

Capuno, Joseph J.

Working Paper

Dominance and divergence: Ethnic groups and preferences for redistribution in Southeast Asia

UPSE Discussion Paper, No. 2021-03

Provided in Cooperation with:

University of the Philippines School of Economics (UPSE)

Suggested Citation: Capuno, Joseph J. (2021) : Dominance and divergence: Ethnic groups and preferences for redistribution in Southeast Asia, UPSE Discussion Paper, No. 2021-03, University of the Philippines, School of Economics (UPSE), Quezon City

This Version is available at:

<https://hdl.handle.net/10419/266057>

Standard-Nutzungsbedingungen:

Die Dokumente auf EconStor dürfen zu eigenen wissenschaftlichen Zwecken und zum Privatgebrauch gespeichert und kopiert werden.

Sie dürfen die Dokumente nicht für öffentliche oder kommerzielle Zwecke vervielfältigen, öffentlich ausstellen, öffentlich zugänglich machen, vertreiben oder anderweitig nutzen.

Sofern die Verfasser die Dokumente unter Open-Content-Lizenzen (insbesondere CC-Lizenzen) zur Verfügung gestellt haben sollten, gelten abweichend von diesen Nutzungsbedingungen die in der dort genannten Lizenz gewährten Nutzungsrechte.

Terms of use:

Documents in EconStor may be saved and copied for your personal and scholarly purposes.

You are not to copy documents for public or commercial purposes, to exhibit the documents publicly, to make them publicly available on the internet, or to distribute or otherwise use the documents in public.

If the documents have been made available under an Open Content Licence (especially Creative Commons Licences), you may exercise further usage rights as specified in the indicated licence.



UP School of Economics

Discussion Papers

Discussion Paper No. 2021-03

August 2021

Dominance and divergence: Ethnic groups and preferences for redistribution in Southeast Asia

by

Joseph J. Capuno

University of the Philippines School of Economics, Diliman, Quezon City

UPSE Discussion Papers are preliminary versions circulated privately
to elicit critical comments. They are protected by Republic Act No. 8293
and are not for quotation or reprinting without prior approval.

Dominance and divergence: Ethnic groups and preferences for redistribution in Southeast Asia*

Joseph J. Capuno
University of the Philippines

Abstract

Does identification with dominant ethnic groups lead individuals to diverge in their preferences for redistribution? This paper contributes to the comparative analysis of the role of ethnic background in shaping attitudes towards government's role in reducing income inequalities in Indonesia, Malaysia, Philippines, Singapore and Thailand, where nearly half-a-billion people live and belong to more than sixty ethnic groups. Using a pool of nationally-representative survey data from the five Southeast Asian countries, we first classified the respondents by population dominance of the ethnic groups they claim to belong, and then examine for differences across members of dominant ethnic groups in their preferences for government redistribution. Relative to the biggest ethnic group, the second biggest ethnic group is found to have less preference for redistribution, after controlling for other factors. No systematic differences in their redistributive preferences are found, however, between the biggest ethnic group and other smaller groups. The results are fairly robust even after accounting for the possible moderating effects of income status, trust in government and in people, subjective social mobility, concerns about social fairness, and views on the importance of fate in one's life. Moreover, the results hold out even in the sub-sample of low-income people for whom economic considerations more than ethnicity are expected to determine their redistributive preferences. Notwithstanding the importance of shared norms or beliefs in aligning the social choices of people with same ethnic or racial background, our results suggest their population sizes, which possibly reflect their relative influence over domestic policies, also matter.

Key words: Redistribution, ethnic dominance, income inequality, social mobility, trust, Southeast Asia

JEL Codes: H20, H53, I39, Z10

* I gratefully acknowledge the Philippine Center for Economic Development for supporting an earlier study (Capuno, 2019) from which this paper draws, the Asian Barometer Project Office for the survey data, and Julian Thomas Alvarez and Jan Chael Laude Pon-An for excellent research assistance.

1. Introduction

This paper aims to contribute to the comparative analysis of the role of ethnic identity in shaping individual views regarding the role of the government to redistribute income or wealth preference for redistribution in five Southeast Asian (SEA) countries. Home to around 465 million people that belong to more than 60 ethnic groups¹ in 2015, Indonesia, Malaysia, Philippines, Singapore and Thailand together provide a suitable setting that is enriched further by some recent socioeconomic trends in these countries.

The five economies are among the more dynamic ones in Asia in the last two decades. According to the World Bank in 2015 Malaysia and Thailand already reached upper middle income status, the same status that Indonesia and Philippines were poised to attain by 2020. Singapore, on the other hand, has already attained high-income status since 1987. The rising economic tides in these countries also lifted many boats. At \$1.90-a-day poverty threshold, about 5.8 percent of the population of Indonesia in 2015 were poor, equivalent to roughly a third of what it was ten years before. It was 10.4 percent in the Philippines in 2012, down by 4 percentage points from 2006. The other three countries have practically eradicated poverty by 2005. Yet, there is still significant income inequality in these countries. In 2015 the Gini Index was around 40 percent for both Malaysia and Indonesia, 44 percent for the Philippines and 36 percent for Thailand. Among the four, only Indonesia's worsened from 2004.²

To be sure, the government in these countries have adopted various policies and programs to shore up the lot of the poor and other disadvantaged groups among their citizens. More recently, Thailand, Indonesia and Philippines, for example, have strengthened their social health insurance programs to confer financial protection against medical risks, which usually disproportionately afflict the destitute, older persons and other minorities (Sumriddetchkajorn et al., 2019; Mahendradhata et al., 2017; Dayrit et al., 2018). Moreover, Indonesia and Philippines now have their own conditional cash transfer (CCT) programs similar to the highly-regarded CCT programs in Latin America. According to the Asian Development Bank (ADB,

¹ Based on the racial or ethnic background declared by the respondents in the fourth wave of the Asian Barometer Survey, to be explained in Section 3 of this paper.

² Data cited here are from the World Bank's World Development Indicators. Available from <https://data.worldbank.org/indicators>. Accessed on 20 June 2020.

2019), in 2012 the shares in GDP spent on social protection programs – including social health insurance, pension schemes, social and welfare assistance for the older people, young children, or marginalized groups, and labor-market oriented programs – amounted to 9.9 percent in Singapore, 4.4 percent in Thailand, 3.8 percent in Malaysia, 2.6 percent in the Philippines, and 1.2 percent in Indonesia. While these figures compare well with the averages for the whole of Asia (5.3 percent) or Southeast Asia (3 percent), the same report also note gaps in coverage, both in terms on target population or types or amount of support provided. Since many of these social protection programs are financed through taxes, it is also worthwhile to note the relatively low tax effort and the tax structures in these countries. According OECD (2017), each year throughout the period 1990-2015, the governments of Malaysia, Singapore, Indonesia and Philippines each collected tax revenues equivalent to less than 20 percent of the GDP, whereas the governments of Japan and Korea already managed to cross the same threshold at least since 1999 and inched up towards the annual average of over 30 percent for OECD countries. The same OECD report also notes for the same four SEA countries in 2015 the share of indirect taxes (taxes on consumption) in gross domestic product exceeded that of direct taxes (taxes on (Martinez-Vazquez, 2011)).

On the face of it, the financing of redistributive social programs through indirect taxes, which are often regressive, seem counterproductive if the objective is to alleviate poverty or reduce inequality. Since all five SEA countries are electoral democracies, whose policy preferences are those then? The answer does not readily present itself since none of the countries has a homogenous population that may be expected to favor the same policy. In fact, all five countries have history of internal conflicts, sometimes involving the state and some ethnic groups. To be sure, the conflicts are not all “culture wars”, though some are a complex of territorial, religious and ideological reasons. The conflicts in Mindanao in southern Philippines, in Aceh and West Papua in Indonesia, and in Patani in Thailand, for example, have ethnic dimensions because the areas involved, often resource rich, are the traditional home bases of some indigenous people (see, for example, Bertrand, 2000; McGibbon, 2004; Moller, 2011). In contrast, the ethnic divisions in Malaysia and Singapore have permeated national politics judging by the names and constituencies of their major political parties.

To contribute to the discussion, we examine here the differences in redistributive preferences of various ethnic groups in the five SEA countries using a pool of nationally-representative survey data. To facilitate cross-country comparison, we construct three ethnic groups ranked by frequency of the racial or ethnic backgrounds declared by the respondents and verified with population data. Instead of a shared, distinguishing cultural trait, relative population dominance is the only common characteristic of the three ethnic groups across countries. Yet, we find the second biggest ethnic group are less likely than the biggest ethnic group, while those in the other smaller ethnic groups do not appear different from the biggest ethnic group, in their support for government redistribution. The results are robust to inclusion of moderating factors such as income status, social mobility, trust in institutions, locations and country-fixed effects. Moreover, the results hold out even in the sub-sample of low-income people who are often presumed to be the beneficiaries of redistribution programs. There is some indication, however, that divergence in redistributive preferences among ethnic groups is also related to the disparities in local economic opportunities facing them in their countries.

The rest of the paper is organized as follows. A brief review of related literature is given in the section. Then in sections 3 and 4 we discuss the data and methods used, respectively. The results are presented in section 5 and discussed in section 6. Finally, some brief concluding remarks end the paper.

2. Review of relevant literature

The burgeoning economic literature that use survey data to explore the link individual preference for or attitudes towards government redistribution and race or ethnic background (of the respondent and others in society) can be classified into three strands, depending on the emphasis assigned to ethnic identity relative to other correlates or drivers of preferences.³ In interpreting their findings, all strands draw from the vast social science literature on social identity (Costa-i-Fond and Cowell, 2015). According to this literature, people identify with others of similar race, ethnicity, language, religion or some other distinguishing characteristics because “group

³ See Stichnoth and Van der Straeten (2013) for a more comprehensive review.

identity enhances rewards and reduces punishment, establishes distributional preferences, and social welfare-maximizing actions” (Chen and Li (2009)).

Studies that belong to the first strand use the information on racial or ethnic background only as a control variable rather than the key variable of interest (e.g., Alesina and La Ferrara, 2005; Alesina and Giuliano, 2010; Page and Goldstein, 2016). In these studies the main focus is the link between redistributive preferences and income (consumption) or social mobility; that is, they test for the relevance of the more established model of the median voter (Romer, 1975; Meltzer and Richard, 1983) or the Prospect for Upward Mobility (POUM) hypothesis (Benabou and Ok, 2001; Piketty, 1995). In their examinations of the POUM hypothesis using survey data from the United States (US), Alesina and La Ferrara (2005) and Alesina and Giuliano (2010) both found, after controlling for several factors, that blacks are significantly more favorable than whites to redistribution. In contrast, Page and Goldstein (2016) found that neither black nor Asian background explains variations in subjective perception of income distribution or preference for redistribution in a US sample data.

Another strand is more explicit about possible importance of race or ethnicity alongside with income and other drivers of redistributive preferences. Also based on US survey data, Fong (2001) found that, relative to non-whites, whites are less likely to express support for redistributions, and differences between them are wider in the sub-sample of rich and upwardly-mobile individuals. Applying statistical learning methods on data from several rounds of US General Social Survey, Keely and Tan (2008) found that only racial identity (Whites, non-White) alongside with gender, age and socioeconomic class are the most important predictors of redistributive preferences. Interestingly, in a study of 34 European countries, those who belong to ethnic minorities only appear to less favorable to redistribution, but the estimate is not significant (Olivera, 2015). In another study also using data from the US General Social Survey, individual preferences for redistribution are found negatively relative to the average income of individual’s ethnic group or religious group (Quattrociocchi, 2018).

In the third strand that includes Luttmer (2001), Dahlberg, Edmark, and Lundqvist (2012), and Luttmer and Singhal (2011), race or ethnicity – especially the distinguishing cultural norms or values they represent – is the main focus. Also using US data, Luttmer (2001) relates

an individual's support to welfare spending to the proportion of welfare recipients in her community who belong to the same racial group as she. He found that while support for welfare spending falls with the rise in the proportion of welfare recipients, the reduction is mitigated when the proportion of recipients that belong to the same racial group increases. This suggests members of the same ethnic group tend to feel more altruistic towards each other. Supporting evidence is found in Sweden where the native Swedes expressed lower preference for redistribution in municipalities with large number of immigrants of different ethnicity (Dahlberg, Edmark, and Lundqvist (2012)). The view that members of the same ethnic group share distinguishing cultural trait gained further attention following the Luttmer and Singhal (2011) who showed that the attitudes towards redistribution of the first and second-generation migrants in the US are correlated with those prevalent in the countries of origin of their parents or grandparents.

While understandably much of the extant literature is focused on Western developed countries with their large welfare states and immigrant population, the issue concerning the role of ethnic background on preference for redistribution is no less relevant in Asia, where it has received less attention despite the ethnic diversity of the region's population. So far, so far only Chang (2018) is relevant here. While the study used survey data for 13 East Asian and Southeast Asian countries, and thus provide a comparative perspective, Chang (2018) focused on traditional Asian values (of self-determination, self-reliance and filial norms) and found them to mitigate the Asian peoples' preference for government redistribution. While these values are more closely associated with Chinese culture, they could also be assimilated by other groups in countries with migrant Chinese population. Hence, it is hard to attribute the findings to ethnic identity per se. Unlike other studies that used more direct measures of redistributive preferences as their dependent variable, Chang (2018) used a composite indicator that includes different dimensions of democracy, which lends itself to interpretations other than redistributive preference. We take this as our take off point for exploring anew the issue in Southeast Asia countries.

3. Data

3.1 Source

We use data for five Southeast Asian countries included in the fourth wave of the Asian Barometer Survey (ABS) conducted along with local institutions under the Asian Barometer Project (2013-2016).⁴ As in the previous waves, the fourth wave adopts the same basic sampling design and survey instrument to facilitate comparisons across countries and time. The standard questionnaire has several modules, including economic evaluation, trust in institution, social capital, political participation, and socioeconomic background. The fourth wave added two new modules on redistribution and social mobility. This analysis covers Indonesia, Malaysia, Philippines, Singapore and Thailand. The surveys were undertaken in 2016 in Indonesia, and in 2014 in the other four countries.

3.2 Sample sizes and distributions

Table 1 shows for each country the total samples, and their distribution by location and racial or ethnic backgrounds as reported by the respondents.⁵ The country samples are randomly selected and nationally-representative adults. Of the 1550 samples in Indonesia, around 50.32% are from rural areas, and the majority are from the regions of Java (57%) and Sumatra (21.3%). The two biggest ethnic groups are Java (39.2%) and Sunda (16.7%), although collectively around 23% of the samples belong to various smaller groups (“Others”). Malaysia has 1207 samples, of which 57% are from urban areas, and the majority are from the Central (30.7%) and East Malaysia (24.9%) regions. The dominant ethnic groups are Malay (50%) and Chinese (29.7%).

The total Philippine samples is 1200. Around 59% are urban-based. Unlike those in the other four countries, the Philippine sample is evenly distributed across the country’s four broad regions. For this reason, sample has more Cebuanos (27.5%) than Tagalogs (20.3%). In fact,

⁴ The Asian Barometer Project (2013-2016) was co-directed by Professors Fu Hu and Yun-han Chu and received support from Taiwan’s Ministry of Education, Academia Sinica and National Taiwan University.

⁵ In Table 1, note the “broad regions” are sampling areas encompassing the country, and do not necessarily correspond to administrative or political units. By design, however, they roughly correspond to the geographic distribution of the population.

however, the Tagalogs, who reside mostly in Luzon, outnumber the Cebuanos, who live mostly in the Visayas and some parts of Mindanao.⁶

All of the 1039 samples in Singapore are urban-based. About half are located in the North (33.4%) and East (21.1%) regions. Three in every four are ethnic Chinese, and roughly one in every ten count themselves as ethnic Malay or Indian. For Thailand, nearly 80 percent of 1200 samples are rural-based, and practically all are ethnic Thai (98%). More than half are from the Northeast (33.75%) and North (18.4%) regions.

[Table 1 here.]

3.3 Government responsibility to reduce income differences

Each survey respondent was asked whether she strongly agrees, agrees, disagrees or strongly agrees with the following statement: “It is the responsibility of the government to reduce the difference between people with high income and those with low income.” The respondent may also decline to answer, say she cannot choose an answer, or do not understand the question. Figure 1 shows the distributions of the responses.

Over 80 percent of the samples in Indonesia, Malaysia and Singapore said they strongly agree or agree with said statement. Only around 60 percent of the Filipinos claimed the same. There is relatively more variation among those who strongly agree with the same statement. The proportion is about 15.4 percent in Indonesia, 18.4 percent in the Philippines, 26 percent each in Thailand and Singapore, 39.4 percent in Malaysia.

[Figure 1 here]

4. Empirical strategy

4.1 Estimation model

Following the empirical strategy of previous studies (e.g., Alesina and La Ferrara, 2005; Corneo and Gruber, 2002; Cojocaru, 2014; Colagrossi, Karagiannis and Raab, 2019; Guillaud, 2013;

⁶ The results of the 2010 Census of Population show that of the 92.34 million Filipinos in 2010 about 12.8 percent are in the National Capital Region (NCR), 43.9 percent in other regions in Luzon outside NCR, 19.5 percent in the Visayas, and 23.8 percent in Mindanao. About 22.5 million are Tagalogs and 9.13 million are Cebuanos. (NSO, 2014)

Olivera, 2015) we use the respondent’s views regarding the government’s redistributive role (section 3.3.) to represent their underlying preferences for redistribution and to link it to their ethnic background. Formally, the i th person’s preference for redistribution is modelled as a latent variable R_i^* , and assumed to be related to the person’s racial or ethnic background E_i and a vector of covariates \mathbf{X}_i . Further, we allow for some factor Z_i to moderate the relationship between ethnicity and redistributive preferences. As an example of a moderating factor, the level of trust in government of members of an ethnic group may predispose them to support a redistribution program that favors others. The same factor may also be directly related to R_i^* . To reflect these assumptions, we estimate regression models of the following form:

$$R_i^* = \alpha + \beta E_i + \gamma(E_i \times Z_i) + \varphi Z_i + \mathbf{X}_i' \boldsymbol{\theta} + \delta_c + \delta_t + \varepsilon_i, \quad (1)$$

where α , β , γ , φ and $\boldsymbol{\theta}$ are parameters to be estimated, and δ_c and δ_t are country- and year-fixed effects, respectively, and $\varepsilon_i \sim N(0, 1)$. To estimate equation (1), we first transform the stated views about the government’s redistributive role into a dummy variable $Redistribution_i$, which takes on a value of 1 if person i ’s answer is “strongly agree”, and 0 otherwise. Note that when this variable equals 0 it does not necessarily mean person i disagrees with the survey statement, since it could also mean that she simply “agrees” with it. Thus, the variable denotes strong views about government-mediated equalization, or, in this study, strong preference for redistribution. This dummy indicator is assumed related to R_i^* as follows:

$$Redistribution_i = \begin{cases} 1 & \text{if } R_i^* > 0 \\ 0 & \text{if } R_i^* \leq 0 \end{cases}$$

Under our distributional assumption about ε_i , the distribution of $Redistribution_i$ conditional on $(E_i, Z_i, \mathbf{X}_i, \delta_c, \delta_t)$ is specified as a probit model:

$$P(Redistribution_i = 1 | E_i, Z_i, \mathbf{X}_i, \delta_c, \delta_t) = \Phi(\alpha + \beta E_i + \gamma(E_i \times Z_i) + \varphi Z_i + \mathbf{X}_i' \boldsymbol{\theta} + \delta_c + \delta_t),$$

where $\Phi(\cdot)$ is the standard normal distribution function (Wooldridge, 2002).

4.2 Model specifications

There are ten model specifications. All models employ a common set of covariates (\mathbf{X}), country- and year-dummy variables, and two ethnicity variables. To facilitate analysis, the ethnicity variables are based on the frequencies of racial or ethnicity backgrounds as declared by the survey respondents in each country, and cross-checked the rankings of the ethnic groups against their relative population sizes as reported in online references (to be explained further in the next section). Though convenient, classifying the respondents into the dominant ethnic group, say, in their country does not necessarily imply they share a common sociocultural trait, political view, or economic status as those in the same category in other countries.⁷ Arguably, an ethnic group's population alone will not adequately reflect its members' attitudes towards government redistribution. To account for other the other socioeconomic, cultural and institutional factors that condition such attitudes, the ethnicity variables are also interacted with moderating factors, as described below.

In the baseline model ([1]), the ethnicity variables are introduced without interactions with other variables. Three sets of moderating factors are introduced however as additional controls. These are the four income quintile variables (with the first income quintile as the default), the three in-country location indicators (to be explained in the next section), and the four country dummy variables (with Philippines as the default country). All three sets are used as additional controls in the other models as well.

In the second model ([2]) the income quintile variables are introduced as moderating factors. This specification thus accounts for possible uneven concentration of ethnic groups across income classes. If, for example, some ethnic minorities are low-income people, then their redistributive preferences may be shaped more by their poverty than cultural trait. It is also

⁷ Though shared social identities like “Chinese” for ethnic background or “Christian” for religious affiliations are reported in all five countries, those who claim to be such are not necessarily the most dominant groups in all five countries. While many claimed to be “Chinese” in Malaysia, Singapore and Thailand, or “Malay” in Malaysia, Singapore or Indonesia (“Malayu”), very few, if at all, claimed to be either in the Philippines. On the other hand, distinctions along religious affiliations are not meaningful for Indonesia and Philippines where Islam and Christianity (to include Roman Catholics and Protestants), respectively, are reported by nearly everybody.

widely hypothesized in economics that, *ceteris paribus*, the relative income of the voter determines her support for redistributive policies (Meltzer and Richard, 1983; Guillaud, 2013)

The third model ([3]) employs two social mobility indicators as moderating factors. These indicators are measured by comparing the respondent’s reported social status relative to that of her parents’. Following the insights of Piketty (1995) and Benabou and Ok (2001), the presumption here is that, *other things constant*, an upwardly-mobile individual is less likely to support redistributive policies because she is unlikely to benefit from them.

Then in the next three models ([4], [5], [6]) three trust variables are sequentially introduced. The idea here is that an ethnic group’s attitude towards redistribution may hinge on their trust in government institutions or in other people. As shown in other studies (e.g., Birskyte, 2014; Güzel, Özer and Özcan, 2019), people are more likely to remit taxes to government they trust (to be fair or incorrupt). Trust in other people may indicate an underlying belief the members of one’s society share values such as reciprocal altruism or compassion (e.g., Alesina and Angeletos, 2005; Yamamura, 2014; Beugelsdijk and Klasing, 2016).

Three fairness variables are introduced in the seventh ([7]) and eighth ([8]) models. Two of these dummy variables – one indicating the perceived fairness of the income distribution in the country, and the other indicating whether the respondent considers her current family income is fair for their past efforts (to earn it). Introduced in the eighth model, the last fairness variable captures the respondent’s sense of empowerment to determine her wealth status or success in life. Roughly similar variables were used in Alesina and Giuliano (2010), Schokkaert and Truyts (2017), Fong (2001), and Alesina and Angeletos (2005).

Possibly some ethnic groups are concentrated in the country’s poor regions. Their redistributive preferences then could reflect more the depravity of their economic environment than their culture. To account for confounding effects of uneven spatial development within a country, three location indicators are included in the ninth model ([9]). One indicator distinguishes urban from rural areas, while the other two differentiate the major cities from the minor ones.

Finally, in the tenth model ([10]) the country dummy variables are interacted with the ethnicity indicators. This specification controls for possible country-specific political, economic,

cultural or historical factors that shape the roles, opportunities, and abilities of various groups to influence public policies. To illustrate the point, the ethnic Chinese people in Singapore, where they are politically dominant, and their counterparts in Indonesia, where they are a minority, may have different views about redistributive policies despite their shared cultural values.

Since the moderating factors by themselves were shown in previous studies to be important correlates of redistributive preferences introducing them in our models serve to test the sensitivity of the results for the ethnicity variables. As additional robustness checks, the same ten models are estimated using a sub-sample of observations in the poorest two income quintiles, another sub-sample excluding the Philippines, and the full sample but using a modified dependent variables. Following Fong (2001), Dahlberg, Edmark and Lundqvist (2012) and Luttmer (2001), limiting the analysis to the set of poor individuals will show if income considerations will override ethnic background for the sub-group of people who can be expected to benefit the most from government redistribution. The idea behind second robustness check is to show the sensitivity of the results to the coding of ethnic groups in the Philippine sample (to be explained below). The last robustness check uses a dependent variable that counts all those who agree, not necessarily strongly, with the government’s redistributive role.

We report the average marginal effects (or simply, marginal effects) of the covariates.⁸ For the ethnicity variables, their respective marginal effects reflect both their own direct effects and indirect effects (through the interaction terms). One caveat is in order. Since the data is observational, the estimated marginal effects (of the ethnicity variable) are not necessarily causal parameters, although control variables are also introduced to minimize omitted variable bias. Further, robust standard errors adjusted for region-level clustering are derived. Done in STATA, all estimations adjust for sampling weights.

⁸ When x is binary independent variables, then its marginal effects = $P(Redistribution = 1|\bar{\mathbf{W}}_x, x = 1) - P(Redistribution = 1|\bar{\mathbf{W}}_x, x = 0)$, where $\bar{\mathbf{W}}_x$ is the vector of regressor variables, except x , and each element is evaluated at means. When x also has an interaction term with z , then its marginal effects captures both its own direct effect and indirect effect (through the interaction with z). Since the marginal effects of x vary with its values, so the marginal effects reported here are technically the average marginal effects of x . (Greene, 2011)

4.3 Regression variables

Table 2 shows the list of regression variables, and their mean values and standard deviations. Except for age and household size, all are dummy variables. Note that not all observations were used due to incomplete information, especially on views about government redistribution, income quintile and social status. Of the combined 6196 observations, only 85 percent is used in the full-sample analysis, and 82 percent is used in the sub-sample analysis excluding the Philippines. Of the 3423 observations in the poorest two income quintiles, only around 79.1 percent is used.⁹

As defined in Section 4.1, *Redistribution* is the main dependent variable. The other dependent variable is *Redistribution2*, which takes the value 1 if the response (to the same question used in *Redistribution*) is “strongly agrees” or “agrees”, and 0 otherwise. Based on the full samples, their respective means are 0.260 and 0.813.

There are three ethnicity variables. All are based on the frequencies of racial or ethnic backgrounds revealed by the respondents in each country (Table 1). Thus, a respondent is tagged to belong either to the biggest ethnic group (*Ethnic1* =1 if Yes, 0 otherwise), to the second biggest ethnic group (*Ethnic2* =1 if Yes, 0 otherwise), or to any ethnic group other than the two biggest groups (*Ethnic3* =1 if Yes, 0 otherwise). To illustrate, consider three Indonesians who claim to be Javanese, Sundanese and Bugis. Accordingly, the Javanese is tagged as *Ethnic1*, the Sundanese as *Ethnic2*, and the Bugis as *Ethnic3*. For reasons cited in Section 3.2, a Filipino who claims to be a Tagalog is tagged as *Ethnic1*, or a Cebuano is tagged as *Ethnic2*, or other than Tagalog or Cebuano is tagged *Ethnic3*. Of the full sample, about 18 percent and 31 percent belong to the *Ethnic2* and *Ethnic3*, respectively. The default category is *Ethnic1*.¹⁰

⁹ In the full-sample analysis, the shares of the valid observations in the total per country are around 86% for Indonesia, 91% for Malaysia, 98% for Philippines, 66% for Singapore, and 80% for Thailand. In the sub-sample analysis, the corresponding shares are around 85% for Indonesia, 84% for Malaysia, 97% for Philippines, 46% for Singapore, and 77% for Thailand.

¹⁰ The ranks of the various ethnic groups based on sample frequencies for Indonesia, Malaysia, Singapore and Thailand in Table 1, and of the two biggest ethnic groups in the Philippines made here are identical to those based on population censuses in these countries, as reported in The World Factbook of the US Central Intelligence Agency. Available from <https://www.cia.gov/library/publications/the-world-factbook/fields/400.html>. These were further verified with those reported in Index Mundi (<https://indexmundi.com/factbook/countries>), World Atlas (<https://worldatlas.com>), and the Philippine Statistics Authority (www.psa.gov.ph). All online sources were accessed on 2 June 2020.

The income quintile indicators are based on declared income quintiles by the respondents.¹¹ In the full sample, about 24 percent belong to the poorest quintile (*Income quintile1*), 27 percent to the second-poorest income quintile (*Income quintile2*), 25 percent to the third quintile (*Income quintile3*), 14 percent to the fourth quintile (*Income quintile4*), and 10 percent to the richest quintile (*Income quintile5*). In the sub-sample of low-income respondents, around 47 percent belong to *Income quintile1*. In all analyses, the default category is *Income quintile1*.

With reference to a ten-step staircase to indicate status in society, with the poorest people on the first step and the richest people on the tenth step, each respondent was asked in which step she would place herself, and then her parents. Based on the chosen steps, two social mobility indicators are constructed. The first indicator is *Own status higher than parents*, which takes the value of 1 if the respondent's step is higher than her parents', and 0 otherwise. The other indicator is *Own status same as parents*, which takes the value of 1 if the respondent's step is the same as her parents', and 0 otherwise. Around fourth of all respondents have higher social status than their parents, while around half have the same.

Each respondent was also asked how much she trusts key institutions in her country, including the national government and the president (or prime minister), with the following possible answers: "a great deal of trust", "quite a lot of trust", "not very much trust", or "none at all". The variable *Trust in national government* takes the value of 1 if the response is "great deal of trust" or "quite a lot of trust" in national government, and 0 otherwise. Analogously, *Trust in president* takes a value of 1 if the response is "great deal of trust" or "quite a lot of trust" in the president (or prime minister), and 0 otherwise. Moreover, the respondents were asked whether they would say that "most people can be trusted" or "that you must be careful in dealing with people". Thus, *Trust most people* takes a value of 1 if the respondent reported that most people can be trusted, and 0 otherwise. In the full sample, the mean values of *Trust*

¹¹ In declaring their household's income quintile, with the first income quintile as the richest and the fifth income quintile as the poorest, the respondent is asked to count "all wages, salaries, pensions, dividends and other incomes that come in before taxes and other deductions." Each country team used the official household income statistics for the annual or monthly household income quintiles in the survey. Since the income quintiles are self-reported, they may be subjective, and the number of observations per quintile are unequal. In this study, we relabeled the reported income quintiles to conform to the convention.

in national government, Trust in president and Trust most people are 0.628, 0.714 and 0.180, respectively.¹²

Also based on survey responses, the variable *Income distribution is fair* takes the value of 1 if the respondent declares that she thinks the income distribution in her country to be “very fair” or “fair”, and 0 otherwise. The variable *Family income is fair* is set equal to 1 if the respondent declares that, considering all the effort that she and her family members have made in the past, she thinks the income that her family currently receives is “very fair” or “fair”, and 0 otherwise. Finally, the variable *Wealth is due to fate* is set equal to 1 if the respondent “strongly agrees” or “somewhat agrees” to the statement that “wealth and poverty, success and failure are all determined by fate”, and 0 otherwise. In the full sample, the corresponding means of these three variables are 0.470, 0.795 and 0.555.

Three dummy variables denote in-country locations. Of the full sample, around half are urban residents (*Urban*). Around 23 percent live in capital or mega cities with at least 1 million population (*Megacity*), and about 19 percent live in regional centers or major cities with at least 100,000 population (*Major_city*). The default category comprises those living in small cities, towns or villages.

The last set of moderating factors consists of five dummy indicators to account for country-specific historical, political, legal or economic factors. These are *Indonesia* (mean=0.254), *Malaysia* (mean=0.210), *Singapore* (mean=0.131), *Thailand* (mean=0.182), and *Philippines* (mean=0.224).

Additionally, twelve control variables based on the respondents’ demographic and socioeconomic characteristics are used. For the full sample, the average age is about 43 years, and around half are female. In all estimations, both *Age* and its squared value are introduced; however, only the marginal effects of *Age* is reported here. Around 15 percent in the full sample and nine percent in the sub-sample completed at least college education (*College*). Nearly 73 percent are married or living in with a partner (*In_union*), while between six and eight percent are divorced, separated or widowed (*Divorced*). The average household size is around 4.7. About

¹² Note that respondents to the trust-related questions are allowed to answer “do not understand the question”, “can’t choose”, or “decline to answer”.

a fourth of the sample belongs to single-generation households (*Single generation*). Around 65 percent have jobs (*Employed*).

In the full sample about 37 percent practice Islam, 27 percent are Buddhists, another 27 percent are Christians (i.e., Catholics, Protestants, and other Christian sects), and three percent are Hindu. The rest belongs to other religions or are atheists.

To control for temporal factors, a dummy for 2014 (*Y2014*) is introduced. Only one dummy out of possible three is used to avoid multicollinearity with the country dummy variables.

[Table 2 here.]

5. Results

To highlight the key results, we plot the marginal effects of *Ethnic2* and *Ethnic3* together with corresponding 95% confidence interval (CI). The results in Figure 2(a) are based on the full samples ($N=5250$), while those in Figure 2(b) and Figure 2(c) are based on, respectively, the sub-sample of the poorest two income quintiles ($N=2707$) and the sub-sample excluding the Philippines ($N=4076$). Also based on the full sample, the results in Figure 3 are derived with *Redistribution2* as the dependent variable and CI is set to 90%. In all figures, model [1] refers to the regression model where the ethnicity variables are introduced without interaction with other variables, while models [2]-[10] refer to the model specifications with interaction terms described in Section 4.2. In all figures, model [3] uses fewer observations due to missing or invalid responses to the social mobility questions. The full regression results corresponding to these figures are shown in the appendix as Table A1, Table A2, Table A3 and Table A4.

5.1 Main

Figure 2(a) shows the main results. The baseline estimate for *Ethnic2* is -0.080 ($p<0.01$) (model [1]). The other estimates of this variable range from -8 percentage points (pps) (model [3]) to -6.6 pps (model [10]), all highly significant as well. In absolute terms, these are roughly equivalent to between 10 and 20 percent of the standard deviation of *Redistribution*. In contrast, the estimates for *Ethnic3* are positive, but none is significant. The estimates for *Ethnic3* are 2.6 pps

in the baseline model and -3.2 pps in the model ([10]), where it is interacted with country indicators. (Table A1)

As shown in Table A1, only a few moderating factors are significant. Both significant at the 5-percent level are *Trust most people* (5.5 pps) and *Income distribution is fair* (-5.8 pps). There also appears variations across countries. While all country variables are positive, not all are significant. On one end, *Indonesia* is significant only in model [10] (0.221 at $p < 0.10$). On the other end, *Malaysia*, which ranges from 22.9 pps (model [2]) to 27.4 pps (model [10]), is highly significant in all ten models. In between these two ends *Singapore* and *Thailand*, which are both significant in eight models, but both except in model [10].

In the bottom row of Table A1, the results of the Wald χ^2 tests indicate the null can be rejected in all specifications. This implies the ethnicity variables and their interaction terms are not simultaneously equal to zero.

5.2 Poorest income quintiles

The results in Figure 2(b) belie the supposition that among the poor ethnic background will matter less than economic consideration in the support for government redistribution. Even for this sub-group, and after controlling for other factors as well, their redistributive preference however still diverge along ethnicity lines. In all models, *Ethnic2* remains negative – ranging from -8 pps in model [9] to -10 pps in model [3] – and highly significant. These estimates are bigger in absolute values than those for the same model shown in Figure 2(a). Again, *Ethnic3* is insignificant in all models and positive in models [1]-[9]. It is negative in model [10]. (Table A2)

As in the full sample, only some moderating factors are significant (Table A2). While *Trust in most people* (5.2 pps) remains significant ($p < 0.10$), *Income distribution is fair* does not. *Megacity* (6.3 pps) is significant in model [7]. While all country variables are positive in all models, only *Malaysia* and *Singapore* are consistently significant. *Thailand* is significant in all models except in [10]. In model [3], *Own status higher than parents'* is likewise positive (5.3 pps) and significant at $p < 0.05$.

In all models again the diagnostic test results indicate null that the ethnicity variables and their interactions terms are jointly equal to zero can be rejected.

5.3 Excluding Philippines

Excluding the Philippines samples modify the overall results a bit. As shown in Figure 2(c), *Ethnic2* is still negative in all models, but now significant only in eight. In models [9] and [10], *Ethnic2* is no longer significant. For *Ethnic3*, all estimates are still positive, except in model [10]. While *Ethnic3* in model [3] is the only estimate significant at the 95% CI, the estimates in models [1], [4], [5] all [8] are significant at 90% CI. In these models the estimates for *Ethnic3* hover around 4 pps. (Table A3)

Among the moderating factors, those significant at $p < 0.10$ are *Trust most people* (5.9 pps), *Income distribution is fair* (-5.9 pps), and *Wealth is due to fate* (-4.1 pps). Ranging from -6.6 to -7.5 pps, *Major_city* is now is significant in all models except [3]. Consistently across all models, neither *Malaysia*, *Singapore* nor *Thailand* is significantly different from *Indonesia* (the default). (Table A3)

Here as well, the null that the ethnicity variables and their interaction terms are jointly equal to zero can be rejected in all models. (Table A3)

[Figure 2 here.]

5.4 Other robustness checks

With *Redistribution2* now as the dependent variable, Figure 3 shows *Ethnic2* is again consistently negative and *Ethnic3* is again positive in all models except [10]. However, *Ethnic2* is significant at $p < 0.10$ in models [1], [2] [3], [7] and [8], and at $p < 0.05$ in model [10]. In contrast, *Ethnic3* is significant (at $p < 0.10$) in models [7] and [9] only. (Table A4)

The significant moderating factors are *Trust in national government* (5.8 pps), *Trust in president* (6.7 pps), *Trust most people* (3.7 pps), *Income distribution is fair* (6.8 pps), and Family income is fair (3.4 pps). Across all specifications, *Indonesia*, *Malaysia*, *Singapore* and *Thailand* are all positive and highly significant. (Table A4)

The Wald χ^2 test results in the bottom row of Table A4 indicate the relevant null hypothesis can be rejected in models [2], [3], [7], [8], [9] and [10]. In the other models, the same hypothesis cannot be rejected at the 5-percent level.

[Figure 3 here]

6. Discussion

This paper sought to contribute to the comparative analysis of the role of ethnic background in shaping attitudes towards government policies with focus on five Southeast Asian countries where nearly half-a-billion population live and belong to more than 60 ethnic groups. Specifically we examined for differences across members of dominant ethnic groups, classified according to their relative population sizes, in their support for government's role in reducing income inequalities. Aside from being simple and convenient, given the available information, our scheme for determining ethnic dominance facilitates cross-country comparisons. Since there is no a priori reason to believe that the biggest or second biggest ethnic group in each country necessarily share a common distinguishing cultural attribute with those in other countries, our scheme brings to highlight ethnic group size, a characteristic that has received less attention than norms, beliefs, or values shared by people of the same ethnicity. To illustrate the point, there are in the sample ethnic Chinese among Malaysians and Thais, though they are not as dominant as their Singaporean counterparts. Notwithstanding the shared cultural values of the ethnic Chinese across these countries, their support for government redistribution however could vary with their perceived or actual relative influence over domestic policies. Indeed we find evidence that suggest ethnic group size contributes to divergence in preferences for redistribution.

Relative to the biggest ethnic group, the second biggest ethnic group are found to have less preference for redistribution, controlling for other factors. Specifically, the probability that they will strongly agree to government-mediated reduction in income differences between the rich and poor people is lower by around 10-20 percent of the standard deviation. Also relative to the biggest ethnic group, those in groups other than the second-biggest ethnic group appear to have greater redistributive preferences, although the differences between them groups are not statistically significant, again after controlling for other factors. By implication then, the latter group and the second-biggest ethnic group also systematically diverge in their redistributive preferences.

The results are fairly robust even after accounting for the moderating effects of income status, trust in government and in people, subjective social mobility, concerns about social fairness, and views on the importance of fate in one's life. Restricting the analysis to a subsample of poor people (i.e., those who reported to belong to the 1st or 2nd income quintiles) sustained the overall findings; that is, even among people who can be expected to benefit the most from government redistribution, those in the second biggest ethnic group are still less likely to prefer government redistribution than those in the most dominant group or those in the other less dominant groups, controlling for other factors. Since this last result is based on subjective income quintile indicators, they should be verified using objective measures of economic status in future studies.

Excluding the Philippines sample or using a more conservative indicator of redistributive preferences yielded some nuanced results, but still consistent with the overall findings thus far. In both analyses, we still find the same systematic differences in preferences for redistribution between the second biggest ethnic group and the biggest ethnic group or, collectively, other ethnic groups. In the first analysis, however, the differences are not significant anymore after controlling for the moderating effects of geographic or country indicators. These additional results suggest, one, the observed differences in preferences among ethnic groups in a country could be related to inequalities in economic opportunities across different localities. This may be true to the extent that certain minorities inhabit less developed areas. In the Philippines case, the relative, more than the absolute, economic development of the regions seems to matter since Cebu and its surrounding provinces are next only to Metro Manila and the Southern Tagalog provinces in prosperity. Another implication of the results is that the variations in redistributive preferences could be related to country-specific socioeconomic, political or legal factors that delimit the relative influence of various ethnic groups over government policies. Already some studies point to the racial composition of the supporters and leaders of political parties in Singapore, Malaysia or Indonesia (see, for example, Huat, 2007; Chin, 2018; Aspinall, 2011). In the Philippines the introduction of the party list system enabled the formation of ethnicity-based coalitions like Ako Bicol, An Waray, Abante Mindanao and Abe Kampampangan, Inc. Since there is already some evidence of political participation by ethnic groups in these countries, the

next step is to investigate how effectively they have pushed for their preferred redistributive policies.

Using a more conservative measure of redistributive preferences also yield qualitatively similar results, although the relevant estimates are significant only at the wider 90% confidence interval. Overall, thus, the sharp divergence across ethnic groups is observed more among those who hold strong views about the government's role in reducing inequality, rather than among those who take moderate positions on the matter.

Why do the ethnic groups in the five Southeast Asian countries exhibit the patterns of redistributive preferences found here? Since the groups were classified by relative size and without regard for their exact ethnic identities, arguably the reason is less about their shared, distinguishing cultural attributes than their common economic or political standing in their countries. Notwithstanding the relevance of shared cultural trait, our results underscore the importance of ethnic dominance.¹³ As a voting bloc, the dominant ethnic group can ably push for their preferred policies. If some of them are also among the richest in the country, as is often the case, they may still support redistributive policies that are less generous to other groups or burden other groups more. In this they have the same interest as the poor population, many of whom usually belong to smaller minority groups. Consequently, the onus of redistribution is on those excluded from these two groups. It is possible of course for the excluded group to co-opt the poor and shift the burden of redistribution towards the dominant group. But then again, their success will depend on relative group sizes, among others. A coalition of small ethnic groups against the dominant group may not be politically effective in countries (such as Thailand or Indonesia) where nearly everyone belongs to dominant group, or even feasible in countries where various small groups are geographically dispersed. In the Philippines, for example, the last two decades saw the proliferation of regional or ethnic-based political parties despite attempts by national parties to establish broad coalitions. Even the poor among the excluded group may not be keen to support redistributive policies if they expect less gain from such and especially when they receive assistance from the rich in their ethnic group. This would fosters strong group

¹³ In India some evidence is found that ethnic dominance is more inimical to cooperation than ethnic diversity (Waring and Bell, 2013).

identification and mutual help among members of the second biggest ethnic group or any group similarly situated. Though our results are consistent with the so-called “diversity debit” hypothesis (Gisselquist, Leiderer and Niño-Zarazúa, 2016), further examination is needed to see if the divergent preferences actually translate to inefficient public goods provisions or worse economic outcomes.¹⁴

Some of our results are consistent with those found in previous studies on Asia. For one, our finding that, after controlling for other factors, belief in the primacy of fate in the determination of material well-being has no statistically significant effect on redistributive preferences, is consistent with Chang (2018) who reported that self-efficacy among Asians tend to mitigate their demands for government redistribution. For another, our results concerning the positive effects of trust (in national government, president or in other people) parallel those in Yamamura (2012, 2014), who found in Japan that the people who tend to express preference for redistribution have high trust in government or live in communities with high levels of social capital.

7. Conclusion

It is now widely recognized that ethnic or racial backgrounds are types of social identifies that people may use to signal their own values, views or preferences to others of different or similar background. Members of the same race or ethnic groups who may not know each other may find the value of such signals in pursuit of collective goals, such as influencing government redistributive programs. In developed countries, for example, many studies find that attitudes towards redistribution are conditioned by the racial or ethnic composition of neighborhoods; that is, people in communities with large immigrant or black residents, other things being equal, tend to be less favorable of government redistribution.

This paper pursued the issue by focusing on the role of relative population sizes of the various ethnic groups in five Southeast Asian countries. Using a pool of nationally-representative samples

¹⁴ Along the lines of Alesina, Baqir and Easterly (1999), two studies in Indonesia report a negative effect of ethnic diversity on social capital (Mavridis, 2015), and geographically segregated ethnic groups have higher levels of local public goods (Tajima, Samphantharak and Ostwald, 2018).

from Indonesia, Malaysia, Philippines, Singapore and Thailand, members of the second biggest ethnic groups tend to be less favor government redistribution than members of the biggest ethnic group or members of other smaller ethnic groups. Moreover even low-income people who stand to benefit from income reallocation exhibit the same redistributive preferences as their ethnic groups. The results are robust to inclusion of the various factors that may directly or indirectly impact (through ethnicity) support for government redistribution. Notwithstanding the importance of shared norms, values, beliefs or views in aligning the social choices of people with same ethnic or racial background, our results suggest that they can be for or against redistributive policies depending on how their relative sizes enable them to influence public policies.

References

- Alesina, A., Baqir, R., Easterly, W., 1999. Public Goods and Ethnic Divisions. *Quarterly Journal of Economics*, 114(4): 1243-1284.
- Alesina, A., Angeletos, G.-M., 2005. Fairness and redistribution. *American Economic Review* 95(4), 960-980.
- Alesina, A., La Ferrara, E., 2005. Preferences for redistribution in the land of opportunities. *Journal of Public Economics* 89(5-6), 897-931.
- Alesina, A., Giuliano, P., 2010. Preferences for redistribution. In: Benhabib, J., Jackson, M., Bisin, A. (Eds.), *Handbook of Social Economics*. Amsterdam, The Netherlands: Elsevier. pp. 93-182.
- Asian Development Bank (ADB), 2019. *The Social Protection Indicator for Asia: Assessing Progress*. Mandaluyong City, Philippines: ADB.
- Aspinall, E., 2011. Democratization and Ethnic Politics in Indonesia: Nine Theses. *Journal of East Asian Studies* 11(2), 289-319
- Benabou, R., Ok, E. A., 2001. Social mobility and the demand for redistribution; The POUM hypothesis. *Quarterly Journal of Economics* 116(2), 447-487.
- Bertrand, J., 2000. Peace and conflict in the southern Philippines: Why the 1996 peace agreement is fragile. *Pacific Affairs*, 73 (1), 37-54.
- Birskyte, L., 2014. The impact of trust in government on tax paying behavior of nonfarm sole proprietors. *Economic Sciences*, 61 (1), 1-15.
- Beugelsdijk, S., Klasing, M., 2016. Diversity and trust: The role of shared values. *Journal of Comparative Economics*, 44 (3), 522-540.
- Capuno, J. J., 2019. Preferences for Redistribution in Southeast Asia. Final research report submitted to the Philippine Center for Economic Development, Quezon City, Philippines.
- Chang, A. C., 2018. How do Asian values constrain public support for redistribution? *Journal of Behavioral and Experimental Economics* 77, 139-150.

- Chen, Y., Li, S., 2009. Group identity and social preferences. *American Economic Review* 99, 431–457.
- Chin, J., 2018. “From *Ketuanan Melayu* to *Ketuanan Islam*: UMNO and the Malaysian Chinese”, in: Welsh. B. (ed.), *The End of UMNO? Essays on Malaysia’s Former Dominant Party*. Petaling Jaya: SIRD. pp. 255-304.
- Cojocaru, A., 2014. Prospects for upward mobility and preferences for redistribution; Evidence from the Life in Transition Survey. *European Journal of Political Economy* 34, 300-314.
- Colagrossi, M., Karagiannis, S., Raab, R., 2019. The Median Voter Takes it All: Preferences for Redistribution and Income Inequality in the EU-28. Publication Office of the European Union, Luxembourg.
- Corneo, G., Grüner, H. P., 2002. Individual preferences for political redistribution. *Journal of Public Economics* 83, 83-107.
- Costa-Font, J., Cowell, F., 2015. Social identity and redistributive preferences: A survey. *Journal of Economic Surveys* 29(2), 357-374.
- Dayrit, M.M., Lagrada, L.P., Picazo, O.F., Pons, M.C., Villaverde, M.C., 2018. The Philippines health system review. World Health Organization. Regional Office for South-East Asia.
- Dahlberg, M., Edmark, K., Lundqvist, H., 2012. Ethnic diversity and preferences for redistribution. *Journal of Political Economy* 120(1), 41-76.
- Fong, C., 2001. Social preferences, self-interest, and the demand for redistribution. *Journal of Public Economics* 82, 225-246.
- Gisselquist, R.M., Leiderer, S., Niño-Zarazúa, M., 2016. Ethnic heterogeneity and public goods provision in Zambia: Evidence of a subnational “diversity dividend”. *World Development* 78 (February), 308-323.
- Greene, W. H., 2011. *Econometric Analysis*, 7th ed. Upper Saddle River, NJ: Pearson Prentice Hall.
- Guillaud, E., 2013. Preference for redistribution: An empirical analysis over 33 countries. *Journal of Economic Inequality* 11, 57-78.

- Güzel, S., Özer, G., & Özcan, M., 2019. The effect of the variables of tax justice perception and trust in government on tax compliance: The case of Turkey. *Journal of Behavioral and Experimental Economics*, 78, 80-86.
- Huat, C. B., 2007. Political culturalism, representation and the People's Action Party of Singapore. *Democratization* 14(5), 911-927.
- Jaime-Castillo, A. M., Marques-Perales, I., 2019. Social mobility and demand for redistribution in Europe: A comparative analysis. *British Journal of Sociology* 70(1), 138-165.
- Keely, L., Tan, C., 2008. Understanding preferences for income redistribution. *Journal of Public Economics*, 92 (5-6), 944-961.
- Luttmer, E.F.P., 2001. Group Loyalty and the Taste for Redistribution. *Journal of Political Economy*, 109(3), 500-528.
- Luttmer, E.F.P., Singhal, M., 2011. Culture, context and the taste for redistribution. *American Economic Journal: Economic Policy* 3, 157-179.
- Mabridis, D., 2015. Ethnic diversity and social capital in Indonesia. *World Development* 67 (March), 376-395.
- Mahendradhata Y, Trisnantoro L, Listyadewi S, Soewondo P, Marthias T., Harimurti, P., Prawira, J., 2017. The Republic of Indonesia Health System Review, Health Systems in Transition, Vol-7 No.1. WHO Regional Office for South-East Asia.
- Martinez-Vazquez, J., 2011. *Taxation in Asia*. Mandaluyong City, Philippines: Asian Development Bank.
- McGibbon, R., 2004. Secessionist challenges in Aceh and Papua: Is special autonomy the solution. *Policy Studies* 10. R Washington, D.C.: East-West Center
- Meltzer, A.H., Richard, S. F., 1983. Test of rational theory of the size of government. *Public Choice* 41(3), 403-418.
- Moller, T., 2011. Insurgency in southern Thailand: A quest for identity. *Conflicts in Asia-Regional and Transnational Dimensions* 29(1), 7-13.

- National Statistics Office (NSO), 2014. *Philippines in Figures 2014*. Quezon City: Philippines: National Statistics Office. Available from <https://psa.gov.ph/sites/default/files/2014%20PIF.pdf>. Accessed on 28 May 2020.
- Olivera, J., 2015. Preferences for redistribution in Europe. *IZA Journal of European Labor Studies* 4, 14.
- Organization for Economic Co-operation and Development (OECD), 2017. *Revenue Statistics in Asian Countries: Trends in Indonesia, Japan, Kazakhstan, Korea, Malaysia, the Philippines and Singapore*. Paris, France: OECD Publishing.
- Page, L., Goldstein, D. G., 2016. Subjective beliefs about the income distribution and preferences for redistribution. *Social Choice and Welfare* 47, 25-61.
- Piketty, T., 1995. Social mobility and redistributive politics. *Quarterly Journal of Economics* 110(3), 551-584.
- Quattrociocchi, J., 2018. Group income and individual preferences for redistribution. *Canadian Journal of Economics* 51(4), 1386-1418.
- Romer, T., 1975. Individual welfare, majority voting, and properties of a linear income tax. *Journal of Public Economics* 4(2), 163-185.
- Schokkaert, E., Truyts, T., 2017. Preferences for redistribution and social structure. *Social Choice and Welfare* 49, 545-576.
- Stichnoth, H, Van der Straeten, K., 2013. Ethnic diversity, public spending, and individual support for the welfare state: A review of the empirical literature. *Journal of Economic Surveys*, 27(2), 364-389.
- Sumriddetchkajorn, K., Shimazaki, K., Ono, T., Kusaba, T., Sato, K., Kobayashi, N., 2019. Universal health coverage and primary care, Thailand. *Bulletin of the World Health Organization*, 97, 415-422.
- Tajima, Y., Samphantharak, K., Ostwald, K., 2018. Ethnic segregation and public goods: Evidence from Indonesia. *American Political Science Review* 112(3), 637-653.

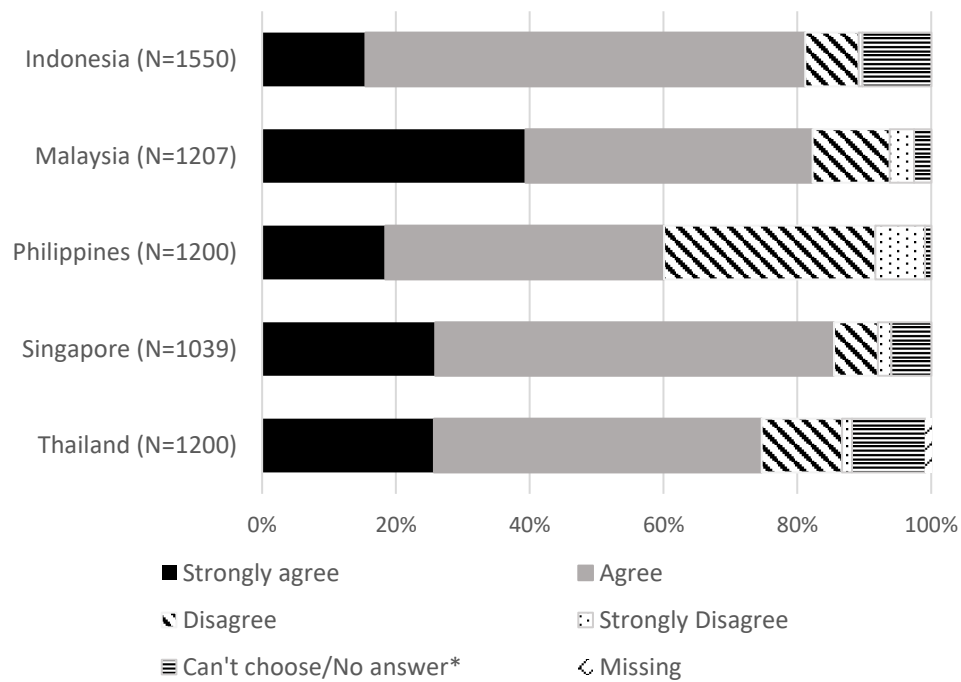
- Yamamura, E., 2012. Social capital, household income, and preferences for income redistribution. *European Journal of Political Economy* 28(4), 498-511.
- Yamamura, E., 2014. Trust in government and its effect on preferences for income redistribution and perceived tax burden. *Economics of Governance* 15, 71-100.
- Waring, T.M., Bell, A.V., 2013. Ethnic dominance damages cooperation more than ethnic diversity: results from multi-ethnic experiments in India. *Evolution and Human Behavior* 34, 398-404.
- Wooldridge, J. M., 2002. *Econometric Analysis of Cross Section and Panel Data*. Cambridge, MA: The MIT Press.

Table 1. Total samples, by country

Country	Rural/Urban, Broad region ^a ,	No.	% of total	Racial/Ethnic Background	No.	% of total
Indonesia (<i>N</i> =1550)	Rural	780	50.32	Java	608	39.23
	Urban	770	49.68	Sunda	259	16.71
				Melayu	75	4.84
	Sumatra	330	21.29	Madura	60	3.87
	Java	880	56.77	Betawi	44	2.84
	Lesser Sunda Islands	90	5.81	Batak	43	2.77
	Kalimantan	90	5.81	Bali	37	2.39
	Sulawesi	110	7.10	Bugis	36	2.32
	Maluk Islands	20	1.29	Minang	36	2.32
	Western New Guinea	30	1.94	Others ^b	352	22.71
Malaysia (<i>N</i> =1207)	Rural	518	42.92	Malay	603	49.96
	Urban	689	57.08	Chinese	358	29.66
				Indian	84	6.96
	Northern	156	12.92	Iban	34	2.82
	Central	371	30.74	Bidayuh	17	1.41
	Southern	207	17.15	Melanau	3	0.25
	Eastern	173	14.33	Others	108	8.95
	East Malaysia	300	24.86			
Philippines (<i>N</i> =1200)	Rural	495	41.25	Cebuano	330	27.50
	Urban	705	58.75	Tagalog	244	20.33
				Ilonggo	155	12.92
	National Capital Region	300	25.00	Ilocano	99	8.25
	Balance Luzon	300	25.25	Waray	89	7.42
	Visayas	300	25.00	Bicol	72	6.00
	Mindanao			Tausug	42	3.50
				Others ^b	169	14.08
Singapore (<i>N</i> =1039)	Urban	1039	100.00	Chinese	788	75.84
				Malay	121	11.65
	East	219	21.08	Indian	114	10.97
	West	142	13.67	Others	16	1.54
	North	347	33.40			
	South	144	13.86			
	Central	187	18.00			
Thailand (<i>N</i> =1,200)	Rural	949	79.08	Thai	1175	97.92
	Urban	251	20.92	Chinese	14	1.17
				Others ^b	11	0.92
	Bangkok	106	8.83			
	North	221	18.42			
	Central	300	25.00			
	Northeast	405	33.75			
	South	168	14.99			

^aThe broad regions are sampling areas.^bIncluding “Declined to answer”, “Can’t choose” or missing.Source of raw data: Asian Barometer Survey (4th wave).

Figure 1. Distribution of respondents by views about government's role to reduce income differences between people with high income and those low income



Notes: This figure is based on answers to the question “Do you agree or disagree with the following statement: “It is the responsibility of the government to reduce the differences between people with high income and those with low incomes.” The possible responses are “strongly agree”, “agree”, “disagree”, “strongly disagree”, “do not understand the question”, “can’t choose”, or “decline to answer”. The last three possible responses are lumped together as “Can’t choose/No answer” in the figure.

Source of raw data: Asian Barometer Survey (4th wave).

Table 2. Summary statistics of the regression variables

Variables ^a	All samples (<i>N</i> =5250)		Poorest two income quintiles (<i>N</i> =2707)		Excluding Philippines (<i>N</i> =4,076)	
	Mean	Std. Dev.	Mean	Std. Dev.	Mean	Std. Dev.
<u>Dependent variable^b</u>						
Redistribution	0.260	0.439	0.784	0.411	0.281	0.450
Redistribution2	0.813	0.390				
<u>Ethnicity variables</u>						
Ethnic1	0.538	0.499	0.535	0.499	0.633	0.482
Ethnic2	0.178	0.382	0.164	0.370	0.151	0.358
Ethnic3	0.284	0.451	0.301	0.459	0.216	0.411
<u>Moderating factors</u>						
Income quintile1	0.243	0.429	0.472	0.499	0.194	0.395
Income quintile2	0.272	0.445	0.527	0.499	0.265	0.441
Income quintile3	0.248	0.432			0.266	0.442
Income quintile4	0.137	0.344			0.156	0.362
Income quintile5	0.099	0.299			0.120	0.325
Own status higher than parents ^c	0.255 ^c	0.436 ^c	0.241 ^d	0.428 ^d	0.268 ^e	0.443 ^e
Own status same as parents ^c	0.516 ^c	0.500 ^c	0.531 ^d	0.499 ^d	0.532 ^e	0.499 ^e
Trust in national government	0.628	0.483	0.601	0.490	0.687	0.464
Trust in the president	0.714	0.452	0.703	0.457	0.760	0.427
Trust most people	0.180	0.384	0.181	0.385	0.208	0.406
Income distribution is fair	0.470	0.499	0.462	0.499	0.516	0.500
Family income is fair	0.795	0.404	0.832	0.374	0.765	0.424
Wealth is due to fate	0.555	0.497	0.575	0.494	0.533	0.499
Megacity	0.226	0.418	0.185	0.388	0.247	0.431
Major_city	0.193	0.395	0.209	0.406	0.134	0.341
Urban	0.543	0.498	0.493	0.500	0.531	0.499
Indonesia	0.254	0.435	0.192	0.394	0.328	0.469
Malaysia	0.210	0.407	0.164	0.370	0.270	0.444
Philippines	0.224	0.417	0.310	0.462		
Singapore	0.131	0.337	0.102	0.302	0.169	0.374
Thailand	0.182	0.386	0.233	0.423	0.234	0.424
<u>Control variables</u>						
Age	43.02	14.30	43.92	14.51	43.04	13.99
Female	0.493	0.500	0.498	0.500	0.492	0.500
College	0.148	0.355	0.093	0.291	0.157	0.364
Employed	0.652	0.476	0.641	0.480	0.681	0.466
In_union	0.725	0.447	0.729	0.445	0.719	0.450
Divorced	0.060	0.238	0.076	0.264	0.051	0.220
Household size	4.710	2.081	4.528	2.077	4.651	2.040
Single generation	0.257	0.437	0.273	0.446	0.272	0.445
Buddhist	0.268	0.443	0.290	0.454	0.346	0.476
Christian	0.277	0.447	0.339	0.473	0.085	0.279
Hindu	0.031	0.174	0.025	0.157	0.040	0.197
Islam	0.374	0.484	0.313	0.464	0.466	0.499
Y2014	0.742	0.438	0.805	0.396	0.668	0.471

^a All variables, except age and household size, are dummy variables.

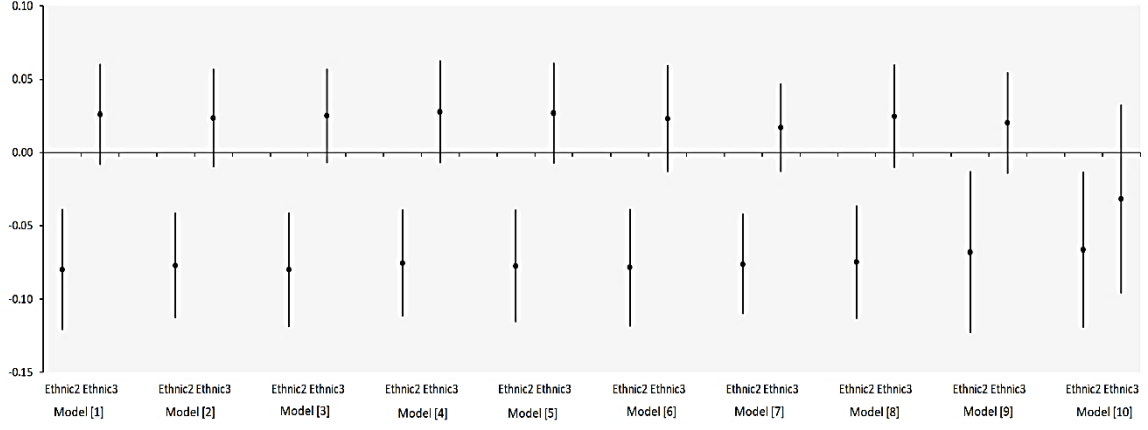
^b Based on the response to the statement: "It is the responsibility of the government to reduce the difference between people with high income and those with low income."

^c Due to missing responses, *N*=4979.

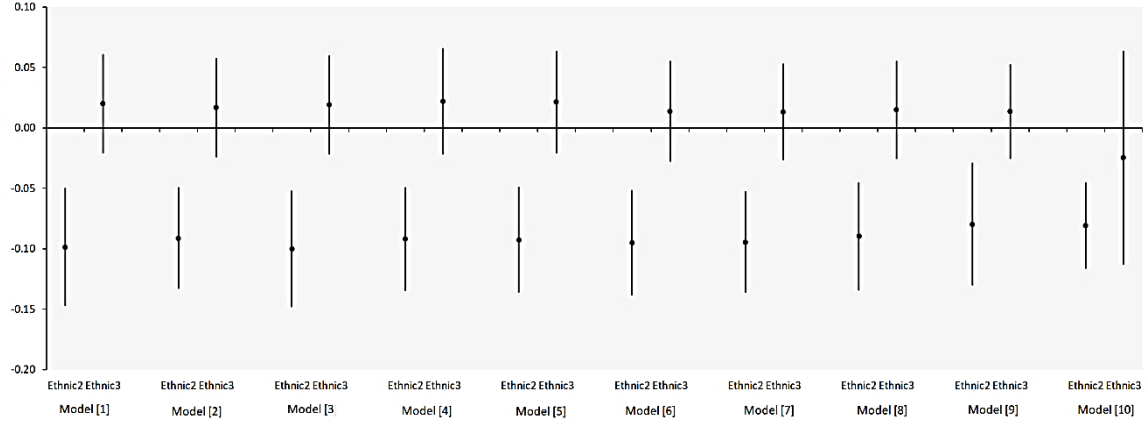
^d Due to missing responses, *N*=2557.

^e Due to missing responses, *N*=3820.

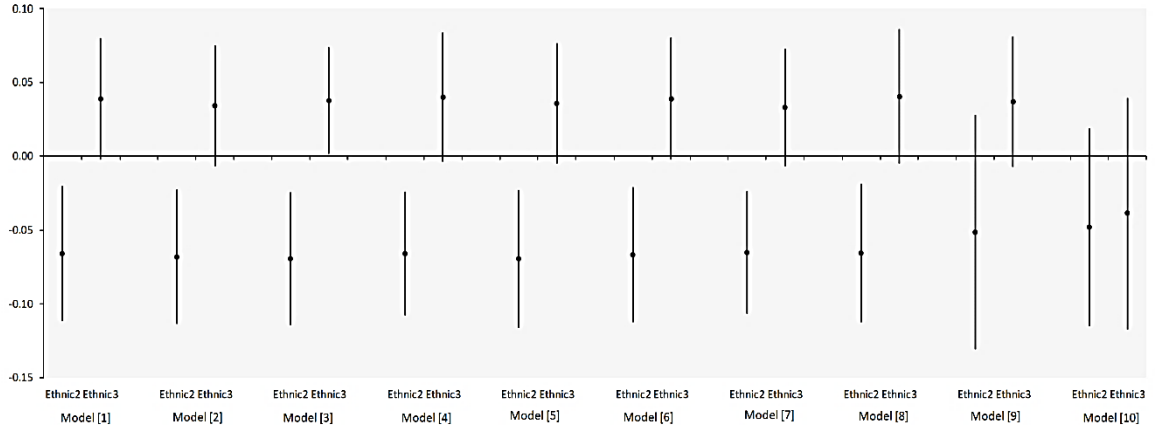
Figure 2. Marginal effects of *Ethnic2* and *Ethnic3*



(a) Full sample ($N=5250$)



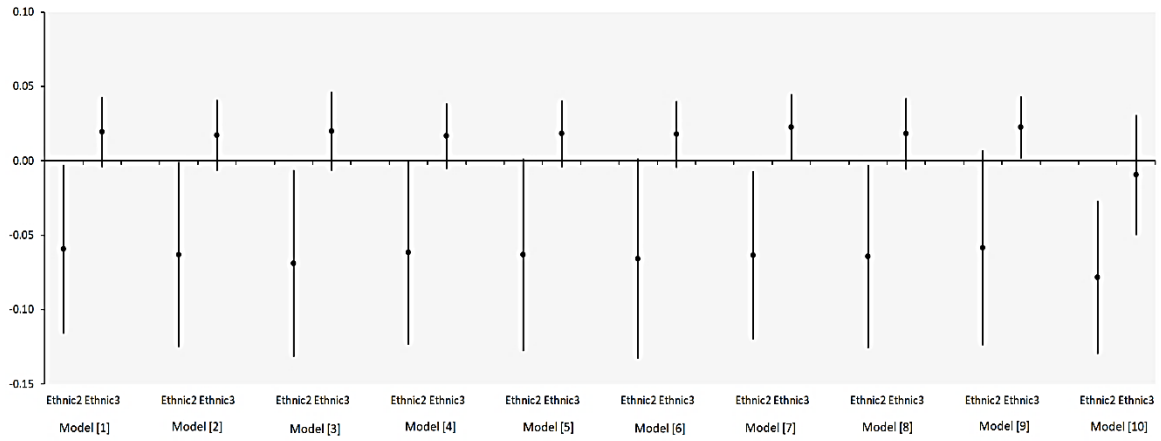
(b) Poorest two income quintiles ($N=2707$)



(c) Excluding Philippines ($N=4076$)

Notes: Figures show marginal effects and the corresponding 95% CI of *Ethnic2* and *Ethnic3* for 10 model specifications. In model [10] of Figure 2(b), *Ethnic2* is not interacted with *Thailand* due to missing observation. For model [3] in Figure 2(a), Figure 2(b) and Figure 2(c), the sample sizes are $N=4979$, $N=2557$, and $N=3820$, respectively.

Figure 3. Marginal effects of *Ethnic2* and *Ethnic3* ($N=5250$; Dep. var.: *Redistribution2*)



Notes: Figures show marginal effects and the corresponding 90% CI of *Ethnic2* and *Ethnic3* for various model specifications. In model [10] *Ethnic2* is not interacted with *Thailand* due to missing observation. For model [3] $N=4979$.

Table A1. Marginal effects of the correlates of preference for redistribution, full sample

Covariates	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Ethnic2	-0.080*** (0.021)	-0.077*** (0.018)	-0.080*** (0.020)	-0.076*** (0.019)	-0.078*** (0.020)	-0.079*** (0.020)	-0.076*** (0.017)	-0.075*** (0.020)	-0.068** (0.028)	-0.066** (0.027)
Ethnic3	0.026 (0.018)	0.023 (0.017)	0.025 (0.016)	0.028 (0.018)	0.027 (0.018)	0.023 (0.019)	0.017 (0.015)	0.025 (0.018)	0.020 (0.018)	-0.032 (0.033)
Own status higher than parents'			0.013 (0.018)							
Own status same as parents'			-0.006 (0.021)							
Trust in national government				-0.004 (0.022)						
Trust in president					-0.016 (0.018)					
Trust most people						0.055** (0.027)				
Income distribution is fair							-0.058** (0.028)			
Family income is fair							-0.012 (0.022)			
Wealth is due to fate								-0.027 (0.019)		
Income quintile2	0.016 (0.031)	0.017 (0.032)	0.021 (0.034)	0.016 (0.030)	0.015 (0.030)	0.016 (0.030)	0.014 (0.030)	0.016 (0.030)	0.015 (0.031)	0.013 (0.031)
Income quintile3	-0.003 (0.034)	-0.002 (0.034)	-0.004 (0.036)	-0.003 (0.033)	-0.003 (0.034)	-0.002 (0.033)	-0.006 (0.032)	-0.004 (0.034)	-0.004 (0.034)	-0.007 (0.034)
Income quintile4	0.036 (0.037)	0.038 (0.039)	0.037 (0.040)	0.037 (0.036)	0.035 (0.037)	0.037 (0.037)	0.031 (0.036)	0.035 (0.037)	0.038 (0.037)	0.034 (0.037)
Income quintile5	0.018 (0.039)	0.018 (0.040)	0.024 (0.038)	0.018 (0.039)	0.018 (0.039)	0.018 (0.038)	0.018 (0.039)	0.017 (0.039)	0.019 (0.041)	0.014 (0.039)
Megacity	0.004 (0.036)	0.006 (0.035)	-0.004 (0.038)	0.003 (0.036)	0.002 (0.036)	0.011 (0.033)	-0.000 (0.034)	0.001 (0.036)	-0.006 (0.038)	-0.005 (0.039)
Major_city	-0.014 (0.036)	-0.014 (0.036)	-0.011 (0.034)	-0.014 (0.036)	-0.014 (0.035)	-0.010 (0.036)	-0.013 (0.035)	-0.013 (0.035)	-0.024 (0.031)	-0.017 (0.035)
Urban	-0.007 (0.020)	-0.006 (0.020)	-0.006 (0.018)	-0.007 (0.020)	-0.008 (0.020)	-0.005 (0.019)	-0.012 (0.018)	-0.009 (0.019)	-0.001 (0.017)	0.000 (0.019)
Indonesia	0.176 (0.127)	0.166 (0.129)	0.185 (0.128)	0.173 (0.125)	0.178 (0.128)	0.172 (0.125)	0.163 (0.124)	0.170 (0.123)	0.203 (0.127)	0.221* (0.125)
Malaysia	0.235*** (0.051)	0.229*** (0.050)	0.243*** (0.050)	0.234*** (0.051)	0.235*** (0.051)	0.236*** (0.051)	0.235*** (0.048)	0.229*** (0.050)	0.245*** (0.047)	0.274*** (0.051)
Singapore	0.111* (0.062)	0.105* (0.061)	0.127** (0.063)	0.112* (0.065)	0.116* (0.062)	0.096 (0.060)	0.129** (0.058)	0.108* (0.062)	0.107* (0.063)	0.099 (0.071)
Thailand	0.113** (0.054)	0.110** (0.055)	0.130** (0.053)	0.112** (0.056)	0.116** (0.055)	0.097** (0.049)	0.119** (0.053)	0.109** (0.055)	0.092 (0.057)	0.048 (0.056)

Table A1. Marginal effects of the correlates of preference for redistribution, full sample (cont.)

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Age	-0.0001 (0.001)	-0.0001 (0.001)	0.0001 (0.001)	-0.00003 (0.001)	-0.000 (0.001)	-0.000 (0.001)	-0.0001 (0.001)	-0.0001 (0.001)	-0.0001 (0.001)	-0.00003 (0.001)
Female	0.004 (0.013)	0.005 (0.013)	0.007 (0.014)	0.005 (0.013)	0.005 (0.013)	0.005 (0.014)	0.003 (0.013)	0.004 (0.013)	0.005 (0.014)	0.005 (0.013)
College	0.041** (0.019)	0.042** (0.019)	0.033* (0.019)	0.040** (0.019)	0.040** (0.019)	0.042** (0.019)	0.040** (0.019)	0.038** (0.019)	0.040** (0.020)	0.040** (0.020)
Employed	0.010 (0.011)	0.010 (0.011)	0.010 (0.012)	0.010 (0.011)	0.010 (0.011)	0.011 (0.012)	0.006 (0.011)	0.008 (0.011)	0.009 (0.011)	0.009 (0.011)
In_union	0.041** (0.018)	0.041** (0.018)	0.031 (0.021)	0.040** (0.019)	0.041** (0.018)	0.041** (0.019)	0.044** (0.018)	0.040** (0.019)	0.040** (0.018)	0.040** (0.018)
Divorced	0.006 (0.029)	0.007 (0.029)	-0.018 (0.033)	0.006 (0.029)	0.007 (0.029)	0.007 (0.030)	0.010 (0.029)	0.007 (0.029)	0.007 (0.028)	0.005 (0.028)
Household size	-0.007* (0.004)	-0.007* (0.004)	-0.008** (0.004)	-0.007* (0.004)	-0.007* (0.004)	-0.007* (0.004)	-0.006 (0.004)	-0.007* (0.004)	-0.007* (0.004)	-0.007 (0.004)
Single generation	0.006 (0.019)	0.006 (0.019)	0.003 (0.019)	0.005 (0.020)	0.005 (0.019)	0.006 (0.019)	0.009 (0.019)	0.006 (0.019)	0.006 (0.019)	0.007 (0.019)
Buddhist	0.057 (0.042)	0.052 (0.044)	0.070* (0.036)	0.058 (0.042)	0.057 (0.042)	0.058 (0.043)	0.054 (0.041)	0.057 (0.042)	0.067 (0.045)	0.065 (0.045)
Christian	0.075 (0.045)	0.074 (0.045)	0.095** (0.046)	0.075* (0.045)	0.076* (0.046)	0.078* (0.047)	0.071 (0.044)	0.078* (0.045)	0.066 (0.045)	0.054 (0.042)
Hindu	0.058 (0.057)	0.060 (0.059)	0.069 (0.053)	0.056 (0.058)	0.060 (0.059)	0.059 (0.058)	0.076 (0.054)	0.064 (0.057)	0.044 (0.058)	0.056 (0.062)
Islam	0.068 (0.053)	0.069 (0.052)	0.080 (0.052)	0.071 (0.054)	0.072 (0.054)	0.076 (0.054)	0.071 (0.053)	0.076 (0.053)	0.039 (0.056)	0.007 (0.055)
Y2014	0.207* (0.125)	0.205 (0.126)	0.209* (0.123)	0.208* (0.124)	0.208* (0.125)	0.211* (0.123)	0.205* (0.123)	0.204* (0.121)	0.218* (0.127)	0.224* (0.129)
<u>Joint test of significance</u>										
All coefficients (Wald χ^2)	27274.52	11449.53	8400.31	67791.41	3967.65	38028.39	26795.05	89205.78	823.48	13457.36
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ethnic2, Ethic3 and interaction terms (Wald χ^2)	40.51	67.28	51.06	44.13	44.97	41.09	54.89	72.36	90.09	282.72
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
N	5,250	5,250	4,979	5,250	5,250	5,250	5,250	5,250	5,250	5,250
Pseudo R-squared	0.0522	0.0531	0.0570	0.0524	0.0527	0.0549	0.0581	0.0531	0.0540	0.0549

Notes: Estimates are adjusted for sampling weights. Figures in parentheses are robust standard errors adjusted for clustering based on in-country regions. Except in column [1], Ethnic2 and Ethnic3 are each interacted with moderating factor(s) in the other models. They are interacted with the income quintile variable in model [2], with in-country location variables in [9], and with country indicators in [10].

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A2. Marginal effects of the correlates of preference for redistribution, poorest two income quintiles

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10] ^a
Ethnic2	-0.099*** (0.025)	-0.091*** (0.021)	-0.100*** (0.024)	-0.092*** (0.022)	-0.093*** (0.022)	-0.095*** (0.022)	-0.094*** (0.021)	-0.090*** (0.023)	-0.080*** (0.026)	-0.081*** (0.018)
Ethnic3	0.020 (0.021)	0.017 (0.021)	0.019 (0.021)	0.022 (0.022)	0.021 (0.022)	0.014 (0.021)	0.013 (0.020)	0.015 (0.021)	0.013 (0.020)	-0.025 (0.045)
Own status higher than parents'			0.058** (0.025)							
Own status same as parents'			0.008 (0.024)							
Trust in national government				0.001 (0.021)						
Trust in president					-0.012 (0.022)					
Trust most people						0.052* (0.029)				
Income distribution is fair							-0.047 (0.031)			
Family income is fair							-0.024 (0.034)			
Wealth is due to fate								-0.019 (0.026)		
Income quintile2	0.018 (0.031)	0.018 (0.032)	0.019 (0.035)	0.018 (0.031)	0.018 (0.031)	0.018 (0.031)	0.016 (0.030)	0.017 (0.031)	0.019 (0.032)	0.016 (0.031)
Megacity	0.066 (0.041)	0.067 (0.041)	0.056 (0.037)	0.066 (0.041)	0.064 (0.042)	0.069* (0.041)	0.063* (0.038)	0.066 (0.042)	0.066 (0.045)	0.063 (0.041)
Major_city	-0.013 (0.047)	-0.012 (0.047)	-0.003 (0.043)	-0.013 (0.047)	-0.013 (0.046)	-0.008 (0.046)	-0.010 (0.045)	-0.013 (0.047)	-0.044 (0.043)	-0.013 (0.046)
Urban	0.001 (0.036)	-0.000 (0.036)	0.004 (0.034)	0.001 (0.036)	-0.000 (0.036)	0.002 (0.035)	-0.005 (0.035)	-0.002 (0.036)	0.018 (0.038)	0.006 (0.036)
Indonesia	0.189 (0.200)	0.189 (0.201)	0.173 (0.187)	0.185 (0.197)	0.194 (0.201)	0.190 (0.194)	0.161 (0.193)	0.169 (0.192)	0.183 (0.197)	0.236 (0.218)
Malaysia	0.208*** (0.043)	0.207*** (0.044)	0.216*** (0.044)	0.204*** (0.047)	0.209*** (0.043)	0.209*** (0.045)	0.204*** (0.044)	0.209*** (0.045)	0.212*** (0.037)	0.258*** (0.048)
Singapore	0.126** (0.055)	0.125** (0.055)	0.151*** (0.053)	0.123** (0.059)	0.129** (0.055)	0.116** (0.055)	0.142*** (0.053)	0.123** (0.053)	0.105* (0.055)	0.132** (0.060)
Thailand	0.114** (0.051)	0.114** (0.052)	0.120** (0.051)	0.111** (0.051)	0.113** (0.052)	0.091* (0.049)	0.116** (0.054)	0.111** (0.053)	0.115** (0.049)	0.103 (0.073)

Table A2. Marginal effects of the correlates of preference for redistribution, poorest two income quintiles (cont.)

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10] ^a
Age	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.000)	0.001 (0.001)
Female	-0.001 (0.015)	-0.000 (0.015)	0.005 (0.016)	-0.001 (0.015)	-0.001 (0.015)	0.000 (0.015)	-0.003 (0.014)	-0.001 (0.015)	-0.002 (0.015)	-0.002 (0.015)
College	0.009 (0.041)	0.009 (0.041)	-0.006 (0.042)	0.008 (0.041)	0.010 (0.041)	0.011 (0.040)	0.008 (0.039)	0.009 (0.040)	0.010 (0.041)	0.009 (0.040)
Employed	-0.021 (0.020)	-0.021 (0.020)	-0.020 (0.022)	-0.021 (0.020)	-0.021 (0.020)	-0.020 (0.020)	-0.025 (0.020)	-0.022 (0.020)	-0.021 (0.020)	-0.021 (0.020)
In_union	0.047 (0.025)*	0.047 (0.025)*	0.030 (0.029)	0.047 (0.025)*	0.045 (0.024)*	0.049 (0.025)*	0.050 (0.024)**	0.046 (0.025)*	0.049 (0.025)**	0.045 (0.025)*
Divorced	0.043 (0.040)	0.043 (0.040)	0.007 (0.040)	0.044 (0.040)	0.042 (0.039)	0.042 (0.040)	0.045 (0.039)	0.045 (0.041)	0.044 (0.040)	0.041 (0.040)
Household size	-0.015 (0.007)**	-0.015 (0.007)**	-0.016 (0.007)**	-0.015 (0.007)**	-0.015 (0.007)**	-0.015 (0.007)**	-0.014 (0.007)**	-0.015 (0.007)**	-0.016 (0.007)**	-0.015 (0.008)*
Single generation	-0.010 (0.019)	-0.009 (0.019)	-0.009 (0.021)	-0.011 (0.020)	-0.009 (0.020)	-0.010 (0.019)	-0.005 (0.019)	-0.010 (0.020)	-0.010 (0.018)	-0.007 (0.020)
Buddhist	0.021 (0.086)	0.020 (0.086)	0.058 (0.060)	0.022 (0.086)	0.025 (0.086)	0.027 (0.086)	0.022 (0.085)	0.020 (0.086)	0.020 (0.087)	0.015 (0.087)
Christian	0.042 (0.089)	0.043 (0.089)	0.075 (0.081)	0.041 (0.088)	0.044 (0.088)	0.046 (0.089)	0.042 (0.089)	0.049 (0.089)	0.042 (0.085)	0.041 (0.081)
Hindu	-0.011 (0.109)	-0.006 (0.111)	0.002 (0.095)	-0.016 (0.111)	-0.009 (0.110)	-0.003 (0.110)	0.012 (0.109)	-0.004 (0.110)	-0.010 (0.102)	0.021 (0.097)
Islam	0.052 (0.096)	0.052 (0.095)	0.071 (0.086)	0.054 (0.096)	0.055 (0.095)	0.061 (0.096)	0.059 (0.095)	0.056 (0.096)	0.042 (0.087)	0.031 (0.086)
Y2014	0.235 (0.204)	0.235 (0.205)	0.221 (0.187)	0.235 (0.202)	0.239 (0.205)	0.245 (0.197)	0.224 (0.198)	0.213 (0.195)	0.224 (0.200)	0.240 (0.208)
<u>Joint test of significance</u>										
All coefficients (Wald χ^2)	36731.62	1.9e+07	19462.80	6.6e+05	3.5e+05	1.9e+05	11240.57	1.9e+05	5347.96	1284.27
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ethnic2, Ethnic3 and interaction terms (Wald χ^2)	30.90	29.67	47.17	39.33	37.75	42.51	54.07	49.32	43.68	105.15
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
N	2,707	2,707	2,557	2,707	2,707	2,707	2,707	2,707	2,707	2,707
Pseudo R-squared	0.0524	0.0528	0.0632	0.0526	0.0531	0.0559	0.0585	0.0537	0.0562	0.0542

Notes: Estimates are adjusted for sampling weights. Figures in parentheses are robust standard errors adjusted for clustering based on in-country regions. Except in column [1], Ethnic2 and Ethnic3 are each interacted with moderating factor(s) in the other models. They are interacted with the income quintile variable in model [2], with in-country location variables in [9], and with country indicators in [10].

^aEthnic2 is not interacted with *Thailand* due to missing observation.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A3. Marginal effects of the correlates of preference for redistribution, excluding the Philippines

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Ethnic2	-0.066*** (0.023)	-0.068*** (0.023)	-0.069*** (0.023)	-0.066*** (0.021)	-0.070*** (0.024)	-0.067*** (0.023)	-0.065*** (0.021)	-0.065*** (0.024)	-0.052 (0.040)	-0.048 (0.034)
Ethnic3	0.039* (0.021)	0.034 (0.021)	0.038** (0.018)	0.040* (0.022)	0.036* (0.021)	0.039* (0.021)	0.033 (0.020)	0.041* (0.023)	0.037 (0.023)	-0.039 (0.040)
Own status higher than parents'			0.022 (0.024)							
Own status same as parents'			0.008 (0.027)							
Trust in national government				-0.004 (0.029)						
Trust in president					0.003 (0.022)					
Trust most people						0.059* (0.032)				
Income distribution is fair							-0.059* (0.033)			
Family income is fair							0.008 (0.019)			
Wealth is due to fate								-0.041* (0.023)		
Income quintile2	0.015 (0.044)	0.017 (0.043)	0.029 (0.049)	0.015 (0.044)	0.016 (0.044)	0.016 (0.044)	0.014 (0.043)	0.015 (0.044)	0.011 (0.045)	0.012 (0.044)
Income quintile3	-0.008 (0.047)	-0.005 (0.045)	-0.006 (0.051)	-0.008 (0.047)	-0.008 (0.047)	-0.007 (0.047)	-0.008 (0.045)	-0.009 (0.048)	-0.013 (0.048)	-0.012 (0.048)
Income quintile4	0.036 (0.049)	0.039 (0.051)	0.045 (0.052)	0.036 (0.049)	0.036 (0.049)	0.037 (0.049)	0.034 (0.048)	0.034 (0.049)	0.032 (0.051)	0.035 (0.049)
Income quintile5	0.007 (0.050)	0.007 (0.052)	0.019 (0.051)	0.007 (0.050)	0.008 (0.050)	0.007 (0.049)	0.010 (0.049)	0.007 (0.049)	0.002 (0.053)	0.004 (0.050)
Megacity	-0.030 (0.045)	-0.029 (0.044)	-0.041 (0.050)	-0.031 (0.045)	-0.031 (0.045)	-0.021 (0.041)	-0.033 (0.042)	-0.035 (0.044)	-0.033 (0.045)	-0.041 (0.051)
Major_city	-0.074** (0.037)	-0.074** (0.037)	-0.069 (0.038)*	-0.074* (0.038)	-0.075** (0.037)	-0.070* (0.037)	-0.073** (0.037)	-0.073** (0.036)	-0.066** (0.030)	-0.074** (0.036)
Urban	-0.003 (0.021)	0.000 (0.021)	-0.002 (0.021)	-0.003 (0.023)	-0.002 (0.021)	0.000 (0.021)	-0.008 (0.020)	-0.005 (0.020)	-0.001 (0.020)	0.005 (0.021)
Malaysia	0.041 (0.132)	0.047 (0.131)	0.040 (0.129)	0.045 (0.131)	0.039 (0.135)	0.047 (0.129)	0.050 (0.127)	0.043 (0.123)	0.031 (0.134)	0.030 (0.135)
Singapore	-0.045 (0.128)	-0.039 (0.127)	-0.035 (0.126)	-0.035 (0.129)	-0.039 (0.130)	-0.055 (0.126)	-0.022 (0.123)	-0.037 (0.119)	-0.073 (0.125)	-0.085 (0.111)
Thailand	-0.066 (0.136)	-0.059 (0.136)	-0.058 (0.132)	-0.060 (0.134)	-0.060 (0.139)	-0.074 (0.131)	-0.055 (0.132)	-0.062 (0.128)	-0.102 (0.139)	-0.124 (0.103)

Table A3. Marginal effects of the correlates of preference for redistribution, excluding the Philippines (cont.)

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10]
Age	-0.0002 (0.001)	-0.00002 (0.001)	-0.00003 (0.001)	-0.00002 (0.001)	-0.0002 (0.001)	-0.0003 (0.001)	-0.0002 (0.001)	-0.0003 (0.001)	-0.0002 (0.001)	-0.0002 (0.001)
Female	0.005 (0.017)	0.006 (0.017)	0.009 (0.018)	0.005 (0.017)	0.005 (0.017)	0.006 (0.017)	0.004 (0.017)	0.005 (0.017)	0.005 (0.017)	0.006 (0.017)
College	0.042* (0.025)	0.045* (0.025)	0.036 (0.025)	0.041 (0.025)	0.041* (0.025)	0.042* (0.025)	0.039 (0.025)	0.037 (0.024)	0.041* (0.025)	0.040 (0.025)
Employed	0.006 (0.012)	0.006 (0.011)	0.004 (0.014)	0.006 (0.011)	0.005 (0.012)	0.007 (0.012)	0.001 (0.012)	0.003 (0.012)	0.005 (0.011)	0.005 (0.012)
In_union	0.046** (0.022)	0.047** (0.022)	0.034 (0.026)	0.045** (0.023)	0.044** (0.022)	0.046** (0.023)	0.049** (0.023)	0.045* (0.023)	0.046** (0.023)	0.044** (0.022)
Divorced	0.006 (0.041)	0.007 (0.041)	-0.023 (0.045)	0.005 (0.041)	0.004 (0.041)	0.007 (0.042)	0.009 (0.041)	0.005 (0.040)	0.006 (0.040)	0.004 (0.040)
Household size	-0.005 (0.005)	-0.005 (0.005)	-0.005 (0.005)	-0.005 (0.005)	-0.005 (0.005)	-0.005 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)	-0.004 (0.005)
Single generation	0.013 (0.023)	0.015 (0.023)	0.013 (0.021)	0.013 (0.023)	0.012 (0.023)	0.013 (0.022)	0.017 (0.022)	0.014 (0.023)	0.013 (0.022)	0.016 (0.022)
Buddhist	0.056 (0.045)	0.052 (0.046)	0.071* (0.038)	0.056 (0.044)	0.055 (0.044)	0.056 (0.045)	0.055 (0.044)	0.056 (0.045)	0.065 (0.047)	0.062 (0.047)
Christian	0.054 (0.050)	0.053 (0.049)	0.074 (0.051)	0.053 (0.049)	0.055 (0.051)	0.054 (0.050)	0.057 (0.048)	0.056 (0.049)	0.046 (0.049)	0.039 (0.046)
Hindu	0.056 (0.063)	0.060 (0.065)	0.070 (0.058)	0.055 (0.064)	0.057 (0.066)	0.053 (0.063)	0.077 (0.059)	0.062 (0.064)	0.049 (0.063)	0.061 (0.068)
Islam	0.079 (0.057)	0.081 (0.056)	0.093 (0.057)	0.083 (0.057)	0.087 (0.059)	0.088 (0.058)	0.082 (0.058)	0.090 (0.056)	0.058 (0.061)	0.022 (0.062)
Y2014	0.226* (0.133)	0.223* (0.132)	0.229* (0.130)	0.222* (0.130)	0.226* (0.135)	0.231* (0.131)	0.226* (0.129)	0.219* (0.123)	0.237* (0.134)	0.239* (0.135)
<u>Joint test of significance</u>										
All coefficients (Wald χ^2)	1.8e+05	30485.29	3186.90	1178.71	925.60	25420.02	8671.65	1465.35	871.92	6460.21
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ethnic2, Ethnic3 and interaction terms (Wald χ^2)	39.70	105.34	48.81	41.39	38.76	47.24	47.88	45.79	127.15	53.38
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
N	4,076	4,076	3,820	4,076	4,076	4,076	4,076	4,076	4,076	4,076
Pseudo R-squared	0.0528	0.0544	0.0565	0.0533	0.0544	0.0555	0.0577	0.0549	0.0546	0.0555

Notes: Estimates are adjusted for sampling weights. Figures in parentheses are robust standard errors adjusted for clustering based on in-country regions. Except in column [1], Ethnic2 and Ethnic3 are each interacted with moderating factor(s) in the other models. They are interacted with the income quintile variable in model [2], with in-country location variables in [9], and with country indicators in [10].

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$

Table A4. Marginal effects of the correlates of preference for redistribution, full sample (Dependent variables: *Redistribution2*)

Independent variables	[1] ^a	[2] ^a	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10] ^a
Ethnic2	-0.059*	-0.063*	-0.069*	-0.062	-0.063	-0.066	-0.064*	-0.064*	-0.058	-0.078**
	(0.034)	(0.038)	(0.038)	(0.038)	(0.039)	(0.041)	(0.034)	(0.037)	(0.040)	(0.031)
Ethnic3	0.019	0.017	0.020	0.017	0.018	0.018	0.023*	0.018	0.022*	-0.009
	(0.014)	(0.014)	(0.016)	(0.013)	(0.014)	(0.014)	(0.013)	(0.015)	(0.013)	(0.025)
Own status higher than parents'			0.018							
			(0.014)							
Own status same as parents'			0.010							
			(0.017)							
Trust in national government				0.058***						
				(0.013)						
Trust in president					0.067***					
					(0.016)					
Trust most people						0.037***				
						(0.017)				
Income distribution is fair							0.068***			
							(0.018)			
Family income is fair							0.034*			
							(0.019)			
Wealth is due to fate								-0.014		
								(0.010)		
Income quintile2	0.018	0.019	0.016	0.018	0.018	0.019	0.021	0.018	0.018	0.016
	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.014)	(0.013)	(0.015)
Income quintile3	0.016	0.018	0.014	0.017	0.017	0.017	0.018	0.015	0.015	0.014
	(0.013)	(0.012)	(0.015)	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.012)	(0.013)
Income quintile4	0.021	0.018	0.018	0.020	0.023	0.021	0.026	0.020	0.022	0.018
	(0.019)	(0.019)	(0.021)	(0.019)	(0.019)	(0.019)	(0.019)	(0.020)	(0.019)	(0.019)
Income quintile5	0.028	0.024	0.026	0.028	0.030	0.028	0.028	0.027	0.026	0.027
	(0.023)	(0.021)	(0.024)	(0.023)	(0.023)	(0.022)	(0.023)	(0.022)	(0.022)	(0.023)
Megacity	-0.000	-0.002	0.001	0.001	0.008	0.004	0.012	-0.001	-0.006	0.003
	(0.033)	(0.032)	(0.035)	(0.031)	(0.033)	(0.033)	(0.032)	(0.033)	(0.032)	(0.030)
Major_city	-0.010	-0.009	-0.011	-0.013	-0.005	-0.008	-0.009	-0.010	-0.008	-0.013
	(0.028)	(0.027)	(0.028)	(0.026)	(0.028)	(0.029)	(0.028)	(0.028)	(0.022)	(0.028)
Urban	0.005	0.003	0.005	0.011	0.010	0.006	0.009	0.004	0.011	0.008
	(0.013)	(0.013)	(0.013)	(0.013)	(0.013)	(0.014)	(0.014)	(0.013)	(0.011)	(0.014)
Indonesia	0.432***	0.438***	0.463***	0.430***	0.414***	0.423***	0.430***	0.433***	0.444***	0.308***
	(0.075)	(0.072)	(0.099)	(0.077)	(0.073)	(0.074)	(0.079)	(0.075)	(0.082)	(0.067)
Malaysia	0.192***	0.195***	0.199***	0.176***	0.182***	0.192***	0.188***	0.195***	0.201***	0.170***
	(0.037)	(0.038)	(0.038)	(0.035)	(0.038)	(0.039)	(0.040)	(0.037)	(0.040)	(0.027)
Singapore	0.254***	0.261***	0.262***	0.224***	0.231***	0.244***	0.221***	0.251***	0.255***	0.171***
	(0.046)	(0.045)	(0.047)	(0.045)	(0.045)	(0.046)	(0.043)	(0.046)	(0.045)	(0.031)
Thailand	0.176***	0.186***	0.179***	0.164***	0.165***	0.167***	0.167***	0.172***	0.182***	0.116**
	(0.049)	(0.048)	(0.052)	(0.046)	(0.047)	(0.050)	(0.047)	(0.050)	(0.045)	(0.046)

Table A4. Marginal effects of the correlates of preference for redistribution, full sample (Dependent variables: *Redistribution2*) (cont.)

Independent variables	[1]	[2]	[3]	[4]	[5]	[6]	[7]	[8]	[9]	[10] ^a
Age	0.001 (0.001)	0.001 (0.001)	0.000 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)	0.001 (0.001)
Female	0.015 (0.009)	0.015 (0.009)	0.015 (0.010)	0.015* (0.009)	0.014 (0.009)	0.015 (0.010)	0.015 (0.010)	0.015 (0.009)	0.015 (0.010)	0.016* (0.009)
College	0.010 (0.018)	0.009 (0.018)	0.015 (0.019)	0.012 (0.017)	0.010 (0.018)	0.010 (0.018)	0.010 (0.017)	0.010 (0.018)	0.009 (0.018)	0.010 (0.018)
Employed	0.011 (0.012)	0.011 (0.012)	0.012 (0.012)	0.011 (0.012)	0.009 (0.012)	0.012 (0.012)	0.013 (0.012)	0.011 (0.012)	0.011 (0.012)	0.014 (0.012)
In_union	0.006 (0.019)	0.004 (0.020)	0.008 (0.021)	0.006 (0.020)	0.004 (0.020)	0.007 (0.019)	0.006 (0.018)	0.005 (0.020)	0.005 (0.019)	0.006 (0.020)
Divorced	-0.024 (0.026)	-0.024 (0.025)	-0.026 (0.024)	-0.023 (0.026)	-0.026 (0.026)	-0.022 (0.025)	-0.023 (0.025)	-0.024 (0.026)	-0.024 (0.025)	-0.025 (0.026)
Household size	-0.001 (0.003)	-0.002 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.002 (0.003)	-0.002 (0.003)	-0.001 (0.003)	-0.001 (0.003)	-0.001 (0.003)
Single generation	-0.007 (0.017)	-0.008 (0.017)	-0.003 (0.017)	-0.007 (0.017)	-0.008 (0.018)	-0.007 (0.017)	-0.011 (0.016)	-0.008 (0.017)	-0.008 (0.017)	-0.006 (0.017)
Buddhist	0.041 (0.036)	0.044 (0.037)	0.038 (0.038)	0.039 (0.038)	0.043 (0.037)	0.040 (0.037)	0.039 (0.037)	0.042 (0.036)	0.047 (0.039)	0.046 (0.045)
Christian	0.050 (0.031)	0.060** (0.028)	0.060** (0.030)	0.047 (0.031)	0.049 (0.030)	0.052* (0.030)	0.055* (0.029)	0.054* (0.030)	0.047 (0.031)	0.050* (0.027)
Hindu	0.009 (0.047)	0.023 (0.041)	0.018 (0.049)	0.006 (0.045)	-0.009 (0.049)	0.006 (0.047)	0.005 (0.045)	0.012 (0.047)	-0.000 (0.050)	0.017 (0.042)
Islam	0.030 (0.036)	0.036 (0.033)	0.030 (0.036)	0.021 (0.037)	0.027 (0.036)	0.033 (0.035)	0.036 (0.035)	0.034 (0.035)	0.025 (0.038)	0.005 (0.033)
Y2014	0.171** (0.069)	0.169** (0.066)	0.197** (0.093)	0.176** (0.071)	0.169** (0.068)	0.168** (0.069)	0.167** (0.070)	0.171** (0.070)	0.178** (0.072)	0.164** (0.066)
<u>Joint test of significance</u>										
All coefficients (Wald χ^2)	14965.81	44841.15	50594.88	4077.30	68925.87	2405.17	44144.55	18602.74	24754.51	21933.54
Prob> χ^2	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Ethnic2, Ethnic3 and interaction terms (Wald χ^2)	5.66	42.17	21.05	7.60	7.90	6.31	51.74	16.91	79.83	652.94
Prob> χ^2	0.0591	0.0000	0.0018	0.1075	0.0950	0.1774	0.0000	0.0020	0.0000	0.0000
N	5,250	5,250	4,979	5,250	5,250	5,250	5,250	5,250	5,250	5,250
Pseudo R-squared	0.0886	0.0908	0.0883	0.0945	0.0960	0.0903	0.1007	0.0894	0.0918	0.0935

Notes: Estimates are adjusted for sampling weights. Figures in parentheses are robust standard errors adjusted for clustering based on in-country regions. Except in column [1], Ethnic2 and Ethnic3 are each interacted with moderating factor(s) in the other models. They are interacted with the income quintile variable in model [2], with in-country location variables in [9], and with country indicators in [10].

^aEthnic2 is not interacted with Thailand due to missing observation.

* $p < 0.10$, ** $p < 0.05$, *** $p < 0.01$