Redistributive Politics in Truncated Welfare States

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Abstract

The relationship between class and support for redistribution is weak and variable in Latin America, despite the region's extreme income inequality. I argue that public opinion reflects the degree to which tax and transfer policies genuinely redistribute resources to the poor. It is not in the material interests of the poor to support "truncated" social policies that tie benefits to formal sector employment. I formalize the logic and use public opinion data from Latin America and Europe to show that popular support is dampened and unmoored from class in policy areas and countries where the poor gain less from social expenditures. In contrast to weakly progressive government welfare provision, more economically progressive forms of informal redistribution like land takings polarize preferences in Latin America. Attention to the structure of redistribution sheds light on political coalition formation outside of Europe and unifies literatures on social policy in developing and advanced economies.

Government housing projects don't help people like me—you need to have a bank account and a job with a contract to get one of those homes. So it doesn't matter to me if the government builds housing or doesn't because their policy is to leave me to take land in the hills and build my own home.

—Author interview with a squatter, Bogotá, Colombia

The most basic assumption of redistributive politics is that the poor prefer social welfare spending and the rich resist it. It follows that class predicts support for redistribution, and the poor vote for politicians who champion it. Yet this theory of redistributive demands flops precisely in one of the most unequal regions of the world where it should operate most seamlessly. In Latin America, public opinion surveys show that the poor are no more likely than the nonpoor to support redistribution (Dion and Birchfield, 2010; Blofield and Luna, 2011; Kaufman, 2009). While inequalities in political power may explain why the poor are unable to implement welfare state expansions, such distortions cannot explain the underlying question: Why don't the poor *want* to soak the rich?

My argument is that it is not in the economic interests of the poor to support social expenditures because many policies do not redistribute resources or risks in their favor. Historically, social expenditures have done little to aid the poor in Latin America. Spending in many countries and policy areas remains *truncated*, meaning that whatever the nominal degree of universality, in fact social programs only cover those with steady formal sector employment. As the opening quote suggests, the poor withdraw their support for welfare spending when excluded from social programs and skeptical that their share of benefits will change. The poor's political demands can shift to alternative forms of redistribution, such as the taking of land or informal commerce. The nonpoor defend their benefits. Empirically, then, I expect that the relationship between class and support for state redistribution will be contingent on social policy coverage.

The logic that truncation alters material interests contrasts with alternatives that emphasize that the poor are confused about their interests, or that the rich are enlightened about theirs. On the one hand, scholars have portrayed the poor as bought off by clientelism (Díaz-Cayeros and Magaloni, 2009; Stokes, 2005), distracted by religion and nationalism (De La O and Rodden, 2008; Scheve and Stasavage, 2006; Shayo, 2009), "naturalized" to accept high levels of inequality (Aalberg, 2003), divided by urban-rural splits (Haggard et al., 2013), or less able to understand their class interests without the mobilizing power of unions (Roberts, 2002; Huber and Stephens, 2012). On the other hand, scholars have proposed that the rich have instrumental reasons to support redistribution in unequal societies, such as minimizing societal conflict or crime, and their elevated support explains the weak relationship between class and redistributive preferences (Dion and Birchfield, 2010; Morgan and Kelly, 2010; Alesina and Rodrik, 1994). While these additional factors may be at play, survey evidence is more consistent with a revised materialist theory that takes into

account the coverage of welfare policies.

This paper uses a formal model to theorize and derive predictions about variation in redistributive demands across social policies and countries. I test the model's implications using survey data from Latin America and Europe. The core results are threefold. First, the poor favor more targeted benefits compared to the nonpoor. Class differences are sharpest in Latin America for informal welfare policies, which I operationalize through an innovative measure of support for land takings. Demand for social insurance, in contrast, peaks with the middle class included in welfare programs. Were the poor unaware of their material interests, or the rich concerned about inequality, it is unclear why the poor's support would be highest and the rich's lowest for policies that do the most to alleviate income disparities. Second, Latin American governments that pursue less truncated social policies—meaning greater coverage of the poor—have a higher level of support and stronger class cleavages around redistribution. Where social expenditures actually redistribute resources, even unequal and young democracies have the "expected" class-based attitudinal patterns. And third, beyond Latin America, income is more predictive of social policy attitudes where spending is more redistributive. However, advanced economies that redistribute more resources have less supportive publics because targeted benefits may erode middle class support. My findings suggest that Latin America does not face this tension (yet): when starting from truncated welfare states, more spending on the poor boosts popular support by giving the informal sector poor a stake in benefits. So rather than being seen as a death knell for social democratic coalitions, targeted spending in developing democracies can reorient politics around redistribution, and away from informal redistribution and populism.

The paper's empirics rest on an assumption, following Zaller and Feldman (1992), that much of the public responds to survey questions in the context of existing policies. They take *who benefits* from redistribution as given. Of course, individuals also shape these policies in a democracy. The clusters of welfare states and demands identified thus are best thought of as alternative equilibria. Perversely, my results suggest that welfare states that do the least to reduce inequality face the least popular pressure, and most resistance, to change.

The Puzzle

The materialist model of preferences, as formalized by Romer (1975) and Meltzer and Richard (1981), assumes that the gap between the median voter's income and mean income determines individual support for redistribution. Scholars extend this to the cross-national level to predict a larger welfare state in unequal democracies (e.g. Iversen and Soskice (2009); Lindert (2004); Perotti (1996)), and to greater redistributive
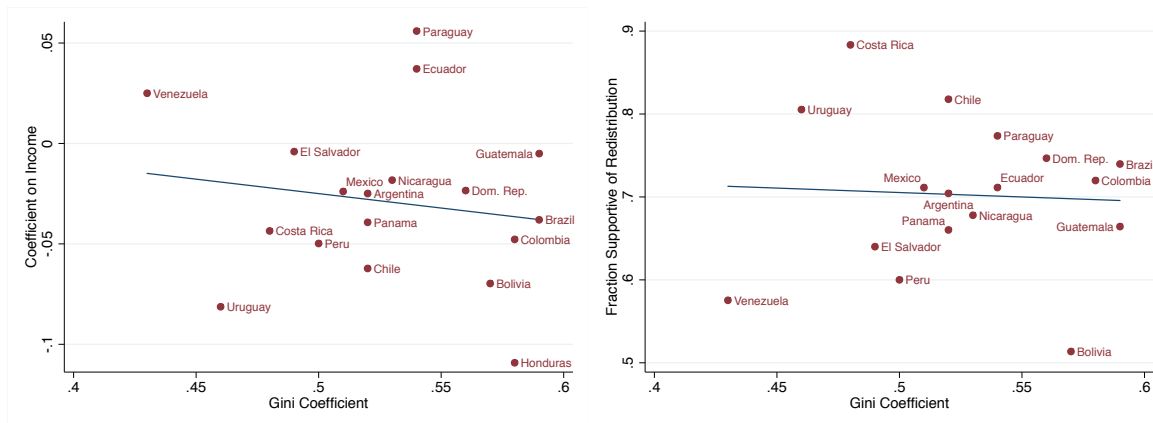
Figure 1: Class Polarization and Support for Redistribution in Latin America
Source: AmericasBarometer (2010)

conflict in unequal societies (Acemoglu and Robinson, 2005; Boix, 2003). As Moene and Wallerstein (2003: 486) sum up the theory, "Welfare policy is expected to 'lean against the wind' in the sense that the greater inequality of pre-tax and transfer income, the greater the electoral support for government policies that redistribute from rich to poor." Synthesizing, the model has three predictions: (1) that the poor support more welfare spending than the nonpoor, (2) that preferences are more polarized by class in unequal societies, and (3) that unequal societies support more redistribution on average than equal ones. These predictions should find clear support in Latin America, given yawning income gaps, but they do not.

First, the relationship between income and redistributive preferences is fragile in Latin America. While some scholars find that demand for redistribution is higher among poor individuals (Gaviria, 2008; Haggard et al., 2013; Morgan and Kelly, 2010), others find no correlation (Dion and Birchfield, 2010; Cramer and Kaufman, 2011; Kaufman, 2009). Blofield and Luna (2011: 167) conclude that, while income seems to predict attitudes toward inequality in Latin America, its "significance is less consistent across countries and over time, and the predictive power of the models is weaker overall" than in advanced industrial democracies. The fragility of these results contrasts with advanced democracies where a robust negative income effect has been found (Beramendi and Rehm, 2011; Bean and Papadakis, 1998).

Second, because the spread of market income is larger, redistributive preferences should be more polarized in unequal societies. The coefficient on income—which can be thought of as a measure of class polarization—thus should be more negative in unequal countries. The left panel of Figure 1 plots the predictive power of income for a standard measure of redistributive attitudes, whether individuals support that the government takes actions to reduce inequality, against the Gini coefficient. While there is a slight negative relationship between inequality and class polarization, the relationship is weak and sensitive to outliers (Honduras and

Venezuela).

Third, the materialist model predicts that a larger fraction of the population supports redistribution in unequal societies. While some surveys show higher levels of support for redistribution in Latin America than in Europe (Dion and Birchfield, 2010; Gaviria, 2008), the results depend on question framing and do not hold within Latin America. The right panel of Figure 1 shows almost no correlation between the fraction of the population that supports government inequality reduction and the Gini coefficient.

Based on this trio of anomalies, many scholars have rejected the materialist model. My argument is that the materialist model has been applied without attention to a key assumption that underpins it: that welfare spending *redistributes* resources to the poor. While a trivial premise for advanced economies, the next section shows that fiscal progressivity varies widely outside Europe, generating divergent material incentives.

Truncated Welfare States

Social policy coverage is a key variable to understand preferences that largely has been overlooked. Truncated welfare state are defined by low levels of welfare coverage for the poor and by important benefits for nonpoor groups. Benefits often do not reach the poor in truncated welfare states because they are linked to formal employment. Major social programs in Latin America, such as pensions, health care, family allowances, and unemployment benefits, long excluded the mostly poor majority in the informal economy. Truncation also arises when transfers, such as those for gasoline, mortgages, tax-exempt goods or public universities, disproportionately favor better-off households (Levy and Schady, 2013). Accordingly, the hallmark of truncated welfare states is expenditures that do little to redistribute resources in favor of the poor.

Truncated welfare states invert two principles central to the comparative political economy literature—the nonregressivity and minimalist core assumptions. Political economists make what Iversen and Soskice (2006) label a "nonregressivity assumption" that the rich always lose from welfare policies, whereas the middle class does less well than the poor but better than the rich. Even with social insurance expenditures, nonregressivity holds because lower income households face greater risk and pay less in taxes (Rehm et al., 2012; Moene and Wallerstein, 2001, 2003). Indeed, advanced democracies substantially favor the poor in their tax and transfer polices (Milanovic, 2000; Mahler, 2010).

The nonregressivity assumption is more tenuous in Latin America. Figure 2 plots a standard measure of the redistributive nature of welfare spending, the percentage change in the Gini coefficient from gross market income to disposable income after taxes and transfers.[1] What stands out is that countries outside of

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[1]Unfortunately, comparable data are unavailable for a broad set of countries using the Luxembourg Income Study (LIS). I expand the sample with estimates for Argentina, Bolivia, and Brazil from Lustig et
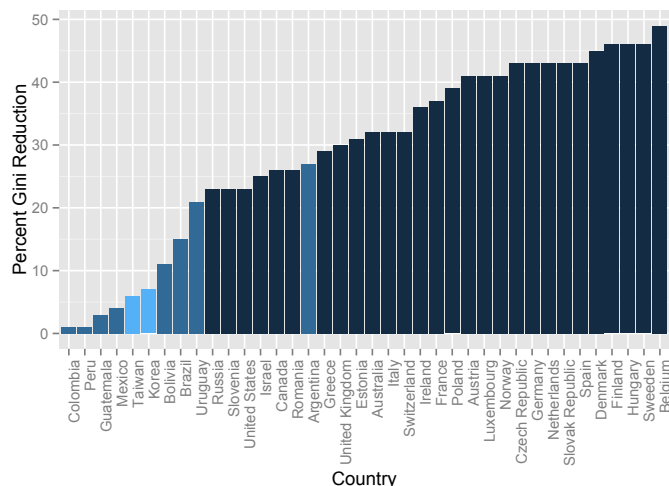
Figure 2: Percent Reduction in the Gini Coefficient After Taxes and Transfers
Source: LIS Fiscal Redistribution Database (2011) and Commitment to Equity Project (2013)

Europe do very little to reduce the gap between rich and poor. Latin America, in particular, is an outlier in the redistributive nature of spending, even after controlling for differences in the level of expenditures. On average, taxes and transfers reduce the Gini coefficient by 36 percent in Europe, and only by 10 percent in Latin America. Government spending leaves inequality basically unchanged in Colombia, Guatemala, and Peru, while it improves the income distribution by more than a fifth in Argentina, Brazil, and Uruguay. Latin America's poor thus face variable—and sometimes weak—material incentives to support welfare expenditures depending on where they live.

A related second assumption is that welfare states begin with a commitment to the absolute poorest and differ in how they extend benefits up the income ladder. Pontusson (2005: 148) captures the idea: "Means-tested social assistance constitutes the minimalist core of the modern welfare state—even the least welfare-oriented societies must somehow take care of the indigent—and it is the extent to which they have gone beyond the minimalist core that distinguishes the social market economies from the liberal market economies." Put otherwise, the "minimalist core assumption" is that welfare states cover the poor and differ in their inclusion of the middle class. Scholars of advanced economies see a trade-off between spending progressivity and popular support (Korpi and Palme, 1998; Iversen and Soskice, 2001). Means-tested polices do more to reduce inequality, but they diminish support for the welfare state because most households will never receive payments reserved for poverty alleviation. In contrast, universal and social insurance benefits elicit broad support because they are attractive to middle class workers facing economic risks, and not just low incomes. Welfare state progressivity and societal support therefore will be inversely related.

al.'s Commitment to Equity Project, which uses a methodology consistent with the LIS database.

Truncated welfare states lack a minimalist core. They differ in how far *down* the income ladder they provide benefits. Contrast the description of Latin America's welfare states by Díaz-Cayeros and Magaloni (2009: 36-7) with the minimalist core assumption: "Social policy in Latin America has traditionally failed to benefit the poor. . . Latin America's biggest social policy-challenge is to extend benefits to those who are now excluded from social-insurance programs—or in other words, to reach the poor." Latin American welfare states began with a commitment to the urban working class, much like European corporatist welfare regimes, during the process of import substitution industrialization post-World War II. However, the industrial working class was small so gains were less widely shared in Latin America. The poor worked in the urban informal and rural sectors, paying for benefits that they rarely received through general taxes and inflation. Given the gap between industrial wages (with coupled benefits) and the informal sector, formal sector workers organized to protect their jobs and avoid resource reallocations toward the poor. As a result, social insurance spending has remained largely stable over time, even during Latin America's economic liberalization, state cuts, and full democratization in the 1980s and 1990s (Haggard and Kaufman, 2008; Wibbels, 2013). Indeed, in a survey of urban voters in Bogotá, Colombia, more than 80 percent of low-income respondents believed that formal sector workers are the primary beneficiary of welfare expenditures.[2]

States have made uneven progress to redirect benefits to the poor, and informal transfers remain critical for Latin America's most vulnerable. Governments have moved to delink social benefits from labor status and invest in means-tested benefits (mainly conditional cash transfer programs) since the 1990s (Pribble, 2013; Garay, 2010; Huber and Stephens, 2012). Support for welfare expenditures should expand as governments move to increase coverage to the region's majority of citizens. But coverage extensions have been partial. For instance, while about half of Latin American governments have expanded noncontributory pension programs to workers in the informal economy, pensions still reach less than 10 percent of the poor in countries like Guatemala and Honduras (Levy and Schady, 2013).

Latin American governments also rely heavily on informal forms of welfare provision to aid the poor, such as the tolerance of property law and regulatory violations. For instance, non-enforcement of value added taxes does more to reduce inequality in Peru than cash transfers (Lustig et al., 2013). Similarly, housing is the single most valuable item that most people own. Yet informal housing, often acquired through land takings, is estimated to account for about a quarter of all urban homes in Latin America, while housing projects are less than a percent (Angel, 2000). About three million people participated in land invasions in the Brazilian countryside since the late 1980s, while land reform reached under half a million people (Hidalgo

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[2] Author's survey, Bogotá, Colombia, August 2013. See Appendix for question wording and details.

et al., 2010). "Redistribution" may not take the expected form in Latin America; informal welfare policies can serve as targeted complements to truncated government policies.

The takeaway is that, in contrast to the minimalist core assumption, welfare states in Latin America differ primarily in how and how much they aid the poor. Many features of truncated social policies persist, despite origins in closed economies and exclusionary democracies, and they have implications for popular demands.

Theoretical Framework

I develop a model that allows variation in the extent to which the poor are included in welfare policies and the direction of social policy extensions. I include a stochastic component of income to capture in a simple and tractable form the leading features that arise from dynamic labor market mobility and income measurement error.

I assume that individuals have utility $U = y - T + B$, where y is an individual's observed current income, T is an income tax that all individuals pay ($T = \tau Y$), and B is a government transfer. A proportional income tax is a reasonable approximation of the fiscal structure in most of Latin America. While only formal sector workers pay income taxes, all individuals pay mildly regressive consumption taxes, which evens out to a flat tax rate. The government determines the generosity of the size of transfers, $\bar{t}$.

I consider two settings that distinguish between types of welfare states, shown in Figure 3. In a truncated welfare state, individuals only receive transfers if they are above a minimum lifetime income level $\underline{Y}$, so that $B = \bar{t} \cdot 1_{Y \geq \underline{Y}}$. I use lifetime income to define a benefit cut-off because many social insurance programs require remaining in the formal sector (above minimum wage) for one's working life, and access to other truncated subsidies depends on purchasing power.[3] The threshold $\underline{Y}$ defines the fraction of the population who receive benefits, ϕ; that is, the $1 - \phi$th quantile of the income distribution. This set-up can distinguish between truncated and more universal welfare states—the major variation in Latin America—by adjusting the income threshold down to full coverage where $\underline{Y}$ equals zero. In a targeted welfare state, only individuals up to a lifetime income cap $\bar{Y}$, or the ϕth quantile, receive benefits, $B = \bar{t} \cdot 1_{Y \leq \bar{Y}}$. A move toward greater coverage of the middle class can be expressed as an increase in the income cap up until universality when citizens receive benefits irrespective of income ($\bar{Y}$=1). I present the model in terms of truncation, while the online Appendix continues with the targeted case.

I assume that $\underline{Y}$ is exogenously determined. While a future model may endogenize the choice of the targeting parameter, the descriptive evidence suggests that the beneficiaries of welfare policies tend to defend

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[3]Lifetime income is a simpler way to approximate a fully dynamic model with multiple periods in which an individual worked inside or outside the formal sector.

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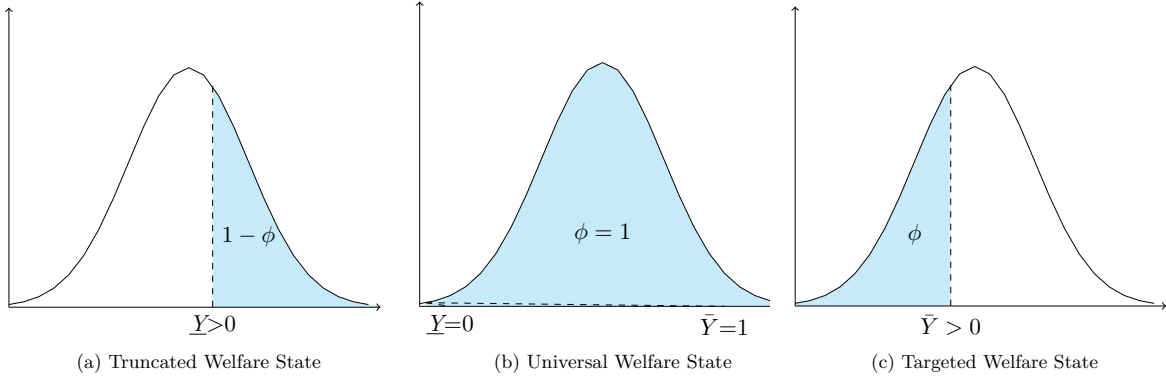| (a) Truncated Welfare State | (b) Universal Welfare State | (c) Targeted Welfare State |

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Figure 3: Coverage Thresholds and Welfare State Types

their benefits over long time periods and make shifts in coverage politically grueling. The political coalition that supports the welfare state, namely formal sector workers, defends $\underline{Y}$ since workers inside the coalition can agree on it. The public thus views the targeting of benefits as fixed, at least in the short-run. The generosity of $\bar{t}$ is different because there is heterogeneity of preferences among formal sector workers, so the preferences of informal sector workers can affect intra-coalition bargaining and $\bar{t}$ is sensibly seen by respondents as a choice variable. The underlying intuition is that voters are skeptical that the targeting of benefits can change; they are more likely to believe that their political choices can impact the level of spending.

The government budget is balanced so the maximum expenditures are determined by the tax collected. As is standard, the government spends its entire budget. Correspondingly, I write the government's budget balance condition as $\tau E[Y] = \bar{t}\phi$, and solve out for the transfer level,

$$\bar{t} = \frac{\tau E[Y]}{\phi}$$

The value of the benefits received by an individual relative to taxes taken out to the population depends on the efficiency of the tax and transfer system, f. I allow f to be less than one due to deadweight loss (the classic "leaky bucket"), or to be greater than one if transfers generate socially valued public goods like social insurance. Social welfare therefore depends on the monetary value of benefits multiplied by f (or the taxes extracted multiplied by $1/f$). An individual's utility equals her after-tax and transfer income, incorporating the efficiency of social expenditures:

$$U = (1 - \tau)Y + 1_{Y \geq \underline{Y}}\frac{\tau E[Y]f}{\phi}$$

I now use this model to provide a materialist framework for analyzing preferences. I assume that in-
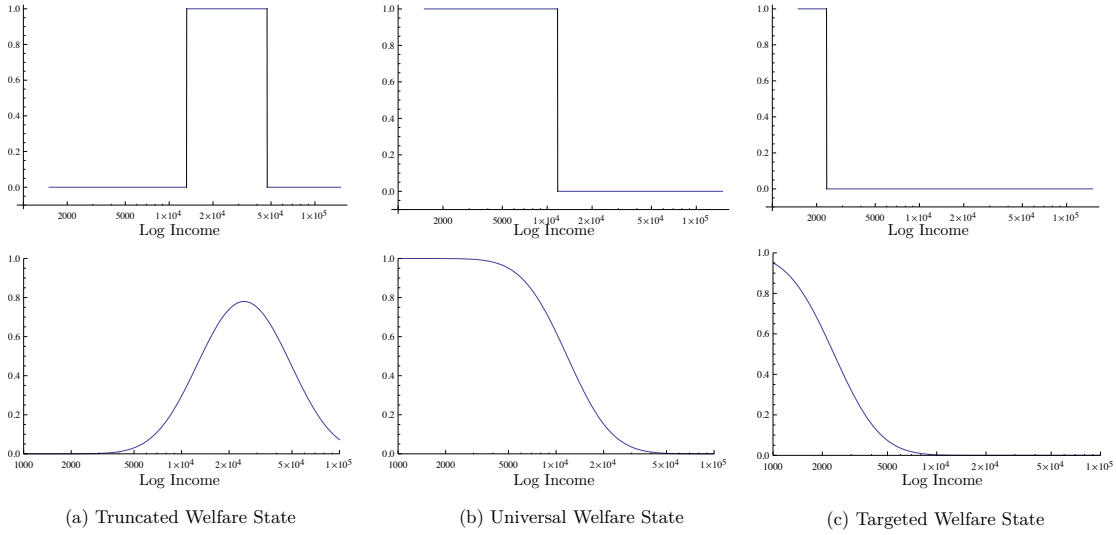
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Figure 4: Deterministic and Stochastic Models by Welfare State Types

dividuals support redistribution if they gain from it personally, which means that their marginal utility is positive. Thus, to determine whether an individual supports redistribution, I calculate marginal utility with respect to the tax rate:

$$\frac{dU}{d\tau} = -Y + 1_{Y \geq \underline{Y}} \frac{E[Y]f}{\phi}$$

In this deterministic model, support for redistribution is a step function because lifetime income exactly equals measured current income. The top row of Figure 4 illustrates preferences in each welfare state type. In a truncated welfare state, individuals above the income threshold support redistribution until they become so wealthy that they are net contributors. In a universal welfare state (e.g. the special case equivalent to the Meltzer and Richard's model), individuals below mean income support redistribution because they are net beneficiaries. In a targeted welfare state, individuals below the income cap generally support redistribution.[4] While this framework captures the intuition that support peaks with the middle class in truncated welfare states, the assumption that current income determines preferences and the conclusion that it leads to are highly unrealistic. The model assumes that individuals have full information about their inclusion in social spending, and that income is perfectly observed and correlated with coverage.

To provide greater realism, I introduce a stochastic component that is a reduced form for dynamics and imperfect measurement. I assume that individuals with the same measured current income y can have

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[4]The exception is where benefits are nearly universal; wealthy individuals right below the cap still may not support redistribution.

different expectations about their lifetime income Y based on unobserved skills, risks, or beliefs, such that redistributive preferences can vary even holding income fixed. For every current income level, there are a range of individuals with different expectations about their lifetime income prospects. Observed earners near the benefit threshold, for example, will include some individuals who expect to access welfare programs, and others who in the future expect not to receive benefits, so support for redistribution will be mixed. I allow the expected change between current and lifetime income to be distributed normally in the population. That is, the log change in lifetime income relative to current income has a mean of 0 and a common variance σ^2. The variance can be thought of as the degree of social mobility because it expresses how current income correlates with lifetime earnings, and depends on the segmentation of the labor market.

The fraction of people with a given current income that will support redistribution equals the probability that someone with that income will have a positive marginal utility for an increase in taxes over their lifetime,

$$Pr\left(-Y + 1_{Y \geq \underline{Y}} \frac{E[Y]f}{\phi} > 0 \middle| y\right).$$

Given that lifetime earnings are distributed log normal in the population conditional on current income, I rewrite the probability of benefitting from expenditures in terms of a standard normal random variable x,

$$Pr\left(-e^{log(y)+x\sigma^2} + 1_{e^{log(y)+x\sigma^2} \geq \underline{Y}} \frac{E[Y]f}{\phi} > 0 \middle| y\right) = Pr\left(-ye^{x\sigma^2} + 1_{x \geq \frac{log(\underline{Y}) - log(y)}{\sigma^2}} \frac{E[Y]f}{\phi} > 0 \middle| y\right).$$

While this expression cannot be calculated analytically, comparative statics can be estimated by numerical integration (quantitative estimates and procedures are described in the Appendix). The bottom row of Figure 4 shows how uncertainty irons out preference discontinuities. To provide some concrete comparative statics, first consider a case analogous to Latin America in which a government expands coverage to the poor. In a truncated welfare state in which only the upper 20 percent of the population receives benefits, the income coefficient is positive because the poor receive nothing from the system. Support peaks among middle class beneficiaries before dropping. A move to a near universal welfare state in which the upper 80 percent of the population receives benefits aligns preferences with redistributive expectations. The income coefficient becomes negative because the poor (except those uncovered) support redistribution and the nonpoor oppose it. Mean support also is higher: while only 20 percent of the population supports truncated expenditures, an estimated 71 percent supports welfare expenditures in the more universal state. Newly included beneficiaries compensate for any drop in support among the middle class, who bear the costs of reduced benefits implied by an expansion in coverage.

For advanced economies, consider a shift from universal provision to targeted benefits for the bottom quantile. Class polarization increases as benefits are more targeted. But now the effect on popular support pushes in the opposite direction. Half of the population withdraws their support with targeting (from 77 to 22 percent). The lost support of the middle class is not compensated for by the incorporation of new beneficiaries, as in the truncated case. Therefore, the effects of expenditures on the poor (progressivity) depend on whether they represent a move toward or away from universal coverage. Cross-nationally, we should see an inverted-U "universalism curve" with an apex of popular support in countries with near universal coverage and intermediate levels of progressivity.

Similar comparative statics can be derived about mobility and state efficiency. Mobility increases the possibility that the poor obtain benefits in truncated welfare states, which makes the income gradient more negative and increases support given an unequal income distribution. Efficiency likewise lifts the level of support because individuals receive more from transfers. But the effects of efficiency on polarization depend on how spending is targeted. Greater efficiency boosts support among likely beneficiaries, while leaving the preferences of those excluded unchanged. In a truncated (targeted) welfare state, an increase in efficiency makes nonpoor (poor) beneficiaries more supportive, making the income gradient more positive (negative).

Comparing multidimensional welfare states is not straightforward, and some countries truncate policies in some areas and target resources to the poor in others. The model has testable implications both for demand patterns across social policy areas, and across countries depending on the aggregate welfare state structure. First, the model suggests that there are discontinuities in popular support around the benefit threshold. Current inclusion in truncated policies should be positively associated with more support for those policies, while associated with less support for targeted policies that burden the formal sector. Second, support for truncated policies peaks with the middle class. A quadratic term for income therefore should be negative and significant (while the coefficient on income may be positive). Third, in contrast, support for targeted and universal policies decreases with income. This pattern should extend to informal welfare policies like land takings that primarily benefit the poor. Turning to the cross-national implications, the fourth hypothesis is that class polarization is greater in countries that spend more on the poor (e.g. the coefficient on income is more negative). Fifth, popular support peaks in countries with more universal coverage (and moderate fiscal progressivity). Finally, more mobility and efficiency should be associated with more support for redistribution. Mobility also polarizes preferences, while efficiency has uneven effects on class polarization depending on coverage. Table 1 summarizes the main predictions.

Data

This paper relies primarily on data from the 2010 LAPOP AmericasBarometer. This survey is unique

Table 1: Theoretical Hypotheses and Empirical Predictions

Hypothesis	Empirical Prediction
Cross-sectoral	
Hypothesis 1: Social policy inclusion increases support for truncated policies, and decreases support for targeted ones.	$\beta^{Targeted}_{Inclusion} < 0 < \beta^{Truncated}_{Inclusion}$
Hypothesis 2: Income quadratically predicts less support for truncated policies.	$\beta^{Truncated}_{Income^2} < 0 < \beta^{Truncated}_{Income}$
Hypothesis 3: Income linearly predicts less support for targeted or universal policies.	$\beta^{Targeted}_{Income} < 0$
Cross-national	
Hypothesis 4: Income is less predictive of support for redistribution in truncated (or less targeted) welfare states.	$\beta^{Targeted}_{Income} < \beta^{Universal}_{Income} < \beta^{Truncated}_{Income}$
Hypothesis 5: Support for redistribution is higher in countries with more universal welfare benefits.	$\mu_{Truncated}, \mu_{Targeted} > \mu_{Universal}$
Hypothesis 6: Support for redistribution is higher in mobile labor markets and efficient states.	$\mu_{Rigid} < \mu_{Mobile}$ $\mu_{Inefficient} < \mu_{Efficient}$

among Latin American polls in that it asks questions about general redistributive attitudes, specific social policies, and receipt of social policy benefits. AmericasBarometer has full regional coverage (18 countries, around 30,000 observations of adults), and each country survey uses national probability samples of adults. For the OECD, I use the 2006 Role of Government IV module of the International Social Survey Program (ISSP). ISSP only includes a handful of Latin American countries (Argentina, Dominican Republic, Uruguay, and Venezuela) among its sample of 29 countries, but it includes comparable questions that permit cross-regional comparison. Table 2 summarizes the dependent variables; the Appendix provides summary statistics.

Dependent Variables

The most common operationalization of redistributive demand comes from survey questions that ask individuals if they agree or disagree that the government should take actions to reduce inequality (*Redistribution*). AmericasBarometer and ISSP both include this generic question. Consistent with the literature, I recode all dependent variables as binary variables so individuals who "agree" or "strongly agree" with inequality reduction are coded as "1" and "0" otherwise. Responses to this question may loosely reflect the overall progressivity of welfare expenditures.

AmericasBarometer also includes questions on support for government social insurance policies, asking respondents about their preferred allocation of responsibility between the government and the private sector for pensions *(Pension)* and health *(Health)*. ISSP has a similar question about whether the government should spend more on pensions and health. Individuals who agree or strongly agree that the government

Table 2: Dependent Variables

Variable Name	Description	Surveys Included
Redistribution	Supports that government takes actions/ responsibility to reduce inequality.	LAPOP 2008-12/ ISSP 2006.
Pension	Supports that the government is responsible/ spends more on pensions.	LAPOP 2010/ ISSP 2006.
Health	Supports that the government is responsible/ spends more on health.	LAPOP 2010-12/ ISSP 2006.
Tax	Supports that the rich pay more in taxes than the poor/than they pay now.	LAPOP 2010 (Arg., Br., Mex., Ven.)/ISSP 2006.
Land	Supports the taking of private property or land.	LAPOP 2006-12.
Housing	Supports that the government provides housing to the poor.	ISSP 2006.

should be the primary provider or spend more are coded as "1," and otherwise "0". My expectation is that benefit inclusion positively predicts support for government provision, and income squared negatively predicts support, due to the truncated nature of pension and health spending in most of Latin America.

In addition, I include two measures of support for targeted welfare provision, one through formal channels and the other through informal means. In select countries, AmericasBarometer asks whether the rich should pay a higher proportional tax rate and ISSP also asks individuals about taxes on the rich. Individuals who support a highly progressive tax scale, or find taxes "too low" or "much too low," are coded as "1" *(Tax)*. Given the policy progressivity, I expect income to predict less support for taxation. In many developing countries, targeted welfare benefits also can come through property takings in which the poor build housing on private or state land. Operationalizing support for property takings is not easy due to data availability and social desirability bias.

This paper develops an innovative, indirect measure of support for property takings. AmericasBarometer asks respondents to score their approval of "seizing private property or land to protest." The question forms part of a block of items about contentious behaviors. I attempt to isolate attitudes toward property violations by using a principal components analysis (PCA) to create an index of general attitudes toward protest. The first component loads positively for all protest behaviors, as expected if common protest attitudes underlie responses. I then take the residuals of a first-stage regression of the property seizure question on the first component to isolate my dependent variable of interest, *Land*. The intuition is that the residuals capture the extent to which respondents' answers differ from their baseline protest attitudes when land is at stake.

I test the construct validity in two ways. First, early waves used a different question wording that specifically asked if respondents approve that individuals "invade private property (houses or unoccupied land)." This phrasing drops reference to "protest," and invokes invasions (that tend to be done collectively by the poor). The question correlates well with my indirect construction ($\rho = .68$), and the regression results are similar. Second, if *Land* captures attitudes toward land takings by the poor, then I expect greater approval and more polarized attitudes in areas where the poor actually have claimed land through invasions more frequently. While no region-wide data exist, I use an available dataset on 5,299 rural land invasions from 1988 to 2004 in Brazil compiled by Hidalgo et al. (2010). A higher frequency of land invasions in a Brazilian state is associated with more support for property takings, and a more negative class coefficient. These findings build confidence that respondents consider land invasions by the poor when formulating their responses. The Appendix fleshes out these verifications and the variable construction.

Land takings are not a relevant form of redistribution in developed countries. Instead, I compare responses on an ISSP question that asks whether it should be the government's responsibility to "provide decent housing to those who can't afford it" (*Housing*). This item differs from others on the ISSP in suggesting that housing expenditures are means-tested. I therefore expect income to negatively predict preferences toward land takings in Latin America and housing provision for the poor in Europe.

Independent Variables

The first independent variable of interest is an individual's access to welfare benefits. AmericasBarometer asks respondents if they have health insurance, a pension, and a labor contract. I create an additive index of an individual's welfare state incorporation based on these answers, and scale the index from 0 to 1, where "1" indicates full inclusion in labor markets and benefits *(Inclusion)*. This allows me to test my first hypothesis that inclusion increases an individual's support for truncated policies.

My other main independent variable is income. I hypothesize that a respondent's income affects their attitudes toward formal and informal forms of redistribution, but that the predictive power of income varies with the extent to which welfare policies genuinely redistribute resources. AmericasBarometer and ISSP have respondents self-report their household income range, divided into eight to sixteen categories depending on the survey wave. To standardize, I take the logged mid-point of each income category and divide each country sample into deciles *(Income)*. Given that I predict that support for truncated policies is highest among the middle class, I also include *Income*^{2} to capture nonlinearity.

I include several additional variables that have been hypothesized to affect support for social policy as controls. First, years of education *(Education)* provides an additional measure of class and a proxy for skill specificity (given no occupational questions). This variable is an important control since the risk-

based literature predicts individuals with general skills will be less supportive of social insurance spending, such as health and pensions. Second, economic insecurity has been hypothesized to increase redistributive demands so I include an indicator variable for whether an individual has lost a job in the past two years *(Unemployed)* or seen their economic situation deteriorate *(Shock)*. Third, women have been found to support less redistribution than men so I control for gender *(Female)*. Fourth, older respondents *(Age)* are more likely to benefit from pension and health insurance policies, and therefore should be more supportive of social insurance. Fifth, urban residents *(Urban)* may access higher quality social benefits and therefore may be more supportive of government social expenditures, as suggested by Haggard et al. (2013). Sixth, individuals who identify as politically conservative should be less supportive of all forms of government welfare provision. I use a scale of political ideology ranging from far left to far right *(Right)*. Finally, to control for the anti-redistribution effect of religiosity hypothesized by Scheve and Stasavage (2006), I use a measure of attendance of religious meetings *(Religion)*.

At the national-level, my key independent variable is the truncation or targeting of social expenditures. When I compare Latin America to Europe, I use fiscal progressivity as presented in Figure 2 *(Percent Gini Reduction)*. But comparable data are not available across Latin America. Another way to think about truncation is through the coverage of major social programs. I create an index that averages the fraction of the surveyed population covered by a formal labor contract, pension, and health insurance in each country *(Coverage)*. The index correlates with national coverage measures from the World Bank's SEDLAC ($\rho = .78$), but is available for all countries.

I use a measure of educational mobility from Andersen (2001) to test if mobility increases popular support and polarization. Higher index values indicate that a child's educational attainment is more correlated with her parent's schooling, so "0" represents a perfectly mobile society and "1" represents a rigid society in which attainment tracks across generations *(Mobility)*. To test my hypothesis that effective states have more redistributive support, I approximate efficiency using the World Bank's index of bureaucratic effectiveness, which measures the quality of bureaucracy, infrastructure, and administrating training. The index is rescaled from 0 to 1, where "1" indicates a highly effective state *(Efficiency)*.

Higher social spending levels tend to be associated with more universal welfare states in Latin America, and therefore more popular support and class polarization. I therefore include a measure of social expenditures as a percent of GDP *(Social Exp.)*, and control for the level of inequality using the Gini coefficient *(Inequality)*. Both measures come from ECLAC (2011).

Analysis

I test the argument in three parts. In the first part, I use differences in social policy design to examine

if individual-level inclusion affects preferences, and if class polarization differs with policy progressivity. In the second part, I test the proposition that welfare state structure shapes demand patterns across Latin America. Finally, I turn to a comparison of Latin America and Europe to check whether public opinion reflects differences in the direction of social policy extensions. While the first analysis relies on standard logit models, the latter use hierarchical models to incorporate national-level variables.

Cross-Sectoral Analysis

I first estimate a series of individual-level logit models for each dependent variable with country-fixed effects. This approach assumes a consistent effect of the explanatory variables across countries, but allows for a comparison of effects across policy types. Table 3 presents the results.

Model 1 examines benefit inclusion (with income plus controls). Inclusion is associated with significantly more support for truncated policies, namely redistribution, pension, and health, and less support for targeted transfers like taxes and land takings. An average woman living in an urban area has a 68 percent probability of supporting redistribution if she has no benefits, and a 72 percent probability if she does.[5] This increase is equivalent to a move from the lowest to highest income level, or from the extreme political right to the left.

Model 2 includes income and its quadratic term.[6] Support for truncated policies—both pensions and general redistribution—seems to peak with the lower middle class. Income is positively signed, while income squared is negatively signed and significant. As individuals become richer, their support for pensions and redistribution changes at a decreasing rate. In contrast, income linearly predicts support for targeted policies. Health follows the same pattern as more targeted policies, perhaps because countries have moved farther to expand basic coverage.

So as not to impose a functional form, I regress a dummy variable for each income quantile and country on support. Figure 5 plots the results for Latin America and Europe. Both regions have similar negative income gradients for taxes (and land takings in Latin America). But rather than a hump, support looks flat across income groups for redistribution, pensions, and health in Latin America, while it slopes downward in Europe (with the exception of health). The raw data thus do not show a consistent or significant inverted-U for truncated policies across Latin America.

Cross-National Analysis

My argument is that demand patterns differ with welfare state structure. The weak relationship between income and preferences observed region-wide may stem from heterogeneity in truncation across Latin America, given uneven progress toward universalism. Indeed, while individual-level characteristics explain just 3

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[5]Predicted probabilities are calculated using the `margins` command in Stata.

[6]I remove inclusion because it attenuates the quadratic functional form, as would be expected.

Table 3: Cross-Sectoral Preferences, AmericasBarometer 2010

	Redistribution		Pension		Health		Tax		Property	
	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)	(1)	(2)
Income	-0.0261*	0.0320	-0.0235*	0.0231	-0.0134*	0.0124	-0.0215	-0.112*	-0.0114*	0.0168
	(-4.42)	(1.46)	(-3.92)	(1.04)	(-2.09)	(0.53)	(-1.79)	(-2.40)	(-1.97)	(0.77)
Inclusion	0.144*		0.201*		0.182*		-0.292*		-0.0967*	
	(2.93)		(4.02)		(3.39)		(-2.89)		(-1.99)	
Income^2		-0.00524*		-0.00403*		-0.00211		0.00797		-0.00286
		(-2.62)		(-1.99)		(-0.97)		(1.83)		(-1.44)
Shock	0.0297	0.0249	0.0430	0.0348	0.0560	0.0482	-0.00954	-0.00191	-0.119*	-0.113*
	(0.86)	(0.72)	(1.22)	(0.99)	(1.48)	(1.28)	(-0.13)	(-0.03)	(-3.51)	(-3.34)
Unemployed	0.167*	0.143*	0.168*	0.133*	0.0944	0.0616	-0.136	-0.0865	-0.215*	-0.196*
	(2.84)	(2.46)	(2.84)	(2.27)	(1.49)	(0.98)	(-1.21)	(-0.78)	(-3.89)	(-3.59)
Education	-0.0000121	0.00308	-0.00838	-0.00429	0.00275	0.00628	-0.0416*	-0.0471*	-0.0127*	-0.0143*
	(-0.00)	(0.75)	(-1.94)	(-1.02)	(0.59)	(1.39)	(-4.63)	(-5.35)	(-3.01)	(-3.47)
Female	-0.0524	-0.0627*	-0.0339	-0.0481	-0.0967*	-0.110*	-0.0453	-0.0242	0.0806*	0.0880*
	(-1.74)	(-2.10)	(-1.11)	(-1.59)	(-2.96)	(-3.38)	(-0.73)	(-0.39)	(2.70)	(2.97)
Age	0.00214	0.00261*	0.00746*	0.00806*	0.00405*	0.00455*	0.00507*	0.00435	0.00638*	0.00619*
	(1.94)	(2.38)	(6.62)	(7.20)	(3.37)	(3.82)	(2.19)	(1.89)	(5.83)	(5.69)
Urban	-0.00394	-0.00621	-0.0242	-0.0246	-0.0165	-0.0154	-0.138	-0.138	-0.0139	-0.0178
	(-0.11)	(-0.17)	(-0.66)	(-0.67)	(-0.42)	(-0.40)	(-1.51)	(-1.50)	(-0.39)	(-0.49)
Right	-0.0142*	-0.0145*	0.0101	0.00973	0.0179*	0.0176*	-0.0516*	-0.0510*	-0.00320	-0.00295
	(-2.28)	(-2.33)	(1.59)	(1.53)	(2.63)	(2.57)	(-3.94)	(-3.90)	(-0.52)	(-0.48)
Religion	-0.0113	-0.0105	0.00185	0.00265	0.0219	0.0225	-0.0212	-0.0230	-0.00120	-0.00105
	(-0.93)	(-0.86)	(0.15)	(0.22)	(1.66)	(1.70)	(-0.85)	(-0.92)	(-0.10)	(-0.09)
Observations	21989	21989	21989	21989	21989	21989	4725	4725	21989	21989
Countries	18	18	18	18	18	18	4	4	18	18

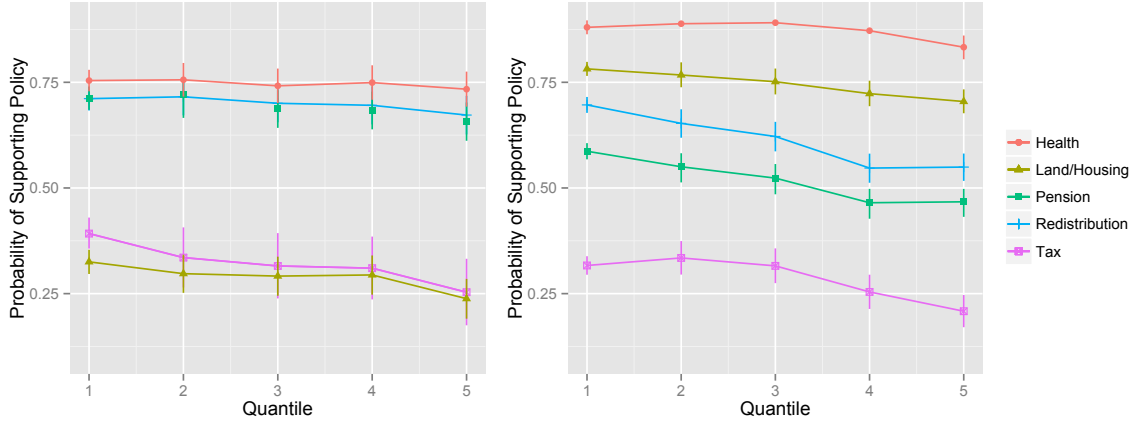t statistics in parentheses, * $p < 0.05$

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Figure 5: Cross-Policy Comparisons for Latin America (Left) and Europe (Right)
Source: AmericasBarometer (2010) and ISSP (2006)

percent of the variance in demands, 23 percent of the variance comes at the national-level.

To build up the hierarchical model, I first present bivariate plots from a two-stage regression. Figure 6 plots the income coefficients from a logit with basic controls, and the population share supportive of redistribution, against welfare coverage. While inequality did little to explain these patterns, coverage provides substantial leverage. The fit between class and preferences is tighter and support for redistribution is higher in countries that cover the poor.

I estimate a multilevel logit with country fixed effects, and then with random effects; both use robust standard errors clustered by country. The models presume that survey answers reflect an underlying support for redistribution, the unobserved variable y^*. The equation for the fixed effects model, where i indexes individuals and j indexes countries, is:

$$y_{ij}^* = \alpha_0 + \beta_1 n_{ij} + \beta_2 z_j n_{ij} + \mathbf{W_{ij}b} + u_j + \epsilon_{ij}$$

The equation has an intercept α_0, the income variable for each individual n_{ij}, the interaction of income with national-level coverage z_j, the matrix of remaining controls $\mathbf{W_{ij}}$, a country fixed effect u_j and an individual error term ϵ_{ij}. The fixed effects model controls for cross-country heterogeneity and the estimates on the interaction terms are more robust because of the less parametric estimation. However, it cannot be used to understand cross-sectional variation, which can be estimated with a random effects model:

$$y_{ij}^* = \alpha_0 + \beta_1 n_{ij} + \beta_2 z_j n_{ij} + \beta_3 z_j + \mathbf{W_{ij}b} + v_j + \epsilon_{ij}$$

The random effects model directly estimates the effect of national variables z_j, but it also makes a
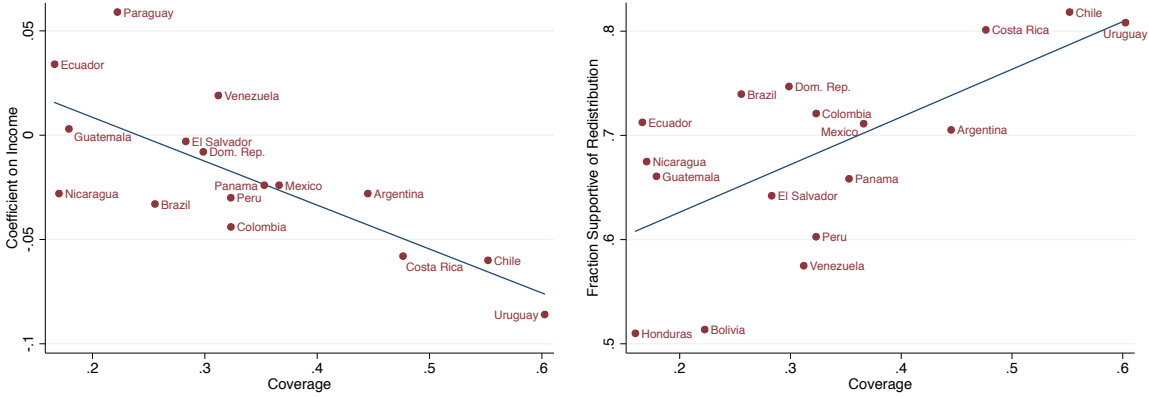
Figure 6: Class Polarization and Support for Redistribution
Source: AmericasBarometer (2010)

stronger distributional assumption of a country-specific error term v_j drawn from a normal distribution. Table 4 presents the results from both models.

Model 1 and 2 use coverage as a higher-level variable. In both the fixed and random effects models, the interaction between coverage and income is negative, which means that income more strongly predicts less redistributive support in more universal welfare states. In the random effects model, the coefficient on coverage is positive. More universal welfare states have higher levels of support across all citizens. To understand the substantive significance, consider how an individual's support is likely to change with income in different welfare regimes.[7]In a high coverage country like Uruguay, moving from the lowest to the highest income quantile reduces predicted support for redistribution from 82 to 74 percent. In contrast, in a truncated coverage country like Ecuador, the same movement reduces predicted support from 62 to 61 percent. This is a critical finding: class preferences are indistinguishable, and support is almost a quarter lower in truncated welfare states.

Models 3 and 4 show that less mobile societies (high *Mobility* scores) have less support for redistribution and less class polarization, as predicted. Models 5 and 6 show that state effectiveness is associated with more support for redistribution, and greater polarization. However, the polarization effect is not statistically significant and disappears once coverage is also included in a model, consistent with the hypothesized coverage-conditional relationship.

Models 7 through 10 consider the controls, welfare state size and inequality. Larger welfare states have higher levels of popular support, and also sharper class cleavages. Welfare state size and coverage are jointly significant as predictors of redistributive support and polarization, but their individual significance drops

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[7]These calculations can be done in Stata or analytically by changing coverage and income, $Coverage * \beta_{Coverage} + \beta_0 + (\beta_{Income} + Coverage * \beta_{Income*Coverage})$.

Table 4: Redistributive Preferences and Coverage, AmericasBarometer 2010

	Redistribution									
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Income	0.00397 (1.51)	0.00403 (1.53)	-0.0185* (-3.59)	-0.0183* (-3.56)	0.00296 (1.09)	0.00294 (1.08)	0.00469 (1.90)	0.00785* (2.66)	0.00641 (0.54)	0.0547* (3.48)
Income*Coverage	-0.0259* (-3.43)	-0.0259* (-3.43)						-0.0160 (-1.93)		-0.0429* (-4.67)
Coverage		0.481* (3.43)						0.435* (2.53)		0.724* (3.78)
Income*Mobllity			0.0971* (2.83)	0.0965* (2.81)						
Mobility				-1.520* (-2.18)						
Income*Efficiency					-0.0151* (-2.88)	-0.0151* (-2.87)				
Efficiency						0.390* (4.71)				
Social Exp.							0.693* (2.19)	0.241 (0.64)		
Income*Social Exp.							-0.0635* (-4.01)	-0.0497* (-2.85)		
Inequality									0.0867 (0.20)	1.157* (2.17)
Income*Inequality									-0.0199 (-0.90)	-0.0858* (-3.27)
Observations	26116	26116	26116	26116	26116	26116	26116	26116	24986	24986
Countries	18	18	18	18	18	18	18	18	18	18
Model	FE	RE	FE	RE	FE	RE	RE	RE	RE	RE

t statistics in parentheses, * $p < 0.05$, controls for age, education, urban, female not shown.
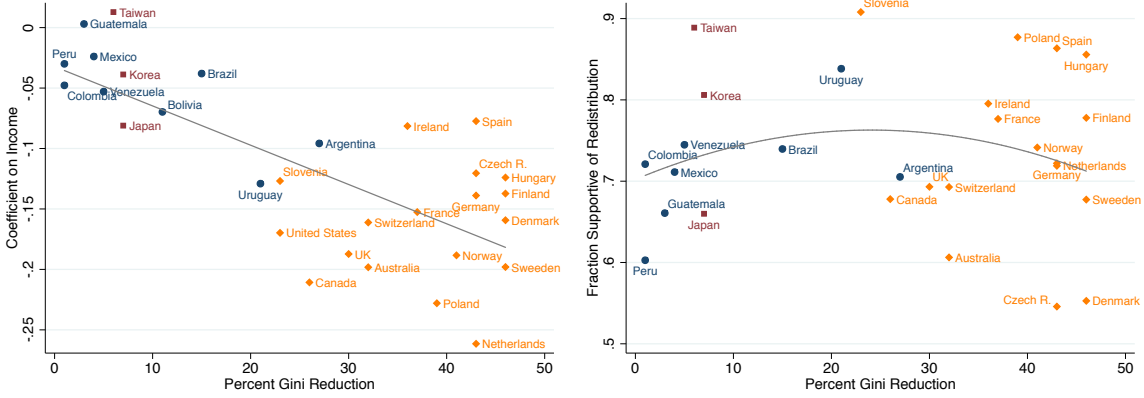
Figure 7: Class Polarization, Support for Redistribution, and Progressivity
Source: ISSP (2006), AmericasBarometer (2010), and Fiscal Redistribution Database (2011)

when included together. In Latin America, spending tends to be associated with greater universalism so it is unsurprising that the variables have similar effects. Model 9 confirms the the opening "puzzle" that inequality has little predictive power. Nevertheless, Model 10 reveals that inequality has the expected effects controlling for coverage. My suspicion is that income inequality, on the one hand, makes it easier for the upper classes to defend policies that work in their favor, and, on the other hand, galvanizes the poor to demand more redistribution. The desire to "soak the rich" is masked if differences in how the poor are included in the welfare state are ignored.

Cross-Regional Results

Figure 7 plots two-stage logit regression results for both regions. Progressive expenditures are associated with more polarized preferences outside of Latin America.[8] While a working paper by Beramendi and Rehm (2011) finds a similar result within the OECD, the relationship between progressivity and class polarization is stronger and clearer, explaining 56 percent of the variance, when the set of cases is expanded to Latin America. There is even greater, and more meaningful, variation in the extent of inequality reduction. Second, the relationship between fiscal progressivity and popular support varies by region and loosely produces the hypothesized "universalism curve." More targeted spending seems to reinforce the welfare state in Latin America, while it undermines it in Europe.

Robustness Checks

It is possible that the factors that lead to more universal welfare states, such as dense union organizations and strong leftist political parties, produce different societal demands, rather than differences in the benefit

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[8]The Latin American countries included by ISSP have similar income coefficient estimates to those calculated through AmericasBarometer (ρ=.82); I show AmericasBarometer results to cover more countries.

structure itself. I test for a potential omitted variable using the proportion of the workforce organized into unions *(Unions)*, and the fraction of years that the executive has been from the left from 1945-2008 *(Left Rule)* from Huber et al.'s Latin America and the Caribbean Social Policy and Political Datasets. I find that both union density and left rule on their own have no impact on the level of support, but they are associated with deeper redistributive cleavages. Importantly, coverage remains a significant predictor of the level of popular support and a jointly significant predictor of polarization. The Left and its allies may make class more salient, but how they design social policy also seems to matter. A related concern is that my measure of benefit inclusion simply proxies for class or union membership, rather than capturing an individual altered material interests. To reject this interpretation, I use questions about preferences over nonsocial policies, namely authoritarian attitudes, as a placebo test. As shown in the Appendix, income predicts less support for military intervention. But, encouragingly, social inclusion has no impact.

Another challenge to the paper's results is that income is measured with error, and that error may be larger in low coverage countries, leading the estimates asymptotically to approach zero. In low income countries, wealth indicators are often more accurate than self-reported income because recall of volatile income flows can be inaccurate, households smooth consumption patterns, and response rates are higher (Deaton, 1997). Handlin (2013) also suggests the use of socioeconomic categories based on a combination of education, income or wealth, and household size to operationalize class. The Appendix shows that the findings are robust to a host of alternative income specifications (as well as use of alternative data sources), which increases my confidence that measurement error does not drive the findings.

Conclusion

In this paper, I ask why, in a context of extreme inequality, the poor voice limited support for social expenditures in Latin America. The main contribution is to formalize and test how differences in welfare state structure shift social demand patterns. The empirics suggest that the poor are more supportive than the nonpoor of economically progressive policies, and the gap between preferences grows in more universal welfare states. Incorporating the fact that "redistribution" does not uniformly favor the poor suggests the usefulness of material interests to understand social demands, and meaningfully advances our understanding of public opinion in Latin America. The more accurate materialist account also provides a natural framework to unify often-disconnected literatures on social policy in developing and advanced economies.

While the theory focuses on the inclusion of the poor, the results help adjudicate between competing perspectives on the behavior of the rich. On the one hand, scholars who observe the small size of Latin American welfare states emphasize that the rich use their de facto influence to stymie the redistributive potential of democracy. On the other, others have proposed that elites affected by rising crime see welfare

spending as a way to improve their personal security, attenuating the effects of income on redistributive attitudes. My results provide an alternative explanation for the rich's weak opposition to redistribution more consistent with qualitative accounts of elite power and median voter models. When explicitly asked who will pay for redistribution, "enlightened" elites look more self-serving. The upper class may support social policies that favor their interests, which are more prevalent in truncated welfare regimes.

Third, this paper expands our understanding of the types of redistribution that merit attention in low and middle-income countries. I show that government redistribution may not polarize preferences, but class can emerge as a salient divide around informal forms of redistribution. Indeed, politicians like Hugo Chávez in Venezuela and Alberto Fujimori in Peru have rallied informal sector poor voters around the taking (and sometimes, the formalization) of land.

More broadly, attention to the structure of redistribution has implication for political coalition formation and change. The nonregressivity assumption implies that under no circumstances can the poor and rich form a political coalition. In contrast, truncated welfare states permit ends-coalitions to cut out the middle class. In this light, the prevalence of populism in developing countries—and particularly what Weyland (1996) calls "neoliberal" populists who unite the informal sector and economic liberals in opposition to organized labor—does not reflect the irrational embrace of charismatic leaders, but results organically from the distorted welfare structure. In sum, the political issues in Latin America make much more sense in light of a political spectrum structured around informal redistribution and the targeting, rather than the level, of formal redistribution. Future research should pay close attention to how moves toward greater universalism can reorient coalition formation to make class and social policy more salient in structuring politics. It is not the poor that fail to understand their own interests; it is political economists that have failed to incorporate the ways that redistribution differs and is changing outside of Europe.

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Appendix

Background

I conducted a public opinion survey of 900 respondents in Bogotá, Colombia to probe their redistributive attitudes. Respondents were asked "In your opinion, which group benefits most from the government's social policies?" Low-income respondents overwhelmingly selected "the middle class who tend to have formal sector jobs," rather than "the lower class who tend to work in the informal sector."

Theoretical Framework

The model can be tweaked to incorporate the case of an income cap for welfare coverage—in other words, a targeted or liberal welfare state. As I discuss in the text, I assume that there is a maximum income level $\bar{Y}$ above which individuals do not receive welfare benefits, which is equivalent to the ϕ'th quantile. To determine the probability that an individual supports redistribution in a targeted welfare state, I rewrite the marginal utility with respect to the tax rate,

$$\frac{dU}{d\tau} = -Y + 1_{Y \leq \bar{Y}} \frac{E[Y]f}{\phi}$$

The fraction of the population with a given current income that support redistribution can be defined just as in the main model, but using this revised formulation of the threshold where the individual benefits if $Y \leq \bar{Y}$.

The model calculations were conducted using the quadrature method in Mathematica. For the numerical integration, the current income distribution is derived from a country's mean per capita income and Gini coefficient, assuming that income is distributed log normal in the country. I use the Latin American mean of a GDP per capita of \$9400 and a Gini coefficient of 0.53. I set to 0.72 so that roughly half of the variance in income is explained by current income, but the sign of the effects is unchanged across parameter values.

This is a structural model that provides point estimates for the income gradients. The model predicts that a truncated welfare state (with only the top 20 percent covered) has a coefficient of 0.2, while a more universal welfare state (with the top 80 percent covered) has a coefficient of -0.02 and a targeted welfare state (with only the bottom 20 percent covered) has a coefficient of -0.4. The model is written in terms of log income so I run the logit models again using log income (rather than income deciles) and basic controls. Compared to the estimates from the data, the model's estimates align relatively well, although the model predicts much higher coefficients for truncated cases than observed. In cases with the lowest coverage levels, the estimated income coefficients are near 0 or even positive, ranging from 0 for Guatemala to 0.08 and 0.05

for Ecuador and Paraguay. For more targeted cases, such as Uruguay, the estimated income coefficient is -0.3.

Summary Statistics

Table 1 presents summary statistics for all the major variables.

Land Variable

AmericasBarometer asks respondents to score their approval of "seizing private property or land to protest" (*e14*). An ideal measure of support for land takings would not include the word "protest" and specify that land takings are actions by the poor. Responses to this question likely capture three things. First, the question forms part of a block where respondents score their approval of a series of contentious behaviors. Responses thus reflect beliefs about the general appropriateness of protest. Second, scores reflect the response style of an individual, meaning the tendency to give extreme or moderate answers. Third, the specific question asks about the inviolability of land in front of other social claims. I try to control for general attitudes toward protest so as to isolate attitudes toward private property seizures.

I construct an index intended to identify the common determinants of protest approval. Therefore, I include three questions about attitudes toward disruptive or illegal protest: seizing property, blocking roads, and organizing to overthrow the government (questions *e14, e15* and *e3*, respectively). I also include three questions on approval of legal protests: past protest participation (*protest*), legal protests (*e5*), and legal protests by groups that criticize the government (*d2*). PCA is a superior technique to the addition of controls in an OLS regression because it captures underlying attitudes toward protest behavior and response styles, rather than opinions about any single type of contentious behavior.

Applying the method of principal components, all variables load positively on the first component. This is consistent with the hypothesis that the primary driving factor behind opinions about all protest variables is an overall stance toward contentious actions. I refer to this index as *Protest approval*. This common first component explains roughly a third of the variation in opinions about various protest behaviors in the Latin America wide data. The second component loads negatively for illegal behaviors—seizing property and plotting to overthrow the government—and positively for less disruptive protest behaviors—including peaceful protests and protest participation. Blocking roads falls in the middle with a loading near zero. The second component appears to capture a common attitude toward law breaking and violence, similar to the index of protest illegality constructed by Opp (1990). While the first component captures general approval of protest, the second—what I call *Legality of protest*—seems to align with a stance toward illegal behaviors.

Table 5: Summary Statistics

Variable	Mean	Median	Std. Dev.	Min.	Max.	N
AmericasBarometer 2010						
Redistribution	0.692	1	0.462	0	1	29278
Pension	0.711	1	0.453	0	1	29278
Health	0.775	1	0.418	0	1	29278
Tax	0.383	0	0.486	0	1	6355
Land	0.277	1	0.268	0	1	29278
Income	4.774	4	2.923	1	10	26182
Inclusion	0.313	0.333	0.349	0	1	29278
Education	9.587	10	4.427	0	18	29187
Unemployed	0.073	0	0.26	0	1	29278
Shock	0.264	0	0.441	0	1	28581
Female	0.517	1	0.5	0	1	29278
Age	38.302	36	14.93	18	75	29278
Urban	0.716	1	0.451	0	1	29278
Right	5.598	5	2.391	1	10	23176
Religion	1.31	1	1.278	0	3	29116
Coverage	0.313	0.300	0.125	0.166	0.602	29278
Cross-National Variables						
Mobility	0.146	0.150	0.028	0.088	0.188	18
Efficiency	0.469	0.490	0.183	0.133	0.839	18
Social Exp.	0.132	0.125	0.057	0.064	0.261	18
Inequality	0.53	0.53	0.043	0.43	0.59	18
Left Rule	0.159	0.140	0.139	0	0.437	18
Unions	0.174	0.150	0.074	0.08	0.363	17
% Gini Reduction	26.1	28.5	16.268	1	46	30
ISSP 2006						
Redistribution	0.755	1	0.43	0	1	38299
Pension	0.680	1	0.467	0	1	40302
Health	0.803	1	0.398	0	1	40302
Housing	0.803	1	0.398	0	1	40302
Tax	0.482	0	0.5	0	1	36123
Income	5.188	5	2.849	1	10	33631
Age	44.97	45	15.653	15	75	40302
Female	0.537	1	0.499	0	1	40298
Education	12.643	12	4.169	1	30	40302
Right	1.941	2	0.739	1	3	31868
Formal	0.723	1	0.448	0	1	40302
Union	0.204	0	0.403	0	1	36391
Religion	3.413	3	2.214	1	8	38626
Unemployed	0.051	0	0.221	0	1	40302

Table 6: First Stage Results, AmericasBarometer 2008-12

	(1)	(2)
Protest Approval	1.230*	2.727*
	(441.68)	(108.68)
Legality of Protest		-1.500*
		(-60.04)
Observations	88452	86133
R^2	0.533	0.546

Cumulatively, the first and second components explain 56 percent of the variance.

To isolate attitudes toward property seizures, I take the residuals of a regression of the first component (*Protest approval*) on approval of property seizure as protest (*e14*). The remaining variation represents how responses differ when an individual considers land seizures. Table 2 shows the first-stage regression coefficients. Protest approval explains just over half of the variance in property seizure attitudes, while legality of protest has limited explanatory power. I only use protest approval in the first-stage regression to construct the dependent variable, although the results are robust to including legality of protest.

I use these first-stage residuals as the dependent variable *Land* in my analysis. Given that a variable constructed from residuals has no natural interpretation, I set the cut-off for support for property takings as the fraction neutral or supportive of property seizures as protest in the original data, roughly a quarter of the population (although the results are robust to the use of the full index).

To verify the construction of the land variable, I first used AmericasBarometer surveys from Peru in 1996 and 1997 that adjust the wording of the question to ask if respondents approve of individuals who "invade private property (houses or unoccupied land).*"* Table 3 compares responses to the question to the indirect construction that I created using principal component analysis, *Land.* The regression results are consistent. In the early surveys, AmericasBarometer only measured household income through wealth measures, including a four-point scale of the observed quality of a home and durable goods. I use a PCA of these measures to create a wealth index that I then standardize. The relationship between income and land seizure preferences is even stronger using the more precise question; if anything, it seems likely that my results underestimate the relationship between income and property seizure attitudes.

The second test of the construct validity comes from an available dataset on 5,299 rural land invasions from 1988 to 2004 in Brazil compiled by Hidalgo et al. (2010). If my dependent variable captures attitudes toward property seizure, I expect greater approval of property seizure and more class polarization of attitudes in areas where the poor have claimed land. While the data set codes land invasions at the municipal level, I create a state-level variable that averages the number of land invasions per municipality across the state (20 states are included in the data set). Few municipalities surveyed in the AmericasBarometer directly experienced land invasions. Creating a municipal-level measure thus would allow a handful of municipalities to drive the results. I run standard logit models, as well as hierarchical models with fixed and random effects, and standard errors clustered at the state level. I control for basic individual-level characteristics, as well as the level of inequality and poverty in the state. I do find that a higher frequency of land invasions in a state, *State Invasions,* is associated with more support for property seizures on average (the coefficient in the random effects model is positive). I find weaker support for the idea that there is greater class polarization in states with more land invasions. While the interactive coefficient of income and invasions is correctly

Table 7: Land, AmericasBarometer 1996-97, Peru

	(1) Invasion	(2) Land
Wealth	-0.190*	-0.0974*
	(-3.58)	(-2.66)
Female	-0.0325	0.115
	(-0.37)	(1.88)
Age	-0.00602	-0.000132
	(-1.52)	(-0.05)
Education	-0.198*	-0.129*
	(-3.86)	(-3.65)
Married	-0.0785	-0.0638
	(-0.70)	(-0.82)
Urban	0.404*	0.0716
	(3.86)	(0.98)
Catholic	-0.132	-0.0350
	(-0.97)	(-0.37)
Observations	2698	2587

t statistics in parentheses, * $p < 0.05$

signed, it does not reach conventional levels of statistical significance. However, the interactive coefficient between education and invasions is correctly signed, which suggests that class more broadly construed does predict greater polarization. Combined, these two tests—from early AmericasBarometer waves with more precise question wording and data on actual land invasions—increase my confidence that I am measuring attitudes toward property takings.

Additional Individual-Level Results

Table 5 replicates the individual-level results using data from a different regional public opinion survey, Latinobarometer. Latinobarometer does not include a general redistributive question so it is not included in the main analysis. But Latinobarometer 2008 asks respondents to choose whether the State, coded as "1," or private sector, "0," should be responsible for the provision of education, pensions, and health. When asked as a binary choice, Latin American are overwhelmingly statist: 88.5 percent of the sample supports state health provision, 87.6 percent state pension provision, and 89.9 percent public primary education. This limited variance makes me skeptical of the results, although they are largely consistent with my theory. Latinobarometer also does not ask about household income, so I measure income through a series of questions about consumer durables (*Wealth*). For each country, I calculate wealth deciles based on a PCA of consumer

Table 8: Brazil Subnational Land, AmericasBarometer 2010

	(1)	(2)	(3)	(4)	(5)
Income	-0.0463*	-0.00722	-0.0112*	-0.00799	-0.0119*
	(-2.11)	(-1.45)	(-3.37)	(-1.63)	(-3.65)
Education	-0.112*	-0.0164*	-0.0113*	-0.0159*	-0.0104*
	(-6.03)	(-6.32)	(-3.16)	(-6.11)	(-2.90)
Female	0.173	0.0236	0.0232	0.0254	0.0250
	(1.50)	(1.37)	(1.35)	(1.47)	(1.45)
Age	-0.0165*	-0.00174*	-0.00174*	-0.00181*	-0.00181*
	(-3.72)	(-2.77)	(-2.77)	(-2.87)	(-2.87)
Urban	-0.253	-0.0376	-0.0376	-0.0339	-0.0335
	(-1.20)	(-1.32)	(-1.33)	(-1.22)	(-1.21)
*Income*State Invasions*		-0.00309		-0.00302	
		(-0.95)		(-0.94)	
*Education*State Invasions*			-0.00418*		-0.00449*
			(-1.97)		(-2.13)
State Invasions				0.0497*	0.0684*
				(2.10)	(2.84)
State Gini				-0.0690	-0.0853
				(-0.20)	(-0.24)
State Poverty				0.000628	0.000634
				(0.67)	(0.68)
Observations	1576	3076	3076	3058	3058
States	20	20	20	20	20
Model	—	FE	FE	RE	RE

t statistics in parentheses, * $p < 0.05$

assets. The key results from individual-level logit models are that inclusion, measured only by health insurance coverage and formal sector employment, due to the lack of questions on pensions, is significant across model specifications. Also, while the wealth coefficient is negative and significant, the quadratic term is also negative and significant in support for pensions and primary education.

Table 9: Redistributive Preferences, Latinobarometer2008

	Education		Pension		Health	
	(1)	(2)	(1)	(2)	(1)	(2)
Wealth	-0.040*	0.067	-0.029*	0.104*	-0.048*	0.0417
	(-3.08)	(1.29)	(-2.54)	(2.25)	(-3.91)	(0.86)
$Wealth^2$		-0.010*		-0.012*		-0.008
		(-2.13)		(-2.99)		(-1.91)
Inclusion	0.187*	0.180*	0.268*	0.259*	0.272*	0.268*
	(2.60)	(2.50)	(4.15)	(4.01)	(4.07)	(3.99)
Education	-0.002	-0.001	-0.016	-0.015	-0.013	-0.012
	(-0.21)	(-0.09)	(-1.95)	(-1.78)	(-1.48)	(-1.38)
Unemployed	-0.227	-0.228	-0.235*	-0.239*	-0.122	-0.123
	(-1.85)	(-1.87)	(-2.15)	(-2.18)	(-1.06)	(-1.07)
Shock	-0.258	-0.254	-0.051	-0.048	-0.072	-0.071
	(-1.84)	(-1.81)	(-0.38)	(-0.36)	(-0.51)	(-0.50)
Female	-0.054	-0.059	0.081	0.073	0.053	0.049
	(-0.82)	(-0.90)	(1.38)	(1.25)	(0.88)	(0.80)
Urban	-0.243*	-0.244*	-0.252*	-0.255*	-0.108	-0.110
	(-3.18)	(-3.19)	(-3.71)	(-3.73)	(-1.55)	(-1.57)
Age	0.009*	0.009*	0.009*	0.009*	0.009*	0.009*
	(3.93)	(3.93)	(4.31)	(4.34)	(4.39)	(4.39)
Right	-0.018	-0.018	-0.023*	-0.023	-0.030*	-0.030*
	(-1.36)	(-1.36)	(-1.96)	(-1.94)	(-2.43)	(-2.41)
Religion	-0.036	-0.034	0.027	0.030	-0.085	-0.084
	(-0.54)	(-0.51)	(0.46)	(0.50)	(-1.37)	(-1.35)
Observations	10692	10692	10652	10652	10748	10748

t statistics in parentheses, country-fixed effects, * $p < 0.05$

Table 6 replicates the individual-level responses using pooled AmericasBarometer data for the years available for each dependent variable and year dummies. *Health* appeared on the 2010 and 2012 wave; *Redistribution* has been asked in 2008, 2010, and 2012; *Property* can be constructed for 2008, 2010, and 2012 (*Pension* is not shown because it only appears in the 2010 wave). The variable *Shock* is dropped because it is unavailable on the pre-2010 waves. For waves prior to 2010, I measure inclusion through formal sector

employment because inclusion questions were not included. When measured only through formal sector employment, inclusion sometimes falls below statistical significance, but it is correctly signed (other than in support for property seizures). Interestingly, income squared is just below statistical significance for support for redistribution, but is associated with less support for health in the pooled sample.

Table 10: Redistributive Preferences, Pooled AmericasBarometer 2008-2012

	Redistribution		Health		Property	
	(1)	(2)	(1)	(2)	(1)	(2)
Income	-0.0198*	0.00509	-0.00913	0.0345	-0.0169*	-0.00462
	(-5.34)	(0.36)	(-1.58)	(1.74)	(-4.71)	(-0.34)
Income^2		-0.00237		-0.00411*		-0.00116
		(-1.82)		(-2.30)		(-0.92)
Inclusion	0.0447*	0.0436	0.0183*	0.0180*	-0.0190	-0.0196
	(2.00)	(1.95)	(2.78)	(2.73)	(-0.89)	(-0.92)
Education	0.00620*	0.00638*	0.00250	0.00279	-0.0200*	-0.0199*
	(2.16)	(2.22)	(0.60)	(0.67)	(-7.17)	(-7.13)
Unemployed	0.0460	0.0469	0.0968	0.0984	-0.109*	-0.109*
	(1.14)	(1.16)	(1.81)	(1.84)	(-2.86)	(-2.84)
Female	-0.0675*	-0.0676*	-0.0769*	-0.0767*	0.0799*	0.0798*
	(-3.46)	(-3.47)	(-2.89)	(-2.88)	(4.22)	(4.22)
Age	0.00265*	0.00269*	0.00425*	0.00433*	0.00170*	0.00172*
	(3.79)	(3.84)	(4.43)	(4.50)	(2.51)	(2.54)
Urban	0.00375	0.00199	-0.0278	-0.0308	-0.0249	-0.0258
	(0.17)	(0.09)	(-0.88)	(-0.97)	(-1.12)	(-1.16)
Right	-0.0140*	-0.0141*	0.0166*	0.0165*	-0.00611	-0.00612
	(-3.60)	(-3.61)	(3.09)	(3.08)	(-1.64)	(-1.64)
Religion	0.0000865	0.000279	0.0392*	0.0396*	-0.0106	-0.0105
	(0.01)	(0.04)	(3.64)	(3.68)	(-1.41)	(-1.40)
Observations	52927	52927	32937	32937	52927	52927
Years	(2008-12)		(2010-12)		(2008-12)	

t statistics in parentheses, country and year-fixed effects, * $p < 0.05$

Additional Cross-National Results

Table 7 shows the additional cross-national results from hierarchical models using the pooled Americas-Barometer data. The coefficients are all correctly signed, although again, some fall below conventional statistical significance.

Table 8 shows the results from the cross-regional comparison just using the data at the national level.

Table 11: Redistributive Preferences and Coverage, Pooled AmericasBarometer 2008-12

		Redistribution								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
Income	0.0158* (2.56)	0.0158* (2.56)	-0.0192* (-5.45)	-0.0192* (-5.44)	-0.00120 (-0.70)	-0.00120 (-0.70)	0.000987 (0.54)	0.00315 (0.45)	0.00942 (1.10)	0.0559* (3.24)
Income*Coverage	-0.0336* (-3.30)	-0.0336* (-3.30)						-0.0523* (-4.46)		-0.0443* (-3.11)
Coverage		0.914* (2.64)						0.763 (1.94)		1.398* (2.67)
Income*Mobility			0.101* (4.25)	0.100* (4.25)						
Mobility				-2.092* (-2.53)						
Income*Efficiency					-0.00711* (-2.10)	-0.00712* (-2.10)				
Efficiency						0.411* (5.12)				
Social Exp.							0.00832 (1.65)	0.3999 (0.96)		
Income*Social Exp.							-0.0582* (-5.39)	-0.0524* (-4.46)		
Inequality									0.0819 (0.15)	1.185 (1.68)
Income*Inequality									-0.0275 (-1.71)	-0.0647* (-3.23)
Observations	65274	65274	65274	65274	65274	65274	50656	50656	51786	51786
Countries	18	18	18	18	18	18	18	18	18	18
Model	FE	RE	FE	RE	FE	RE	RE	RE	RE	RE

t statistics in parentheses, * $p < 0.05$, controls for age, education, urban, female not shown.

A more progressive welfare state is associated with a statistically significant more negative coefficient on income. The results for a "universality curve" are weaker. There is no linear relationship between the level of support for redistribution and progressivity. Adding a squared term leads the coefficients on income and income squared to be correctly signed, but they do not reach standard levels of statistical significance. As future data on progressivity in a broader range of countries becomes available, it may become possible to test this hypothesis more vigorously.

Table 12: Cross-Regional Comparison

	Coefficient on Income	Fraction Supportive of Redistribution	
	(1)	(2)	(3)
% Gini Reduction	-0.00319*	0.000045	0.00505
	(-5.53)	(0.04)	(0.98)
% Gini Reduction^2			-0.0001
			(-1.00)
Observations	28	28	28

t statistics in parentheses, * $p < 0.05$

Robustness Checks

Table 9 shows the tests for potential omitted variables and measurement error. First, I use the proportion of the workforce organized into unions *(Unions)*, and the fraction of years that the executive has been from a left, center-left, or Christian Democrat-left party from 1945-2008 *(Left Rule)* to check whether omitted variables may explain both welfare state and preference structure. Model 1 shows that union density is associated with more polarized preferences, but has no impact on the level of popular support. Model 2 confirms that coverage remains a significant predictor of the level of support, even controlling for union density, and coverage and union density are jointly significant predictors of more polarized preferences. Models 3 and 4 show that the same trend applies for years of left rule. Having the Left in power for longer polarizes redistributive preferences, but coverage remains a significant predictor of the level of support.

To check that differences in measurement error across country do not drive my results, I use a variety of alternative income measures. AmericasBarometer includes questions about ownership of consumer durables and access to basic services, which I weight through a PCA and use to instrument for income *(Wealth)*. Using Handlin (2013)'s recommendations, I also construct an alternative measure of socioeconomic class. The additive index gives equal weight to income (or wealth) and educational components. Income (or wealth) is condensed into four categories from 1 to 4 of roughly equal size. Then, education is divided into four categories based on meaningful cut points (the groups capture those with no education or incomplete primary education; complete primary education but incomplete secondary; complete high school degrees but

Table 13: Redistributive Preferences and Coverage, AmericasBarometer 2010

	Redistribution								
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)
Income	0.000493	0.00270	-0.00143	0.00116					
	(0.19)	(0.80)	(-0.90)	(0.44)					
Unions	0.130	0.00614							
	(0.44)	(0.02)							
Income*Unions	-0.0373*	-0.0362*							
	(-2.72)	(-2.63)							
Coverage		0.532*		0.515*	0.523*	0.528*	0.506*	0.538*	0.538*
		(3.30)		(3.16)	(3.30)	(3.46)	(3.40)	(3.71)	(3.71)
Income*Cov.		-0.00762		-0.00883					
		(-1.04)		(-1.22)					
Left Rule			-0.0353	-0.101					
			(-0.24)	(-0.66)					
Income*Left Rule			-0.0236*	-0.0227*					
			(-3.32)	(-3.17)					
Wealth					-0.000197				
					(-0.08)				
Wealth*Cov.					-0.0189*				
					(-2.67)				
Income Index						-0.00123			
						(-0.30)			
Income Index*Cov.						-0.0228			
						(-1.85)			
Wealth Index							-0.00112		
							(-0.29)		
Wealth Index*Cov.							-0.0228*		
							(-1.99)		
W_Income								0.000826	
								(0.19)	
W_Income*Cov.								-0.0241	
								(-1.90)	
W_Wealth									0.000826
									(0.19)
W_Wealth*Cov.									-0.0241
									(-1.90)
Observations	26420	26420	27600	27600	30769	27667	30769	27423	27423
Countries	17	17	18	18	18	18	18	18	18
Model	FE	RE	FE	RE	RE	RE	RE	RE	RE

t statistics in parentheses, * $p < 0.05$, controls for age, education, urban, female not shown.

no higher education; and higher education). These scales are combined to create an index that ranges from 1 to 7, *Income Index* and *Wealth Index.* Another version of this scale constructs the same scale using income data weighted by household size, dividing the total household income by the number of adult equivalences (in which children are given a lesser weight of 0.65, and economies of scale are adjusted for at a rate of 0.5), *W_Income* and *W_Wealth.* Table 9 shows the random effects models using these alternative specifications (the fixed effects results are equivalent). The signs and size of the coefficients are unchanged using these alternative specifications, although the interaction between coverage and different income measures at times hovers below statistical significance.

Finally, Table 10 shows the results from a Placebo test to check if the social benefit inclusion variable primarily captures class. It has been shown that the poor have more authoritarian attitudes and weaker support for democracy. But direct inclusion in social policies should not affect support for democracy. As a dependent variable, I use AmericasBarometer questions about support for authoritarian interventions or decision making. The questions are coded as "1" if a respondent agrees that a military take-over of the state would be justified "when there is a lot of crime," and "0" if military intervention is unjustified (*Military Intervention);* and as "1" if a respondent agrees that "our country needs a government with an iron first" and "0" if she agrees that "problems can be resolved with everyone's participation (*Authoritarian Decisions).* While income is a significant negative predictor of support for authoritarian governance, benefit inclusion has no effect.

Table 14: Placebo Test

	Military Intervention	Authoritarian Decisions
Income	-0.0575*	-0.0483*
	(-9.60)	(-4.58)
Inclusion	-0.00507	-0.0171
	(-0.39)	(-0.75)
Education	-0.0348*	-0.0319*
	(-8.13)	(-4.23)
Unemployed	0.172*	-0.0538
	(3.33)	(-0.59)
Shock	-0.00187	-0.0508
	(-0.05)	(-0.83)
Female	0.0670*	0.125*
	(2.20)	(2.37)
Urban	0.198*	0.231*
	(5.37)	(3.61)
Age	-0.0153*	-0.0134*
	(-14.27)	(-7.00)
Right	0.0576*	0.0000389
	(9.19)	(0.00)
Religion	0.0165	-0.0335
	(1.33)	(-1.56)
Observations	19993	16898

t statistics in parentheses, * $p < 0.05$