	0	76	(3.0)
Slovakia	10	1	2	6	8	27	23	18	12	1	0	43	(5.0)
Slovenia	13	4	2	7	20	30	17	13	6	1	0	62	(4.3)
Sweden	25	0	3	6	11	20	23	24	8	3	1	40	(3.3)
Tajikistan	4	0	0	9	7	20	46	12	5	0	0	36	(7.1)
Turkey	6	2	2	13	7	32	21	10	10	1	2	56	(6.2)
Ukraine	4	6	7	15	25	24	13	5	1	0	0	77	(5.3)
Uzbekistan	3	0	4	4	14	43	5	7	18	0	2	65	(7.0)
Average	9	2	4	10	14	30	17	12	7	1	1	60	

Source: LiTS 2010.

Table A12:   Owners of second home *and* car, self-placement in the income distribution

	Percent that said someone in their household owned a secondary residence and a car (LiTS 2010)	Percent of those reporting a car and a secondary residence who placed themselves in the following deciles:										Percent that put them-selves in bottom half of income distribution	s.e.
		lowest	2	3	4	5	6	7	8	9	highest		
Albania	4	0	0	2	4	14	20	10	27	9	14	19	(6.3)
Armenia	3	0	4	3	26	45	11	10	0	3	0	76	(7.4)
Azerbaijan	1	0	0	8	8	45	13	9	18	0	0	60	(14.7)
Belarus	6	2	3	0	8	33	25	13	10	2	0	46	(6.4)
Bosnia-Herzegovina	4	0	0	6	11	42	9	19	14	0	0	59	(7.3)
Bulgaria	8	3	3	13	25	28	15	10	3	0	0	72	(4.9)
Croatia	16	1	4	8	15	31	21	11	7	2	1	58	(3.8)
Czech Republic	5	0	0	3	8	28	29	23	5	2	0	40	(6.6)
Estonia	11	1	5	16	32	22	18	4	1	0	0	77	(4.1)
France	10	0	0	6	11	26	26	15	8	2	3	42	(4.9)
Georgia	3	3	11	11	8	59	8	0	0	0	0	92	(5.4)
Germany	6	0	0	3	4	21	25	33	6	0	0	28	(6.2)
Great Britain	5	2	0	6	12	19	23	15	14	6	3	39	(5.5)
Hungary	2	5	4	8	9	34	16	20	5	0	0	59	(10.5)
Italy	13	0	0	1	9	30	27	18	11	1	0	41	(4.1)
Kazakhstan	2	0	0	5	0	37	24	10	15	10	0	42	(11.0)
Kosovo	6	0	0	5	11	33	26	9	10	3	3	49	(6.2)
Kyrgyzstan	3	0	10	4	6	43	18	4	15	0	0	63	(9.3)
Latvia	7	3	4	21	20	28	10	10	0	1	0	76	(4.3)
Lithuania	7	4	5	10	28	30	15	4	1	3	0	76	(5.0)
Macedonia	9	3	5	17	18	32	11	9	3	0	2	74	(4.7)
Moldova	2	3	4	24	9	25	12	18	3	0	0	66	(9.9)
Mongolia	9	4	10	17	14	39	5	5	1	0	1	83	(4.0)
Montenegro	12	0	1	3	5	31	16	24	12	7	1	39	(4.4)
Poland	3	0	6	5	14	24	17	21	9	0	2	49	(7.5)
Romania	6	4	4	7	15	30	15	20	5	0	0	60	(6.2)
Russia	3	7	2	12	21	30	8	13	4	0	0	72	(6.7)
Serbia	11	3	6	11	19	31	14	9	4	1	0	71	(3.6)
Slovakia	9	0	0	6	8	25	24	20	13	1	0	39	(5.2)
Slovenia	11	3	1	5	19	32	18	13	7	1	0	60	(4.6)
Sweden	23	0	3	6	11	19	25	24	8	4	1	39	(3.5)
Tajikistan	4	0	0	8	6	19	50	15	0	0	0	33	(7.9)
Turkey	4	3	0	11	0	33	28	13	9	1	3	46	(7.6)
Ukraine	2	0	8	20	15	25	14	11	2	0	0	68	(8.5)
Uzbekistan	2	0	0	4	19	43	2	9	23	0	0	66	(10.1)
Average	*7*	*1*	*3*	*8*	*13*	*31*	*18*	*13*	*8*	*2*	*1*	*57*	

Source: LiTS 2010

Table A13:   Recipients of income support, self-placement in the income distribution

| | Percent of households that received income support, 2010 | | Percent of those reporting income support who placed themselves in the following deciles: | | | | | | | | | | Percent who placed themselves above the bottom | s.e. |
	National statistics	In LiTS survey	lowest	2	3	4	5	6	7	8	9	highest	two deciles	
France	6.3	3.6	14	14	35	22	13	3	0	0	0	0	72	(7.5)
Germany	< 1	5	11	33	32	5	9	5	0	0	0	0	52	(6.7)
Great Britain		1.4	7	30	30	16	9	7	0	0	0	0	62	(10.3)
Italy*		1.3	23	0	18	34	25	0	0	0	0	0	77	(12.7)
Sweden	5.7 **	1.1	0	29	32	8	18	0	0	5	8	0	71	(13.7)

Sources: LiTS 2010; German Federal Statistical Agency; Vie-publique.fr; European Commission; Institut national de la statistique et des études économiques.

Notes: * applied for targeted income support, not necessarily received; ** 2008.

Table A14:   Respondents with too little food, self-placement in the income distribution

	(A) LiTS 2010			
	Percent with inadequate access to food (2010-12) (FAO)	Percent of households that had had to cut consumption of staple foods, 2009-2010 (LiTS)	Percent having had to cut staple foods who placed themselves in the fifth decile or higher	s.e.
France	< 5	13	34	(4.2)
Germany	< 5	8	29	(4.9)
Great Britain	< 5	9	21	(3.3)
Italy	< 5	20	51	(3.6)
Sweden	5.3	3	44	(8.5)
(B) WVS 2010-14 (countries with GDP per capita PPP > $30,000 in 2013)				
	Percent with inadequate access to food (2010-12) (FAO)	Percent of households that had "often" or "sometimes" gone without enough food in last year	Percent saying "often" or "sometimes" who placed themselves in the fifth decile or higher	s.e.
Australia	< 5	5	28	(6.1)
Bahrain	n.a.	29	55	(2.7)
Germany	< 5	3	37	(6.4)
Hong Kong	n.a.	7	51	(5.9)
Japan	14.2	5	11	(2.8)
Netherlands	< 5	3	6	(3.5)
New Zealand	5.3	8	28	(5.5)
Qatar	n.a.	2	56	(10.1)
Singapore	n.a.	8	74	(3.4)
South Korea	< 5	9	44	(5.1)
Spain	< 5	6	29	(5.2)
Sweden	5.3	3	27	(8.3)
Trinidad & Tobago	17.1	13	52	(4.3)
United States	< 5	11	39	(3.4)

Sources: LiTS 2010; FAO (2012); World Values Survey VI (2010-14).

Table A15: Do people know how inequality is changing, 2013?

	Rich-poor gap increased	Rich-poor gap decreased	Rich-poor gap stayed same	Don't know or no answer	Actual change in Gini, 2007-12, % pts.	Right answer	Percent that got right answer
Argentina	57	15	24	4	-2.55	Decreased	15
Australia	64	4	25	7	-0.03	Same	25
Bolivia	32	26	37	4	-7.75	Decreased	26
Brazil	50	25	24	1	-1.49	Decreased	25
Britain	72	3	21	4	-0.04	Same	21
Canada	76	2	18	4	0.29 [a]	Same	18
Chile	51	13	34	2	-0.64 [a]	Same	34
China	69	17	9	4	2.02	Increased	69
Czech Republic	82	2	15	2	-0.99	Same	15
El Salvador	38	17	43	2	-3.42	Decreased	17
France	81	3	16	0	1.48	Increased	81
Germany	88	1	11	0	-1.28	Decreased	1
Greece	88	3	8	1	4.63	Increased	88
Indonesia	60	10	29	1	4.60	Increased	60
Israel	81	2	13	4	-0.08 [a]	Same	13
Italy	88	3	8	1	0.25	Same	8
Malaysia	32	22	38	8	0.10	Same	38
Mexico	59	13	22	6	-0.34	Same	22
Nigeria	80	7	10	3	-0.97 [a]	Same	10
Pakistan	83	3	7	7	6.08 [a]	Increased	83
Philippines	66	9	24	1	0.16	Same	24
Poland	71	12	12	4	-2.09	Decreased	12
Russia	74	8	16	3	1.11 [a]	Increased	74
S. Africa	66	14	18	2	2.26 [a]	Increased	66
S. Korea	79	5	16	1	-0.23	Same	16
Senegal	69	12	16	4	2.59 [a]	Increased	69
Spain	90	3	7	0	6.49	Increased	90
Turkey	70	18	9	3	-1.01	Decreased	18
Uganda	75	13	5	7	2.54 [a]	Increased	75
United States	67	5	25	3	1.48	Increased	66
Venezuela	40	22	35	2	-3.55	Decreased	22
Egypt	53	9	32	7			
Ghana	69	10	17	4			
Japan	58	7	32	2			
Jordan	54	7	33	7			
Kenya	80	13	7	1			
Lebanon	87	2	11	1			
Palestinian Terrs.	73	7	16	4			
Tunisia	71	12	15	2			
Mean: those with data for 2012					-0.16		34.6
Mean (all)	67.7	9.9	19.2	3.2	0.31		38.7

Sources: Pew Global Attitudes Survey spring 2013, SWIID 5.0 dataset, authors' calculations.
Note: [a] change in Gini 2007-2011. Rich-poor gap coded as having "stayed the same" if the Gini changed by less than one percentage point. Figures calculated using pre-tax-and-transfer income Gini. Using *post*-tax-and-transfer income Gini, mean percent right is 34 percent using all countries and 33 percent using just those with data for 2012.

Table A16: Do people know how inequality is changing, 2002?

	Rich-poor gap "got worse"	Rich-poor gap "got better"	Rich-poor gap stayed same	Don't know/ refused	Actual change in Gini, 1996-2001, % pts.	Right answer	Percent that got right answer
Argentina	94	2	3	2	2.1	Worse	94
Britain	68	17	10	5	-1.6	Better	17
Bulgaria	86	5	5	4	0.1	Same	5
Canada	77	10	9	4	1.5	Worse	77
Czech Republic	84	7	5	3	-2.1	Better	7
France	82	12	4	2	-1.7	Better	12
Germany	90	6	3	1	2.0	Worse	90
Ghana	61	9	26	3	3.4	Worse	61
Italy	64	12	23	2	-0.7	Same	23
Japan	56	16	24	3	5.4	Worse	56
Jordan	65	15	19	1	2.1	Worse	65
Kenya	85	12	3	0	-4.5	Better	12
Lebanon	84	9	6	2	n.a.	n.a.	
Mexico	63	15	20	2	0.8	Same	20
Pakistan	53	13	17	17	2.0	Worse	53
Peru	81	4	13	2	0.0	Same	13
Philippines	73	18	5	4	-0.2	Same	5
Poland	85	8	4	2	-5.4	Better	8
Russia	92	4	3	2	9.6	Worse	92
S. Africa	73	18	5	4	-0.5	Same	5
S. Korea	83	6	10	1	-2.8	Better	6
Slovakia	91	5	2	2	3.0	Worse	91
Tanzania	63	23	5	9	-1.3	Better	23
Turkey	86	8	4	2	-0.7	Same	4
Uganda	77	14	7	3	6.8	Worse	77
Ukraine	44	51	5	1	-7.7	Better	51
United States	67	15	12	6	-0.1	Same	12
Uzbekistan	88	8	3	1	-4.6	Better	8
Mean	75.5	12.2	9.1	3.2	0.2		36.6

Sources: Pew Global Attitudes Survey summer 2002, SWIID 5.0 dataset, authors' calculations.
Note: Rich-poor gap coded as having "stayed the same" if the Gini changed by less than one percentage point.

Table A17: Do people know how inequality is changing, 2013 (using income share of top 10 percent)?

	Rich-poor gap increased	Rich-poor gap decreased	Rich-poor gap stayed same	Don't know or no answer	Actual change in top 10% income share, 2007-12, % pts.	Right answer	Percent that got right answer
Argentina	57	15	24	4	-4.15	Decreased	15
Bolivia	32	26	37	4	-9.16	Decreased	26
Brazil	50	25	24	1	-1.9	Decreased	25
Britain	72	3	21	4	-3.37	Decreased	3
Chile	51	13	34	2	-0.63	Stayed same	34
Czech Rep.	82	2	15	2	-0.15	Stayed same	15
El Salvador	38	17	43	2	-3.25	Decreased	17
France	81	3	16	0	0.55	Stayed same	16
Germany	88	1	11	0	-1.88 [a]	Decreased	1
Greece	88	3	8	1	0.57	Stayed same	8
India	66	18	11	5	1.38 [a]	Increased	66
Italy	88	3	8	1	1.29	Increased	88
Mexico	59	13	22	6	0.36	Stayed same	22
Philippines	66	9	24	1	-0.37	Stayed same	24
Poland	71	12	12	4	-0.82	Stayed same	12
Russia	74	8	16	3	-0.62	Stayed same	16
S. Africa	66	14	18	2	-1.5 [a]	Decreased	14
Senegal	69	12	16	4	0.67 [a]	Stayed same	16
Spain	90	3	7	0	1.12	Increased	90
Turkey	70	18	9	3	2.27	Increased	70
Uganda	75	13	5	7	-1.58	Decreased	13
United States	66	5	25	3	-0.77	Stayed same	25
Australia	64	4	25	7			
Canada	76	2	18	4			
China	69	17	9	4			
Egypt	53	9	32	7			
Ghana	69	10	17	4			
Indonesia	60	10	29	1			
Israel	81	2	13	4			
Japan	58	7	32	2			
Jordan	54	7	33	7			
Kenya	80	13	7	1			
Lebanon	87	2	11	1			
Malaysia	32	22	38	8			
Nigeria	80	7	10	3			
Pakistan	83	3	7	7			
Palestinian Terrs.	73	7	16	4			
South Korea	79	5	16	1			
Tunisia	71	12	15	2			
Mean: those with data for 2012							29
Mean (all)	67.7	9.9	19.2	3.2			28

Sources: Pew Global Attitudes Survey spring 2013, World Bank, authors' calculations.
Note: [a] change in top 10 percent income share 2007-2011. Rich-poor gap coded as having "stayed the same" if the top 10 percent income share changed by less than one percentage point.

Figure A3: Trend in Poverty--Perceptions and Reality, Europe 2007-2010

Percent that thought that poverty had increased in previous three years, Aug-Sep 2010

Change in percentage of population in poverty, 2007-10
(income below 60% of median equivalised income after social transfers)

Sources: Eurobarometer (74.1) and Eurostat.

Table A18: Inequality perceptions and perceived social conflict, Eurobarometer 2009, country level, OLS

	Dependent variable: Percent saying that there is very much tension...									
	(A) ... between rich and poor					*(B) ... between managers and workers*				
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Gini (pre-tax-and-transfers)	45.88 (41.46)					51.08 (36.72)				
Gini (post-tax-and-transfers)		53.04 (80.37)		-249.84* (96.75)	-265.74* (93.72)		50.07 (75.18)		-162.79* (68.56)	-187.13* (62.41)
Perceived Gini			232.62* (91.06)	391.03** (93.80)	470.13** (127.46)			182.21 (92.45)	285.43** (82.62)	468.70** (114.38)
Log GDP per capita					10.26 (19.69)					25.29 (18.21)
Log population					1.86 (2.88)					2.68 (2.96)
Constant	8.83 (20.46)	15.19 (25.57)	-45.16 (27.40)	-22.72 (17.91)	-107.01 (67.15)	4.78 (17.94)	14.53 (23.48)	-30.75 (28.62)	-16.13 (27.30)	-193.96* (70.31)
N	22	22	17	17	17	22	22	17	17	17
R²	.02	.02	.38	.67	.75	.03	.02	.25	.38	.70

Sources: Eurobarometer 2009, SWIID 5.0, ISSP 2009, Penn World Tables 8.0 for GDP per capita, World Bank WDI for population.

Notes: OLS, robust standard errors. * $p < .05$, ** $p < .01$.

Table A19: Poverty perceptions and support for government redistribution (Eurobarometer 2010)

Dependent variable: Agreement or disagreement with statement that poverty in (OUR COUNTRY) is a problem that needs urgent action by the government

	(A) Country level, OLS: average response				(B) Individual level, ordered probit: 4 = "totally agree", 1= "totally disagree"			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Actual poverty rate	.05**		.02**	.02**	.08**		.06**	.05**
(Eurostat 2010)	(.01)		(.01)	(.01)	(.02)		(.01)	(.01)
Proportion that think 20%		.01**	.01**	.01**				
or more are poor		(.00)	(.00)	(.00)				
Respondent thinks that						.64**	.57**	.51**
20% or more are poor						(.06)	(.05)	(.04)
Ln GDP per capita				-.00				-.31**
				(.13)				(.10)
Ln population				-.02				-.01
				(.02)				(.04)
Constant	2.64**	2.89**	2.64**	2.90**				
	(.19)	(.10)	(.11)	(.64)				
N	27	27	27	27	26,232	26,232	26,232	25,865
R^2	.41	.67	.73	.74				
Pseudo R^2					.03	.04	.05	.06

Sources: Eurobarometer 2010, Eurostat 2010. Penn World Tables 8.0 for GDP per capita, World Bank WDI for population.

Notes: Robust standard errors, clustered by country in panel B. Panel B also controls for gender, age, education, and marital status (not shown).

* $p < .05$, ** $p < .01$.

Table A20: Poverty perceptions and perceived class tension (Eurobarometer 2010)

	(A) Country level, OLS: average response				(B) Individual level, ordered probit: 3 = "lot of tension", 1= "no tension"			
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Actual poverty rate	-.00		-.04**	-.03**	-.01		-.02	-.04*
(Eurostat 2010)	(.01)		(.01)	(.01)	(.02)		(.02)	(.02)
Percent that think 20% or		.68**	.99**	1.14**				
more are poor		(.21)	(.15)	(.19)				
Respondent thinks that						.45**	.48**	.41**
20% or more are poor						(.07)	(.07)	(.05)
Ln GDP per capita				.13				-.39
				(.10)				(.23)
Ln population				.01				.06
				(.01)				(.04)
Constant	2.22**	1.82**	2.22**	1.60**				
	(.23)	(.10)	(.15)	(.43)				
N	27	27	27	27	25,949	25,949	25,949	25,596
R²	.00	.38	.59	.62				
Pseudo R²					.00	.02	.02	.03

Sources: Eurobarometer 2010, Eurostat 2010. Penn World Tables 8.0 for GDP per capita, World Bank WDI for population.

Notes: Robust standard errors, clustered by country in panel B. Panel B also controls for gender, age, education, and marital status (not shown).

* p < .05, ** p < .01.