

Does Religiosity and Social Trust Promote Community Participation in Development? Evidence from Indonesia

Ni Made Sukartini, Achmad Solihin and M. Khoerul Mubin

Department of Economics, Faculty of Economics and Business, Universitas Airlangga
nimade.sukartini@gmail.com

Article Info

Volume 83

Page Number: 3529 - 3543

Publication Issue:

March - April 2020

Abstract.

This paper investigates the association of religiosity and trust to community participation or volunteering in development. Social trust is measured in several indicators, is an important aspect of development process, since social trust related to many development outcomes, such as growth, democratic stability as well as subjective well-being. In economic terms, when people trust each other, transaction cost can be reduced, organization can perform better, government policy could stimulate output faster, and many more. Utilizing Indonesia Family Life Survey (IFLS) wave 2014 this study finds the following results. Firstly, social trust closely associated with individual characteristics. Maturity, better educational and income level improve individual trust and individual participation in community activities. Secondly, individual subjective report about religiosity strongly associated with willingness to participate in various community activities. Policy relevant with this finding it is important to promote tolerance and religiosity, as these aspects can improve social trust. Social trust closely associates with more participation in community activities for accumulating public services and public goods. As more public services and public goods are available, nationally better welfare can be promoted.

Article History

Article Received: 24 July 2019

Revised: 12 September 2019

Accepted: 15 February 2020

Publication: 23 March 2020

1. Introduction

It is believed that all religions in the world promote pro social behaviour, altruistic value and encourage volunteer activity [1,2,3]. Empirical studies on the impact of religiosity on volunteering or community participation is either still not many but also it is inconclusive. There are several studies empirically found positive association between religiosity and volunteering, i.e. subjective report on self-religiosity associate with report on more frequent joining social activity or volunteering [4,5,3]. However, [6] found religiosity report or religiosity does not associate with activity on volunteering; and [7] found no association between religiosity and volunteering in the European context.

[8,9,10]are among studies which discuss the association of social capital and social trust on various economic outcome, especially in developing countries. Recently, researches focus on these topics increase significantly. In general, it is found that trust, general trust or social trust¹ as one indicator of social capital has positive impact on development outcome, such as: output, democratic stability, and education [11]. At micro level, as individual trust each other transactional cost can be eliminated, organization perform better, government policies run efficiently, financial development spread faster, and more economic success can be

¹Terminology trust, general trust and social trust is synonym is other. This study will use them interchangeably.

achieved through better trust [12]. Trust in organizations increases the results obtained, including better work behaviour [13]. Social trust can be referred as trust in people in general. Positive and improvement in output and growth of output is related with better general trust among the society [14,8,15]. In addition, commitment in the organization similar with trust, a behavior that reflects employee loyalty to the organization, concern for the organization, success, and further development [16].

Participating in voluntary activity is part of culture and national identity in Asia. In Japan, mutual help through neighbourhood association is well-known as “*jichikai*” [17,18] or “*borantia*”[19]. Volunteering in Indonesia is known as “*gotong-royong*” [20]. Trust or general trust is an attitudinal variable. Recently, economists apply general trust as complement of demographic and socioeconomic variables to investigate their association with volunteering. The study of [18,3] conclude that in the Western and developed countries, doing volunteer activities generally seen as an opportunity for personal fulfilment or personal development. On average the community in these countries have been achieved success economically; primary and secondary need have been filled proportionally with income level. The situation is not similar in less developing countries. Poor people need to rely and support each other due to their limitation on credit and insurance market [21,22] and due to lack of universal access to government support [23]. In Japan, volunteering is common among people in the community for the purpose of maintaining harmony in the community [17]. In Sociology, theoretically the link between volunteering and general trust are represented into: (i) the stability hypothesis, (ii) the group socialization hypothesis, (iii) the contextual diversity hypothesis, and floor-ceiling hypothesis [24].

Study which focus on the association between trust and volunteering are relatively limited. Most of the studies focus on the association of trust and the development outcome. The study of [8] found there are robust positive significant impact of general trust on growth of output and ratio of investment to GDP. Comparing across countries, this study concluded that trust and norms of civic cooperation are stronger in countries with formal institutions that effectively protect property and contract rights. This study was focused on 29 selected countries involved in the world value survey (WVS) in the 1980 survey and 1990-1991 survey. The study of [15] also investigated the association of trust and general on economic performance, such as investment, growth of output, income distribution and poverty. Applying general equilibrium model, [15] provide mathematical foundation and promote the following theoretical predictions: (i) higher trust increases investment and growth; (ii) homogeneous societies exhibit higher trust, and thereby investment and growth; (iii) egalitarian distributions of income enhance trust, and thereby raise investment and growth; (iv) discrimination lowers trust, reducing investment and growth; (v) there is a low-trust poverty trap. Following [8], this study also utilizes WVS data based on survey waves 1980, 1990-1, and 1995-6. However, the study of [15] focused on analysing the general trust. As the data involved in three waves, the sample countries increase into 41 countries. General trust is measured by analysing the proportion of respondent in each country that respond, “strongly agree or agree” on the statement: “most people can be trusted”, or alternatively “you cannot be too careful in dealing with people. Proportion of respondent respond agree on these statements were range significantly. It was found about 5.5 per cent (in Peru) to 61.2 per cent (in Norway). The number of samples in

each country ranges from 900-2,800 respondents. This number is designed as national sample representation [15]. Other study that replicate [15] is conducted by Dincer and Uslaner (2007). However, this study compared trust and growth among states in Alaska and America as a whole. This study used data from Uslaner's data from survey in 43 states of Alaska and General Social Survey (GSS) in America. This study found that a 10-percentage point increase in trust increases the growth rate of per capita income by 0.5 percentage point, growth rate of housing prices by 1.25 percentage points, and the growth rate of employment by 2.5 percentage points over a decade.

The study of [25] explores the association of social capital and human capital formation in terms of investment in educational level and consumption level. This study uses combination data from previous studies, i.e. [15] and combined with survey of WVS 2005. Total sample applied in this study is 63 countries. This study concludes that in general, better trust level (proportion of sample report "agree") associate positively with investment in education and productive consumption. As far as our concern, only two articles that recently analysing the association between trust and religiosity. The first one is [26], which focus on investigating the association between trust and religiosity in 18 selected countries in Latin America. The other study is [27], which consist of 105 selected countries being surveyed by World Value Survey (WVS) or the Gallup World Poll; and it is compared with states in USA. Interestingly, there is conflicting results regarding the association of religiosity and trust between these two studies. The first study which focus in Latin America concludes that subjective report of individual regarding their religiosity is positively associates with horizontal and vertical trust. The association is stronger within the

Catholic affiliation. The other finding is that correlations with attitudes toward the market, in general, are heterogeneous but never negative. On the other hand, the second study which focus on cross countries study found that religiosity; the importance of religion in individual daily life, has negative association with level of trust.

Indonesia is one of the largest countries in terms of Islam or Muslim population, accounted for approximately 12.7 per cent of world Muslim population. Islam is belonged to the majority of Indonesian. On the other hand, it is traditionally, several community services (*gotong royong*) such as "siskamling"; "kerjabakti"; posyandu; "arisan", "rapatwarga" etc. Empirical study by [28] found that social capital in terms of civic engagement and civic involvement in East Java and Central Java decrease significantly during the recent years. The author argue that exposure of television, radio and mobile phone associate with lower community participation in attending community meeting for discussing types of projects to be implemented in *Program Nasional Pemberdayaan Masyarakat Mandiri* (PNPM). The better signal of TV, radio and mobile phone the longer household member spend time for enjoying time at home and become reluctant attending community regular meeting in PNPM project. Recently, various things such as availability of game online, video youtube and social media might make individual choose enjoying private time rather than socializing activity. For this reason, it is interesting to investigate the subjective report community participation in Indonesia and relating it with subjective report of religiosity and social capital (trust) in Indonesia.

Research question to be addressed is "do religiosity and social capital (trust) encourage community participation in Indonesia?". This study utilizes household data from Indonesia

Family Life Survey (IFLS) wave 2014. The organization of this paper as follows. Introduction in part one will be followed by literature review, data and empirical finding, and last part in conclusion.

2. Literature Review

Social capital is new terminology and it is widely discussed in new institutional economics literature. Social capital is intensively discussed in literature due to its reasonable issues to be addressed especially in developing countries. Unlike developed countries, almost all determinants of success in development is limited in less developed countries. Not only human capital is low, but capital are also mostly limited. Furthermore, government policy is not effective. Developing countries also face with constraints on financial market and other factors. These constraints encourage rural community and majority of developing countries to rely more on the role of social capital. Social capital is measured by trust indicators, civic engagement, and social network. Among the three measurements, trust is the most intensively used in many studies.

2.1. Measurement of Trust

The measurement of trust is quite varying among several studies. The WVS apply the following question to the respondents "Generally speaking, would you say that most people can be trusted or that you need to be very careful in dealing with people?". Possible answers include "Most people can be trusted", "Don't Know" and "Can't be too careful". The study of [26] measure social capital in terms of trust, based on the following question.

Firstly, to measure horizontal trust, respondents are asked "Generally speaking, would you say that most people can be trusted (1) or that you cannot be too careful in dealing with people (0)?".

Secondly, to measure vertical trust, respondents are asked "How much confidence do you have in each of these institutions (government, police, armed forces, judiciary, banks): a great deal of confidence (4), quite a lot of confidence (3), not very much confidence (2), or none at all (1)?".

Thirdly, asking attitude toward the market system ("system"), respondent are asked: "Generally speaking, would you say that you are very satisfied (4), quite satisfied (3), not very satisfied (2) or not at all satisfied (1) with how the market economy performs in your country?".

Lastly, general statement respondents are asked "For each of the following statements, can you tell me how much you agree with each (strongly agree (4), agree (3), disagree (2) or strongly disagree (1))?: i) the market economy ("market") is the only system which will lead to the development of the country; ii) private firms ("firm") are essential to the country's development.

[29] applies generalized trust for the individual is measured with the standard trust question, "Using this card, generally speaking, would you say that most people can be trusted, or that you can't be too careful in dealing with people?". The respondent is asked to respond on a scale, "Please tell me on a score of 0–10, where 0 means you can't be too careful and 10 means that most people can be trusted". Aspect of general trust from 267.870 people in 83 countries based on 1980-2000 World Value Survey (WVS) found the following result. As much as 29.55 per cent of respondent answering "most people can be trusted" and the rest 70.55 per cent answer "cannot be too careful".

Research on social capital recently considers various links between trust and other social variable, such as religiosity. Empirically, there are three measurements about religiosity, based

on the unit of analysis and study method. First measurement is applying cross countries studies. This measurement use the percentage of population that belong to particular religion, which is ordered hierarchical as: Catholic, Islam, Protestant, and other religion [27,30]. These study conclude that Protestant have positive significant effect on trust. Other study found both Buddhism and Hinduism associate with higher trust level, and this finding still consistent after adding specification of: believe in hell and heaven; believe in live after live and reborn [31]. The second measurement applies unit analysis at individual level. This study measure religiosity based on individual subjective report regarding their attendance on holy place such as church, mosque, etc.; or report on the frequency the individual do pray every day. This measurement is conducted in the study of [32,33]. Other recent study include[34,35,36]. [34] found that Catholic associate with higher level of trust among Latin American; however, [35,36] found that Protestant Germany have positive and higher trust compare to other religion. The latest measurement use experimental method to predict individual religiosity level. There are several study use standard trust game, ultimatum game and dictator game and associate it with public good provision and religiosity[37,38]. These studies found that more religious subjective report associate with willingness to contribute in public goods game and significantly reporting higher trust level.

Trust game is a game which divides players as proposer and receiver equally. The number of player must similar; i.e. one proposer matches with one receiver. Typically the division is done by randomization by the experimenter or by computer. Previous experimenter, the game is conducted either manually or by computer program. A Z-tree program is the most well-known application for this typical experiment.

The game can also be done hypothetically or by using real money. If the game is conducted hypothetically, the experimenter has to declare that the hypothetical token will be converted into real money at the end of the game or experiment. At the first stage, experimenter allocate the token (hypothetical money) or real money as an initial endowment to the proposer. At this stage, the proposer must decide the amount of money to shares or send to receiver. The amount of money typically in local currency unit but the value is equivalence to USD\$ 10. The proposer is free to choose the amount of money she or he wants to send: 0, 2, 5 or all 10 dollar. After the proposer made decision how much money to share with the receiver, then they send it in seal envelope (if the game is manually) or by typing the amount or clicking the button which shows the money amount on the computer screen. Before the amount of sent by proposer arrive at the hand of receiver, experimenter or computer will triple the money secretly and send to receiver. At second stage the receiver has the triple amount of money sent by proposer. Receiver must make decision how much money to send back for proposer, and likely with the proposer, the receiver also free to decide the amount, either 0, 5, 10. 15 or all 30 if the sender sends all the money (10) at the first stage. This flow of activity usually repeated 10 times in one round of experiment [39,40]. Ultimatum game and dictator game other typical game to measure trust as well as altruistic behaviour. Like trust game, both ultimatum and dictator game also divide players into a group of proposer and a group of receiver. The difference between ultimatum and dictator game is that unlike dictator game; ultimatum game finish one in the first stage the receiver reject the proposer share of money [41,42].

2.2. Measurement of Religiosity

[43] investigate the association of subjective report on religiosity and volunteering activities

in USA. Share of population African American were evenly distributed in all states, however these population is still being minorities among total population of America. [43] analysed the subjective report of religiosity based on respondents respond for the statement: “How religious are you?”.

The options of answer for this question are: (1) very religious, (2) religious, (3) quite religious, (4) not religious. On the other hand, Mathur (2012) apply 6 statements for religiosity. The statements are: (1) I am very religious; (2) I believe in God; (3) My religion is very important to me; (4) I go to temple/church/mosque/gurudwara (synagogue) regularly; (5) Spiritual values are more important than material things; (6) If people in India/ United States were more religious, this would be a better country. The respondents answer for these statements are: (1) strongly agree; (2) agree; (3) disagree; (4) strongly disagree.

2.3. Volunteering

Volunteering is defined as regular or irregular unpaid work on behalf of an organization or group without monetary compensation. Volunteering is divided into volunteering in religious organization activity and non-religious organization related activity [44,19,24,7,18,3,45]. Following [24] who investigate data on The Giving in the Netherlands Panel Survey (GINPS), in most Western Countries, there are typically around 15 different types of volunteering activity, such as: sports, health, human services, education, culture and the arts, neighbourhood, residential affairs, environment, nature preservation, animal protection, politics, union, international solidarity, refugees, religion, and “other”. Recently due to limited in membership and to make easier in analysis, neighbourhood and residential affair were collapsed into

“community organization category”; environmental, nature preservation and animal protection is grouped into one category; political organization and unions were collapsed into one category; and international solidarity and refugee organizations were collapsed into one category.

In Japan, volunteering is known as “borantia” and “jichikai”. In Indonesia, volunteering activity is commonly works in rural area. This is known as “gotong royong”. Typical volunteering activity in IFLS survey include: (i) volunteering in maintaining improve drinking water; (ii) security or “siskamling”; (iii) irrigation system; (iv) garbage disposal; (v) woman association or “PKK”; (vi) health services or “Posyandu”; (vii) religious activity, and (viii) saving and loan or “Arisan”.

2.4. Link between Trust and Volunteering

According to [24] the link between trust and volunteering as follows: “...when people get together, organize group activities, collaborate to achieve goal, and this activity endorsed by many fellow and group members for the purpose of sharing experiences, ... this will create a sense of belonging in community. Furthermore, as the intensity of enjoying and working together each community member try their best for maintaining the harmony by intention behaving positive and reciprocate each other [17].

Despite the varieties in volunteering organization, there is a sign of decreasing in report of doing volunteering [46,44,3]. According to [17] it is about time commitment that made distinction between why individual choose regular and irregular volunteering. Formal volunteering usually schedule on behalf of an organization, while informal one is not necessarily on behalf of any organisation. Formal volunteering usually associate more with regular volunteering activity.

3. Data, Hypothesis, and Empirical Model

3.1. Data

This study utilizes household data from Indonesia Family Life Survey (IFLS) wave 2014. This data is the latest data published by RAND corporation with SurveyMeter Jogjakarta. Data wave 2014 survey around 31,469 households. Data for household informant and section trust are selected for the analysis of this study.

3.2. Hypotheses

Hypothesis to be addressed in this study stated in the following statement. Firstly, Individual characteristic such as age, income and educational level has positive association with subjective reports of trust. Secondly, Subjective report for individual religiosity and trust has positive association with community participation.

3.3. Empirical Model

Model empirics for testing hypotheses one and two, are presented below.

$$Trust_i = \beta_0 + X\beta + \varepsilon_i$$

.....
.....(1)

$$Tot_Part_i = \alpha_0 + X\beta + Y\gamma + Z\delta + \varepsilon_i$$

.....
..... (2)

Where: $Trust_i$ is subjective report of individual for various trust indicators, X is a vector which

representing individual characteristics which include age (year), gender (male=1), marital status (married=1), educational level (0-7), income level (Rp), religion (0-6). Y is a vector which representing subjective trust report, which also the dependent variable in equation (1). Z is a vector which representing individual subjective religiosity report. Finally, ε is residual or error terms in the model, i is individual, $\alpha, \beta, \gamma, \delta$ are parameters to be estimated.

4. Result and Discussion

In this part, it will be presented: summary statistic and estimation result model equation (1) and equation (2). Table 1 presents summary statistics.

There are some observation can be made based on Table 1. Firstly about the sample size. Total sample among variables varies according to their availability. Individual characteristics presented in table. Subjective trust report for losing wallet will be return by police officer has total sample 30,306 while total sample which respond for community services is 31,469. The differences in total sample are due to differences in respondent respond. About 5-6,000 respondents did not answer or chose option do not know for question “Say you lost a wallet or a purse that contained Rp. 200.000 and your identity card. I’d like you to think about how likely it is that it will be returned with the money if it were found by someone else?”; especially for the option “if it is found by police officer/stranger”.

Table 1. Summary statistics of data.

Variable and Description	No.Obs	Mean/			
		Proportion	Std. Dev.	Min	Max
Individual Characteristics					
Age (year)	31,463	37.33	14.93	14	101
Marital Status	31,463	2.00	0.87	1	6
Gender (Male=1)	31,463	0.47	0.50	0	1
Location (Urban=1)	31,469	0.41	0.49	0	1

Monthly Income (Rp)	31,469	21,477	290,708	0	20,000,000
Religion	31,463	1.24	0.76	1	6
Cellphone (Has cellphone=1)	31,467	0.74	0.44	0	1
Internet (Has access internet=1)	31,467	0.36	0.48	0	1
A. Individual Subjective Report for Trust Indicator(*)					
1. Willingness to help other	31,463	32.52	4.63	10	40
2. Individual has to alert with others	31,463	18.94	6.52	10	40
3. Trust people if having similar Ethnic	31,463	22.20	6.56	10	40
4. Trust left child with neighbor if going out	31,463	30.24	8.28	10	40
5. Trust left house to neighbor if going out	31,463	28.37	5.74	10	40
6. Trust that own village and surround is safe	31,463	31.50	5.14	10	40
7. Trust safe walk alone at night	31,463	28.62	5.62	10	40
B. Trust lost wallet will be returned safely if:					
1. It was found by someone live close by	30,979	28.86	10.69	10	40
2. It was found by police officer	30,306	31.25	9.86	10	40
3. It was found by complete stranger	30,757	16.67	8.99	10	40
Individual Subj. Report Religiosity	31,463	29.01	6.88	10	40
Individual Participation in Community Services					
Total participation in community services	31,469	1.30	1.25	0	8

Source: IFLS data 2014

Individual characteristics for age varies between 14 – 101 years, with mean age is 37.33 years in 2014. Marital status is classified as: (1) not yet married, (2) married, (3) separated, (4) divorced, (5) widowed, (6) cohabitate. In terms of monthly income, the mean is very low Rp 21,475 with standard deviation Rp 290,707. However, some respondents have monthly income Rp0 while the other have Rp20,000,000. Regarding religion, in Indonesia there are 6(six) religions institutionalized by the government, namely and coded as: 1. Islam; 2. Catholic; 3. Protestant; 4. Hindu; 5. Budha; and 6. Konghucu. Detailed respondent regarding religion (but it is not shown in table 1) are: Islam 28,284 (89.90%); Catholic 414 (1.32%); Protestant 1,193 (3.79%); Hindu 1,508 (4.79%); Budha 47 (0.15%) and Konghucu 17 (0.05%). Furthermore, in terms of access on phone or mobile phone and internet; the data said that about 76 per cent of respondents have access on telephone and about 36 per cent have access on internet as source of information.

There are 7(seven) questions regarding subjective report for trust indicators. These

indicators are listed in line (A) of Table 2. Trust indicator is said high if individual felt no worries, safe, enjoy and happy to interact or have activities in their neighbourhood. Therefore, it is expected indication of trust, that every questions or statements in line A will be responded as first (strongly agree) or second option (agree). An exception alert is for statement number 2, where the point is stated as negative framing. To make it parallel with the other option, the respond for this statement that indicate “trust”, it should be “strongly disagree or disagree”. In analysis, we made coding in numbers as follows: “strongly agree=40”, “agree=30”, “disagree=20”, and “strongly disagree=10”. This modification is made to make easier reading the regression result [11].

Among the seven indicators, in terms of size or magnitude of statistic for trust indicator, the following are quite high. This means the highest modus of respond respondent, i.e.: trust for willingness to help people, trust that village in general is safe, and trust for leaving child with neighbour when going out. This means that the most frequent answer is “30 (agree)”. Regarding

trust indicator for the system and cultural norms, among the three indicators, the magnitude of modus implying the level of trust, listed as: trust for police, trust for neighbour and the least trust for stranger. In terms of religiosity, the modus of respond lie between “20 (not religious) and 30 (religious)”. Finally, total community participation has mean value of 1.30 with standard deviation is 1.20. This implies that selected household in Indonesia participate at least one activity among 8 activities conducted in their neighbourhood.

Table 2 in the next page tabulates summary of subjective trust report. The statement in IFLS applies the same question as the one in WVS survey but applying the negative framing words. As the respond is stated in 4 (four) options, i.e.: “strongly disagree=40”, “disagree=30”, “agree=20” and “strongly agree=10”, then this study applied multinomial logistic regression for the analysis. The frequency table of respondent responds are strongly disagree 508 (1.61%); disagree 3,676 (11.68%); agree 19,266 (61.28%), and strongly agree 8,013 (25.47%). This figure illustrates that individual trust level is quite low, majority of IFLS 2014 respondent (61.28% of 31,463) answer agree to be alert with other people. In line with this figure, multinomial logistic regression chose the highest frequency group data as reference point. In this case the reference group is the respondent who report agree to be alert with somebody else.

Refers to the figure in Table 2, the estimation result indicate an interesting issue. In general,

Table 2. Estimation result for determinant of individual trust.

Independent Variables	In this village I have to be alert or someone is likely to take advantage of me			
	<i>Strongly agree</i>	<i>Agree (Ref.)</i>	<i>Disagree</i>	<i>Strongly disagree</i>
Constant	-0.755*** (0.0689)		-1.470*** (0.0852)	-3.278*** (0.198)
Individual Characteristics				
Age (year)	-0.00868***		0.000855	-0.00808**

trust level decrease with individual age, with estimated coefficient =-0.008 point; and distrust also decrease with age with magnitude of the coefficient almost similar=-0.0087 point. Distrust indicator decrease among married or ever married respondent. The magnitude is=-0.062. The finding is quite interesting with regards to gender and residential location. Male respondents have two contrasting finding. Trust can be increase among male respondent with magnitude range between 0.284-0.376 point, but at the same time distrust also increase among male respondent with estimated magnitude 0.089 point. Respondents who reside in urban areas, contrary with common expectation, are found have higher trust level compare to those who reside in rural areas. By the same time, distrust is found increase among respondents in rural areas. Regarding this finding, it might further verified the study result of [28]; however, we do care for the interpretation and differences in measurement. This study use dummy variable have mobile phone and dummy for having access on internet. Respondent that have mobile phone significantly reporting lower trust level about -0.281 up to -0.309 point compare to those that do not. On the other hand, distrust also increased by 0.286 point among those that have mobile phone. Similar finding is applicable for having access on internet. Trust level among those who have internet access decrease about -0.546 up to -0.964 point, and it is also found that distrust increased by 0.172 point.

	(0.00129)	(0.00162)	(0.00387)
Marital Status	-0.0620*** (0.0204)	-0.00325 (0.0249)	0.0506 (0.0596)
Gender	0.0888*** (0.0279)	0.284*** (0.0383)	0.376*** (0.0947)
Location (Urban=1)	-0.0580** (0.0284)	0.0410 (0.0375)	0.227** (0.0942)
Monthly income (Rp)	4.08e-08 (4.48e-08)	-2.02e-07* (1.20e-07)	7.96e-09 (1.05e-07)
Has Cellphone (1=yes)	0.286*** (0.0378)	-0.309*** (0.0443)	-0.281*** (0.106)
Has internet access (1=yes)	0.172*** (0.0338)	-0.546*** (0.0502)	-0.964*** (0.134)
Goodness of Fit Model			
Observations	31,457	31,457	31,457
Wald Chi Sq.(15)	1,145.97		
Prob.>Chi Sq	0.0000		
Pseude R2	0.0195		

Robust standard errors in parentheses; notation significantly *** p<0.01, ** p<0.05, * p<0.1

Returning to the question of this study, Table 3 summarize estimation result of the association between subjective report of trust and subjective report of religiosity on the community participation in producing public goods. The terms public goods here is simple about looking after safety at night, which is in Indonesia, especially in Jawa known as “siskamling”, and various community services which known as “kerjabakti” an activity for cleaning the residential surrounded, cleaning the pond and village water sources, regular health checked up for community: children and elderly known as “posyandu”, etc. In total there are 8(eight) types of community services reported in IFLS 2014. The estimation result is presented in table 3.

Dependent variable in Table 3 is total number of subjective reports for participation in

community services. The number is ranging from 0(zero) to 8(eight). If respondent said never participated at all, the number will be assigned as 0(zero). On the other hand, if they said “yes, I participated” in all 8(eight) questions, then the number assigned is 8 (eight). The proportion of respondent’s participation as follows. There are about 9,506 (30,21%) of respondents never participated in any programs. About 10,858 (34.50%) respondents just participated in one program; about 6,092 (19.36%) participated in two programs; about 3,066 (9,74%) participated in three programs; about 1,335 (4,24%) participated in four programs. It is only 33(0.10%) and 10(0.03%) respondents reported they participated in seven and eight programs.

Table 3. Summary result for the Association of Religiosity, Trust and Community Partisipation in Development Program

Independent Variables	Dependent Variable is: Subjective Report for Total Community Participation							
	(0)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Constant	1.356*** (0.168)	-0.840*** (0.189)	-1.907*** (0.240)	-2.793*** (0.338)	-3.941*** (0.603)	-7.176*** (1.208)	-10.40*** (2.508)	-9.762** (4.113)
Individual Characteristics								
Age (year)	-0.0172***	0.00579***	0.0129***	0.0177***	0.0208***	0.0425***	0.0260***	0.0610***

	(0.00137)	(0.00135)	(0.00161)	(0.00212)	(0.00327)	(0.00573)	(0.0100)	(0.0148)
Marital Status	-0.0541**	0.00640	-0.0163	-0.0207	-0.0825	-0.248**	-0.0969	-0.978**
	(0.0240)	(0.0222)	(0.0275)	(0.0380)	(0.0619)	(0.118)	(0.202)	(0.413)
Gender	-0.0161	-0.159***	-0.320***	-0.414***	-0.397***	-0.297***	-0.414**	-0.396
(Male=1)	(0.0161)	(0.0177)	(0.0229)	(0.0331)	(0.0545)	(0.105)	(0.176)	(0.299)
Location	-0.259***	0.139***	0.187***	0.139**	-0.000246	-0.293	-0.320	0.772
(Urban=1)	(0.0307)	(0.0341)	(0.0436)	(0.0614)	(0.103)	(0.193)	(0.390)	(0.680)
Monthly Income	-6.96e-08	-4.17e-08	-1.78e-07*	-1.47e-07	-9.00e-08	-2.25e-07	-1.45e-07	-0.0211**
(Rp)	(4.97e-08)	(5.67e-08)	(9.30e-08)	(1.13e-07)	(1.56e-07)	(3.51e-07)	(3.51e-07)	(0.00955)
Subjective Trust Report								
Tr_Etnis	0.00653***	6.30e-05	-0.00167	-0.00143	-0.00621	0.00174	0.0324	0.0465
	(0.00232)	(0.00260)	(0.00334)	(0.00466)	(0.00815)	(0.0141)	(0.0254)	(0.0371)
Tr_Lchild	0.0151***	-0.0171***	-0.0217***	-0.0189***	-0.0291***	-0.0554***	-0.0227	-0.0337
	(0.00194)	(0.00208)	(0.00267)	(0.00377)	(0.00658)	(0.00983)	(0.0198)	(0.0495)
Tr_LHouse	-0.00966***	0.00697**	0.0142***	0.0115**	0.00164	0.0451**	0.0436	-0.00891
	(0.00272)	(0.00308)	(0.00395)	(0.00563)	(0.00907)	(0.0184)	(0.0305)	(0.0767)
Tr_SafeV	-0.0135***	0.00865**	0.00862*	0.00260	0.00603	0.0145	0.00415	0.0208
	(0.00300)	(0.00348)	(0.00445)	(0.00627)	(0.0112)	(0.0182)	(0.0375)	(0.0752)
W_Alone	-0.000265	0.00175	0.00590	0.00272	0.0158	0.0298	0.0354	-0.0835*
	(0.00286)	(0.00324)	(0.00429)	(0.00590)	(0.0109)	(0.0186)	(0.0428)	(0.0473)
Return_Police	-0.00339**	0.00556***	0.00679***	0.0130***	0.0128***	0.0156*	0.0144	0.00779
	(0.00146)	(0.00164)	(0.00214)	(0.00304)	(0.00486)	(0.00912)	(0.0180)	(0.0290)
Return_Neighbour	-0.00226	-0.000810	0.000752	-0.00100	0.0113**	-0.00416	-0.00776	0.124**
	(0.00156)	(0.00172)	(0.00221)	(0.00306)	(0.00502)	(0.00878)	(0.0184)	(0.0611)
Return_Stranger	0.00123	0.00140	0.00609***	0.00904***	0.0107**	0.0154*	0.0108	-0.0405
	(0.00173)	(0.00189)	(0.00232)	(0.00323)	(0.00520)	(0.00895)	(0.0186)	(0.0517)
Subjective Religiosity Report								
Religiosity	-0.0140***	0.00474*	0.00836***	0.0137***	0.00897	0.0175	0.0596*	0.0155
	(0.00225)	(0.00252)	(0.00317)	(0.00441)	(0.00730)	(0.0144)	(0.0349)	(0.0439)
Goodness of Fit Model								
Observations	29,675	29,675	29,675	29,675	29,675	29,675	29,675	29,675
Wald Chi Sq.(112)	5,344.35							
Prob > Chi Sq.	0.0000							
Pseudo R2	0.0292							

Robust standard errors in parentheses; the notation of significance level *** $p < 0.01$, ** $p < 0.05$, * $p < 0.1$

Equation (2) is estimated using multinomial logistic regression. As the modus of subjective report is on 1(one) participation; then this become the reference point of estimation. The estimation result indicate that total participation of respondent increases with age, for those reporting that they ever participated at least in one program. Married or being ever married and male respondents tends to have lower participation or never participated at all. Residents who reside in urban areas, tends to participate more than one

program, and on the other hand reside in urban areas also reducing the participation in community services. In terms of monthly income, the higher the income of respondents associated with lower number of participations in community services.

In terms of trust indicators, respondents who report only trust people with similar ethnicity tend to have very low participation or not participate at all in community services. On the other hand, those who never participate

relative to those participate in one program, associate with disagreeing leaving their children when go away. [47,26]classified trust for the police as indicator of trust for the system. Regarding this context, in this study trustfor the system is larger associated with more participation types. This means the better trust indicators, the more participation in the community activity. Religiosity is strongly associated with more participation in community services. The lower religiosity is associated with lower participation in community services.

5. Conclusion and Policy Implication

This study analyses the association between religiosity, trust and community participation. The determinant of trust indicates that trust increase with age, gender and education. This study follows the IFLS structure and choose only 7(seven) indicators of several trust indicators listed in appendix and 3(three) indicators regarding trust for institutions. We drop In terms of general trust, majority or modus respondents agree to leave their children with their neighbour if they went out and could not carry their children. This

indicator of trust implies that household and community in Indonesia still have high degree of trust and social capital in general. In terms of trust for system and social norms, most of respondent still believe and respect in institution (police protection). Indonesia is a heterogeneous country in terms of ethnic and religion. Keeping the unity in diversity and trust level is important for maintaining development process run smoothly.

This study finds that the degree of general trust, trust for institution, and subjective report for religiosity have positive and significant association with local community participation in development process. As developing countries, Indonesia need social capital and community participation as complement for implementing various government programs. Government budget allocation will be more effective for gaining various goals if community participation and community social capital are maximizing and become a complement input in development process. Continuous development process and support from the community will ensure sustainability in development process.

Appendix. Summary questions for Trust measurement in IFLS 2014.

No	Questions	Respond	
TR01	I am willing to help people in this village if they need it	Stronglyagree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR02	In this village I have to be alert in dealing with other people	Stronglyagree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR03	Taking into account the diversity ofethnicities in the village, I trust peoplewiththe same ethnicity as mine more.	Stronglyagree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR04	I would be willing to leave my childrenwith my neighbors for a few hours if Icannot bring my children with along.	Stronglyagree	1
		Agree	2
		Disagree	3
		Strongly disagree	4

No	Questions	Respond	
TR05	I would be willing to ask my neighbors to look after my house if I leave for a few days	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR06	How safe do you consider this village?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR07	In most parts of the village, is it safe for you to walk alone at night?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR08	Say it was found by someone who lives close by. Is it likely or unlikely that it will be returned to you with the Rp.200.000?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR09	Say it was found by a police officer. Is it likely or unlikely that it will be returned to you with the Rp. 200.000?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR10	Say it was found by a complete stranger. Is it likely or unlikely that it will be returned to you with the Rp.200.000?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR11	How religious are you?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR28	What do you think if people who have different faith from you build a house of worship in your community?	Strongly agree	1
		Agree	2
		Disagree	3
		Strongly disagree	4
TR29a	In an election, having a candidate with the same religion as yours makes it [...] to vote for him/her.	Very Likely	1
		Somewhat likely	2
		Neither more or less likely	3
		...	4
		Somewhat unlikely ...	5
TR30a	In an election, if the candidates have the same religion as yours, how important is the religiosity of a candidate in influencing your decision to vote for him/her? A more religious candidate makes it [...] to vote for him/her.	Very Likely	1
		Somewhat likely	2
		Neither more or less likely	3
		...	4
		Somewhat unlikely ...	5
TR30b	In an election, if the candidates have a different religion than yours, how important is the religiosity of a candidate in influencing your decision to vote for him/her? A more religious candidate makes it [...] to vote for him/her.	Very Likely	1
		Somewhat likely	2
		Neither more or less likely	3
		...	4
		Somewhat unlikely ...	5
		Very unlikely	

References

- [1] Ecklund EH and Park J2005 Asian-American Community Participation and Religion: Civic Model Minorities *Journal of Asian American Studies* **8**:1-23
- [2] Ruiter S and De-Graaf ND 2006 National Context, Religiosity and Volunteering: Result from 53 Countries *American Sociological Review* **71**:191-210
- [3] Yeung JWK 2018 Are Religious People Really More Helpful? Public and Private Religiosity and Volunteering Participation *Nonprofit and Voluntary Sector Quarterly* **47**:1178-1200 DOI: DOI: 10.1177/0899764018783277
- [4] Vermeer P and Scheepers P2011 Religious Socialization and Non-Religious Volunteering: A Dutch Panel Study **23**:940-958
- [5] Wang L and Handy F2014 Religious and Secular Voluntary Participation by Immigrants in Canada: How Trust and Social Networks Affect Decision to participate **25**:1559-1582
- [6] Grossman PJ and Parrett MB 2011 Religion and Pro Social Behavior: A Field Test *Applied Economics Letters* **18**:523-526
- [7] Prouteau L and Sardinha B2015 Volunteering and Country Level Religiosity: Evidence from the European Union **26**:242-266
- [8] Knack S and Keefer P 1997 Does social capital have an economic payoff? A cross-country investigation *The Quarterly Journal of Economics* **112**:1251-1288
- [9] Perdana A, Matakos K and Radin E 2006 Does It Pay to Participate? *CSIS Working Paper Series* WPI no. 095
- [10] Olken B 2006 Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages *American Economic Journal*
- [11] Berggren N and Bjornskov C 2009 Does Religiosity Promote or Discourage Social Trust? Evidence from Cross-Country and Cross-State Comparisons *Working Paper in Economics*
- [12] Alesina A and La Ferrara E 2002 Who trusts others? *Journal of Public Economics* **85**:207-234
- [13] Lee LTS and Sukoco BM 2011 Reflexivity, stress, and unlearning in the new product development team: the moderating effect of procedural justice *R&D Management* **41**(4) 410-423
- [14] Dincer O and Uslander E 2007 Trust and Growth *Working Paper in Economics Nota di Lavoro* **73**:1-14
- [15] Zak PJ and Knack S 2001 Trust and Growth *The Economic Journal* **111**:295-321
- [16] Eliyana A and Ma'arif S2019 Job satisfaction and organizational commitment effect in the transformational leadership towards employee performance *European Research on Management and Business Economics*
- [17] Taniguchi H 2012 The Influence of Generalized Trust on Volunteering in Japan *Nonprofit and Voluntary Sector Quarterly* **XX**:1-21 DOI: DOI:10.1177/0899764011434554
- [18] Wilson J 2000 Volunteering Annual Review of Sociology **26**:215-240
- [19] Nakano LY 2000 Volunteering as a Lifestyle Choice: Negotiating Self-Identities in Japan *Ethnology* **39**:93-107
- [20] Bowen JR 1986 On the Political Construction of Tradition: Gotong Royong in Indonesia *The Journal of Asian Studies* **45**:545-561
- [21] Murdoch J 1995 Income Smoothing and Consumption Smoothing *Journal of Economic Perspectives* **9**:103-114
- [22] Murdoch J 1999 Between the State and the Market: Can Informal Insurance Patch the Safety Net *World Bank Research Observer* **13**:187-207
- [23] Dercon S 2004 *Insurance Against Poverty* Oxford University Press
- [24] Beckkers R 2012 Trust and Volunteering: Selection or Causation? Evidence From a 4 Year Panel Study *Polit Behav* **34**:225-247 DOI: DOI: 10.1007/s11109-011-9165-x
- [25] Dinda S 2007 Social Capital in the creation of Human Capital and Economic Growth: A Productive Consumption Approach *Working Paper in Economics Indian Statistical Institute*
- [26] Pablo B, Rossi M and Zacclicklever D 2009 Individual's Religiosity Enhances Trust: Latin American Evidence for the Puzzle *Journal of Money Credit and Banking* **41**:555-566
- [27] Berggren N and Jordahl H2006 Free to Trust? Economic Freedom and Social Capital *Kyklos* **59**:141-169
- [28] Olken AB2009 Do Television and Radio Destroy Social Capital? Evidence from Indonesian Villages *American Economic Journal: Applied Economics* **1**:1-33

- [29] Ljunge M 2014 Social capital and political institutions: Evidence that democracy fosters trust *Economics Letters* **122**:44-49
- [30] Bjornskov C 2007 Determinant of Generalized Trust: A Cross-Country Comparison *Public Choice* **130**:1-21
- [31] Barro RJ and McCleary RM 2006 Religion and Economy *Journal of Economic Perspectives* **20**:49-72
- [32] Welch MR, Sikkink D and Loveland MT 2007 The Radius of Trust: Religion, Social Embeddedness and Trust *Strangers Social Forces* **86**:23-46
- [33] Welch MR, Sikkink D, Sartain E and Bond C 2004 Trust in God and Trust in Man: the Ambivalent Role of Religion in Shaping Dimensions of Social Trust *Journal for the Scientific Study of Religion* **43**:317-343
- [34] Branas-Garza P, Rossi M and Zacliclever D 2009 Individual's Religiosity Enhances Trust: Latin American Evidence for the Puzzle *Journal of Money, Credit and Banking* **41**:555-566
- [35] Traummuller R 2009a Individual Religiosity, Religious Context, and the Creation of Social Trust *Germany Schmollers Jahrbuch* **129**:357-366
- [36] Traummuller R 2009b Moral Communities? Religion as A Source of Social Trust in A Multi-Level Analysis of 97 German Regions *Working Paper in Economics Department of Economics University of Konstanz*
- [37] Tan JHW 2006 Religion and social preferences: An experimental study *Economics Letters* **90**:60-67
- [38] Tan JHW and Vogel C 2008 Religiosity and Trust: An Experimental Study *Journal of Economic Psychology* **29**:283-484
- [39] Anderson L, Mellor J and Milyo J 2010 Did the Devil Make Them Do It? The Effects of Religion in Public Goods and Trust Games *Kyklos* **63**:163-175
- [40] Johnson ND and Mislin AA 2011 Trust Games: A Meta-Analysis *Journal of Economic Psychology* **32**:865-889
- [41] Cameron L 1995 Raising the Stake in the Ultimatum Game: Experimental Evidence from Indonesia *Working Paper Industrial Relation Section* **345**:1-33
- [42] Davis DD and Holt CA 1993 *Experimental Economics* Princeton University Press Princeton
- [43] Mattis JS, Jagers RJ, Hatcher CA, Lawhon GD and Murphy EJ 2000 Religiosity, Volunteerism and Community Involvement among African American: An Exploratory Analysis *Journal of Community Psychology* **39**:1-406
- [44] Ariza-Montes A, Rodriguez VF, Valencia PT and Hager M 2018 Religious vs Secular Volunteering Motivations: A Study on European Elders Research *Ageing and Social Policy* **6**:82-111 DOI: 10.4471/rasp.2018.3136
- [45] Yeung AB 2008 Free to Choose-So Why Choose Volunteering? Exploring Independence and Social Action in the Finnish Church Voluntary Action *The Journal of the Institute for Volunteering Research* **9**:36-45
- [46] Apinumahakul A, Barham V and Devlin RA 2009 Charitable Giving, Volunteering, and the Paid Labor Market *Non Profit and Voluntary Sector Quarterly* SAGE Publication
- [47] Cardenas JC, Chong A and Nopo H 2008 To What Extent do Latin Americans Trust and Cooperate? Field Experiments on Social Exclusion In Six Latin American Countries *Research Department Series IV*