

BELIEFS, ECONOMIC VOLATILITY, AND REDISTRIBUTIVE PREFERENCES ACROSS DEVELOPING COUNTRIES

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Beliefs about social competition affect redistributive demands and the responsibility assigned to government regarding public provisions. Given the strong link between beliefs and the extent of support for social protection, it is important to explain the cross-country differences. The paper analyzes the factors that are crucial in explaining redistributive demands across developing countries with a special emphasis on beliefs about social competition. While ideas about luck versus effort in determining economic prospects are explanatory in every country, our findings also suggest that in societies with high economic volatility the role of beliefs is amplified. Vast fluctuations in economic performance fuel the opinion that economic failure is a result of systemic characteristics, and individuals are not necessarily held fully responsible for their material faiths in such settings. Therefore, government is assigned a greater role in basic provisioning.

Keywords: Beliefs; Redistribution; Social competition; Volatility; Multilevel analysis
JEL classification: H4, H8, O7

I. INTRODUCTION

THERE are a number of personal and contextual factors that explain why redistributive preferences vary across countries and individuals. While earlier studies emphasized the role of self-seeking motives, later studies added contextual variables such as social mobility, welfare regimes, and fragmentation to the explanations (Meltzer and Richard 1981; Moene and Wallerstein 2001; Cusack, Iversen, and Rehm 2006; Benabou 2000; Glaeser 2005). Recent literature identifies the link between social competition and redistributive preferences both at the individual and country level. It has been suggested that people become more favorable towards the poor and redistribution if the need is believed to have systemic causes rather than being due to a lack of effort and hard work by individuals (Fong 2001). In other words, preferences are not merely formed by self-regarding motives, and higher redistribution is demanded in cases when being poor is not attributed to laziness. Additionally, socioeconomic and political institutions vary greatly across countries, which reinforces opinions about the role of luck versus individual effort in income generation (Alesina and Angeletos 2005).

The literature linking beliefs to redistributive preferences is well established for developed countries but most developing countries remain unexamined. This paper attempts to extend the analysis of the role of value judgments about the relationship between attitudes towards hard work and support for government responsibility within and across developing countries. We attempt to explore three main questions: first, the extent of between-state variation in individual preferences about government provision; second, whether between-state differences in provision can be explained by differences in the volatility of countries; and third, if individual-level variables such as beliefs have different effects across countries. We argue that macroeconomic factors, particularly growth volatility, amplify the role of beliefs. While volatility is expected, on average, to generate more public support due to insurance and redistribution motives, we argue that it also molds beliefs about social competition. In societies where there is greater volatility, more individuals would attribute economic failures to non-personal causes. Thus, beliefs about social competition being unfair have a larger impact on redistributive support in nations that experience more frequent fluctuations in their economic performance.

Our findings from the hierarchical model reveal that beliefs play a significant role in determining public support for redistribution in developing countries. At the individual level, value judgments about social competition turn out to be statistically significant, and their magnitude is large. At the country level, economic volatility is positively associated with support for redistribution. More importantly for our claim, the impact of attitudes on economic success is aggravated in countries with higher levels of volatility. In other words, there is cross-country heterogeneity with regard to how much beliefs can change support for redistribution. This is not the case with other variables, which are also important predictors of individual-level preferences. Thus, as we argue, contextual variables—particularly volatility—are found to both directly and indirectly influence support for redistribution; directly through insurance and transfer motives, and indirectly through shaping individual-level beliefs.

The rest of the paper is organized as follows. In Section II, cross-country opinions about government responsibility, social competition, and volatility are presented. The factors that are theoretically important for value judgments are also discussed in more detail. In Section III we explain the data selection and our methodology. In Section IV, we present our results and their implications. Section V concludes the paper.

II. BELIEFS, ECONOMIC VOLATILITY, AND REDISTRIBUTIVE PREFERENCES

Individual preferences for redistribution are mostly attributed to a person's economic position, and it has been argued that the net beneficiaries of social policies,

who are typically people at the lower end of income distribution, would be in favor of redistribution while people with better economic resources would resist, as they are the net payers. Since inequality means that more people will be at the bottom of the earnings scale, it is suggested that countries with higher factor income inequality redistribute more to the poor (Milanovic 2000). But there is a wide range of empirical literature identifying that income levels or inequality are not necessarily connected to redistributive preferences, and there are deviations at both ends. Not only is macro-level inequality inadequate to explain the cross-country variation, but also people are individually motivated by noneconomic factors. There are numerous reasons in the literature for the theoretical and empirical deficiencies of the purely selfish models. In several studies, subjective social positioning and expectations about the future economic stance are taken to the core. Once individuals believe that there is intense social rivalry and social mobility, it is less likely that they will be supportive of redistribution (Ravallion and Lokshin 2000; Benabou and Ok 2001). Therefore, in addition to the objective measures of economic interest, subjective indicators can be equally determining for policy choices.

It has also been shown that political and cultural factors, such as the type of the welfare regime, historical legacy, and social fragmentation influence individual preferences, as they alter income and risk distribution as well as perceptions about how the system should function and provide (Corneo and Gruner 2002; Glaeser 2005; Blekeasune and Quadagno 2003). For instance, in social democratic states, post-tax and transfer income distribution is highly improved in comparison to liberal states; hence, there is a certain level of disassociation between personal effort and one's economic success. Also, societies with a communist past expect more egalitarian policies from their governments.

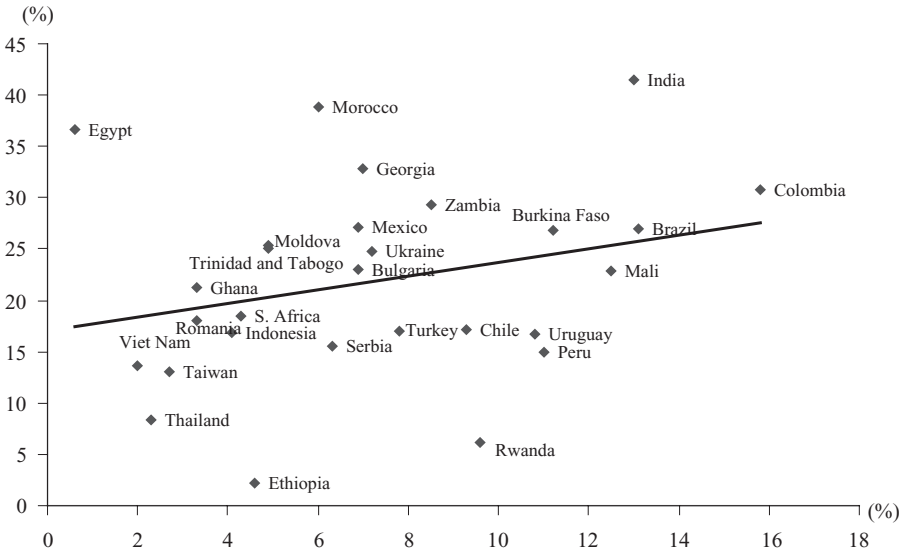
Most recently, the importance of beliefs in preference formation has been brought forward. After controlling for many individual and country-level determinants, beliefs about the reasons for economic success or hardship are found to be explanatory for redistributive choices (Fong 2001; Alesina and Angeletos 2005; Benabou and Tirole 2006). People tend to be more in favor of government provisions when they attribute poverty to system-wide failure. For instance, it has been shown that no benefits were offered when the target group consisted of undeserving individuals whose poverty was believed to have a personal basis (Appelbaum 2001). In addition to the concept of deservingness, individual attributes such as ideology, religiosity, and group identity are still crucial since they also shape beliefs about distributive justice as well (Fong and Luttmer 2009; Scheve and Stasavage 2006; Glaeser 2005). Thus, it is important to study opinions on social competition and whether people believe that they have opportunities to succeed or not by assessing the contextual and individual factors and the links between them.

Among the few studies conducted for developing countries, Ardanaz (2009) found that demand for redistribution is high in Latin America, but this was not matched by a more redistributive fiscal policy. Also, he suggested that religion and subjective indicators of economic wellbeing are much better predictors of preferences. Utilizing a larger sample, Haggard, Kaufman, and Long (2010) claimed that redistributive demands are much lower among poorer groups, especially agricultural workers. This is explained by the different cleavages and coalitions in developing countries. Patti and Navarra (2010) directly tested the impact of opinions about the poor on redistributive demands with individual-level data, and pointed out that the more the individual perceives the process determining wealth and poverty in society as fair, the less s/he supports redistribution in developing countries. Finally, Dion (2010), using a similar multilevel modeling approach, revealed that depending on the context, it might be rational for wealthy individuals to support redistribution even when their economic interests run counter to this choice. In particular, religious and cultural values might dominate the preference formation and weaken the self-interest-related motives. Therefore, it is crucial to examine the relationship between beliefs and support for redistribution in less developed countries, as self-interest-related factors are insufficient to account for the divergences.

It can be seen from Figure 1 that there is a significant correlation between support for government responsibility and attitudes towards hard work across developing countries as well. On the one hand, in countries such as Colombia, Brazil, and Mali, hard work is not believed to bring success and this is associated with greater redistribution. In Vietnam, Taiwan, and Thailand, on the other hand, there is a strong belief in the close connection between success and hard work, and hence an expectation of more individual responsibility. In Brazil, 27% of people agreed that the government should take more responsibility in providing for everyone, and 13.1% claimed that hard work does not bring success in the long run. However, in Thailand, only 2.3% of people thought that success is not determined by hard work, and only 8.4% called for greater government provisions.

As argued in the literature, the fairness of social competition affects support for redistribution and we can distinguish countries along this nexus. In nations where the majority of the population agrees that economic hardships are caused by failures in the system, we also expect to see higher spending on social protection and welfare. The opposite, low levels of expenditure, holds true for countries where a big proportion of the population assigns greater responsibility to individual effort in determining success. Thus, we argue that, in addition to structural features such as exposure to international competition, inequality, and risks, attitudes towards social competition are effective in shaping the kind and scope of social protection programs in less developed countries. The macro-level factors, as discussed widely in existing studies, have a direct impact on redistributive

Fig. 1. Attitudes towards Hard Work and Support for Government Responsibility



Source: World Values Survey (several years).

Notes: 1. X-axis shows the share of respondents agreeing that hard work does not bring success (% of replies with a score of 10).

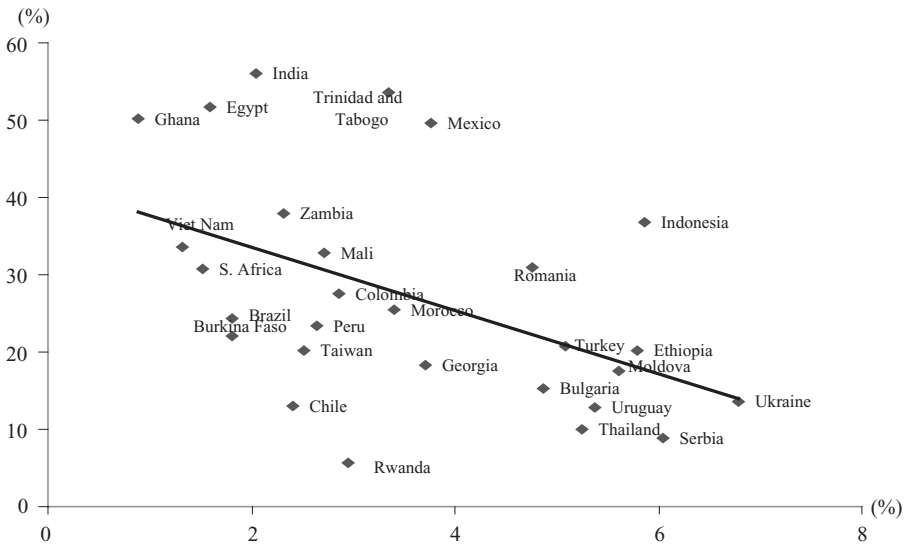
2. Y-axis shows the share of respondents supporting government responsibility (%).

preferences and the design of these policies, but they also indirectly change opinions about the needy. In particular, economic volatility might shape beliefs about the reasons for economic failures away from the individual to systemic features and hence enhance support for redistribution.

The mean volatility for the sample is recorded as 2.26 points while the standard deviation is around 1.54 points. In Ethiopia the real GDP growth changed, on average, for the 5-year period under consideration by 6.98 points, and, by contrast, only 0.62 points in Vietnam for the same period. The variation of volatility is still present when we consider the 10-year averages. Figure 2 displays the relation between attitudes towards hard work and the volatility of growth rates across countries. It can be seen that there is a negative association between fluctuations in growth rates and opinion that hard work brings success. The overall correlation coefficient is around -0.48 , suggesting that the higher the macroeconomic risks, the more people attribute reasons of failure to non-individual reasons.

In the remainder of the paper we first attempt to explain the individual and country-level determinants of redistributive demands with a special emphasis on beliefs about social competition. We analyze how attitudes towards economic

Fig. 2. Attitudes towards Hard Work and the Volatility of Growth Rates



Source: World Values Survey (several years).

Notes: 1. X-axis shows the volatility of growth (standard deviation of growth).

2. Y-axis shows the share of respondents agreeing that hard work does not bring success (% of replies with a score of 1).

success are related to demand for social programs and how individual choices are influenced by the country context. At the individual level, beliefs, income, labor market status, education, ideology, gender, religiosity, and trust are the core variables; at the country level, volatility of growth, inequality, and ethnolinguistic fractionalization are the primary variables. Frequent fluctuations in a country's economic performance increase the macro-level risks and hence can lead to higher demands for protection as people find it more difficult to cope with these through individual measures. This channel is studied extensively in explaining the link between openness and government size (Katzenstein 1985; Rodrik 1998). Similar findings are present in the asset specificity literature, which measures the degree of riskiness with the transferability of assets owned by individuals, and how there can be systematic differences across nations (Duman 2009).

Moreover, the macroeconomic volatility might shift opinions about who is liable for failure away from the individual. The reason for having this secondary effect might be the collective aspiration for fairness and the responsibility attributed to public bodies for achieving this (Alesina and Angeletos 2005). Fluctuations in growth rates increase the proclivity of people to believe that social competition is not just and thus the government should assume a greater role in providing for

everyone. Contrarily, in societies where markets are functioning better, attitudes are reversed, and more individual effort is seen as essential for success. Inequality has a more direct impact through increasing the necessity of social protection policies. When there are large or growing inequalities in society, it is more likely that the blame for economic failures is attributed to the system and the perceived unfairness of it (Kenworthy and Pontusson 2005). Finally, ethnolinguistic fractionalization can be crucial as long as it averts people's altruism towards non-group members. Individuals are more generous to those with whom they can affiliate, and fractionalization increases the distance among groups, which causes lower support for protection for outsiders (Shayo 2007).

III. DATA AND METHODOLOGY

A. *Data*

The micro-level data come from the World Values Survey (WVS), which is one of the most comprehensive cross-country surveys and includes a wide array of questions on the political, economic, social, and demographic characteristics of the respondents. The survey was last conducted in 2005–8 and we use the data from this period in our study because it has the largest country coverage and the most recent data.¹ While in total there are 37 developing countries, we restricted our sample to 28 as they have data on all the variables in which we are interested.² At the individual level, there is a total of 28,306 observations and the sample sizes vary across countries. Thus, we adjusted individual-level variables according to the sample weights.

As a proxy for the dependent variable, we use the following survey question regarding government versus individual responsibility for providing basic needs: “Now I’d like you to tell me your views on various issues. How would you place your views on this scale? 1 means you agree completely with the statement on the left; 10 means you agree completely with the statement on the right; and if your views fall somewhere in between, you can choose any number in between. The government should take more responsibility to ensure that everyone is provided for versus people should take more responsibility to provide for themselves.” We also recoded the dependent variable as a binary variable, attributing a score of 1 to people who completely agree with the statement for robustness tests.

¹ The surveys are not longitudinal and the 2005–8 wave has a different questionnaire, hence we did not combine the last wave with earlier ones even though this option could have provided extended coverage of developing countries.

² The countries are: Mexico, South Africa, Brazil, Chile, India, Bulgaria, Romania, Taiwan, Turkey, Ukraine, Peru, Uruguay, Ghana, Moldova, Georgia, Thailand, Indonesia, Vietnam, Serbia, Egypt, Morocco, Trinidad and Tobago, Burkina Faso, Ethiopia, Mali, Rwanda, and Zambia.

TABLE 1
Individual and Country Level Indicators

Variable	Definition	Source
<i>Hard work</i>	Variable based on the question whether individual believes that hard work bring success or not. It ranges from 1 (success) to 10 (no success)	World Values Survey
<i>Self-reported income</i>	Variable referring to the self-reported income ranging from 1 (low decile) to 10 (high decile)	World Values Survey
<i>Gender</i>	Dummy variable taking the value of 1 if the respondent is male and 0 otherwise	World Values Survey
<i>Age</i>	Variable indicating the age of the respondent	World Values Survey
<i>Education</i>	Variable indicating the educational achievement of the respondent. Recoded for no education (omitted category), primary, secondary, high and university levels	World Values Survey
<i>Labor market status</i>	Variable referring to the status of the respondent in the labor market. Recoded for employed (omitted category), unemployed, and out of labor market (nonemployed)	World Values Survey
<i>Ideology</i>	Variable referring to self-positioning on a left-right continuum from 1 (left) to 10 (right)	World Values Survey
<i>Trust</i>	Dummy variable taking the value of 1 if the individual believes that most people can be trusted and 0 otherwise	World Values Survey
<i>Religiosity</i>	Variable indicating how often an individual attends religious services ranging from 1 to 7	World Values Survey
<i>Region</i>	Dummy variable for five regions: Postcommunist (omitted category), Latin America, Africa, East Asia, Middle East, and North Africa	Region
<i>Volatility of growth</i>	Standard deviation of real GDP per capita growth calculated at 10 years and 5 years before the survey	World Development Indicators
<i>Inequality</i>	Gini coefficient	World Development Indicators
<i>Ethnic fractionalization</i>	Probability of two randomly selected individuals belonging to different ethnolinguistic groups	Fractionalization Data

Similar to existing studies, beliefs about hard work, level of self-reported income, gender, age, education, labor market status, ideology, trust, religiosity, and regions are employed as the independent variables (see Table 1). Belief is constructed on the question about hard work bringing success or not. The more an individual perceives that success is not due to hard work, the more likely s/he supports redistribution and equality. For income, the question on income categories that the respondents belong to, ranging from the bottom to top 10th deciles, is used, and to standardize across nations, the deviation from the sample mean is used. Gender gets a score of 1 if the respondent is a male and 0 otherwise. Age is defined

by three categories: young, middle aged, and old. For education we cluster the original categories into five, and the national educational categories are also standardized by taking the sample means into account. For labor market status we have three categories: employed, unemployed, and not part of the labor market. Ideology is dichotomized into being left or right wing while the question on trust asks the respondents whether people can be trusted or not. Religiosity looks at people's observance regardless of denomination. Finally, the region is a dummy variable for five macro-regions where post-communist region is taken as the reference category. As stated in many earlier studies, lower income, less education, being a female, being older, religiosity, trust, unemployment, and being in a post-communist region are expected to lead to more support for redistribution.

The country-level factors can be multiple but owing to data limitations we have utilized the ones that we see as central to the fairness judgments and can also directly influence support for government responsibility in providing basic goods. These also allow us to compare our results to some of the earlier findings in the literature. Volatility of growth rate is calculated by considering the standard deviation of real GDP first for the last 5 years and then for the last 10 years immediately preceding the survey year in each country. Since we suggest that volatility increases support for more government responsibility both directly by making the economic prospects riskier in a country and indirectly by molding beliefs about the fairness of the social competition, we also create an interaction variable between volatility and beliefs about hard work. Inequality for each country is calculated by the average Gini coefficients for the 2000s. Fractionalization captures the ethnic and linguistic differences among individuals, or in other words, the degree of social heterogeneity in a society, and is measured by the probability of an individual interacting with someone from a different ethnic or linguistic background. In line with the literature, we expect higher inequality and lower fractionalization to boost redistributive demands. Also, the higher volatility and interaction terms are expected to raise public support for government provision.

B. *Methodology*

Our methodology is based on multilevel modeling, which enables us to inspect both individual and country-level variables, and their interaction. We employ a random intercept and random slope model where countries are allowed to differ in terms of their intercepts and slopes compared to the overall estimation results. The random intercept model assumes that the regression constants of different countries vary around a mean while the random slope model assumes that the slope of a predictor varies randomly between countries. In our case a random slope of beliefs was assumed since the context affects the relationship between attitudes towards social competition and redistributive claims. The role of beliefs is expected to be greater in countries with high levels of volatility as this

macro-level feature can lead people to believe that failures are rooted in non-personal factors, and even economically successful individuals can perceive themselves as lucky.

Individuals are regarded as level 1 units while the countries they are nested in are level 2 units. Even though classical regression techniques can use dummy variables for varying group coefficients, multilevel modeling includes group indicators as well as group-level predictors. Thus, with multilevel modeling we can study the impact of national variables on individual preference formation while at the same time recognizing that all respondents within a country will receive the same level 2 treatment and thus perfectly correlate on level 2 measures. In addition, this type of methodology informs us on the proportion of variation that is caused by level 1 or level 2 variables. The basic model is as follows:

$$p_{ij} = \Pr(y_{ij} = 1 | x_{ij}, X_j),$$

$$\text{Logit}(p_{ij}) = \beta_0 + \beta_1 x_{ij} + \beta_2 X_j + \beta_3 x_{ij} X_j + u_{0j},$$

$$\text{Var}(u_{0j} | x_{ij}, X_j) = \sigma_{u_0}^2 | x, X,$$

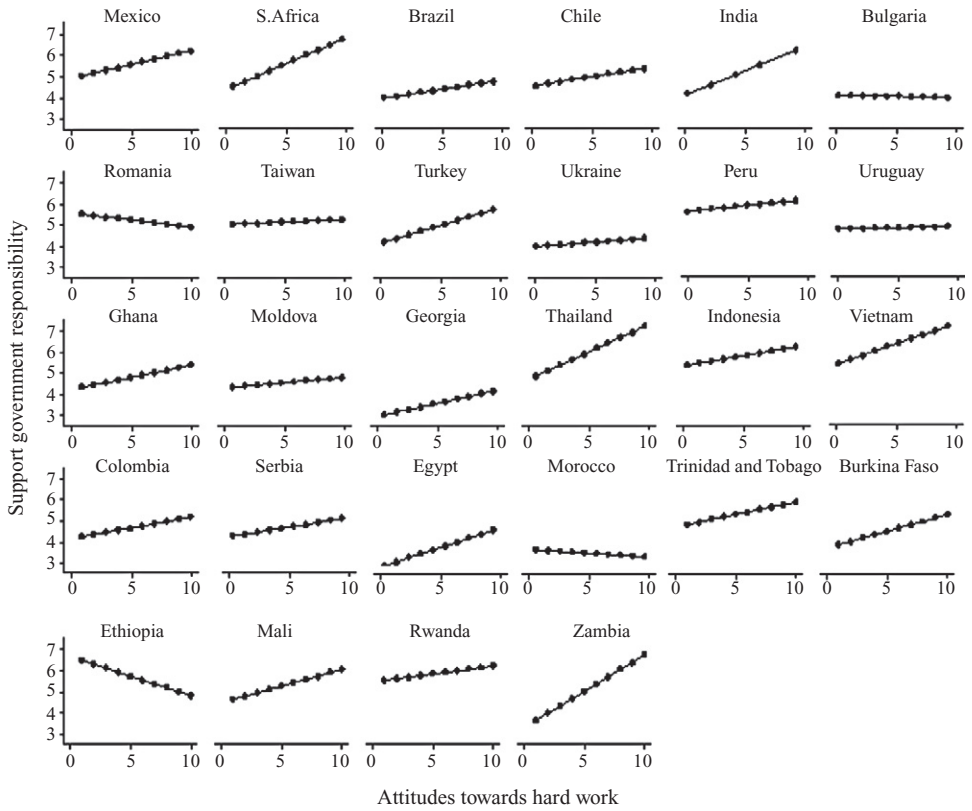
where x_{ij} is the set of level 1 variables, X_j is the set of level 2 variables, and $x_{ij} X_j$ is the set of interaction variables. Thus, the model allows us to directly analyze the impact of country-specific factors on average support for government provisioning, and also indirectly detect their effect on attitudes towards social competition.

While random intercept assumes only that the regression coefficient of different countries varies around a mean, random slope assumes that the slope of a predictor varies randomly between countries. For our case, this means that the slope of beliefs about social competition varies across nations, and we argue that this is mainly due to volatility strengthening the impact of the former. In other words, beliefs might be related to redistributive claims differently in a more volatile country than in a less volatile country. As can be seen from Figure 3, both the intercepts and slopes of hard work are distinct across countries; hence the multi-level model appears to be the most suitable empirical choice.

IV. RESULTS

Table 2 presents the estimation results for all survey countries with four different specifications. The first model regresses the support for redistribution at the individual level plus a constant (the dependent variable is measured on a scale of 1 to 10 where 1 fully agrees with government responsibility and 10 fully agrees with individual responsibility). All the variables carry their expected coefficients while some of the control variables are insignificant. Age, primary schooling, trust, religiosity, MENA dummy, and, surprisingly, unemployment do not appear

Fig. 3. Attitudes towards Hard Work and Support for Government Responsibility by Country/Region



to be explanatory at the individual level. Income, the rest of the education categories, and several regional dummies are positively related to redistributive claims while nonemployment, being female, and identifying with left wing ideology lead to higher support for redistribution. The nonemployment and Latin America dummies are significant at the 5% level while all the other indicators are significant at the 1% level. When people do attribute being in need to individual reasons, there is less demand for protection, which can also be seen from the negative association between the hard work variable and the dependent variable. The coefficient on the hard work variable is -0.12 and is significant at the 1% level. Associating hard work with economic success leads individuals across countries to favor less government provisioning. It should also be noted that the constant has the largest magnitude indicating that there are country-level predictors for preferences.

TABLE 2
Multilevel Analysis of Beliefs and Government Responsibility

	1	2	3	4
Level 1:				
<i>Hard work</i>	-0.12**	-0.12**	-0.12**	-0.21**
<i>Middle</i>	-0.006	-0.007	-0.004	-0.003
<i>Old</i>	-0.007	-0.008	-0.002	-0.003
<i>Gender</i>	-0.11**	-0.11**	-0.11**	-0.11**
<i>Income</i>	0.12**	0.12**	0.11**	0.11**
<i>Unemployed</i>	-0.08	-0.07	-0.07	-0.08
<i>Nonemployed</i>	-0.08*	-0.08*	-0.09*	-0.09*
<i>Ideology</i>	-0.09**	-0.09**	-0.09**	-0.09**
<i>Trust</i>	0.066	0.066	0.062	0.062
<i>Primary</i>	0.03	0.03	0.012	0.008
<i>Secondary</i>	0.22**	0.21**	0.21**	0.21**
<i>High</i>	0.26**	0.27**	0.26**	0.25**
<i>University</i>	0.29**	0.29**	0.29**	0.29**
<i>Religiosity</i>	-0.02	-0.02	-0.02	-0.02
<i>LA</i>	0.74*	1.15**	1.08**	1.42**
<i>AFRICA</i>	0.85**	1.6**	1.49**	1.98**
<i>ASIA</i>	1.12**	1.62**	1.62**	1.42**
<i>MENA</i>	-0.27	-0.12	-0.1	-0.31
<i>Constant</i>	2.4**			
Level 2:				
<i>Constant</i>		1.84**	1.23**	1.14**
<i>Volatility</i>		-0.16**	-0.13**	-0.28**
<i>Volatility*hard work</i>				-0.04**
<i>Fractionalization</i>		1.01**	0.92*	0.96*
<i>Inequality</i>		-0.98**	-0.99**	-0.95**
Variance components:				
Level 1 residual variance	8.02	8.01	7.88	7.83
Level 2 (constant)		0.21	0.36	0.33
Hard work			0.009	0.006
Covariance (hard work/constant)			-0.04	-0.04
Level 1 N	28,306	28,306	28,306	28,306
Level 2 N	28	28	28	28
LL log likelihood	-69,711.46	-63,320.52	-62,784.2	-62,087.34
Wald test	942.52	874.64	683.51	606.87
AIC	140,181	137,725.4	137,268.8	137,102.6
BIC	140,346	137,802.2	137,467.7	137,211.4

Note: Dependent variable = 1–10 scale: 1 for fully agreeing with government responsibility and 10 for fully agreeing with individual responsibility.

* $p = 0.05$ and ** $p = 0.01$, one-tailed tests of significance.

In the second model we add the macroeconomic indicators: volatility of growth, inequality, and fractionalization to the regression. All of the macro-level variables are explanatory for the variation in redistributive demands across countries. We find that, in keeping with the literature, fractionalization does lead to less support

for redistribution while inequality is positively related to preferences.³ Volatility, on the other hand, raises agreement with higher government responsibility and the coefficient is around -0.16 . All of the individual-level variables continue to carry their signs and explanatory power including beliefs about whether hard work brings success or not. Also, the unexplained variance declines, as can be seen from the approximately 18% reductions both in Akaike information criterion (AIC) and Bayesian information criterion (BIC) between the two specifications. We also run the same models using real GDP growth volatility over the 10 years and the ratio of top and bottom income deciles. The signs and magnitudes of coefficients do not alter.⁴

The third model adds the random slope and treats the effects of beliefs about social competition as varied across countries. All the individual level variables keep their signs, and changes in the coefficients are minor. When the hard work variable enters the multilevel estimation, the significance of fractionalization decreases to 5%, while volatility and inequality continue to be explanatory at 1%. Besides the level 1 residual variance, AIC and BIC values decrease further, indicating improvements in the model specification. The impact of beliefs on government provision remains at -0.12 and statistically significant, verifying our claim that beliefs have distinct effects across countries.

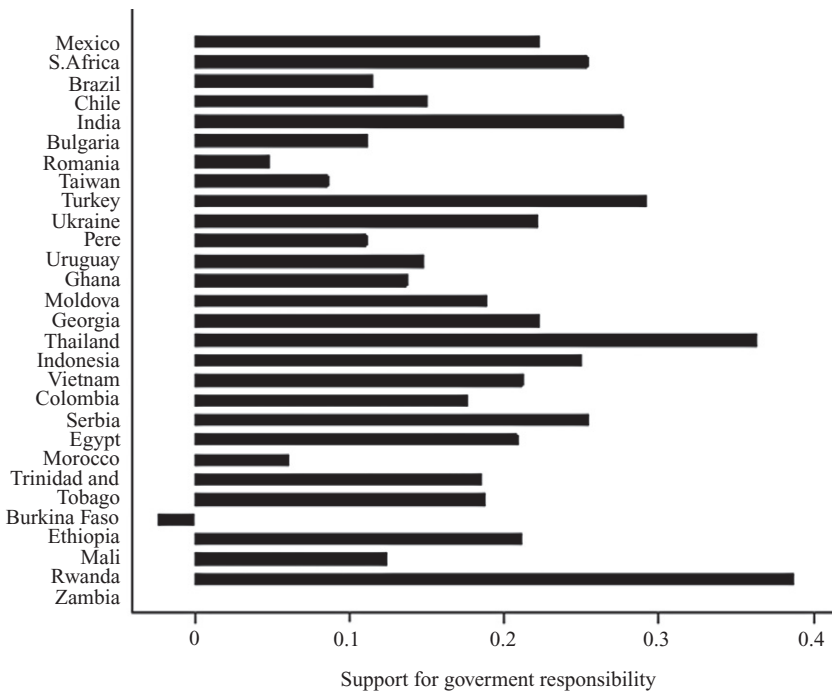
In the last model, we insert the interaction variable in the model to test our claim that beliefs on hard work are more effective in countries with higher economic volatility. Not only do the AIC, BIC, and level-1 residual variances decline, but also the magnitude of volatility and hard work are enhanced with the inclusion of the interaction variable between them. Volatility has a coefficient of -0.28 and is significant at 1% while the coefficient on beliefs about hard work rises to -0.21 and remains significant at 1%. Moreover, the interaction variable has a negative and significant coefficient around -0.04 . Although this might appear to be small, each variable continues to affect the agreement with individual responsibility negatively alone and jointly. Thus, our claim about beliefs being amplified under more volatile settings is confirmed. Finally, the interaction term increases the magnitude of the macro variables and some of the regional dummies but does not alter their significance levels, which might suggest that the macroeconomic environment is crucial in explaining individual demands for redistribution across countries.

We can also observe the impact of beliefs at different levels and how volatility enhances it. Figure 4 estimates the total impact of random slopes and the coefficients of beliefs on the support for more government provisioning across countries after including the coefficient of the interaction variable. The random slopes are

³ Gini coefficients in developing countries, on average, are higher than they are in developed countries and there are limited welfare benefits to correct for market inequalities, which might be the reason for empirical support for the conventional models.

⁴ The additional regression results can be obtained upon request from the author.

Fig. 4. Total Impact of Random Slopes, Beliefs, and Interaction



now between 0.18 in Thailand to 0.2 in Zambia. In addition to the above values, the magnitude of the interaction variable is added for each country. It can be seen that the effects are magnified everywhere; hence, these results also confirm our claim that beliefs operate more strongly when countries exhibit economic volatility. Finally, we ran robustness checks by using a binary dependent variable,⁵ and the results continue to hold. Beliefs are still found to be explanatory for redistributive preferences, and fluctuations in economic growth add up to the role of beliefs.

V. CONCLUSIONS

There is a growing body of literature on the relationship between attitudes about social competition and redistributive claims. For developed countries, several studies have established a solid association between the variables, and conclude

⁵ It can be argued that there is no rank order between the statements on which the dependent variable is based, and people with strong preferences about government or individual role in provisioning are clustered towards each end. Thus, we recode the responses and attribute a dummy variable of 1 to cases where there is full agreement with individual responsibility.

that social protection systems can only be reformed after considering underlying value judgments. Our paper first analyzed widely employed indicators to test the importance of beliefs in a developing country sample. The findings confirmed the results in the existing literature, implying that opinions about individual versus societal responsibility for those in need significantly change redistributive preferences. Therefore, countries in which a larger share of the population believes in the unfairness of the system would opt for generous social protection programs even if these might not be directly in their best interest. Perceptions about the fairness of social competition significantly affect redistributive claims across a number of developing countries.

Second, we argued that contextual factors mediate the role of opinions, and beliefs about whether hard work brings success or not have a stronger impact on public support for government responsibility in certain countries. In addition to the structural features discussed in previous studies—exposure to international competition, inequality, development strategies, and risks—we suggested that beliefs are effective in shaping the kind and scope of social protection programs in less developed countries. Additionally, we claimed that macro-level factors also interact with opinions about the causes of deprivation, and hence exhibit a secondary impact on redistributive schemes. Particularly high economic volatility is found to enhance positive judgments about individuals, bearing less responsibility for their economic failures. More volatile growth fuels perceptions about the unfairness of the system and generates more widespread support for redistribution. Our study, which is one of the first attempts to establish a multilevel link between beliefs and support for government responsibility in providing basic goods, verified these claims. Thus, it can be concluded that reforming social protection programs might be more difficult and gradual in societies where the majority is of the opinion that there are system-wide problems and the markets are incapable of cushioning against risks.

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