Uniter or Divider? Religion and Social Cooperation: Evidence from Indonesia

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Abstract

This study investigates how religion influences particularized and generalized trust, as well as inter-group discrimination and tolerance, in contemporary Indonesia. I combine the individual-level data of the latest round of the Indonesian Family Life Survey with the national census microdata and other nationally representative datasets to examine two sources of variation through which religion may influence these attitudes: individual religiosity and the community's religious composition. Religiosity is positively associated with particularized trust and in-group preference, and negatively with religious tolerance. The strengths of the associations between measures of in-group preference (including political preference) and individual religiosity are much stronger than those from gender, education, or per-capita expenditure; they are also strongest among Muslims, the dominant majority in Indonesia. These associations are robust to various identification strategies. Using selection on observables to benchmark the potential bias from selection on unobservables, I find that the selection on unobservables needs to be multiple times that on observables to explain away these results.

Meanwhile, consistent with previous empirical studies in economics and political science in the United States and other countries, I find in Indonesia that individuals

are more cooperative and trusting of their community members in more religiously homogeneous communities. At the same time – and in support of the optimal contact hypothesis of Allport (1954) – individuals in more homogeneous communities exhibit more in-group trust and are less tolerant of members of the religious out-groups. I also find that the inclusion of segregation measures can substantially affect the size of the diversity coefficients. Conditional on diversity, the segregation coefficients are significant and their signs are opposite those of religious diversity for some of the outcomes.

Keywords: religiosity, religious diversity, religious segregation, trust, tolerance, Indonesia

JEL Codes: D64, O53, Z12

1 Introduction

For believers, religious beliefs shape other attitudes that can determine the individual behaviors that ultimately affect welfare and economic outcomes (Akerlof and Kranton, 2000; Deaton, 2009; Lehrer, 2009). The propensity for social cooperation is an instance of a behavior linked to religiously-shaped attitudes. Two aspects of religion may influence cooperation through its effects on attitudes. First, all world religions urge their believers to extend benevolence to others, including strangers (Neusner and Chilton, 2005). At the same time, however, many religious traditions emphasize the importance of religious communities (Iannaccone, 1992; Berman, 2000). This emphasis endows a believer with a social identity while at the same time creates a categorical distinction between believers and non-believers. In religiously diverse societies, therefore, the net effects of religion on social cooperation in religiously diverse societies are ambiguous: The exhortation to charity may improve the general propensity to cooperate, but the emphasis on the religious community may focus that cooperation toward members of one's own religious community at the expense of outsiders.

This paper is an attempt to empirically disentangle these effects in the context of one particular developing country. Specifically, I study how religion is associated with particularized and generalized trust as well as religious tolerance in the ethnically- and religiously-diverse country of Indonesia. Ample evidence from other contexts suggests positive associations between generalized trust and economic development, often through the link between trust and institutional quality.[1] Historical evidence also supports the idea that religious intolerance

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[1] Positive associations between generalized trust and institutional quality have been shown in case studies (Putnam et al., 1993) as well as quantitative analyses using cross-country data (Knack and Keefer, 1997; La Porta, Rafael et al., 1997) and household-level data (Narayan and Pritchett, 1999; Maluccio et al., 2000; Carter and Castillo, 2011). Furthermore, Carter and Castillo (2011) provided empirical evidence of the

can impede development by limiting innovations.[2] Despite this evidence, very few national-level studies examine the determinants of trust and tolerance in developing countries, in part due to the lack of data.

This paper helps to fill this gap. Using a dataset that combines the new religion and trust modules of the latest Indonesian Family Life Survey (IFLS) with national population and village censuses, this paper examines individual and community correlates of trust and religious tolerance in contemporary Indonesia. The dataset also allows for the use of variations in religious denominations, religiosity, and the religious diversity and segregation of communities to study how religion may influence local level intra- and inter-group cooperation. In addition to contributing to the trust and social capital literature, this paper contributes to two other strands of literature. First, this is the first study in a developing country of the link between variations in religious denominations/religiosity and cooperative attitudes for the different world religions.[3] Guiso et al. (2003) examine a similar question on inter-religion differences in attitudes, albeit using cross-country regression with its well-known econometric issues, such as omitted variables and the crudeness of its measures. The richness of the dataset used in this paper helps address these problems to a great extent.

Second, this paper also contributes to the literature on ethno-religious fragmentation. It introduces two variations to the standard fragmentation literature by examining religious, instead of ethnic, heterogeneity and by including religious segregation in addition to diversity/ fragmentation. The reason for the former may not be immediately obvious, given that in addition to being religiously diverse, Indonesia is also country that is ethnically diverse, with hundreds of ethnic groups spread across its archipelago. However, religious identity appears to play a more important role throughout its recent history.[4] As argued by Bertrand (2004, p.110) in his discussion of sources of ethno-religious conflicts in Indonesia: "In the Indonesian context, one's religious identity is often more important than one's ethnic identity as Javanese, Ambonese, Madurese, or other." Meanwhile, the inclusion of segregation is motivated by the question of the likely role of social networks in affecting attitudes.

important role of altruistic sharing norms in improving household well-being in South African communities.

[2]Landes (1998), for instance, argued that religious intolerance was responsible for scientific regress in many (Catholic) European countries and Chaney (2008) has made a similar claim regarding Islam in medieval Muslim societies.

[3]A previous study on Indonesia asking a similar question is by Mujani (2004), who examined correlates of trust and tolerance among Indonesian Muslims. However, in addition to its limited focus on Muslims, his data have a much smaller sample size, fewer individual- and household-level variables, and none of the community-level variables.

[4]In the words of Bertrand (2004, p.72): "During the New Order period, religious identity emerged as the most important form of ethnic identification." Here, Bertrand adopts an inclusive definition of ethnic identity that includes religious identity. This observation is corroborated in our sample: Table 1 suggests that people tend to exhibit greater trust of coreligionists compared to that of coethnics, and the difference between the two is statistically significant.

Indonesia's religious diversity provides a perfect context for this investigation. Indonesia is a non-secular state in which the major world religions, i.e., Islam, Catholicism, Protestantism, Hinduism, Buddhism and Confucianism, are represented.[5] Muslims account for 87.2% of the population, followed by Protestants (7.0%), Catholics (2.9%), Hindus (1.7%), Buddhists (0.7%), Confucianists (0.05%), and other beliefs.

The findings can be organized into two main parts. First, on individual-level religion variables, I find that in Indonesia, religiosity is more robustly associated with particularized rather than generalized trust. While more religious people are more trusting of neighbors, there is a non-linear relationship between religiosity and the generalized trust of strangers. Moreover, religiosity is associated with discriminative trust of coethnics and coreligionists and is negatively associated with tolerance. The strengths of the associations between measures of in-group preference and religiosity are much stronger than those from gender, education, or per-capita expenditure and they are strongest among Muslims, the dominant majority in Indonesia. These relationships are robust to different specifications, and using an exercise to examine the potential bias from selection on unobservables, I find that the selection on unobservables needs to be between 1.2 and 88.7 times that on observables in order to explain away these results. These results provide evidence of the link between religion and "parochial altruism" (Bernhard et al., 2006; Choi and Bowles, 2007), which is altruism toward members of one's own group with hostility toward members of the out-groups. In Indonesia, this link is strongest for Muslims.

Meanwhile, in line with the findings of Alesina and La Ferrara (2002) for the case of the United States, I find in Indonesia negative associations between the trust of neighbors and strangers and religious diversity in the community. I also find that, people tend to be more trusting of each other (and of strangers) in more segregated communities. However, religious diversity is positively correlated with tolerance, while segregation is negatively correlated with tolerance. These findings are suggestive of the role of network effects in sustaining discriminative attitudes. At the same time, they are also evidence supportive of the optimal inter-group contact hypothesis of Allport (1954) which posits that, under the right circumstances, frequent interactions with those who are dissimilar may reduce prejudice.

The paper is organized as follows. The next section provides the conceptual framework. Section 3 discusses the data and measurements used for the analysis. Section 4 describes the empirical strategy and the results on individuals' religion/religiosity variables. It is followed

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[5]I use the term "non-secular state" because, even though the state does not adhere to any particular religion, the first principle in its ideology is "[Belief] in the one and only God" – with a fairly loose interpretation of the term "the one and only God".

by the analysis of of the role of community heterogeneity in Section 5. In Section 6, I extend the basic analysis to study the role of religion and religious heterogeneity on political preference. Section 7 concludes.

2 Conceptual framework

2.1 Religion and social cooperation

Does religion facilitate attitudes conducive to social cooperation? First, consider altruism. One of the common denominators across all religions is the emphasis on benevolence (Neusner and Chilton, 2005). Intuitively, it would be reasonable to think that more religious people are more altruistic. Existing evidence, however, is mixed. Sociological surveys based on self reports often provide evidence that people who attend religious services and pray more are more likely to contribute to charity. Social psychology studies, however, question some of these findings. Batson et al. (1993) compared between studies that used self-reports measures and those using behavioral ones to examine the link between helpfulness (or altruism) and religious involvement. They found that the positive associations often found using the former measures disappeared when behavioral measures were used. Using economic experiments, Anderson et al. (2010) did not find religious involvement to be a significant predictor of contributions in public goods games. Further evidence suggests that the positive findings based on self-reports may have been driven by stronger reputational concerns, instead of actual willingness to help, among the religious (Batson et al., 1993; Norenzayan and Shariff, 2008).

Meanwhile, religious teachings also put a lot of emphasis on trustworthiness. In Islam, it is captured in the notion of "*amanah*" – which is to render trust to whom it was due (an-Nisa, 4:58) – and in Christianity, in the notion of "stewardship", illustrated among others in the parable of the talents (Matthew 25:14-30; Luke 19:12-28).[6] However, they do not seem to advocate unconditional (generalized) trust.[7] This distinction between trustworthiness and trusting behaviors may explain why, as we shall see below, the overall evidence on the link between religion and trust has been mixed.

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[6]The parable of the talents tells a story of how a master who, coming from a journey, differentially rewarded servants who made productive use of the possessions that he entrusted them and punished the one who did not.

[7]In Islam, the Qur'an (al-Hujurat, 49:12) advises Muslims not to have unfounded suspicions toward each other. A similar advice can be found in the Judeo-Christian tradition – "you shall not hate your brother in your heart" (Leviticus 19:17) and "Do not act vengefully or bear a grudge against a member of your nation" (Leviticus 19:19). In both cases, however, such trust is extended primarily to members of the in-group, and not to strangers (Levy and Razin, 2012).

Analyses of observational data provides the evidence for the link between religiosity and trust. Using the generalized trust question from the World Value Survey (WVS) data for 66 countries, Guiso et al. (2003) found that religious people trust others more than the non-religious (although not compared to atheists). Among the religious, trust toward others is positively correlated with current religious participation, but not by whether a person is brought up religiously. Using a similar question on generalized trust, Mujani (2004) found that participation in the various Islamic rituals was positively correlated with interpersonal trust in Indonesia.

However, the evidence from economic experiments is more mixed. Using the standard experimental trust game, Anderson et al. (2010) did not find a link between the intensity of religious participation and trust toward anonymous partners. However, information about the partner's religious norms appears to influence trust. When the same game is implemented among (mainly Judeo-Christian) German subjects, Tan and Vogel (2008) find that information about the otherwise anonymous partner's religiosity affects behavior. The religious are trusted more, particularly by the religious others. Moreover, the religious trustees are also more trustworthy. The importance of information on partner's religion (or ideology) is echoed in studies using a different experimental game between kibbutzim and non-kibbutzim members in both religious and secular kibbutzims (Sosis and Ruffle, 2004; Ruffle and Sosis, 2006). Sosis and Ruffle (2004) find that members of religious kibbutzims in Israel are more willing to cooperate when anonymously paired with a member of the kibbutzim than with a city resident.

The one relationship in which both observational and experimental evidence align is that between religiosity and inter-group tolerance. Results based on observational as well as behavioral evidence since Allport and Kramer (1946) first found the positive association between religious affiliation and racial prejudice are strongly in favor of finding a positive link between religiosity and intolerance (Batson et al., 1993; Hall et al., 2010; Guiso et al., 2003). More recently, experimental evidence using priming of religious concepts provide further evidence that when one's religious identity is made salient, there is greater intolerance toward members of the out-group – both in terms of religion and ethnicity (McCauley, 2009; Johnson et al., 2010; Parra, 2011).[8]

Are there inter-religion differences in cooperative behavior? The role of (multiple) inter-pretations and institutions on different religions makes it very difficult *ex ante* to predict these attitude differences. Instead, we turn to the empirical literature to look for empirical regularities. Benjamin et al. (2010) used priming to examine the impact of the salience of

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[8]Moreover, McCauley (2009) also found that the effects of salient religious identities on inter-group discrimination are stronger than those of tribal ones.

religious identities among Catholics, Protestants, Jews, and non-believers. After receiving religious priming, subjects were asked to play experimental games to measure their contributions to the public goods and dictator games. Among Catholics, religious priming decreased public good contributions and expectations of other's contributions, while among Protestants, it increased contributions. However, religious identity did not affect generosity in the dictator game.

With respect to trust, the cross-country analysis of observational data by Guiso et al. (2003) found that participation in religious services increases trust only among Christians. Among the Christian denominations, Putnam et al. (1993) has argued that because of its hierarchical structure, Catholicism tend to breed less interpersonal trust than Protestantism. Observational analyses using cross-country data found support for this conjecture, although this difference was smaller among younger Christians (La Porta, Rafael et al., 1997; Guiso et al., 2003).[9] However, such a difference is not found in the analysis using United States data (Alesina and La Ferrara, 2002).

Meanwhile, the link between religion and intolerance are present across all religious denominations, with a notable except of Buddhists, who are on average more tolerant than non-religious people. The least intolerant toward immigrants and other races were Hindus and Muslims, followed by Jews, Catholics and Protestants (Guiso et al., 2003).

2.2 Community heterogeneity and cooperation

Furthermore, the religious composition of communities may influence individuals' cooperative attitudes in a way similar to ethnic or income heterogeneity. So far, existing studies on the associations between community heterogeneity and social capital documented negative associations between community heterogeneity and the various measures of civic engagements (Alesina and La Ferrara, 2000; Costa and Kahn, 2003), trust (Glaeser et al., 2000; Alesina and La Ferrara, 2002), and the willingness to provide public goods (Vigdor, 2004; Miguel and Gugerty, 2005) or support redistribution policies (Luttmer, 2001). Most of the literature focuses on diversity, typically measured using the fragmentation index. More recent literature, however, begins to provide evidence that segregation may play a more important role than diversity in influencing the quality of governance (Alesina and Zhuravskaya, 2011) and social capital (Uslaner, 2010; Rothwell, 2010).

Inter-group discrimination may account for the link between heterogeneity and lower cooperation (e.g., Alesina and La Ferrara, 2002). Individuals may discriminate out of either

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[9]Guiso et al. (2003) show that Catholics born after the Second Vatican Council are more trusting and tolerant than their older cohorts, even though their moral values did not significantly differ from older Catholics.

preference or prejudice (or false expectations). Social interactions can affect discrimination by, among others, facilitating statistical discrimination or through network effects (Arrow, 1998; Fafchamps, 2004). In the former, if people do not interact in groups, then those interactions would allow individuals to assess each other's qualities (or "types") based on their observable characteristics, in which religion may be one. In this case, statistical intergroup discrimination occurs only if individuals in different groups have different hidden characteristics.

On the other hand, if individuals tend to interact more within groups or networks, these interactions may result in discrimination, even when individuals do not have a preference for discrimination and there is no differential hidden characteristics across groups. Why? For one, within-network (or in-group) interactions facilitate better transmission of information (Granovetter, 2005; Fafchamps, 2004). As a result, individuals can screen the "good" from the "bad" types among the in-groups better than among the out-groups.[10] Moreover, denser networks allow for better enforcements of cooperative norms among the in-groups. Using field experiments among subjects from a slum in Kampala, Uganda, Habyarimana et al. (2007) find that better within-ethnicity enforcement of cooperative norms may be one of the key explanations for why ethnic diversity lowers public good provision.

In the presence of network effects, diversity may reduce overall level of cooperation in the community. On the other hand, diversity can also foster better intergroup cooperation by softening prejudice. The optimal contact hypothesis of Allport (1954) suggests that under optimal conditions, contacts with people who are different will break down stereotypes and reduce prejudice. Henceforth, diversity can potentially reduce discriminative trust and intolerance. A large meta-analytic study of intergroup contacts by Pettigrew and Tropp (2006) provides support for this optimal contact hypothesis. Meanwhile, making a clever use of the lottery nature of *Hajj* visa allocation in Pakistan to identify the effect of pilgrimage on attitudes, Clingingsmith et al. (2009) found that the pilgrimage increases religious tolerance five to eight months after participants returned home. They argue that this increased tolerance is a result of their interactions with other *hajjis* from around the world.

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[10]Fafchamps (2004) elaborates a game-theoretic model of trust-based exchanges in which information propagated through ethnic-based (or religion-based) social networks can act to sustain an equilibrium with discrimination among individuals with no preference for discrimination even in the absence of differential hidden characteristics across groups.

3 Data and measurements

3.1 Data sources

I use four national-level datasets. The Fourth Wave of the Indonesian Family Life Survey (IFLS) provides individual- and household-level variables. IFLS is a longitudinal, socio-economic household survey based on a sample representing 83% of the Indonesian population living in 13 out of 26 provinces in 1993. It collects a rich set of information on households, the communities they live in, and the facilities available to them.[11] Although IFLS has a panel structure, the religion, trust, and tolerance modules were newly introduced in IFLS4. A total of 29,054 adults – defined as household members who are 15 years or older – in 12,692 households were interviewed for the religion, trust, and tolerance modules in IFLS4.

For the community-level variables, I employed the IFLS community module and three other national datasets. The first is the the 2000 Indonesian Population Census. In principle, the census has 100% coverage of the population on all indicators, although in practice, numbers for some areas were estimated due to political issues in post-transition Indonesia (Suryadinata et al., 2003, p. xxiv). I use the individual religion information in the census to construct community religious heterogeneity measures which will become the focus of the second part of this paper.[12]

In addition, I also use the 2000 Indonesian Poverty Map developed by Indonesia's statistical agency, *BPS-Statistics*, based upon the initiatory work of Suryahadi et al. (2003). The poverty map was constructed by imputing the per-capita expenditure of each household in the population by applying observed correlations between household characteristics and per-capita expenditure from a survey that contains both information onto the 2000 population census data (which only has the former). These imputed data can then be used to construct community-level expenditure distributional variable, such as the per-capita expenditure sub-district Gini used here.[13]

Finally, I complement the community-level variables with the 2005 Village Potential (or *Podes* 2005). *Podes* collects a large number of village characteristics information for all of Indonesian villages and the 2005 dataset is the most recent dataset prior to IFLS4. I use this

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[11]Four full-sample waves of the survey (IFLS1-IFLS4) have been conducted in 1993, 1997, 2000, and late 2007. In 1998, an additional survey interviewing 25% of the sample, known as IFLS2+, was conducted to measure the impact of the economic crisis.

[12]The village-level location codes, obtained from the IFLS team, conveniently include a 2000 BPS village-level codes, which makes the merging between the IFLS4 and the 2000 Census as well as the 2000 Poverty Map a relatively painless process. Nonetheless, we were still unable to match perfectly, leaving 649 out of 29,037 observations with missing village religious heterogeneity.

[13]In merging the IFLS dataset with the subdistrict per-capita expenditure Gini, 592 individual observations were unmatched.

dataset to obtain topographical, demographical and other village characteristics that will be used as the control variables.[14]

3.2 Measures

3.2.1 Measures of cooperative attitudes

IFLS4 contains multiple questions that measure different aspects of attitudes toward cooperation in the community. This proves very useful for the analysis. For trust, the multiple questions allow for the distinction between generalized and particularized trust, and between trusting behaviors and beliefs. I will argue below why the distinctions matter. In addition, it also has separate measures of religious tolerance. In all of these attitude questions, answers to the questions are on a four-point scale.

Regarding trust, one criticism of many existing survey-based studies of trust is inadequate specificity, given their heavy reliance on a single question on the generalized trust (Nannestad, 2008).[15] IFLS4 addresses this criticism to a great extent. There are seven questions in IFLS4 on individual measures of trust attitudes. These questions allow a distinction of the trust concept in two dimensions: Between beliefs and behaviors; and between generalized and particularized trust.

First, the distinction between beliefs and behaviors. As a behavior, trust is the willingness to place one's resources in the hands of another party without any legal commitment from the latter (Fehr, 2009). A rational principal will trust an agent if the expected payoff from that action exceeds the alternative action, which is not to trust. This expected payoff depends on both the payoff that the principal will receive from that transaction and his beliefs regarding the trustworthiness of the agent.

To illustrate, consider a simple version of extensive-form trust game (following Berg et al. (1995)) between a principal and an agent depicted in Figure 1. A principal chooses whether to entrust his resources, p, to an agent in his community or otherwise receives nothing. If the principal chooses to trust, the agent must choose between behaving honestly or dishonestly. If the agent behaves honestly, the principal will receive a return of $P > 0$ and the agent, a; otherwise, he will lose all of his investment and the agent will receive A that depends on her type. There are two types of agents: the high type (H) and the low type (L). We assume that high-type's payoff from taking dishonest actions (A_H) are lower than that of the low

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[14]In merging the IFLS dataset with Podes 2005, 252 individual observations were unmatched.

[15]The question that is often the based of such studies is the one used in the American General Social Surveys, to wit, "Generally speaking, would you say that most people can be trusted or that you can't be too careful in dealing with people?" or its variations.
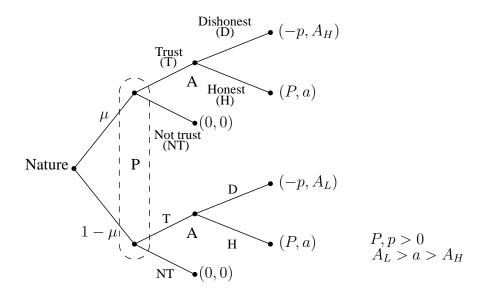
FIGURE 1: Trust game

types (A_L).[16] To simplify, assume that this payoff difference is significant enough that the high types are always honest, and the low types are always dishonest. In the community, the share of the high types is μ. The principal does not know the agent's type and instead only knows the share of the different types of agents.

The principal's decision to trust depends on the stake (p), potential payoffs (P) and his beliefs regarding the value of μ, to wit, the trustworthiness of the agent population.[17] Most surveys on trust typically ask respondents to rate the statement "In general, one can trust people", which can plausibly be interpreted as a measure of other people's trustworthiness – a proxy for μ.[18] However, in some cases, we may be more interested in the trusting behaviors rather than beliefs and Glaeser et al. (2000) suggests that the usual trust question is correlated with the latter, not the former.[19]

In addition to the distinction between behaviors and beliefs, there is also the distinction between particularized and generalized trust. The former refers to a more narrow type of

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[16]This may be due differences in individual norms or the quality of the different institutions between groups.

[17]An natural extension to this model is to incorporate the quality of local institutions to punish breaches of trust. We can incorporate this notion in the game depicted in Figure 1 by adding a branch following the agent's decision to behave dishonestly. In this branch, with some probability π (that depends on institutional quality), "Nature" would find out and punish the dishonest behavior. This probability of capture will enter into the principal's optimization problem and influence her decision to trust.

[18]Fehr (2009), however, questioned this interpretation. He found that individuals' preference parameters are associated with their responses to this trust question in the German Socio-Economic Panel (SOEP) data, suggesting that individuals may introspect on their own behaviors when answering this question.

[19]The findings of Glaeser et al. (2000), however, may not be general across societies. See Nannestad (2008) for a review.

trust, namely that toward similar others (in terms of gender, race, ethnicity, and so on) while the latter refers to a broad type of trust that is, for instance, embodied in an affirmation to the statement that "most people can be trusted". Results from the literature suggests that it is the latter type of trust, and not the former, that is positively associated with social, economic, and governance outcomes (Putnam et al., 1993; Glaeser et al., 2000; Uslaner and Conley, 2003; Guiso et al., 2011).

With multiple questions on trust in IFLS4, I can disentangle some of these aspects. First, on behaviors that correspond to the particularized trust of a known neighbor, respondents were asked to rate on a four-point Likert-type scale – from "strongly disagree" to "strongly agree" – the following statements:

(i) "I would be willing to leave my children with my neighbors for a few hours if I cannot bring my children with along";

(ii) "I would be willing to ask my neighbors to look after my house if I leave for a few days".

Second, respondents were also asked questions about their beliefs regarding the trustworthiness of different types of an anonymous other. They were asked to imagine a scenario where they lost a wallet or a purse containing Rp. 200,000 (approximately US$20, almost half of the average monthly per-capita expenditure of the IFLS4 respondents) along with an identity card. They were then asked to assess how likely they would get the wallet back with the money intact if it were found by: (i) someone who lives close by; (ii) a stranger; and (iii) a policeman. Respondents can respond on a 4-scale measure from "very unlikely" to "very likely". Responses to (i) and (ii) can be interpreted as particularized and generalized trust beliefs respectively. Meanwhile, responses to (iii) can be interpreted as trust beliefs of the authorities.

Finally, IFLS4 allows for further distinction of particularized trust with regards to religion and ethnicity. Respondents were asked to rate on a four-point Likert-type scale the following statements about trust of people of the same ethnicity and religion: "Taking into account the diversity of ethnicities (religions) in the village, I trust people with the same ethnicity (religion) as mine more". The interpretation of these questions along the belief-behavior dimension is somewhat ambiguous. At any rate, I take them as measures of in-group (or discriminative) trust.

Meanwhile, to measure religious tolerance, I use a set of questions regarding respondent attitudes toward non-coreligionists. In particular, IFLS4 asked whether respondents object to having non-coreligionists live in their village, neighborhood, or house. It also asked whether respondents would object if a relative was going to marry a non-coreligionist and

if people of a different religion were to build a house of worship. In all these questions, respondents can respond on a 4-scale measure, from "no objection at all" to "not acceptable".

Finally, as a proxy of altruism, I use the responses to the following statement: "I am willing to help people in this village if they need it". In addition, respondents were asked to assess how safe their villages were; and how safe it was to walk around at night. Overall, this set of questions, in combination with particularized trust questions above, indicate the extent to which respondents find their communities to be cohesive.

[TABLE 1 APPROXIMATELY HERE]

Table 1 presents the summary statistics for these outcome variables. In general, respondents report a high level of willingness to help and trust their neighbors. They are also more willing to entrust their properties than their children to their neighbors. With regards to their beliefs of the trustworthiness of others, respondents believe neighbors and, to a lesser extent, the police are trustworthy. However, their generalized trust belief – often seen as the type of trust that matters most in facilitating economic outcomes – is much lower.

Meanwhile, based on the averages of the tolerance measures, we can rank the issues captured by these measures from the most to the least contentious. Interfaith marriage is the most contentious, followed by the issue of allowing non-coreligionists to build a place of worship. Relative to these two issues, respondents are much more tolerant about allowing non-coreligionists live in the same village or neighborhood, but not so much in the same house.

3.2.2 Religion, religion-based education, and the religiosity measure

Our analysis focuses on examining how religion and religious intensity correlate with social and civic capital in Indonesia. In IFLS4, each respondent was asked about his or her religion and can choose between Islam, Catholicism, Protestantism, Hindu, Buddhism, and Confucianism. Our analysis focuses on the first five of these religions since there are only two Confucians in the sample.[20] Each respondent was also asked to evaluate his or her own religiosity out of a 4-scale measure – "not religious", "somewhat religious", "religious" and "very religious". These two variables and their interactions will be our main regressors of interest. Table 2 presents the distribution of religiosity overall and for each religion.

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[20]To focus on the five main world religions, 17 observations were dropped either because they refused to answer (10 observations), has religion that is not among the six listed above (5 observations) or are Confucians (2 observations).

The religiosity question in IFLS is a self-assessment question; it is therefore useful to examine how answers to these questions relate to observed behavior. For adherents of each religion, IFLS4 asked a pair of questions on an individual's religious practices. Muslims were asked how many times they prayed every day and whether they observed the *halal* food requirement. Christians were asked how often did they pray or read the bible and whether they actively participated in activities such as religious fellowships. Meanwhile Buddhists and Hindus were asked whether they meditated in the temple and whether they observed certain religion-related diets. I use these data to validate respondents' self-assessments of their religiosity.

Table 3 presents the share of individuals that follow a particular religious practice for a given level of religiosity and for each religion. The pattern suggests strong correlations between self-assessment of one's religiosity and his or her adherence to religious practices across different religions. For Muslims, the more religious a person, the more likely that he or she follows (and go beyond) the mandatory number of prayers of five times a day. However, there does not seem to be much variation with respect to keeping the *halal* diet across different religious intensities, except among the non-religious muslims. Similarly among Christians, the more religious tend to pray more frequently during the day. In addition, they are also more likely to participate actively in religious activities such as prayer fellowships. Meanwhile, more religious Hindus are more likely to frequent temples daily, and are more likely to maintain follow the no beef/red meat dietary restrictions. Similarly, more religious Buddhists are more likely to pray in the temple daily and be a vegetarian.

To further validate this measure, I also consider a question from IFLS's community participation module – which is a module that is separate from the religion module. In the community participation module, respondents were asked whether they knew of a particular activity in the village, and if they do so, whether they participated. Included in the list of activities inquired is a religious activity. Table 4 presents a summary on responses for different levels of religiosity. Participation tends to increase in religiosity, and the χ^2 tests reject statistical independence between religiosity and participation.

Meanwhile, many religion-based educational institutions often function as a source of oblique socialization of religious values and beliefs. The values transmitted through these

institutions in the past may affect cooperative attitudes at present. To capture this, I employ data on each individuals' educational history. IFLS contains information on the types of institution managing the schools attended by the respondents, including whether it is a religion-based – to wit, Catholic, Protestant, or Buddhist, but not Hindu – institution. With this information, I construct an indicator of whether the respondent receives an education from an institution of her religion (or a "coreligion education") or a religion-based institution that is not of her religion (or a "non-coreligion education").[21]

Having received an education from religion-based institution is correlated with an individual's religiosity. Therefore, including these variables will likely absorb some of the correlations between religiosity and outcomes. I therefore do not include these variables in the base specification. Nonetheless, I believe that the question of the role of religion-based education is in itself an interesting and important one. I therefore implement a separate set of regressions to examine the question.

[TABLE 5 APPROXIMATELY HERE]

3.2.3 Measures of religious diversity and segregation

The following will examine how diversity and segregation are associated with cooperative attitudes. For diversity, instead of using the usual fractionalization index, I follow Reardon et al. (2000) in using the diversity index first proposed by Theil (Theil, 1972; Theil and Finizza, 1971) that makes use of the entropy of the discrete probability distribution of groups in the unit of analysis.[22] That is, in community i, the entropy of the discrete probability distribution of religion in a village is calculated as follows:

$$H_i = \sum_r^R s_{ir}.ln\left(\frac{1}{s_{ir}}\right) \tag{1}$$

where s_{ir} indicates the share of population with religion r in community i. The index can take a value of between zero (perfectly homogeneous) and the natural log of the number of distinct religious groups in the community.

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[21]To obtain this information, I made use of the panel nature of the dataset to trace the education history from the first wave of IFLS (IFLS1). This introduced a minor problem, since IFLS1 conflated Buddhists and Protestant schools into a single category. In these cases, I assume that the respondent is attending a Protestant-managed school. The potential misclassification from this last assumption is miniscule, since even if all of these schools assumed to be Protestant-managed are Buddhist-managed, at most I would have misclassified 59 individuals (49 Protestants and 10 Buddhists).

[22]Despite not using the usual fractionalization index, the correlation between the entropy index and the fractionalization index in my data is 99.1%.

Meanwhile, we measure segregation using the Mutual Information Index that is also based on the entropy measure of diversity. Essentially, the Mutual Information Index measures the difference in the entropy of the community's religious distribution with the weighted average of the entropy of the sub-communities. In their comparisons of the properties of different segregation measures, Reardon and Firebaugh (2002) and Frankel and Volij (2011) conclude that the Mutual Information Index is the most well-behaved.[23] Hence, for community i and its subcommunities, indexed by n, the segregation index is calculated as:

$$M_i = H_i - \sum_{n \in N} \pi_n H_n. \tag{2}$$

where π_n is the population weight for subcommunity n. A larger value indicates a more segregated community. Like the diversity index, the segregation index can take a value of between zero and the natural log of the number of distinct groups in the community.

I use the 2000 population census microdata to construct these indices both at the subdistrict and village level. The subdistrict segregation index compares the subdistrict entropy with the population-weighted average of the entropy of its villages. Hence, a more segregated subdistrict is one where people of different religions are more clustered in the different villages. Meanwhile, the village segregation index compares the village entropy with the population-weighted average of the entropy of the census blocks within the village. A more segregated village, therefore, is one where people of different religions are clustered in the different census blocks.

3.2.4   Other regressors

I implement the same set of control variables across outcomes, which is summarized in Table 5. For the base specification, I include the standard individual characteristics such as sex, age, married status, and years of education. To address potential non-linear effects of age, I include dummy variables indicating whether the individual's age is greater or equal to 25, 45, and 65 years old. Similarly for education, I also introduce a set of dummy variables to indicate whether an individual has received some junior high, senior high, or college-level education.

The decision to cooperate can be a risky act and risk preference may affect cooperative behaviors. Indeed, Schechter (2007) shows that failing to include the risk preference pa-

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[23]Frankel and Volij (2011) found that the Mutual Information Index did not satisfy the composition invariance property. Composition invariance property states that the segregation of a community should not change when the number of students from a particular religion in the sub-communities is multiplied by the same number across the community. However, in this analysis, segregation is used to analyze the effect of exposure on attitudes. Coleman et al. (1982) argue that this property is unnecessary in this case.

rameters in trust regressions in experimental games may significantly alter the coefficients of important regressors. IFLS elicits risk aversion by asking respondents to choose payoffs with different risk levels, which I used to create an ordinal ordering of risk aversion.[24] This variable can take a value of between 0 and 4 where a larger number indicates greater risk aversion.[25] Risk aversion is elicited using without real payoffs and there are some concerns about potential biases from this approach. However, the experience from the Mexican Family Life Survey suggests that such biases may not be so severe (Hamoudi, 2006).

Moreover, an individual's discount factor may affect local cooperative attitudes through its effects on social capital investment (Glaeser et al., 2002). IFLS elicits a measure of the individual discount factor by asking respondents to choose different payoffs that give returns at different times from today. Similar to the measure of risk aversion, the discount factor is elicited without real payoffs.

At the household level, I include the level spline of the log per-capita expenditure (PCE), with a knot point at the median.

At the community level, in addition to the community diversity and segregation measures, I include the urban status of the community and dummy variables of its topographical characteristic (i.e., on a coast, flatland, hill, or valley), log population density in the village, whether the village has recently experienced a natural disaster, and distance from subdistrict and district capitals. Olken (2009) found that television and radio reduce social capital. Hence, I also included a dummy variable for whether the village can receive a broadcast from the national public television and a regional television, as well as the number of private television networks whose signals reach the village. In the base specification, I also include subdistrict PCE Gini obtained from the 2000 Poverty Map.

4   Individual religion, trust, and tolerance

Individual religiosity and attitudes are likely to be endogenous. I try to address this problem in the following ways. First, I include a rich set of control variables at various levels of aggregation. Second, to further ameliorate the omitted variable bias, I estimated fixed effects models. With IFLS data, I can include fixed-effects up to the household level; however, there are potential trade-offs between bias reduction and information loss from the "over-inclusion"

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[24]IFLS4 elicited risk preference using two sets of questions on risk aversion. The hypothetical sure payoff in first set is Rp.800.000, almost twice the average monthly per-capita expenditure of the IFLS4 respondents. Meanwhile, the sure payoff in second set is five times that in the first set. The amounts of relative risk in the two sets are also different. I use the first set of questions as a measure of the risk preference parameter.

[25]I code as "4" individuals whose "strong dislike" for risk cannot be explained by the standard utility theory: They prefer a sure payoff over a 50-50 gamble even though the smaller payoff in the gamble equals the sure payoff.

of controls. Finally, following the strategy similar to that of Altonji et al. (2005), I conduct an exercise to assess the likelihood that the entirety of these findings come from omitted variable biases.

To estimate the association between religiosity and attitudes, I employ the following specification:

$$Y_{ijk} = \alpha + \sum_{r=3,4} \beta_1^r . \mathbb{1}(rlgs_i \geq r) + \mathbf{X_i}.\beta_\mathbf{i} + \mathbf{X_j}.\beta_\mathbf{j} + \mathbf{X_k}.\beta_\mathbf{k} + \varepsilon_{ijk} \qquad (3)$$

where Y is the outcome variable, $\mathbb{1}(rlgs_i \geq r)$ is a dummy variable that is equal to one if individual i reports a religiosity greater or equal to r for $r = 3, 4$ and zero otherwise, $\mathbf{X}$ is the vector of control variables, ε is the residual, and j, k index households, and communities respectively. For the analysis, I combine the first two religiosity categories – i.e., "not religious" and "somewhat religious" – into one (default) category of "less religious". The coefficients of interest, β_1^3 and β_1^4 are the marginal effects of being religious and very religious respectively. To account for heterogeneous response of religiosity in different religions, I included the religion fixed-effects in the model.

In this specification, including household fixed-effects would provide the most reduction in the omitted variable bias possible in this data set. However, 8,387 out of 12,680 households (and 5,444 out of 9,737 households with more than one members) in the sample are homogeneous in their religiosity. The inclusion of the household fixed-effects will remove the effects of religiosity that have been "institutionalized" in the household. Since individuals living in homogeneous-religiosity households tend to be more religious, results would tend to discount the effects coming from them.[26] As such, I will report results that are estimated using the community fixed-effects specification. For robustness, I include in the appendix results estimated using the household fixed-effects model. In both cases, standard errors that are robust-clustered at the level of the fixed-effects.

[TABLE 6 APPROXIMATELY HERE]
[TABLE 7 APPROXIMATELY HERE]

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[26]Among individuals living in a multiple-member, homogeneous-religiosity household, 90.2% consider themselves either religious or very religious, compared to 64.7% among those living in a heterogeneous-religiosity household.

4.1 Attitudes and individual/household characteristics

The results are presented in Tables 6 and 7. Before addressing the role of religiosity in cooperative behaviors, however, I will first examine the links between the different plausibly exogenous regressors and the different outcomes in this subsection.

4.1.1 Gender

Men exhibit greater willingness to help and trust than women. The coefficients for the indicator variable *male* in Table 6 are positive and significant on the willingness to help neighbors and to trust neighbors to watch their children and their house. These trusting behaviors may be borne out of the fact that, compared to women, men are more likely to assess the trustworthiness of their close neighbors more favorably. Men are also more likely to perceive the village to be safe than women.

Men are also generally more tolerant toward non-coreligionists than women (Table 7). Again, there may be a belief component to tolerant behavior, as men tend to rate the trustworthiness of strangers higher than women. Consistent with this, men also exhibit less discriminative trust either with regards to ethnicity and religion. There is, however, an exception to the gender difference in tolerance. Men are not more tolerant – although neither are they less tolerant – than women on allowing non-coreligionists build their house of worship in the village. Moreover, men also tend to be less trusting of the police.[27] These effects are robust to the both the community and household fixed effects specifications.

The findings on helpfulness and interpersonal trust broadly align with what is known about gender differences in social preference. On helping behavior, the meta-analytic studies of the psychology literature by Eagly and Crowley (1986) found that men helped more than women. Meanwhile on trust, using U.S. data, Alesina and La Ferrara (2002) find that women exhibit less generalized trust. Similarly, in their survey paper of gender differences in the experimental literature, Croson and Gneezy (2009) find that in trust games, women tend to trust less or the same than men, and that their decisions to trust are more sensitive to the experimental context and social distance.

4.1.2 Age

With only a cross-section dataset, we cannot disentangle between age and cohort effects. Hence, the analysis below will confound both effects. Below, we refer to the age groups as "young adulthood" (15-24 years old), "early adulthood" (25-44 years old), "middle adult-

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[27]Guiso et al. (2003) also found negative, albeit insignificant, coefficient of being a male and trust toward the police.

hood" (45-64 years old), and "late adulthood" (65 years old and older). The results suggest that in most cases, there are non-linear relationships between age and cooperative attitudes.

The willingness to help neighbors hardly varies by age except of the slight decline in late adulthood. The willingness to trust neighbors to watch one's children or house when away increases with age up until middle adulthood, perhaps partly due to the positive associations between age and trust beliefs of strangers and close neighbors (although the latter association is not statistically significant) among early adults.

On average, there is a marginal increase in religious discriminative trust between those in early and middle adulthood, and a similar increase for ethnic discriminative trust between middle and late adulthood. Consistent with this result, the tolerance of having non-coreligionists in the village also decreases between early and middle adulthood. For other residential tolerance measures, tolerance is negatively associated with age across all age groups. Interestingly, in terms of inter-faith marriage, those in their middle adulthood are the most intolerant – perhaps, because it is at around this age group that parents marry their children.[28] Meanwhile, in terms of allowing other believers to build their house of worship, it appears that the young adults in the sample are the most intolerant compared those in the other age groups.

4.1.3 Education

Additional education is positively associated willingness to help, but negatively with trusting behaviors. Interestingly, however, education is positively associated with inter-personal trusting beliefs: More educated people are more likely to assess neighbors and strangers to be trustworthy. Perhaps, education alters an individual's understanding of potential sources of risks associated with trusting behaviors other than the trustworthiness of her "agent", such as the quality of local institutions to punish breaches of trust.[29] Indeed, education up until high school is negatively associated with a lower assessment of village safety. Meanwhile, the assessment of the trustworthiness of the police increases with junior secondary education, but decreases with college education.

Education is negatively associated with religious and ethnic discriminative trust and this negative associations at different levels of education are stronger for ethnic discrimination. It is also positively correlated across all residential tolerance measures. Education, particularly at the college level, is also positively associated with tolerance of other believers' house

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[28]For instance, the average age of fathers to the once-married adults in the IFLS4 sample that were married between 1997 and 2007 was 56.9 (with a median at 55) years old and that of mothers to be 50.1 (with a median at 49) years old.

[29]See footnote 17 for a sketch of model that incorporates institutional quality in the trust game framework.

of worship. However, more education – even beyond high school – is associated with less tolerance of interfaith marriages.

4.1.4   Risk and time preferences

Trusting behaviors of neighbors are negatively associated by risk preference, but not trusting beliefs. More risk averse individuals are less likely to entrust their children and house to their neighbor's watch, although in the case of the house, this association is not robust to the household fixed-effects specification. However, their beliefs of the trustworthiness of their neighbors and strangers are not associated with risk preference. Similarly, their trust beliefs of the police are not affected by risk preference.

   More risk-averse individuals also tend to trust people who are similar to them more. Risk aversion is positively correlated with discriminative trust with respect to both religion and ethnicity. It is negatively correlated with tolerance in allowing non-coreligionists stay in their house, and positively with inter-faith marriage, but these correlations are weak and not robust to the household fixed effects.

   Meanwhile, Glaeser et al.'s (2002) static model suggest that (local) social capital should increase with the individual discount factor. We therefore expect the discount factor to be positively correlated with community trust and altruism. We find some support for this prediction: A higher discount factor is positively associated with a willingness to help and a higher trust belief of strangers. It is also positively associated with the tolerance of having non-coreligionists live in the village. At the same time, however, a higher discount factor is negatively associated with the tolerance of having non-coreligionists live at home and of interfaith marriage.

4.1.5   Household expenditure

A higher per-capita expenditure of the is associated with the willingness to help neighbors among households whose per-capita expenditure (PCE) is below the median (or the "poorer households") but those with above median not those with above-median PCE (or "richer households") in the community fixed-effects model. Among richer households, a higher PCE is correlated with less willingness to entrust one's property to a neighbor and a lower belief of the trustworthiness on neighbors. Meanwhile, among poorer households, a higher PCE is (weakly) associated with greater trust of strangers.

   Moreover, a higher PCE is associated with less in-group preference. In all households, a higher PCE is associated with less discriminative trust with respect to ethnicity. It is also associated with less religious discrimination, but only among the richer households. Among

richer households, a higher PCE is associated with more tolerance regarding allowing non-coreligionists to live in the village or neighborhood as well as tolerance of non-coreligionists' house of worship. Among poorer households, PCE is also positively associated with tolerance at the village and neighborhood level; however, it is negatively correlated with tolerance on inter-faith marriage.

4.2   Religiosity, religious education, and attitudes

Religiosity is positively correlated with cooperative attitudes involving members of the community and the in-groups, but not the out-groups. Furthermore, for most outcomes, the correlations are monotonic in religiosity. More religious people exhibits more willingness to help neighbors. They are also more willing to trust neighbors with their children or property. This behavior may have partly arisen out of their more favorable beliefs regarding the trustworthiness of others: Religious people are more trusting of neighbors, strangers, and the police compared to less religious people.[30] However, in the case of the trust belief of stranger, the relationship is not monotonic in religiosity: The very religious are less trusting of strangers compared to the less religious.

At the same time, religiosity is also positively correlated with religion-based and ethnic-based discriminative trust. It is negatively correlated with *all* measures of tolerance.

The religiosity coefficients are robust to both community and household fixed effects, although they are smaller in the latter specification. Since homogeneously religious households tend to be more religious (see footnote 26), the lower magnitudes of these coefficients in the household fixed-effects specification come partly from removing the effects from these more religious individuals. In a separate analysis that is not reported here, I find non-linearity in the relationships between religiosity and some of the outcomes. Nonetheless, qualitatively the results in that analysis are identical to the linear case presented here.

Columns (3) - (6) of Table 8 present estimates from the extended specification that includes indicators for individuals' religious educational background. Including these indicators reduce the magnitude of the religiosity coefficients, albeit only very slightly. Overall, the results suggest that religious educational background mainly plays a role in affecting inter-group cooperative attitudes. Coreligion educational background has a weak negative impact on helpfulness while non-coreligion has no impact. The only significant effect of religious educational background on community trust behaviors and beliefs comes from that of non-coreligion education on trusting neighbors to watch one's children.

However, coreligion education is associated with more trust of coreligionists, and less

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[30] "Less religious" includes individuals reporting themselves to be "not religious" and "somewhat religious".

religious tolerance across all measures. In contrast, having been educated by a non-coreligion religious institution reduces religious discriminative trust, and increases tolerance across all of the measures. This latter result may be interpreted as support for Allport's (1954) contact hypothesis.

[Table 8 approximately here]

The evidence so far points to statistically significant correlations between religiosity and attitudes. How meaningful are these correlations in real terms?[31] To answer this question, I examine compare coefficients on the religiosity dummies with the coefficients on three other regressors: gender, PCE, and education. I will mostly focus on the coefficients of the (*religious/very religious*) dummy – i.e., the marginal response of the religious relative to the less religious. Hence, unless noted differently, any reference to the religiosity variable in the remainder of this section refers to this variable. Moreover, keep in mind that I am making comparisons of correlative, not causal, relationships. The analysis is based on results presented in Tables 6 and 7.

Given a lot of interest among social scientists to see gender differences in attitudes, the gender variable serves as a useful benchmark. The religiosity coefficient tend to be negligible for the willingness to help or trust neighbors. However, the coefficient on the *very religious* dummy variable are almost four times the effect of gender for the willingness to help neighbors, and they are comparable to the effect of gender for the willingness to trust. The ratio of the religiosity and the gender coefficients in the trust belief of neighbor regression is slightly less than four. Meanwhile, for the trust beliefs of strangers, the magnitude of the two coefficients are comparable.

The ratio of the magnitude of the religiosity and the gender coefficients is more than five times for the discriminative trust of coreligionists, and almost five-thirds for the discriminative trust of coethnics. These ratios are also generally large – between 2.2 and 4.5 – for tolerance measures whose gender effects are significantly different from zero.

Next, I compare the magnitudes of the religiosity coefficient with the effects of a standard deviation change in log PCE (hereafter, the "log PCE effect").[32] Among poorer households, the two coefficients are comparable for the willingness to help neighbors while the *religious+* effect is slightly larger than the log PCE effect for the trust belief of strangers. The effect of religiosity on trust belief of neighbors is almost four times the log PCE effect among richer households.

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[31]I would like to thank Larry Iannaccone for suggesting this line of inquiry.

[32]As shown in Table 5, the standard deviation of log PCE is 0.79. As such, the "log PCE effect" equals to 0.79 × the log PCE coefficient.

In general, the effects of religiosity on inter-group cooperation are much larger than the log PCE effects. Among poorer households, the magnitude of the religiosity coefficient is three times the log PCE effect on trust of coethnics and between 2.6 and 6.2 times the log PCE effect on various measures of tolerance. Among richer households, where the log PCE effect is mostly absent or imprecisely estimated for most outcomes, these ratios tend to be larger except for tolerance regarding allowing non-coreligionists build their house of worship.

Relative to the education coefficients, the religiosity coefficient for the willingness to help neighbors is smaller than that from an additional level of education (i.e., from primary to junior/senior secondary to college). It is, however, larger when we consider the coefficient on the *very religious* variable. The religiosity coefficients for trusting behaviors also tend to be larger than any of the education level coefficients. The religiosity coefficient for trust belief of neighbors is also larger than any of the education coefficients.

Meanwhile, we find that in most cases, the magnitudes of the effects of religiosity on in-group preferences are stronger than those from an additional level of education. In all cases, except for inter-faith marriage, the religiosity and education coefficients have different signs. To simplify exposition for these coefficients, I will compare here two hypothetical persons from the sample, namely, a very religious person with some college education vs. a less religious person with primary school or less.

For discriminative trust of coreligionists, the effect of religiosity is much stronger than education such that a highly-educated highly-religious individual, on average, will be more discriminative than a less religious individual with a primary school education. Similarly, the former will be less tolerant in allowing non-coreligionists live in his or her house, and much more intolerant of allowing non-coreligionists to build their house of worship. On the other hand, the total effects of education is stronger for ethnic discriminative trust and tolerance of having non-believers in one's village and neighborhood. For intolerance regarding inter-faith marriage, the magnitude of the religiosity coefficient is larger than the marginal effects of education at all levels, but unlike those for other measures of tolerance, they are of the same sign.

4.2.1   Selection on observables as a benchmark for omitted variable bias

Even with the household fixed effects, potential latent variables problems may nonetheless remain.[33] Altonji et al. (2005) suggest a way to informally benchmark potential omitted variable bias using selection on the observable characteristics for a bivariate normal model and

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[33]For instance, household fixed effects may have absorbed some of the differences that are inherent to a family (such as genetic differences), but may not have completely eliminated intra-household unobservables such as personality differences.

Bellows and Miguel (2008) develop a similar test for linear models without the assumption of joint normality. These authors derive measures to quantify how important the omitted variable bias needs to be in order to explain away the entire effects. This paper follows the approach of Bellows and Miguel, whose derivation is reproduced below.[34]

The objective of the derivation is to quantify how much stronger the relationship between the unobservable and religiosity relative to the relationship between the observable and religiosity in order for all of the effects to come from the omitted variable bias. To this end, consider the specification of interest:

$$Y = \alpha R + q\beta + \varepsilon \tag{4}$$

where q is the index of the full control variables, including both observables and unobservables. If we estimate α using OLS without q, we have the following omitted variable bias:

$$plim \, \widehat{\alpha}_{NC} = \alpha + \beta \frac{Cov(R, q)}{Var(R)} \tag{5}$$

where NC indicates the "No control" estimate.

Now, suppose that there are a set of control variables $\mathbf{X}$ and q is linearly correlated with these variables:

$$q = \mathbf{X}'\gamma + \tilde{q} \tag{6}$$

Plugging this into the original equation 5, we obtain:

$$Y = \alpha R + \mathbf{X}'\gamma\beta + \beta\tilde{q} + \varepsilon \tag{7}$$

In this case, our estimate of α yields:

$$plim \, \widehat{\alpha}_{C} = \alpha + \beta \frac{Cov(R, \tilde{q})}{Var(R)} \tag{8}$$

where C denotes "Control". Given the linear relation between q and $\mathbf{X}'\gamma$, we have the following:

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[34]See Bellows and Miguel (2008, Appendix A). Nunn and Wantchekon (2011) also utilize this approach in their examination of the effects of living in regions that were heavily raided for slaves in the past on current levels of trust in Africa.

$$\widehat{\alpha}_{NC} - \widehat{\alpha}_C = \beta \left(\frac{Cov(R,q)}{Var(R)} - \frac{Cov(R,\tilde{q})}{Var(R)} \right)$$
$$= \beta \left(\frac{Cov(R,\mathbf{X}'\gamma)}{Var(R)} + \frac{Cov(R,\tilde{q})}{Var(R)} - \frac{Cov(R,\tilde{q})}{Var(R)} \right) \quad (9)$$
$$= \beta \frac{Cov(R,\mathbf{X}'\gamma)}{Var(R)}$$

We can now find an estimate of the measure of omitted variable bias necessary to explain away the entire religiosity effects. Suppose there is no religiosity effect and we set $\alpha=0$. Dividing equation 7 with equation 9, we have:

$$\frac{\widehat{\alpha}_C}{\widehat{\alpha}_{NC} - \widehat{\alpha}_C} = \frac{Cov(R,\tilde{q})}{Cov(R,\mathbf{X}'\gamma)} \quad (10)$$

The term on the left-hand side can be estimated. Meanwhile, the right-hand side term gives the ratio between the religiosity-unobservable and religiosity-observable covariances, which captures how much stronger the covariance between religiosity and the unobservable variable relative to its covariance with the observable variables needs to be to explain away the entire effect of religiosity.

Table 9 presents the calculations of this ratio. I consider the basic and extended specifications (i.e., without and with the religious education background). In both specifications, I included community and religions fixed effects. In the basic specification, for outcomes in which the *religious/very religious* coefficients are statistically significant, the magnitudes of these ratios lie between 1.2 and 83.4. Meanwhile, for outcomes where the *very religious* coefficients are statistically significant, the magnitudes of these ratios lie between 4.6 and 88.7. The ratios are quite similar for the extended specification. In sum, in most cases, the selection on the unobservables needs to be multiples of that on observables in order for the results to come entirely from the omitted variable bias.

[TABLE 9 APPROXIMATELY HERE]

4.3 Does the religion matter?

Next, we look at inter-religion differences. Before we begin the analysis, however, two caveats are in order. First, as is the case in many multiethnic, multireligion countries, ethnicity and religion are not easily separable in Indonesia. In this particular sample, two adherents of

two of the religions are ethnically very homogeneous: 88% of Hindus are Balinese and 81% of Buddhists in the sample are of Chinese descent. In addition, 86% of Hindus live in the province of Bali. Hence, the analysis cannot rule out confounding ethnicity effects. The second caveat relates to the small sample of Buddhists. In this sample, there are only 88 Buddhist respondents in the sample – and therefore, the estimates of its coefficients have low power.

[TABLE 10 APPROXIMATELY HERE]
[TABLE 11 APPROXIMATELY HERE]
[TABLE 12 APPROXIMATELY HERE]

4.3.1 Examining average differences

I begin with looking at average differences across religions. I estimated the following:

$$Y_{ijk}^r = \alpha + \sum_{d=2}^{5} \alpha_d . \mathbb{1}(x_{ri} = d) + \sum_{r=3,4} \beta_1^r . \mathbb{1}(rlgs_i \geq r) + \mathbf{X_i}.\beta_\mathbf{i} + \mathbf{X_j}.\beta_\mathbf{j} + \mathbf{X_k}.\beta_\mathbf{k} + \varepsilon_{ijk}^r \quad (11)$$

where as in above $\mathbb{1}$ is the indicator function, x_{ri} denotes the index of individual i's religion and d indexes the different religions. In the estimations, "Islam" is the omitted religion category.[35] For this analysis, I opt for the province fixed-effects specification since in 138 out of 262 sample districts (or 52.7% of the sample districts), all respondents within these districts adhere to the same religion. This is equal to 36.0% of the sample respondents. As a robustness check, I include in the appendix estimates using the district fixed-effects specification.

Tables 10 to 12 present the results of the province fixed effects estimations. In the regressions analyzing inter-religion differences, Islam is the omitted religion category. Overall, there appears to be very little inter-religion differences in terms of community and non-discriminative cooperative attitudes. However, there are significant inter-religion differences in terms of discriminative trust and tolerance and these differences are mainly between Muslims, who are the majority in the country, and the rest.

With respect to cooperative attitudes in the community, Protestants are less willing to help their neighbors compared to adherents of other religions. Meanwhile, Buddhists

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[35]We follow this convention of setting "Islam" as the omitted category for all estimations that involve religion categories in this paper.

are less willing to trust their neighbors to watch their children or property. However, on average, these differences do not seem to be driven by differences in their beliefs regarding the trustworthiness of neighbors or strangers.

However, in terms of discriminative trust, Muslims trust their coreligionists more compared to adherents of other religions. They are also the most intolerant in all tolerant measures. Meanwhile, Catholics and Buddhists are the least discriminative with regards to both ethnicity and religion. They also tend to be among the two most tolerant believers on most measures. Catholics are also more tolerant than Protestants across all measures.

4.3.2   The role of the majority status

In their cross-country analysis, Guiso et al. (2003) found that adherents of the majority religion tend to be more intolerant. I examine whether this phenomenon exists within countries and explains the inter-religion differences in attitudes. To explore this question, I include an indicator variable of whether the respondent adheres to the majority religion in the village. In this sample, only 3 Catholics and 6 Buddhists live in a village where their respective religion is the majority religion. Our discussion will therefore focus only on the other three religions.

The right halves of Tables 10 to 12 present the religion results with the village-majority status variables included. Protestants exhibit an even less willingness to help neighbors, and minority Protestants find their community less safe compared to their minority-Muslim counterpart. Minority Christians and Buddhists also tend to be more distrustful of the police. However, minority Hindus exhibit more trusting behaviors than minority Muslims. In contrast, as minorities, the gaps in religio-discriminative trust between Muslims and adherents of other religions, except Hindus, tend to be smaller.

Majority status in the village does not appear to significantly affect community or discriminative trust. However, majority status is negatively correlated with all aspects of tolerance, and the magnitude of the negative coefficient is largest on tolorance of non-coreligionists' house of worship. This suggests that among the tolerance issues, this issue may be the most political. Meanwhile, majority Protestants and Hindus tend to be more tolerant on most measures, except on the issue of non-coreligionists' house of worship.

[TABLE 13 APPROXIMATELY HERE]

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4.3.3 The religiosity-attitudes associations

The above specification assumes that adherents of different religions behaviorally respond to their reported religiosity homogeneously. To allow for heterogeneous response across different religions, I estimate an alternative specification to examine the inter-religion differences that allows for different intercepts and religiosity coefficients for different religions, to wit:

$$
\begin{aligned}
Y_{ijk}^r = \alpha_1 + \sum_{d=2}^{5} \alpha_d . \mathbb{1}(x_{ri} = d) + \sum_{r=3,4} \beta_1^r . \mathbb{1}(rlgs \geq r) + \sum_{d=2}^{5} \beta_d . \mathbb{1}(x_{ri} = d) . \mathbb{1}(rlgs_i \geq 3) \\
+ \mathbf{X_i} . \beta_\mathbf{i} + \mathbf{X_j} . \beta_\mathbf{j} + \mathbf{X_k} . \beta_\mathbf{k} + \varepsilon_{ijk}^r
\end{aligned}
\tag{12}
$$

For tractability, I will focus on the interactions between religion and the *religious/very religious* dummy variable. Based on the same rationale used to justify the basic religiosity specification above, I included the community fixed-effects and estimated the regressions with robust standard errors that are clustered at the community level.

The coefficients on the interaction terms describe the inter-religion differences. Assuming that people rarely switch religion in Indonesia, religion can be treated as an exogenous attribute that is inter-generationally transmitted. However, individuals choose the level of religiosity for their given religion. Religiosity is, therefore, likely to be endogenous to attitudes. Take an example of tolerance. If an unobserved preference parameter or personality trait, say sociability, affects both tolerance and the choice of religiosity for a given religion, a sociable person will be more tolerant and, at the same time, choose a low level of religiosity if he is "given" an intolerant religion.[36] Therefore, the inter-religion differences in the religiosity coefficients can be interpreted as the relative extent to which one religion is more likely to encourage (or discourage) the attitude in question.

The results are shown in Table 13.[37] For the associations between religiosity and measures of community cohesiveness, there do not appear to be many inter-religion variations in the association between religiosity and attitudes. Moreover, we also do not find inter-religion variations with respect to trust beliefs and discriminative trust: Across all of these measures, except with regards to trust belief of the police, the joint *F-tests* suggest we cannot reject the hypotheses that each of the religion interaction terms is equal to zero.

However for tolerance measures, in almost all cases the negative links between religiosity and intolerance are strongest among Muslims. In fact, they appear to be mostly absent in

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[36]Here, we also assume that the characteristics of a religion responds very slowly, if at all, to individuals' religiosity choice.

[37]Table A.6 provide the results for cases with *religion × very religious* interactions.

all other religions. Exceptions to this are tolerance of having non-coreligionists in the house among Buddhists (where the link between religiosity and intolerance is as strong as among the Muslims) and tolerance of interfaith marriage among Catholics (where the link between religiosity and intolerance is potentially stronger than Muslims, even though the interaction term is not statistically significant).

4.4   Gender differences in the religiosity correlates

Finally, I decompose the analysis to look at inter-gender differences in the behavioral responses to religion. The analysis utilizes the basic specification with the community fixed-effects described in Equation 3. Tests of pooling by gender show for all outcomes, the pooling hypotheses cannot be rejected.[38]

[TABLE 14 APPROXIMATELY HERE]

Table 14 presents the religiosity coefficients when we estimated the data separately by gender. Overall, the links between religiosity and trusting attitudes are stronger for men than women. Religiosity is associated with trusting behaviors among men, but not women. The extent to which religiosity are associated with trusting beliefs are also stronger for men.

I find similar results regarding inter-group cooperative attitudes. The positive association between religiosity and discriminative trust is stronger for men; similarly, the extent to which men become more intolerant as they become more religious is larger – although to different degrees for different measures of tolerance – compared to that of women. If we were to take a causal interpretation, then one can interpret this as suggesting that religious commitment alters cooperative attitudes more among men than women.

5   Community heterogeneity and cooperation

The theory and evidence reviewed above suggest two channels through which community diversity and segregation may affect cooperation: Network effects and (optimal) inter-group contact. In the case of the former, under the assumption of mostly trust-based exchanges, diversity may weaken overall cooperation by weakening intra-group information transmission and norm enforcement. Moreover, denser networks may strengthen cooperation by strengthening these intra-group mechanisms. Therefore, we expect to find greater community trust

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[38]For outcomes where the pooling hypothesis is rejected, the critical value for rejection is at 1% except for trust beliefs of neighbors and tolerance of non-coreligionists' house of worship at 5% and trust of coreligionists at 10%. See Tables A.7 and A.8 in the appendix

in more homogeneous communities, and we expect this trust to be stronger among people living in segregated communities.

However, on the flip side, diversity means a higher likelihood of contacts with those who are different from us, and frequent contacts may break down stereotypes, increase trust, and reduce prejudice. Diversity, therefore, can lessen prejudice and this potentially facilitate greater inter-group (and overall) cooperation. Under this premise, residential segregation will likely strengthen inter-group prejudice.

The net effect of heterogeneity on community trust is theoretically unclear and is therefore an empirical matter. On the other hand, the theoretical prediction based on Allport's contact hypothesis is clearer: Diversity is expected to reduce inter-group discriminative trust and increase tolerance while segregation is expected to have the reverse effect.

Before presenting the results, it is important to note the potential endogeneity of these community heterogeneity variables. For instance, its is plausible that the observed religious diversity in the community was in fact the outcome of its more tolerant residents. On the one hand, these measures of community heterogeneity were derived from the national census dataset, which was collected eight years prior to the outcomes of interest. This reduces concerns of contemporaneous reverse causality. However, this may not solve the issue that potentially arises if both attitudes and community compositions are persistent over time.

5.1   Does segregation matter?

Table 15 present the coefficients for the village and subdistrict heterogeneity variables.[39] On the left halves of these tables, we have the coefficients of the community diversity variables when the segregation variables are excluded. Meanwhile, on the right halves are the coefficients for both the community and the segregation variables. All estimates utilize the basic model of Equation 3 with the district fixed-effects specification.

In many cases, failing to include segregation in the regression often changes the inference on the link between diversity and attitudes.[40] For trust beliefs and inter-religious tolerance, the exclusion of segregation variables may have introduced biases. For instance, in case of trust beliefs, the diversity coefficient in the trust-of-neighbors regression became negative when segregation is introduced for regressions with village-level heterogeneity variables. Similarly, with the inclusion of segregation, diversity coefficients for the regressions on the trust beliefs of strangers and the police became significant and its magnitudes increased. In the case of tolerance, the inclusions of the village segregation variable lead to increases in the

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[39]For the coefficients of other community variables, see Tables A.9 and A.10 in the appendix.

[40]The correlation between the village diversity and segregation variables is 0.76, while the correlation between the subdistrict diversity and segregation variables is 0.58.

magnitude of the village diversity coefficient in all cases except for the tolerance of having non-coreligionists live in the same village, and in all tolerance outcome for the regressions with subdistrict heterogeneity variables. In none of these cases did the sign change. In the following section, I will focus on the specification that includes the segregation variable.

[TABLE 15 APPROXIMATELY HERE]

5.2   Diversity and segregation

Religious diversity appears to be associated with lower trust of neighbors, strangers, and the police. The signs of the village and subdistrict diversity coefficients are negative for the willingness to entrust neighbors with their house or children, as well as trust beliefs of their neighbors and they are significant for the regressions on the trust belief of strangers. Meanwhile, for the coefficients of the subdistrict diversity variable are weakly significant for the willingness to entrust neighbors with children outcome. Interestingly, however, people living in more diverse subdistricts tend to find it safer to walk in their village at night.

Subdistrict diversity is associated with less discriminative trust with regards to religion. Furthermore, people living in more diverse villages and subdistricts are also more tolerant across all five measures of tolerance. Meanwhile, those living in more religiously segregated subdistricts exhibit less willingness to help neighbors. In both of the regressions utilizing the village and subdistrict heterogeneity variables, the segregation variables are positively associated with belief that one's neighbors are trustworthy. They are also associated with the belief that the police are trustworthy. In the case of the trust belief of strangers, the coefficient is only significant for the subdistrict segregation variable.

Segregation does not appear to be correlated with discriminative trust. However, people in segregated villages tend to be less tolerant of allowing people of different faiths in their home. People in more segregated subdistricts are also less willing to let non-coreligionists build their house of worship in their village.

Overall, the evidence, therefore, suggests some support for Allport's optimal contact hypothesis that intergroup contact can reduce prejudice. However, it does not appear that improved intergroup relations are able to compensate the negative overall effects of diversity on particularized and generalized trust, which in part might be attributable to network effects. At any rate, these results need to be interpreted carefully given the potential endogeneity of residential choices.

5.3 Individual religiosity and community heterogeneity

The analysis so far provides evidence of positive correlations between religiosity and in-group preferences. As such, individuals' behavioral and attitudinal responses to the religious compositions of their communities may vary with their level of religiosity. In other words, given the association between religiosity and in-group preferences, the religious may be less willing to cooperate in more religiously diverse communities and, conversely, more willing to cooperate in more segregated communities. To examine this possibility, we examine the coefficients of the interactions between the *religious/very religious* dummy and community diversity and segregation in the model with community and religion fixed effects.[41]

The results in Table 16 support this hypothesis. The strength of the association between religiosity and the willingness to help neighbors and to entrust neighbors with their house is weaker in more religiously diverse villages, and stronger in more religiously segregated villages. The associations between religiosity and trust beliefs toward neighbors is also weaker in more diverse villages. We find similar results at the subdistrict level for diversity. Meanwhile, the associations between religiosity and the willingness to entrust neighbors are stronger in segregated subdistricts.

At the same time, diversity is also linked with weaker associations between religiosity and in-group preferences and intolerance. The magnitude of the positive correlations between religiosity and trusts of coethnics are weaker in more diverse subdistricts. Similarly, the magnitude of the negative correlations between religiosity and tolerance are also weaker in more diverse villages and subdistricts for all tolerance measures, except regarding inter-faith marriage.[42] In contrast, the magnitude of the negative association between religiosity and tolerance in allowing non-coreligionists live in the same house is larger in more segregated villages. Curiously, link between religiosity and intolerance of interfaith marriage is weaker in more segregated subdistricts.

I further decompose the analysis and separately examine differences between Muslims and non-Muslims (see Tables A.13-A.15 in the appendix). Most of the results in the pooled regressions are replicated the Muslim subset. Among Muslims, the associations between religiosity and measures of community cohesion as well as trust beliefs (except that of strangers)

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[41]See Tables A.11 and A.12 for interactions with the *very religious* dummy.

[42] Table A.12 suggests that diversity also weakens the link between religiosity and intolerance of inter-faith marriage among the very religious.

tend to be weaker in more diverse villages and subdisctricts. For these outcomes, subdistrict-level segregations appear to play a more important role. The associations between religiosity and the willingness to entrust neighbors with one's children and house are stronger in more segregated subdistricts.

With regards to in-group preferences and tolerance, given the across-the-board effects of both village and subdistrict diversities on the associations between religiosity and outcomes, I examine outcomes whose associations with religiosity are not affected by community diversities among Muslims. Two outcomes appear to be "immune" to the effect of diversity among Muslims: trust of coreligionists and tolerance of inter-faith marriage.

In contrast, I find many of the effects of community diversity on the association between religiosity and outcomes to be absent among non-Muslims. Village and subdistrict diversities do not affect the association between religiosity and almost all measures of community cohesion, except for the willingness to entrust neighbors to watch one's children. In contrast to results from the Muslim subset, village and subdistrict diversities are associated with a weaker association between religiosity and trust of coreligionists and coethnics – although the coefficient on the $religiosity \times village\ diversity$ interaction is not significant for trust of coethnics. They are not associated with the association between religiosity and measures of tolerance, except for tolerance of non-coreligionists' house of worship.

Meanwhile, among non-Muslims, subdistrict segregation weakens the links between religiosity and community cohesive behaviors. The associations between religiosity and helpfulness as well as their willingness to entrust neighbors to watch their house are weaker among non-Muslims living in more segregated subdistricts. Similarly, the association between religiosity and the sense of safety for non-Muslims are weaker in more segregated subdistricts. Village segregation does not affect the association between religiosity and any tolerance measure among non-Muslims; however, subdistrict segregation is associated with a weaker link between religiosity and tolerance in having a non-coreligionist stay in one's home.

6   Religiosity and political preference

A natural extension to this analysis is to ask whether the effects of religion go beyond preferences regarding interpersonal interactions, into the political sphere. Using data on the characteristics that respondents find important in a political leader, I examine whether a stronger commitment to the religious identity is also positively associated with an in-group bias in politics. Upon finding a bias, I also examine the "cost" of such a bias by examining which other important characteristic(s) (if any) in a political leader gets "crowded out" by this in-group bias. Answers to these questions can help understand the implications of the

use (and misuse) of religion in political discourse.

IFLS4 contains a set of questions that elicit each respondent's opinion regarding factors that are important when electing a district head or a mayor. The interviewer begins by asking a series of "Yes/No" questions to determine whether a particular factor is important to a respondent. Nine factors were considered, to wit, the candidate's appearance, popularity, program quality, similarity in political affiliation, similarity in religious affiliation, similarity in ethnicity, governing experience, gender, and the amount of money (or "campaign gifts") that the candidate gives out during his/her campaign stops. Once the respondent had answered all nine questions, he/she was asked to rank the most, second- and third-most important factors for his/her choice of a district head.

For each of the factors, I generated three binary outcome variables. The first is whether that factor is an important factor for the respondent. It is equal to one for a particular factor if the respondent answers "Yes" to it during the first series of the "Yes/No" questions. The second variable captures the notion of whether the respondents consider the factor to be among the top-three most important factors in a political candidate. It is equal to one for a factor if the respondent included it in his/her list of the three most important factors in a district head candidate. Finally, I generated a variable that is equal to one for a factor if it is listed as the respondent's most important factor in a district head candidate.

Table 18 presents the results. The first column suggests that religiosity is positively correlated with assigning importance on almost all factors except for program quality and the campaign-stop gifts. On the second column, as expected, we find that religiosity is associated with a greater likelihood of putting the candidate's religion among the top three most important factors. However, religiosity is negative associated with the likelihood of including the candidate's popularity, program quality, or "gift money" as the three most important factors in a candidate. Finally, in the third column, religiosity is positively associated with the likelihood of considering the candidate's religion to be the most important criterion, and negatively with the likelihood of considering the candidate's appearance, experience, program quality and campaign gifts to be the most important criteria. For the most religious, the religion of the candidate gains increasing importance at the expense of program quality.

Table 19 presents the correlations between the in-group political preferences and community heterogeneity. Similar to our results on discriminative trust and tolerance, we find that in-group-biased political preferences are negatively associated with village an subdistrict diversity. Meanwhile, subdistrict segregation is positively associated with assigning religion as the most important criteria in a district head. Similarly, the results on interactions between religiosity and community diversity and segregation variables (Table 20) suggest that a greater diversity (both at the village and subdistrict) is correlated with a weaker associations

between religiosity and in-group biases in political preference, reflected in the weaker link between religiosity and the likelihood that the respondent put religion as the most important criteria. In contrast, in more segregated subdistricts, the associations between religiosity and in-group biases in political preference tend to be stronger. Meanwhile, in more segregated villages, the association between religiosity and the likelihood of assigning religion as the most important criteria of a district head is stronger.

7   Conclusion

Using data on contemporary Indonesia, this paper provides evidence on the positive association between religion and cooperative attitudes. More religious people tend to trust neighbors and members of their communities more, but at the same time, exhibit more in-group trust and political preferences. Religiosity is also negatively correlated with tolerance and these correlations are strongest for among Muslims. These findings illustrate the extent of the link between religion and parochial altruism in Indonesia. In a more benign form, the link appears to be present in all religions, but the manifestation of parochial altruism tends to be strongest among the adherents of the country's majority religion, Islam. Meanwhile, consistent with previous literature, we find that after controlling for segregation, religious diversity tends to be negatively associated with trust. However, in support of the inter-group contact hypothesis, diversity tends to be positively associated with religious tolerance. On the other hand, religious segregation tends to have opposite associations with various measures of inter-group cooperative attitudes.

These results may help understand the link between religion and development. In many developing countries, politicians often resort to religion as a means to garner support. Indonesia is a case in point. The fall of the secular, authoritarian, and centralized government in 1998 has allowed a more important role for religion in the public space. Moreover, decentralization without a clear political commitment to separate the state and the church/mosque has allowed regional governments to implement policies with distinctly religious flavor (Bush, 2008).[43] This incursion of the government into religion will have implications toward intra- and inter-group cooperation and this problem does not appear to be isolated to Indonesia: Fox (2008) suggests an increase in government involvement in religion between 1990 and 2002. Future research should examine the causal links from these attitudes to economic outcomes, particularly those that depend on inter-group cooperation.

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[43]As of 2008, Bush (2008) counted 78 district regulations in 52 districts/municipalities that are religion-based.

References

Akerlof, George A. and Rachel E. Kranton, "Economics and Identity," *Quarterly Journal of Economics*, 2000, *115* (3), 715–753.

Alesina, Alberto and Ekaterina Zhuravskaya, "Segregation and the Quality of Government in a Cross Section of Countries," *American Economic Review*, August 2011, *101* (5), 1872–1911.

___ **and Eliana La Ferrara**, "Participation in Heterogeneous Communities," *Quarterly Journal of Economics*, 2000, *115* (3), 847–904.

___ **and** ___ , "Who trusts others?," *Journal of Public Economics*, August 2002, *85* (2), 207–234.

Allport, Gordon W., *1979. The nature of prejudice*, Reading Mass.: Addison-Wesley Pub. Co., 1954.

___ **and Bernard M. Kramer**, "Some roots of prejudice," *The Journal of general psychology*, 1946, *22*, 9.

Altonji, J. G, T. E Elder, and C. R Taber, "Selection on observed and unobserved variables: Assessing the effectiveness of Catholic schools," *Journal of Political Economy*, 2005, *113* (1), 151–184.

Anderson, Lisa, Jennifer Mellor, and Jeffrey Milyo, "Did the Devil Make Them Do It? The Effects of Religion in Public Goods and Trust Games," *Kyklos*, 2010, *63* (2), 163–175.

Arrow, Kenneth J., "What Has Economics to Say about Racial Discrimination?," *The Journal of Economic Perspectives*, April 1998, *12* (2), 91–100.

Batson, Charles, Patricia Schoenrade, and W. Larry Ventis, *Religion and the Individual : A Social-Psychological Perspective*, New York: Oxford Univ. Press, 1993.

Bellows, John and Edward Miguel, "War and Local Collective Action in Sierra Leone," Working Paper December 2008.

Benjamin, Daniel J., James J. Choi, and Geoffrey W. Fisher, "Religious Identity and Economic Behavior," NBER Working Paper 15925 April 2010.

Berg, Joyce, John Dickhaut, and Kevin McCabe, "Trust, Reciprocity, and Social History," *Games and Economic Behavior*, July 1995, *10* (1), 122–142.

Berman, Eli, "Sect, Subsidy, and Sacrifice: An Economist's View of Ultra-Orthodox Jews," *Quarterly Journal of Economics*, August 2000, *115*, 905–953.

Bernhard, Helen, Urs Fischbacher, and Ernst Fehr, "Parochial altruism in humans," *Nature*, August 2006, *442* (7105), 912–915.

Bertrand, Jacques, *Nationalism and ethnic conflict in Indonesia*, Cambridge, UK; New York: Cambridge University Press, 2004.

Bush, Robin, "Regional 'Sharia' Regulations in Indonesia: Anomaly or Symptom?," in Greg Fealy and Sally White, eds., *Expressing Islam: Religious Life and Politics in Indonesia*, Singapore: Institute of Southeast Asian Studies, 2008.

Carter, Michael R. and Marco Castillo, "Trustworthiness and Social Capital in South Africa: Analysis of Actual Living Standards Data and Artifactual Field Experiments," *Economic Development and Cultural Change*, July 2011, *59* (4), 695–722.

Chaney, Eric, "Tolerance, Religious Competition and the Rise and Fall of Muslim Science," 2008.

Choi, Jung-Kyoo and Samuel Bowles, "The Coevolution of Parochial Altruism and War," *Science*, October 2007, *318* (5850), 636 –640.

Clingingsmith, David, Asim Ijaz Khwaja, and Michael Kremer, "Estimating the Impact of The Hajj: Religion and Tolerance in Islam's Global Gathering," *The Quarterly Journal of Economics*, 2009, *124* (3), 1133 –1170.

Coleman, James, Thomas Hoffer, and Sally Kilgore, "Achievement and Segregation in Secondary Schools: A Further Look at Public and Private School Differences," *Sociology of Education*, April 1982, *55* (2/3), 162–182.

Costa, Dora L. and Matthew E. Kahn, "Civic Engagement and Community Heterogeneity: An Economist's Perspective," *Perspectives on Politics*, 2003, *1* (01), 103–111.

Croson, Rachel and Uri Gneezy, "Gender Differences in Preferences," *Journal of Economic Literature*, May 2009, *47*, 448–474.

Deaton, A. S, "Aging, religion, and health," NBER Working Paper 15271, National Bureau of Economic Research 2009.

Eagly, Alice H. and Maureen Crowley, "Gender and helping behavior: A meta-analytic review of the social psychological literature.," *Psychological Bulletin*, 1986, *100* (3), 283–308.

Fafchamps, Marcel, *Market institutions in Sub-Saharan Africa : theory and evidence*, Cambridge Mass.: MIT Press, 2004.

Fehr, Ernst, "On The Economics and Biology of Trust," *Journal of the European Economic Association*, April 2009, *7*, 235–266.

Fox, Jonathan, *A world survey of religion and the state*, Cambridge; New York: Cambridge University Press, 2008.

Frankel, David M. and Oscar Volij, "Measuring school segregation," *Journal of Economic Theory*, January 2011, *146* (1), 1–38.

Glaeser, Edward L., David I. Laibson, and Bruce Sacerdote, "An Economic Approach to Social Capital," *The Economic Journal*, 2002, *112* (483), F437–F458.

_ , _ , **Jose A. Scheinkman, and Christine L. Soutter**, "Measuring Trust," *Quarterly Journal of Economics*, August 2000, *115* (3), 811–846.

Granovetter, Mark, "The Impact of Social Structure on Economic Outcomes," *Journal of Economic Perspectives*, January 2005, *19* (1), 33–50.

Guiso, Luigi, Paola Sapienza, and Luigi Zingales, "People's opium? Religion and economic attitudes," *Journal of Monetary Economics*, January 2003, *50* (1), 225–282.

_ , _ , **and** _ , "Civic Capital as the Missing Link," in Jess Benhabib, Alberto Bisin, and Matthew Jackson, eds., *Handbook of social economics.*, Vol. Volume 1, North-Holland, 2011, pp. 417–480.

Habyarimana, James, Macartan Humphreys, Daniel N. Posner, and Jeremy M. Weinstein, "Why Does Ethnic Diversity Undermine Public Goods Provision?," *American Political Science Review*, November 2007, *101* (04).

Hall, Deborah L., David C. Matz, and Wendy Wood, "Why Don't We Practice What We Preach? A Meta-Analytic Review of Religious Racism," *Personality and Social Psychology Review*, February 2010, *14* (1), 126 –139.

Hamoudi, A., "Risk Preferences in Households and Families," Technical Report, UCLA working paper 2006.

Iannaccone, Laurence R., "Sacrifice and Stigma: Reducing Free-riding in Cults, Communes, and Other Collectives," *The Journal of Political Economy*, April 1992, *100* (2), 271–291.

Johnson, Megan K., Wade C. Rowatt, and Jordan LaBouff, "Priming Christian Religious Concepts Increases Racial Prejudice," *Social Psychological and Personality Science*, April 2010, *1* (2), 119 –126.

Knack, Stephen and Philip Keefer, "Does Social Capital Have An Economic Payoff? A Cross-Country Investigation," *Quarterly Journal of Economics*, 1997, *112* (4), 1251–1288.

La Porta, Rafael, Florencio Lopez de Silanes, Andrei Shleifer, and Robert W. Vishny, "Trust in Large Organizations," *The American Economic Review*, May 1997, *87* (2), 333–338.

Landes, David, *The Wealth and Poverty of Nations : Why Some Are So Rich and Some So Poor*, New York Ny: W.W. Norton, 1998.

Lehrer, Evelyn L, *Religion, economics, and demography : the effects of religion on education, work, and the family*, London: Routledge, 2009.

Levy, Gilat and Ronny Razin, "Religious Beliefs, Religious Participation, and Cooperation," *American Economic Journal: Microeconomics*, August 2012, *4* (3), 121–151.

Luttmer, Erzo F. P., "Group Loyalty and the Taste for Redistribution," *Journal of Political Economy*, 2001, *109* (3), 500–528.

Maluccio, John, Lawrence Haddad, and Julian May, "Social capital and household welfare in South Africa, 1993-98," *Journal of Development Studies*, August 2000, *36* (6), 54–81.

McCauley, John F., "Distinguishing Religious and Ethnic Politics: Evidence from a Field Experiment in West Africa," 2009.

Miguel, E and M Gugerty, "Ethnic diversity, social sanctions, and public goods in Kenya," *Journal of Public Economics*, December 2005, *89* (11-12), 2325–2368.

Mujani, Saiful, "Religious Democrats: Democratic Culture and Muslim Political Participation in Post-Suharto Indonesia." PhD dissertation, Ohio State University 2004.

Nannestad, P., "What have we learned about generalized trust, if anything?," *Annu. Rev. Polit. Sci.*, 2008, *11*, 413–436.

Narayan, Deepa and Lant Pritchett, "Cents and Sociability: Household Income and Social Capital in Rural Tanzania," *Economic Development and Cultural Change*, July 1999, *47* (4), 871–897.

Neusner, Jacob and Bruce Chilton, *Altruism in world religions*, Washington, D.C.: Georgetown University Press, 2005.

Norenzayan, Ara and Azim F. Shariff, "The Origin and Evolution of Religious Prosociality," *Science*, October 2008, *322* (5898), 58 –62.

Nunn, Nathan and Leonard Wantchekon, "The Slave Trade and the Origins of Mistrust in Africa," *American Economic Review*, December 2011, *101* (7), 3221–3252.

Olken, Benjamin A, "Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages," *American Economic Journal: Applied Economics*, September 2009, *1* (4), 1–33.

Parra, Juan Carlos, "The effects of religion on social cooperation: Results from a field experiment in Ghana," 2011.

Pettigrew, Thomas F. and Linda R. Tropp, "A Meta-Analytic Test of Intergroup Contact Theory.," *Journal of Personality and Social Psychology*, 2006, *90* (5), 751–783.

Putnam, Robert, Robert Leonardi, and Raffaella Y. Nanetti, *Making Democracy Work : Civic Traditions in Modern Italy*, Princeton N.J.: Princeton University Press, 1993.

Reardon, Sean F. and Glenn Firebaugh, "Measures of Multigroup Segregation," *Sociological Methodology*, 2002, *32* (1), 33–67.

 , John T. Yun, and Tamela Mcnulty Eitle, "The Changing Structure of School Segregation: Measurement and Evidence of Multiracial Metropolitan-Area School Segregation, 1989-1995," *Demography*, 2000, *37* (3), 351–364.

Rothwell, Jonathan T., "Trust in Diverse, Integrated, Cities: A Revisionist Perspective," *SSRN Electronic Journal*, 2010.

Ruffle, Bradley J. and Richard Sosis, "Cooperation and the in-group-out-group bias: A field test on Israeli kibbutz members and city residents," *Journal of Economic Behavior & Organization*, June 2006, *60* (2), 147–163.

Schechter, L., "Traditional trust measurement and the risk confound: An experiment in rural Paraguay," *Journal of Economic Behavior & Organization*, 2007, *62* (2), 272–292.

Sosis, Richard and Bradley J. Ruffle, "Ideology, religion, and the evolution of cooperation: Field experiments in Israeli Kibbutzim," in "Research in Economic Anthropology," Vol. 23, Bingley: Emerald (MCB UP), 2004, pp. 89–117.

Suryadinata, Leo, Evi Arifin Nurvidya, and Aris Ananta, *Indonesia's population : ethnicity and religion in a changing political landscape*, Singapore: Institute of Southeast Asian Studies, 2003.

Suryahadi, Asep, Chris Elbers, and Menno Pradhan, *Developing a Poverty map for Indonesia: an initiatory work in three provinces*, SMERU Research Institute and BPS, 2003.

Tan, Jonathan H.W. and Claudia Vogel, "Religion and trust: An experimental study," *Journal of Economic Psychology*, December 2008, *29* (6), 832–848.

Theil, Henri, *Statistical decomposition analysis: With applications in the social and administrative sciences*, North-Holland Pub. Co., 1972.

__ **and Anthony J. Finizza**, "A note on the measurement of racial integration of schools by means of informational concepts†," *The Journal of Mathematical Sociology*, July 1971, *1* (2), 187–193.

Uslaner, Eric M., "Segregation, mistrust and minorities," *Ethnicities*, December 2010, *10* (4), 415–434.

__ **and Richard S. Conley**, "Civic engagement and particularized trust," *American Politics Research*, 2003, *31* (4), 331–360.

Vigdor, Jacob L., "Community Composition and Collective Action: Analyzing Initial Mail Response to the 2000 Census," *Review of Economics and Statistics*, 2004, *86* (1), 303–312.

Tables

TABLE 1: SUMMARY STATISTICS: WILLINGESS TO HELP, TRUST AND TOLERANCE

	Num. of obs.	Mean	Std. dev.	Median	IQR	Min	Max
Community cohesion							
Willingness to help	29037	3.15	0.38	3	0	1	4
Village is [...]							
generally safe	29034	3.07	0.37	3	0	1	4
safe at night	29032	2.99	0.38	3	0	1	4
Trust neighbor to watch [...]							
children	21842	2.68	0.57	3	1	1	4
house	29035	2.87	0.46	3	0	1	4
Trust beliefs							
Trust [...] to return lost wallet							
neighbors	28425	3.03	0.94	3	1	1	4
strangers	27498	1.52	0.78	1	1	1	4
police	26916	2.81	0.99	3	2	1	4
Trust [...] more							
coreligionist	29036	2.80	0.58	3	1	1	4
coethnic	29036	2.65	0.58	3	1	1	4
Tolerance							
Tolerate non-coreligionist to live in [...]							
village.	29037	2.80	0.54	3	0	1	4
neighborhood.	29037	2.75	0.58	3	0	1	4
house.	29035	2.43	0.73	3	1	1	4
Tolerate non-coreligionist to [...]							
marry a relative.	29035	1.77	0.81	2	1	1	4
build house of worship.	29035	2.26	0.79	2	1	1	4

TABLE 2: DISTRIBUTION OF RELIGIOSITY

	Degree of religiosity				Num. of obs.
	Not religious	Somewhat religious	Religious	Very religious	
All religions	0.03	0.19	0.73	0.06	28973
Islam	0.03	0.19	0.73	0.05	25890
Catholic	0.03	0.15	0.72	0.09	447
Protestant	0.02	0.15	0.76	0.07	1157
Hindu	0.01	0.05	0.77	0.17	1392
Buddhist	0	0.21	0.70	0.09	87

	Not religious	Somewhat religious	Religious	Very religious	Refused to answer
Muslim					
How many times do you pray each day?					
$[\chi^2(9, 25856) = 8.9e+03, p = 0.00]^*$					
Do not practice	0.66	0.25	0.04	0.01	0.19
Between 0 and 5	0.25	0.43	0.11	0.09	0.07
5 times	0.08	0.29	0.73	0.65	0.47
More than 5	0.01	0.02	0.11	0.25	0.07
Refused to answer	0.00	0.00	0.00	0.00	0.21
Do you eat halal food?					
$[\chi^2(3, 25856) = 140.4, p = 0.00]^*$					
Yes	0.91	0.96	0.98	0.98	0.95
Num. of obs.	712	5034	18793	1352	58
Christian					
How often do you pray/read the bible?					
$[\chi^2(12, 1601) = 319.9, p = 0.00]^*$					
Do not practice	0.27	0.02	0.01	0.01	0.00
Sometimes	0.41	0.31	0.12	0.05	0.00
Morning and evening	0.10	0.20	0.08	0.05	0.00
Once a day	0.15	0.17	0.28	0.23	0.50
Before each activities	0.07	0.29	0.51	0.67	0.50
Refused to answer	0.00	0.00	0.00	0.00	0.00
Do you actively participate in religious activities?					
$[\chi^2(3, 1601) = 151.8, p = 0.00]^*$					
Yes	0.27	0.62	0.85	0.91	0.5
Num. of obs.	41	244	1205	120	2
Hindu					
Do you practice meditation in the temple?					
$[\chi^2(9, 1392) = 118.1, p = 0.00]^*$					
Do not practice	0.38	0.04	0.01	0.00	0.00
On holy days	0.25	0.41	0.28	0.19	0.33
During the full moon	0.38	0.17	0.25	0.20	0.67
Every day	0.00	0.38	0.46	0.61	0.00
Do you have religious-related dietary restrictions?					
$[\chi^2(9, 1392) = 27.1, p = 0.00]^*$					
No dietary restrictions	0.75	0.80	0.70	0.61	0.67
Some dietary restriction	0.13	0.01	0.02	0.00	0.00
No beef/red meat	0.13	0.17	0.27	0.36	0.33
Vegetarian/vegan diet	0.00	0.01	0.01	0.02	0.00
Num. of obs.	8	71	1068	242	3
Buddhist					
Do you practice meditation in the temple?					
$[\chi^2(4, 86) = 11.49, p = 0.02]^*$					
Do not practice	-	0.56	0.16	0.25	0.00
On 1st & 15th of each Chinese month	-	0.22	0.39	0.25	1.00
Every day	-	0.22	0.43	0.50	0.00
Are you a vegetarian?					
$[\chi^2(2, 86) = 3.93, p = 0.14]^*$					
Yes		0.00	0.13	0.25	1.00
Num. of obs.		18	61	8	1

$^*\chi^2$ calculations exclude respondents who refuse to answer the religiosity question.

TABLE 4: SHARE PARTICIPATING IN RELIGIOUS ACTIVITIES IN THE VILLAGE[†]

	Degree of religiosity				Statistics	
	Not religious	Somewhat religious	Religious	Very religious	Num. of obs.	P-val χ^2
All religions	0.29	0.41	0.61	0.70	25917	0.000
Muslims	0.28	0.40	0.59	0.66	23291	0.000
Catholics	0.27	0.57	0.80	0.76	383	0.000
Protestants	0.45	0.62	0.76	0.88	1016	0.000
Hindus	0.67	0.66	0.79	0.82	1173	0.053
Buddhists	-	0.00	0.26	0.57	54	0.035

[†] Responses to whether respondents participate in any religious activity held in the village in the past 12 months.

TABLE 5: SUMMARY STATISTICS: REGRESSORS

	Num. of obs.	Mean	Std. dev.	Median	IQR	Min	Max
Individual-level variables							
Basic specification							
Religiosity	28973	2.82	0.56	3	0	1	4
Male	29037	0.48	0.50	0	1	0	1
Age	29034	36.87	15.62	34	22	13	100
Years of education	29023	7.40	4.02	9	3	0	18
Risk aversion	29029	2.72	1.46	3	2	0	4
Patience	29020	1.48	0.93	1	1	0	4
Married	29037	0.70	0.46	1	1	0	1
Extended specification							
Received corlgn edu.	29037	0.33	0.47	0	1	0	1
Received non-corlgn edu.	29037	0.04	0.20	0	0	0	1
Household-level variables							
Monthly per-capita expenditure	29014	484193.48	706572.53	326482.3	348159.5	0	5.8e+07
Log (1 + PCE)	29014	12.74	0.79	12.7	1.00	0	18
Community-level variables							
Urban	29037	0.53	0.50	1	1	0	1
Topography:							
Plain	28362	0.80	0.40	1	0	0	1
Coast	28362	0.10	0.30	0	0	0	1
Valley	28362	0.01	0.09	0	0	0	1
Hill	28362	0.09	0.29	0	0	0	1
Population density (pop/ha)	28362	49.66	98.08	17.6	44.6	0.0089	1782
Receives broadcast of:							
Public TV station	28362	0.91	0.29	1	0	0	1
Private TV station	28362	0.84	0.37	1	0	0	1
Natural disaster in last 5 years	28869	0.54	0.50	1	1	0	1
Distance to:							
Subistrict capital (km)	28360	4.71	5.51	3	3.98	0.10	44
District capital (km)	28360	20.20	22.02	12	24	0.10	138
Village-level:							
Diversity	28362	0.22	0.27	0.10	0.33	0	1.3
Segregation	28362	0.04	0.06	0.018	0.055	0	.47
Subdistrict-level:							
Diversity	28894	0.26	0.27	0.17	0.35	0	1.3
Segregation	28894	0.04	0.06	0.014	0.031	0	.52
PCE Gini	28666	0.24	0.03	0.24	0.051	0.14	.36

TABLE 6: COMMUNITY COHESION & TRUST BELIEFS

	Willing to help (1)	Village is safe [...] generally (2)	at night (3)	Trust nbr. to watch kid(s) (4)	house (5)	Trust [...] to return lost wallet neighbors (6)	strangers (7)	police (8)
Religiosity:								
Religious/ very religious	0.013**	0.026***	0.008	0.011	-0.000	0.109***	0.027**	0.139***
	(1.98)	(4.81)	(1.26)	(0.93)	(-0.00)	(6.52)	(2.08)	(7.05)
Very religious	0.162***	0.171***	0.090***	0.063***	0.062***	0.097***	-0.055**	0.172***
	(11.64)	(10.73)	(5.81)	(2.94)	(4.08)	(3.28)	(-2.30)	(6.22)
Male	0.043***	0.024***	0.109***	0.055***	0.051***	0.028***	0.032***	-0.119***
	(8.69)	(4.87)	(15.75)	(7.58)	(9.41)	(2.61)	(3.06)	(-8.74)
Age:								
≥ 25 years old	-0.004	0.021***	0.053***	0.049***	0.030***	0.017	0.009	-0.087***
	(-0.58)	(3.51)	(7.16)	(3.89)	(3.86)	(1.11)	(0.74)	(-4.74)
≥ 45 years old	0.002	0.012*	0.027***	0.069***	0.025***	0.022	0.044***	0.042***
	(0.36)	(1.94)	(4.57)	(6.49)	(3.17)	(1.38)	(3.20)	(2.69)
≥ 65 years old	-0.041***	-0.025***	-0.012	-0.023	-0.031**	-0.003	0.059***	-0.024
	(-4.04)	(-2.91)	(-1.45)	(-1.39)	(-2.50)	(-0.13)	(2.64)	(-0.88)
Education:								
Some junior high school	0.032***	-0.009	-0.020***	-0.049***	-0.023***	0.053***	0.027*	0.047***
	(4.45)	(-1.25)	(-2.66)	(-4.44)	(-2.93)	(3.11)	(1.96)	(2.72)
Some senior high school	0.019**	-0.006	-0.005	-0.045***	-0.017**	0.045***	0.045***	-0.000
	(2.56)	(-0.89)	(-0.80)	(-3.45)	(-2.01)	(2.62)	(3.06)	(-0.01)
Some college	0.017*	0.004	0.018*	-0.051***	-0.003	0.078***	0.142***	-0.055**
	(1.69)	(0.45)	(1.96)	(-3.12)	(-0.32)	(3.65)	(6.84)	(-2.34)
Risk aversion	0.003	0.000	-0.001	-0.010***	-0.004*	-0.005	-0.005	0.001
	(1.44)	(0.13)	(-0.42)	(-2.77)	(-1.77)	(-1.02)	(-1.24)	(0.16)
Patience	0.014***	0.000	-0.007***	0.006	0.001	0.009	0.012**	0.042***
	(4.64)	(0.06)	(-2.97)	(1.17)	(0.15)	(1.33)	(2.05)	(5.35)
Married	0.007	0.005	0.005	-0.047***	-0.019***	0.008	-0.013	-0.015
	(1.26)	(0.97)	(0.89)	(-4.10)	(-2.78)	(0.58)	(-1.07)	(-0.97)
Log. (1 + PCE) Spline:								
Below median†	0.016**	0.005	0.005	0.003	0.003	0.020	0.027*	-0.004
	(2.11)	(0.72)	(0.66)	(0.26)	(0.33)	(1.10)	(1.81)	(-0.18)
Above median†	0.000	-0.011*	-0.005	-0.007	-0.021***	-0.037***	0.004	-0.012
	(0.07)	(-1.88)	(-0.72)	(-0.65)	(-2.77)	(-2.69)	(0.28)	(-0.78)
Constant	2.859***	2.954***	2.837***	2.649***	2.834***	2.606***	1.094***	2.778***
	(30.95)	(32.90)	(29.17)	(17.82)	(27.20)	(11.73)	(6.07)	(10.58)
Community fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Religion fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
N	28932	28929	28927	21759	28930	28333	27411	26832
Adj. R²	0.084	0.088	0.088	0.097	0.050	0.100	0.059	0.082

t statistics in parentheses. * p < 0.1, ** p < 0.05, *** p < 0.01
†Spline coefficients are for the slope of the interval. The omitted education category is "Some primary or no school". The omitted age category is "15-24 years old". Standard errors are robust and clustered at the community level.

TABLE 7: DISCRIMINATIVE TRUST & TOLERANCE

	Trust [. . .] more		Tolerate non-corlgn living in [. . .]			Tolerate non-corlgn to [. . .]	
	corelgn (1)	coethnics (2)	village (3)	neighbor (4)	house (5)	marry rltv. (6)	bld h. wrshp (7)
Religiosity:							
Religious/ very religious	0.087***	0.068***	-0.059***	-0.081***	-0.120***	-0.132***	-0.101***
	(8.48)	(6.33)	(-6.10)	(-8.50)	(-10.89)	(-9.79)	(-8.56)
Very religious	0.160***	0.070***	-0.007	-0.011	-0.089***	-0.138***	-0.103***
	(8.72)	(3.71)	(-0.43)	(-0.64)	(-4.32)	(-5.79)	(-4.60)
Male	-0.016**	-0.041***	0.013**	0.010	0.032***	0.059***	-0.001
	(-2.44)	(-6.27)	(2.09)	(1.40)	(3.95)	(6.87)	(-0.07)
Age:							
≥ 25 years old	0.008	-0.020**	-0.007	-0.016**	-0.040***	-0.065***	-0.027**
	(0.82)	(-2.13)	(-0.95)	(-1.99)	(-3.46)	(-4.78)	(-2.14)
≥ 45 years old	0.029***	0.009	-0.023***	-0.034***	-0.061***	-0.049***	-0.006
	(3.01)	(0.96)	(-3.08)	(-3.81)	(-5.24)	(-3.79)	(-0.49)
≥ 65 years old	-0.000	0.024*	-0.029**	-0.027**	-0.041**	0.038**	-0.008
	(-0.01)	(1.91)	(-2.19)	(-1.97)	(-2.37)	(2.10)	(-0.40)
Education:							
Some junior high school	-0.054***	-0.068***	0.070***	0.081***	0.050***	-0.027*	0.014
	(-5.09)	(-6.90)	(6.87)	(8.39)	(4.06)	(-1.82)	(1.06)
Some senior high school	-0.074***	-0.098***	0.026***	0.021**	0.005	-0.047***	0.025*
	(-7.58)	(-9.65)	(3.01)	(2.29)	(0.43)	(-3.57)	(1.95)
Some college	-0.073***	-0.118***	0.044***	0.035***	0.022	-0.071***	0.037**
	(-5.15)	(-8.23)	(4.15)	(3.30)	(1.33)	(-4.06)	(2.19)
Risk aversion	0.012***	0.013***	0.001	0.001	-0.005	0.008**	-0.002
	(4.03)	(4.53)	(0.18)	(0.18)	(-1.61)	(2.01)	(-0.46)
Patience	0.006	-0.012***	0.008**	0.006	-0.012***	-0.013**	-0.008
	(1.36)	(-2.96)	(2.17)	(1.57)	(-2.78)	(-2.49)	(-1.59)
Married	-0.009	0.011	-0.014*	-0.005	-0.044***	-0.056***	-0.027**
	(-1.16)	(1.38)	(-1.95)	(-0.67)	(-4.55)	(-4.65)	(-2.58)
Log. (1 + PCE) Spline:							
Below median†	-0.002	-0.028***	0.029***	0.025**	0.018	-0.027*	0.018
	(-0.19)	(-3.01)	(2.67)	(2.25)	(1.36)	(-1.82)	(1.36)
Above median†	-0.014	-0.017*	0.011	0.013*	0.003	-0.010	0.024**
	(-1.53)	(-1.92)	(1.45)	(1.67)	(0.27)	(-0.84)	(2.13)
Constant	2.795***	3.058***	2.417***	2.431***	2.333***	2.260***	2.105***
	(22.90)	(26.06)	(17.79)	(17.15)	(14.06)	(12.20)	(12.31)
Community fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Religion fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
N	28931	28931	28932	28932	28931	28931	28931
Adj. R²	0.151	0.174	0.222	0.252	0.263	0.242	0.265

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

† Spline coefficients are for the slope of the interval. The omitted education category is "Some primary or no school". The omitted age category is "15-24 years old". Standard errors are robust and clustered at the community level.

TABLE 8: RELIGIOSITY AND RELIGIOUS EDUCATION

	BASIC		EXTENDED			
	Religious/ Very (1)	Very Religious (2)	Religious/ Very (3)	Very Religious (4)	CoreIgn. education (5)	Non-coreIgn. education (6)
Willing to help	0.013**	0.162***	0.013**	0.162***	-0.010*	-0.016
	(1.98)	(11.64)	(2.01)	(11.64)	(-1.73)	(-1.09)
Vilage is safe [...]						
generally	0.026***	0.171***	0.026***	0.170***	-0.003	-0.008
	(4.81)	(10.73)	(4.82)	(10.72)	(-0.61)	(-0.64)
at night	0.008	0.090***	0.008	0.090***	-0.002	0.023*
	(1.26)	(5.81)	(1.30)	(5.82)	(-0.32)	(1.86)
Trust neighbor to watch [...]						
kid(s)	0.011	0.063***	0.010	0.063***	0.021**	-0.028
	(0.93)	(2.94)	(0.85)	(2.92)	(2.26)	(-1.43)
house	-0.000	0.062***	-0.000	0.062***	0.007	-0.005
	(-0.00)	(4.08)	(-0.04)	(4.06)	(0.92)	(-0.34)
Trust [...] to return wallet						
neighbors	0.109***	0.097***	0.109***	0.097***	0.004	0.024
	(6.52)	(3.28)	(6.54)	(3.29)	(0.31)	(0.69)
strangers	0.027**	-0.055**	0.027**	-0.055**	0.002	0.010
	(2.08)	(-2.30)	(2.08)	(-2.30)	(0.19)	(0.28)
police	0.139***	0.172***	0.139***	0.171***	-0.015	-0.040
	(7.05)	(6.22)	(7.04)	(6.20)	(-1.10)	(-1.20)
Trust [...] more						
coreligionists	0.087***	0.160***	0.085***	0.159***	0.025***	-0.039**
	(8.48)	(8.72)	(8.37)	(8.67)	(3.07)	(-1.99)
coethnics	0.068***	0.070***	0.067***	0.070***	0.019**	-0.006
	(6.33)	(3.71)	(6.28)	(3.68)	(2.30)	(-0.35)
Tolerate non-coreligionist to live in [...]						
village	-0.059***	-0.007	-0.058***	-0.006	-0.038***	0.020
	(-6.10)	(-0.43)	(-5.98)	(-0.37)	(-5.06)	(1.52)
neighborhood	-0.081***	-0.011	-0.079***	-0.010	-0.045***	0.030**
	(-8.50)	(-0.64)	(-8.37)	(-0.57)	(-5.89)	(2.22)
house	-0.120***	-0.089***	-0.118***	-0.087***	-0.059***	0.055***
	(-10.89)	(-4.32)	(-10.72)	(-4.20)	(-6.06)	(2.78)
Tolerate non-coreligionist to [...]						
marry relative	-0.132***	-0.138***	-0.130***	-0.136***	-0.038***	0.061**
	(-9.79)	(-5.79)	(-9.68)	(-5.72)	(-3.29)	(2.32)
build house of worship	-0.101***	-0.103***	-0.098***	-0.101***	-0.063***	0.087***
	(-8.56)	(-4.60)	(-8.33)	(-4.51)	(-5.56)	(3.82)

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.
Each row presents results from separate regressions with community and religion fixed-effects. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant. Education institution dummies are relative to non-religious public and private education.

TABLE 9: SELECTION ON OBSERVABLES TO ASSESS POTENTIAL BIAS FROM UNOBSERVABLES

	BASIC		EXTENDED	
	Religious/ Very Religious (1)	Very Religious (2)	Religious/ Very Religious (3)	Very Religious (4)
Willing to help	-1.17	-50.21	-1.17	-50.67
Vilage is safe [...]				
generally	24.60	88.65	25.20	85.69
at night	-3.83	13.66	-3.48	14.54
Trust neighbor to watch [...]				
kid(s)	1.36	4.60	1.11	4.37
house	-0.03	11.83	0.16	11.36
Trust [...] to return wallet				
neighbors	-42.31	-15.84	-40.37	-15.20
strangers	7.01	63.45	7.07	56.87
police	83.43	-69.75	89.29	-78.43
Trust [...] more				
coreligionists	12.34	22.76	10.42	19.71
coethnics	6.60	6.63	6.14	6.33
Tolerate non-coreligionist to live in [...]				
village	5.27	1.03	4.58	0.77
neighborhood	6.31	1.40	5.46	1.06
house	5.62	28.20	4.95	17.30
Tolerate non-coreligionist to [...]				
marry relative	9.75	-8.05	8.47	-8.78
build house of worship	-69.53	-24.47	70.76	-56.77
Full-control specification includes:				
Religious education controls	No	No	Yes	Yes
Individual-level controls	Yes	Yes	Yes	Yes
Community fixed effects	Yes	Yes	Yes	Yes
Religion fixed effects	Yes	Yes	Yes	Yes

Each cell calculates the following measure: $\hat{\beta}_C/(\hat{\beta}_{NC} - \hat{\beta}_C)$ where $\hat{\beta}_C$ is the estimated religiosity coefficient in the full-control specification and $\hat{\beta}_{NC}$ is the coefficient in the no-control specification. Estimates are made using OLS and fixed effects are implemented in estimating both control and no-control specifications. The individual-level controls are sex, dummy variables for age and education categories, risk and time preference, married status. The household-level controls are the linear splines for log PCE.

TABLE 10: INTER-RELIGION DIFFERENCES IN COMMUNITY COHESION

	Willing to help (1)	Village is safe [...] generally (2)	at night (3)	Trust nbr. to watch kid(s) (4)	house (5)	Willing to help (6)	Village is safe [...] generally (7)	at night (8)	Trust nbr. to watch kid(s) (9)	house (10)
Catholic	-0.027	0.019	0.046**	0.015	-0.035	-0.058	-0.019	0.027	0.045	-0.027
	(-1.50)	(0.77)	(1.98)	(0.38)	(-1.19)	(-1.57)	(-0.47)	(0.51)	(0.67)	(-0.54)
Protestant	-0.029*	-0.011	0.008	0.038*	0.005	-0.091**	-0.097**	-0.045	0.036	-0.001
	(-1.72)	(-0.67)	(0.45)	(1.69)	(0.27)	(-2.52)	(-2.38)	(-0.92)	(0.53)	(-0.03)
Hindu	0.001	-0.039**	0.023	0.062	-0.034	-0.000	-0.059	-0.009	0.065	0.037
	(0.03)	(-2.17)	(1.04)	(1.29)	(-0.63)	(-0.00)	(-1.53)	(-0.19)	(0.70)	(0.58)
Buddhist	0.004	-0.070	-0.083	-0.211**	-0.207***	-0.046	-0.122	-0.119	-0.176	-0.206**
	(0.11)	(-0.90)	(-1.28)	(-2.37)	(-3.50)	(-0.92)	(-1.27)	(-1.49)	(-1.49)	(-2.40)
Majority religion in village						-0.035	-0.043	-0.021	0.026	0.004
						(-1.03)	(-1.09)	(-0.47)	(0.40)	(0.08)
... × Catholic						0.052	0.001	-0.059	-0.627***	-0.486*
						(1.19)	(0.02)	(-0.74)	(-7.33)	(-1.76)
... × Protestant						0.119**	0.172***	0.112*	0.044	0.028
						(2.04)	(3.03)	(1.81)	(0.54)	(0.48)
... × Hindu						0.001	0.043	0.068	-0.003	-0.146
						(0.01)	(0.65)	(0.88)	(-0.02)	(-1.62)
... × Buddhist						0.242**	0.178*	0.196**	-0.140	0.040
						(2.42)	(1.73)	(2.12)	(-0.96)	(0.56)
Constant	3.084***	3.120***	2.936***	2.805***	3.013***	3.111***	3.151***	2.950***	2.772***	3.007***
	(23.27)	(27.19)	(26.45)	(15.69)	(24.11)	(22.90)	(26.68)	(24.95)	(14.45)	(22.22)
Province fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P-val of joint test on:										
Religions	0.372	0.132	0.267	0.054	0.004	0.025	0.057	0.062	0.225	0.014
Majority status & int.						0.032	0.007	0.019	0.312	0.021
Religions × majority status						0.018	0.004	0.112	0.361	0.032
N	27751	27748	27746	20912	27749	27751	27748	27746	20912	27749
Adj. R^2	0.057	0.051	0.054	0.069	0.034	0.057	0.052	0.055	0.069	0.034

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Standard errors are robust and clustered at the community level. Included variables not shown: dummy variables for religiosity, age and education categories, sex, risk and time preference, linear spline for log PCE, urban/rural status, log population density, dummy variables for topography, whether village is natural disaster prone, and recently experienced natural disaster, receipt of public and local television signals, the number of private television signals, distance from subdistricts and districts. "Muslim" is the omitted category.

TABLE 11: INTER-RELIGION DIFFERENCES IN TRUST BELIEFS

	Trust […] to return lost wallet			Trust […] more		Trust […] to return lost wallet			Trust […] more	
	neighbors (1)	strangers (2)	police (3)	corelgn. (4)	coethnics (5)	neighbors (6)	strangers (7)	police (8)	corelgn. (9)	coethnics (10)
Catholic	-0.020	0.046	-0.051	-0.305***	-0.065*	-0.096	-0.042	-0.171*	-0.254***	-0.046
	(-0.33)	(1.03)	(-0.66)	(-7.55)	(-1.85)	(-0.63)	(-0.52)	(-1.65)	(-3.33)	(-0.66)
Protestant	-0.073	-0.006	-0.018	-0.195***	-0.033	-0.195	-0.121	-0.169*	-0.175***	-0.091
	(-1.23)	(-0.19)	(-0.59)	(-4.94)	(-0.86)	(-1.47)	(-1.61)	(-1.86)	(-2.75)	(-1.30)
Hindu	0.028	-0.005	0.084	-0.149***	-0.033	-0.033	-0.133*	0.005	-0.169**	-0.032
	(0.26)	(-0.09)	(1.34)	(-3.70)	(-0.95)	(-0.21)	(-1.69)	(0.04)	(-2.01)	(-0.39)
Buddhist	-0.051	-0.067	-0.133	-0.298***	-0.175***	-0.133	-0.124	-0.249*	-0.206**	-0.139
	(-0.44)	(-0.80)	(-1.42)	(-3.32)	(-2.71)	(-0.83)	(-1.11)	(-1.88)	(-2.03)	(-1.52)
Majority religion in village						-0.078	-0.096	-0.128	0.058	0.016
						(-0.59)	(-1.35)	(-1.60)	(0.91)	(0.23)
…× Catholic						0.656**	-0.242**	0.075	0.458***	-0.296
						(2.46)	(-2.05)	(0.33)	(4.77)	(-0.92)
…× Protestant						0.217	0.160	0.218*	0.026	0.181
						(1.00)	(1.23)	(1.73)	(0.23)	(1.56)
…× Hindu						0.123	0.250*	0.148	0.059	0.014
						(0.31)	(1.73)	(0.83)	(0.38)	(0.10)
…× Buddhist						0.190	-0.307***	0.096	-0.465***	-0.223*
						(0.93)	(-2.67)	(0.57)	(-2.82)	(-1.72)
Constant	3.154***	1.059***	3.161***	3.082***	3.334***	3.218***	1.143***	3.275***	3.021***	3.304***
	(12.68)	(5.31)	(10.30)	(18.84)	(18.02)	(11.85)	(5.47)	(10.38)	(17.15)	(16.90)
Province fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P-val of joint test on:										
Religions	0.725	0.745	0.373	0.000	0.038	0.262	0.144	0.189	0.018	0.414
Majority status & int.						0.828	0.000	0.539	0.003	0.023
Religions × majority status						0.715	0.000	0.394	0.013	0.043
N	27178	26278	25690	27750	27750	27178	26278	25690	27750	27750
Adj. R²	0.074	0.041	0.062	0.108	0.135	0.074	0.041	0.062	0.109	0.136

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Standard errors are robust and clustered at the community level. Included variables not shown: dummy variables for religiosity, age and education categories, sex, risk and time preference, linear spline for log PCE, urban/rural status, log population density, dummy variables for topography, whether village is natural disaster prone, and recently experienced natural disaster, receipt of public and local television signals, the number of private television signals, distance from subdistricts and districts. "Muslim" is the omitted category.

TABLE 12: INTER-RELIGION DIFFERENCES IN TOLERANCE

	Tolerate non-corlgn living in [...]			Tolerate non-corlgn to [...]		Tolerate non-corlgn living in [...]			Tolerate non-corlgn to [...]	
	village (1)	neighbor (2)	house (3)	marry reltv. (4)	bld h. wrshp (5)	village (6)	neighbor (7)	house (8)	marry reltv. (9)	bld h. wrshp (10)
Catholic	0.129***	0.160***	0.421***	0.776***	0.557***	0.046	0.033	0.270***	0.583***	0.286***
	(5.50)	(6.30)	(13.07)	(16.37)	(15.06)	(1.02)	(0.67)	(3.19)	(6.53)	(2.85)
Protestant	0.117***	0.159***	0.411***	0.686***	0.459***	0.013	0.007	0.238***	0.422***	0.216**
	(5.95)	(6.49)	(11.26)	(15.20)	(9.53)	(0.32)	(0.16)	(2.86)	(5.22)	(2.17)
Hindu	0.119***	0.160***	0.319***	0.704***	0.210*	0.096	0.059	0.175	0.499***	0.155
	(3.23)	(3.78)	(5.20)	(8.52)	(1.88)	(1.42)	(0.80)	(1.42)	(3.35)	(1.34)
Buddhist	0.175***	0.225***	0.398***	0.987***	0.563***	0.087	0.091	0.240**	0.761***	0.306***
	(3.93)	(4.48)	(5.84)	(11.13)	(7.79)	(1.50)	(1.43)	(2.25)	(6.39)	(2.71)
Majority religion in village						-0.089**	-0.136***	-0.161**	-0.210**	-0.288***
						(-2.01)	(-2.83)	(-2.00)	(-2.59)	(-2.77)
...× Catholic						0.009	0.046	0.007	-0.233	0.007
						(0.10)	(0.47)	(0.04)	(-0.67)	(0.05)
...× Protestant						0.154**	0.209***	0.225*	0.399***	0.239*
						(2.23)	(2.74)	(1.91)	(3.04)	(1.69)
...× Hindu						0.035	0.189**	0.273*	0.398*	0.057
						(0.35)	(1.98)	(1.67)	(1.71)	(0.30)
...× Buddhist						0.164*	0.211**	0.235	0.526***	0.172
						(1.76)	(2.22)	(1.61)	(3.86)	(1.24)
Constant	1.954***	1.808***	1.787***	1.820***	1.661***	2.034***	1.931***	1.934***	2.004***	1.939***
	(8.64)	(7.91)	(6.15)	(7.04)	(6.10)	(8.84)	(8.27)	(6.44)	(7.22)	(6.59)
Province fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes	Yes
P-val of joint test on:										
Religions	0.000	0.000	0.000	0.000	0.000	0.278	0.462	0.039	0.000	0.023
Majority status & int.						0.091	0.053	0.349	0.002	0.000
Religions × majority status						0.081	0.031	0.231	0.001	0.225
N	27751	27751	27750	27750	27750	27751	27751	27750	27750	27750
Adj. R^2	0.172	0.200	0.221	0.205	0.202	0.172	0.200	0.222	0.206	0.203

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

Standard errors are robust and clustered at the community level. Included variables not shown: dummy variables for religiosity, age and education categories, sex, risk and time preference, linear spline for log PCE, urban/rural status, log population density, dummy variables for topography, whether village is natural disaster prone, and recently experienced natural disaster, receipt of public and local television signals, the number of private television signals, distance from subdistricts and districts. "Muslim" is the omitted category.

TABLE 13: INTER-RELIGION DIFFERENCES IN THE ASSOCIATIONS BETWEEN RELIGIOSITY AND ATTITUDES

| | Religious/ Very religious | Very religious | (Religious/ Very religious) × [...] | | | | Statistics | |
| | | | Catholic | Protestant | Hindu | Buddhist | Num. of obs. | P-val of joint test: Religions |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Willing to help	0.011*	0.162***	0.043	0.028	-0.012	0.070	28932	0.381
	(1.66)	(11.61)	(1.04)	(1.18)	(-0.28)	(1.40)		
Vilage is safe [...]								
generally	0.027***	0.171***	0.020	-0.011	-0.061	-0.060	28929	0.572
	(4.95)	(10.75)	(0.43)	(-0.45)	(-1.51)	(-0.57)		
at night	0.008	0.090***	-0.017	-0.011	0.015	-0.079	28927	0.939
	(1.33)	(5.81)	(-0.31)	(-0.37)	(0.35)	(-0.64)		
Trust neighbor to watch [...]								
kid(s)	0.012	0.063***	-0.064	0.009	-0.062	0.092	21759	0.789
	(1.00)	(2.94)	(-0.85)	(0.17)	(-0.84)	(0.51)		
house	0.002	0.062***	0.015	-0.028	-0.030	-0.112	28930	0.799
	(0.20)	(4.08)	(0.31)	(-0.73)	(-0.63)	(-0.87)		
Trust [...] to return wallet								
neighbors	0.111***	0.098***	-0.123	0.095	-0.185	-0.231	28333	0.300
	(6.57)	(3.31)	(-1.16)	(0.98)	(-1.44)	(-0.91)		
strangers	0.027**	-0.055**	-0.032	0.030	-0.002	-0.150	27411	0.911
	(2.03)	(-2.29)	(-0.30)	(0.45)	(-0.03)	(-0.83)		
police	0.140***	0.172***	0.297***	-0.094	-0.133	-0.040	26832	0.048
	(6.81)	(6.24)	(2.77)	(-0.94)	(-1.16)	(-0.14)		
Trust [...] more								
coreligionists	0.087***	0.160***	0.071	-0.036	-0.002	-0.062	28931	0.631
	(8.08)	(8.71)	(1.07)	(-0.95)	(-0.03)	(-0.49)		
coethnics	0.069***	0.070***	0.030	-0.062	0.046	0.042	28931	0.400
	(6.22)	(3.69)	(0.43)	(-1.51)	(1.10)	(0.29)		
Tolerate non-coreligionist to live in [...]								
village	-0.066***	-0.008	0.167***	0.046*	0.133***	0.154	28932	0
	(-6.42)	(-0.49)	(3.12)	(1.71)	(3.86)	(1.19)		
neighborhood	-0.089***	-0.012	0.190***	0.078***	0.154***	0.167	28932	0
	(-8.93)	(-0.71)	(3.66)	(2.94)	(4.70)	(1.27)		
house	-0.132***	-0.090***	0.193***	0.151***	0.219***	0	28931	0
	(-11.20)	(-4.43)	(3.46)	(4.28)	(4.27)	(0.00)		
Tolerate non-coreligionist to [...]								
marry relative	-0.141***	-0.139***	-0.051	0.141**	0.212***	0.283**	28931	0.001
	(-9.93)	(-5.88)	(-0.65)	(2.26)	(2.77)	(2.50)		
build house of worship	-0.112***	-0.105***	0.073	0.128***	0.262***	0.212	28931	0
	(-8.89)	(-4.65)	(1.18)	(2.73)	(4.01)	(1.53)		

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Each row presents results from separate regressions for model with community and religion fixed effects. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant.

TABLE 14: RELIGIOSITY BY GENDER

	MALE		FEMALE	
	Religious/ Very (1)	Very Religious (2)	Religious/ Very (3)	Very Religious (4)
Willing to help	0.017*	0.163***	0.004	0.158***
	(1.81)	(7.86)	(0.51)	(9.08)
Vilage is safe [...]				
generally	0.028***	0.181***	0.024***	0.157***
	(3.67)	(8.46)	(2.89)	(7.73)
at night	0.006	0.134***	0.018*	0.056***
	(0.82)	(6.54)	(1.89)	(2.64)
Trust neighbor to watch [...]				
kid(s)	0.015	0.066**	0.003	0.056**
	(0.98)	(2.01)	(0.18)	(2.19)
house	0.005	0.069***	-0.010	0.050**
	(0.59)	(3.27)	(-0.87)	(2.42)
Trust [...] to return wallet				
neighbors	0.123***	0.096**	0.082***	0.098**
	(5.78)	(2.38)	(3.51)	(2.56)
strangers	0.040**	-0.045	0.008	-0.065*
	(2.19)	(-1.23)	(0.44)	(-1.87)
police	0.136***	0.199***	0.126***	0.143***
	(5.15)	(5.21)	(4.94)	(3.77)
Trust [...] more				
coreligionists	0.102***	0.139***	0.058***	0.167***
	(7.80)	(5.37)	(4.33)	(6.80)
coethnics	0.092***	0.056**	0.034**	0.080***
	(7.12)	(2.02)	(2.35)	(3.53)
Tolerate non-coreligionist to live in [...]				
village	-0.073***	0.024	-0.042***	-0.032
	(-6.41)	(0.89)	(-3.22)	(-1.44)
neighborhood	-0.099***	0.020	-0.059***	-0.035
	(-8.39)	(0.72)	(-4.63)	(-1.57)
house	-0.123***	-0.071**	-0.105***	-0.091***
	(-8.61)	(-2.23)	(-6.68)	(-3.30)
Tolerate non-coreligionist to [...]				
marry relative	-0.132***	-0.099***	-0.108***	-0.142***
	(-7.27)	(-2.98)	(-5.61)	(-4.51)
build house of worship	-0.108***	-0.050*	-0.077***	-0.138***
	(-6.92)	(-1.65)	(-4.66)	(-4.42)

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Each cell presents the religiosity coefficient from a separate regression for the community fixed-effects model. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant. Education institution dummies are relative to non-religious public and private education.

TABLE 15: DIVERSITY, SEGREGATION AND ATTITUDES

| | VILLAGE HETEROGENEITY | | | | SUBDISTRICT HETEROGENEITY | | | |
| | Model 1 | Model 2 | | Num. of obs. | Model 3 | Model 4 | | Num. of obs. |
	Diver-sity (1)	Diver-sity (2)	Segre-gation (3)	(4)	Diver-sity (5)	Diver-sity (6)	Segre-gation (7)	(8)
Willing to help	0.001	-0.031	0.144	27751	-0.015	0.031	-0.194*	27824
	(0.04)	(-1.10)	(1.53)		(-0.64)	(0.85)	(-1.79)	
Vilage is safe [...]								
generally	-0.004	0.001	-0.024	27748	0.013	-0.008	0.090	27821
	(-0.20)	(0.03)	(-0.33)		(0.39)	(-0.24)	(0.63)	
at night	0.055***	0.048	0.033	27746	0.092**	0.077**	0.065	27819
	(2.75)	(1.54)	(0.42)		(2.14)	(2.40)	(0.37)	
Trust neighbor to watch [...]								
kid(s)	-0.078*	-0.044	-0.153	20912	-0.047	-0.115*	0.280	20972
	(-1.90)	(-0.74)	(-0.69)		(-0.99)	(-1.75)	(1.21)	
house	-0.021	-0.040	0.084	27749	0	-0.008	0.036	27822
	(-0.98)	(-1.33)	(0.83)		(0.01)	(-0.20)	(0.28)	
Trust [...] to return wallet								
neighbors	0.006	-0.104	0.505**	27178	0.010	-0.132	0.605**	27251
	(0.11)	(-1.56)	(2.11)		(0.14)	(-1.27)	(2.07)	
strangers	-0.044	-0.077*	0.153	26278	-0.074*	-0.161**	0.384**	26349
	(-1.31)	(-1.69)	(0.99)		(-1.69)	(-2.47)	(2.18)	
police	-0.032	-0.153**	0.552**	25690	0.038	-0.063	0.439*	25761
	(-0.65)	(-2.11)	(2.07)		(0.56)	(-0.65)	(1.77)	
Trust [...] more								
coreligionists	-0.069*	-0.055	-0.065	27750	-0.090	-0.133*	0.182	27823
	(-1.87)	(-0.85)	(-0.37)		(-1.51)	(-1.83)	(1.12)	
coethnics	-0.115***	-0.079	-0.169	27750	-0.052	-0.066	0.060	27823
	(-3.16)	(-1.18)	(-0.89)		(-0.95)	(-0.91)	(0.37)	
Tolerate non-corlgn to live in [...]								
village	0.111***	0.105***	0.028	27751	0.113**	0.121**	-0.034	27824
	(3.56)	(2.62)	(0.19)		(2.40)	(2.51)	(-0.21)	
neighborhood	0.129***	0.155***	-0.118	27751	0.134**	0.158***	-0.102	27824
	(3.49)	(2.90)	(-0.61)		(2.31)	(2.85)	(-0.51)	
house	0.178***	0.265***	-0.403**	27750	0.174**	0.212***	-0.161	27823
	(3.74)	(3.93)	(-2.00)		(2.57)	(2.86)	(-0.69)	
Tolerate non-corlgn to [...]								
marry relative	0.192***	0.216***	-0.111	27750	0.200**	0.249**	-0.207	27823
	(4.04)	(3.09)	(-0.62)		(2.57)	(2.25)	(-0.82)	
build house of worship	0.340***	0.439***	-0.456	27750	0.360***	0.502***	-0.595**	27823
	(5.44)	(4.57)	(-1.55)		(4.01)	(4.39)	(-2.30)	

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Each row presents results from four models with district fixed effects. Standard errors are robust and clustered at the subdistrict level. Included variables not shown for all four models: religiosity, sex, dummy variables age and education categories, risk and time preference, linear spline for log PCE, urban/rural status, log population density, dummy variables for topography, whether village is natural disaster prone, and recently experienced natural disaster, receipt of public and local television signals, the number of private television signals, distance from subdistricts and districts, and a constant.

TABLE 16: DIVERSITY, SEGREGATION, AND COMMUNITY COHESION & TRUST BELIEFS

| | Willing to help | Village is safe [...] | | Trust nbr. to watch | | Trust [...] to return lost wallet | | |
| A. VILLAGE HETEROGENEITY | | generally | at night | kid(s) | house | neighbors | strangers | police |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Religious/ very religious	0.013*	0.025***	0.006	0.012	-0.001	0.108***	0.026*	0.141***
	(1.87)	(4.54)	(1.07)	(0.97)	(-0.07)	(6.30)	(1.90)	(6.94)
... × vilage diversity†	-0.054**	0.015	0.007	-0.067	-0.060*	-0.169**	-0.094	-0.055
	(-2.24)	(0.51)	(0.22)	(-1.22)	(-1.93)	(-2.42)	(-1.49)	(-0.77)
... × village segregation†	0.308***	-0.018	0.108	-0.144	0.161	0.388	0.209	0.067
	(3.50)	(-0.15)	(0.88)	(-0.64)	(1.29)	(1.32)	(0.94)	(0.23)
Very religious	0.164***	0.178***	0.098***	0.060***	0.060***	0.095***	-0.051**	0.170***
	(11.45)	(11.17)	(6.26)	(2.70)	(3.78)	(3.12)	(-2.05)	(6.01)
P-val of joint test of:								
Village interactions	0.002	0.810	0.238	0.041	0.153	0.045	0.314	0.660
N	28287	28284	28282	21304	28285	27695	26777	26196
Adj. R²	0.085	0.093	0.090	0.102	0.060	0.106	0.063	0.084
B. SUBDISTRICT HETEROGENEITY	(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Religious/ very religious	0.012*	0.024***	0.007	0.014	-0.000	0.107***	0.028**	0.141***
	(1.80)	(4.43)	(1.16)	(1.17)	(-0.03)	(6.30)	(2.11)	(6.94)
... × subdistrict diversity†	0.000	0.010	-0.008	-0.122**	-0.061**	-0.161**	-0.107*	-0.067
	(0.01)	(0.34)	(-0.25)	(-2.44)	(-2.17)	(-2.48)	(-1.84)	(-1.09)
... × subdistrict segregation†	0.135	0.093	0.065	0.413***	0.251**	0.495	0.138	-0.046
	(1.24)	(0.92)	(0.49)	(2.70)	(2.09)	(1.57)	(0.64)	(-0.16)
Very religious	0.163***	0.178***	0.095***	0.059***	0.062***	0.094***	-0.052**	0.167***
	(11.53)	(11.22)	(6.09)	(2.67)	(3.96)	(3.10)	(-2.12)	(5.96)
P-val of joint test of:								
Subdistrict interactions	0.285	0.323	0.884	0.018	0.064	0.046	0.156	0.376
N	28561	28558	28556	21511	28559	27967	27048	26466
Adj. R²	0.084	0.092	0.090	0.102	0.059	0.105	0.063	0.084
Community fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	
Religion fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes	

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

†De-meaned diversity/segregation variables. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant.

TABLE 17: DIVERSITY, SEGREGATION, AND DISCRIMINATIVE TRUST & TOLERANCE

| | Trust [...] more | | Tolerate non-corlgn living in [...] | | | Tolerate non-corlgn to [...] | |
| A. VILLAGE HETEROGENEITY | corelgn | coethnics | village | neighbor | house | marry rltv. | bld h. wrshp |
	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Religious/ very religious	0.084***	0.068***	-0.061***	-0.081***	-0.124***	-0.132***	-0.105***
	(7.90)	(6.18)	(-6.10)	(-8.24)	(-10.81)	(-9.34)	(-8.36)
... × vilage diversity†	-0.033	-0.066	0.125***	0.159***	0.180***	0.049	0.196***
	(-0.49)	(-1.07)	(3.21)	(4.31)	(3.72)	(1.01)	(2.90)
... × village segregation†	0.094	-0.142	-0.131	-0.202	-0.298**	0.085	-0.344
	(0.27)	(-0.42)	(-0.64)	(-1.20)	(-2.12)	(0.51)	(-1.55)
Very religious	0.156***	0.066***	-0.008	-0.014	-0.092***	-0.142***	-0.102***
	(8.30)	(3.39)	(-0.48)	(-0.77)	(-4.35)	(-5.84)	(-4.39)
P-val of joint test of:							
Village interactions	0.843	0.019	0.000	0.000	0.001	0.182	0.010
N	28286	28286	28287	28287	28286	28286	28286
Adj. R²	0.155	0.180	0.221	0.249	0.260	0.247	0.256
B. SUBDISTRICT HETEROGENEITY	(1)	(2)	(3)	(4)	(5)	(6)	(7)
Religious/ very religious	0.085***	0.068***	-0.062***	-0.084***	-0.125***	-0.133***	-0.105***
	(8.05)	(6.14)	(-6.15)	(-8.56)	(-10.95)	(-9.46)	(-8.43)
... × subdistrict diversity†	-0.022	-0.077**	0.148***	0.185***	0.148***	0.037	0.173***
	(-0.51)	(-2.01)	(4.69)	(5.59)	(3.30)	(0.75)	(2.77)
... × subdistrict segregation†	0.064	0.011	-0.091	-0.207	-0.197	0.255*	-0.315
	(0.27)	(0.05)	(-0.57)	(-1.27)	(-1.07)	(1.67)	(-1.52)
Very religious	0.157***	0.067***	-0.009	-0.015	-0.092***	-0.137***	-0.101***
	(8.43)	(3.51)	(-0.55)	(-0.86)	(-4.39)	(-5.61)	(-4.43)
P-val of joint test of:							
Subdistrict interactions	0.879	0.052	0.000	0.000	0.004	0.026	0.022
N	28560	28560	28561	28561	28560	28560	28560
Adj. R²	0.155	0.179	0.222	0.251	0.261	0.246	0.261
Community fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes
Religion fixed effects	Yes	Yes	Yes	Yes	Yes	Yes	Yes

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$

†De-meaned diversity/segregation variables. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant.

TABLE 18: RELIGIOSITY AND DISTRICT HEAD CRITERIA

| | Characteristic is [...] in district head | | | | | |
| | Important | | Three-most Important | | Most Important | |
	Religious/ Very Religious (1)	Very Religious (2)	Religious/ Very Religious (3)	Very Religious (4)	Religious/ Very Religious (5)	Very Religious (6)
Religion	0.048***	0.034***	0.082***	0.032***	0.068***	0.040***
	(6.50)	(3.53)	(9.74)	(2.76)	(9.49)	(3.44)
Ethnicity	0.033***	0.057***	0.000	0.002	-0.001	-0.001
	(3.93)	(4.61)	(0.08)	(0.21)	(-0.37)	(-0.34)
Appearance	0.027***	0.039***	-0.006	0.032***	-0.006*	0.006
	(3.16)	(3.29)	(-0.83)	(2.63)	(-1.70)	(0.93)
Popularity	0.024***	0.046***	-0.015**	-0.011	-0.005	-0.002
	(2.93)	(3.62)	(-2.12)	(-1.06)	(-1.52)	(-0.35)
Program quality	0.001	0.013*	-0.018***	-0.046***	-0.026***	-0.047***
	(0.30)	(1.91)	(-2.91)	(-3.71)	(3.29)	(-4.23)
Political Aff.	0.027***	0.013*	0.004	-0.046***	0.002	0.002
	(3.00)	(1.91)	(0.80)	(-3.71)	(0.91)	(0.42)
Experience	0.013**	0.014**	-0.001	-0.002	-0.018**	0.005
	(2.43)	(2.02)	(-0.14)	(-0.22)	(-2.15)	(0.42)
Gender	0.029***	0.051***	0.002	0.013**	-0.000	0.002
	(3.28)	(3.63)	(0.43)	(2.10)	(-0.05)	(0.85)
Gift	-0.018**	0.043***	-0.020***	0.010	-0.007***	0.005
	(-2.43)	(3.49)	(-4.89)	(1.48)	(-3.06)	(0.91)
Community FE	Yes	Yes	Yes	Yes	Yes	Yes
Religion FE	Yes	Yes	Yes	Yes	Yes	Yes

Each cell shows the estimate for the religiosity coefficient from a separate community fixed effects regression. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant.

TABLE 19: DIVERSITY, SEGREGATION AND DISTRICT HEAD CRITERIA

| | VILLAGE HETEROGENEITY | | | SUBDISTRICT HETEROGENEITY | | |
	Diver- sity (1)	Segre- gation (2)	Num. of obs. (3)	Diver- sity (4)	Segre- gation (5)	Num. of obs. (6)
[...] is important						
Religion	-0.087*	0.147	27717	-0.145***	0.144	27790
	(-1.76)	(1.13)		(-3.38)	(1.50)	
Ethnicity	-0.094*	0.070	27717	-0.109**	0.023	27790
	(-1.71)	(0.47)		(-1.96)	(0.19)	
[...] is three-most important						
Religion	-0.100***	0.130	27717	-0.188***	0.382***	27790
	(-2.64)	(0.96)		(-3.60)	(2.79)	
Ethnicity	-0.041**	0.066	27717	-0.058***	0.134*	27790
	(-2.46)	(1.02)		(-2.59)	(1.86)	
[...] is the most important						
Religion	-0.070***	0.141	27717	-0.134***	0.463***	27790
	(-2.77)	(0.98)		(-4.21)	(3.40)	
Ethnicity	-0.003	0.009	27717	-0.004	-0.004	27790
	(-0.65)	(0.40)		(-0.63)	(-0.18)	

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$.

Each row presents results from two models: The left half is a model with the village heterogeneity variables, and the right half is a model with the subdistrict heterogeneity variables. Both models are estimated with district fixed effects. Standard errors are robust and clustered at the subdistrict level. Included variables not shown for all four models: religiosity, sex, dummy variables age and education categories, risk and time preference, linear spline for log PCE, urban/rural status, log population density, dummy variables for topography, whether village is natural disaster prone, and recently experienced natural disaster, receipt of public and local television signals, the number of private television signals, distance from subdistricts and districts, and a constant.

TABLE 20: COMMUNITY COMPOSITIONS, RELIGIOSITY, AND DISTRICT HEAD CRITERIA

	Important		Three-most Important		Most Important	
	Religion	Ethnicity	Religion	Ethnicity	Religion	Ethnicity
A. VILLAGE HETEROGENEITY	(1)	(2)	(3)	(4)	(5)	(6)
Religious/ very religious	0.057***	0.038***	0.094***	0.001	0.075***	-0.000
	(7.71)	(4.24)	(10.76)	(0.22)	(10.37)	(-0.15)
... × vilage diversity†	0.014	-0.041	-0.049	-0.047**	-0.116***	-0.000
	(0.37)	(-1.11)	(-1.27)	(-2.25)	(-4.41)	(-0.02)
... × village segregation†	-0.118	-0.112	0.051	0.059	0.237**	-0.014
	(-0.96)	(-0.76)	(0.33)	(0.59)	(2.40)	(-0.90)
Very religious	0.041***	0.059***	0.039***	-0.003	0.043***	-0.001
	(4.31)	(4.63)	(3.29)	(-0.27)	(3.71)	(-0.40)
P-val of joint test of:						
Village interactions	0.513	0.040	0.242	0.015	0.000	0.525
N	28250	28250	28250	28250	28250	28250
Adj. R^2	0.189	0.167	0.167	0.081	0.116	0.014
B. SUBDISTRICT HETEROGENEITY	(1)	(2)	(3)	(4)	(5)	(6)
Religious/ very religious	0.056***	0.037***	0.092***	0.001	0.074***	-0.000
	(7.63)	(4.14)	(10.49)	(0.12)	(10.37)	(-0.07)
... × subdistrict diversity†	0.015	-0.068*	-0.043	-0.051***	-0.129***	-0.001
	(0.49)	(-1.85)	(-1.43)	(-2.88)	(-5.69)	(-0.23)
... × subdistrict segregation†	-0.134	0.139	0.129	0.119	0.486***	-0.043*
	(-0.95)	(0.99)	(1.10)	(1.33)	(4.72)	(-1.80)
Very religious	0.041***	0.057***	0.039***	-0.001	0.043***	-0.001
	(4.33)	(4.55)	(3.32)	(-0.09)	(3.73)	(-0.42)
P-val of joint test of:						
Subdistrict interactions	0.636	0.178	0.336	0.015	0.000	0.079
N	28523	28523	28523	28523	28523	28523
Adj. R^2	0.188	0.166	0.167	0.081	0.117	0.014
Community fixed effects	Yes	Yes	Yes	Yes	Yes	Yes
Religion fixed effects	Yes	Yes	Yes	Yes	Yes	Yes

t statistics in parentheses. * $p < 0.1$, ** $p < 0.05$, *** $p < 0.01$
†De-meaned diversity/segregation variables. Standard errors are robust and clustered at the community level. Included variables not shown: sex, dummy variables for age and education categories, risk and time preference, married status, linear spline for log PCE, and a constant.