The Determinants of Participation in the Social Activities: 
The Case of Indonesia

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Abstract
One of the most issues debated in the social capital literature is the unconditional cash transfer effect on social capital, especially regarding the potential of unmeasured targeted mechanisms at the community level about social relations. This article aims to identify the determinant of social capital in the form of household participation in social activities and the impact of unconditional cash transfers (BLT) on participation in social activities in Indonesia by using differences-differences approach (DID). The results showed that the most influential factor on household participation in social activities is the education level of the head of the household and the members of the productive age group. Meanwhile, unconditional cash transfers policy has a positive effect on the rotating saving and credit association. Thus, participation in social activities undertaken by the community undoubtedly has an important element in the success of government programs.

Keywords: social capital, unconditional cash transfer (BLT), differences-in-differences (DID)
Introduction

Social capital had an essential role in the development that owned by a community. Social capital is an actual and exciting topic in the study of economic development. This reason is due to the claim that the differences between various social variables between regions and countries can explain the differences in income and productivity that appear in the region or country. In this case, a non-economic variable that can capture various aspects of social structure is what is called social capital.

Coleman (1990) regards social capital as a combination of social structures that facilitate specific actions of actors within the structures. Social capital as Fukuyama (1995) states is a set of norms in a social system that improves the level of cooperation among the members of that society and causes a decrease in the costs of transactions and communication. According to Putnam (1995), social capital refers to those features of the social organization such as norms, social networks, and social trust that facilitate coordination and cooperation for mutual benefit. Experts have realized the importance of social capital in the formation of civil society (Fukuyama, 2000). Several definitions of social capital and its functions have been suggested by experts, each emphasizing a particular aspect and role of social capital. However, based on the descriptions mentioned, it can be deduced that social capital was known by elements such as trust, networks, norms, and rules; and its primary function is to facilitate and to improve consistency in the relationship among individuals in different levels and positions.

Furthermore, the existence of social capital is also essential not only to support the effectiveness of government but also to contribute to revenue growth as well as other economic indicators (Keefer and Knack, 2005). The essential of social capital as a critical element in development should be one of the considerations in the implementation of government programs, including cash transfer. By the implementation of the government program, especially in poverty alleviation, attention to the influence of social capital from the program began to increase.

One of the government programs in the form of cash assistance is unconditional cash transfer program (Bantuan Langsung Tunai). The program set in line with the 2005 global oil price increments that reached its highest level over the past 25 years, at around $ 70 per barrel, forcing the Government to reduce subsidies for fuel oil twice in March and October (Bank Indonesia, 2005). A logical consequence as a result of the reduction of fuel subsidy is the price of domestic fuel has increased. Thus, efforts to mitigate the adverse impact of the fuel price increments, the Government has set up unconditional cash transfer (BLT) designed to reduce the burden on communities, especially the low-income household community to maintain purchasing power when Government adjusts subsidized fuel prices. Cameron and Shah (2012) conclude that the target faults in BLT are primarily leakage, positively associated with increased crime experienced by households. Also, confirm that BLT leakage negatively correlated with the participation of household members in community activities.

A crucial issue concerning the government’s scheme of cash transfer to social capital is to be aware of the potential for unmeasurable impacts on targeting mechanisms on community-
level regarding social ties and relationships (Hossain, 2010). In the short term, a targeted cash-aid program may not result in a continuing negative impact on existing social relations. However, in the long-run, the accumulation of aid schemes through targeting can deepen the occurrence of social divisions because individuals begin to be individualistic and egoistic. This fact may pose a risk to the weakening of existing social capital in the community as indicated by the lower levels of community participation in formal and informal activities.

Babajanian (2012) suggests that cash assistance can prevent household members from moving elsewhere, maintaining family and community ties that lead to more active household members in social relationship and ceremonial events within a community. Ressler (2008) finds evidence that government transfer can strengthen social networks through enhancing social capital demonstrated by increasing levels of public participation in formal and informal activities.

Studies related to the impact of government transfer on social capital so far have indicators and diverse estimation results. First, the broad definition of social capital can lead to the difficulty of obtaining sufficient representative indicators to represent the concept of social capital. One of the indicators used is the activity of individuals or households in the social community. In societies with various social intensities, the types of social activities undertaken vary widely and are unique among communities. Second, it is the household’s decision to engage in social activities based on factors that are difficult to measure empirically. In this case, social activities are more influenced by the individual’s awareness of the responsibility of safeguarding the safety and comfort of the environment, and there are no legal sanctions that bind a person to engage in social activities. Households with a high level of social awareness will be actively involved in the social activities. In contrast, relatively individualistic and egoistic households tend to avoid social activities. Third, the problem of estimation in the assessment can be overcome if there is enough informative data about the involvement of household members in various community activities. The potential for unmeasurable impacts in the targeting mechanisms on social ties and social relationships at the community level and diverse empirical findings and household decision issues in social activities based on factors that are difficult to measure empirically. Therefore, the questions in this study are as follows: what factors determine the involvement of households in social capital in the form of household participation in social activities and does the unconditional cash transfer have an impact on social capital in the form of household participation in social activities in Indonesia.

This study provides important empirical contributions or novelty among others: firstly, analyzing unconditional cash transfer, using the involvement of household participation as an indicator of social capital in more detail and comprehensive. Second, the use of IFLS data has an indispensable panel structure for applying relevant methods to control unobserved heterogeneity. As an illustration, households that tend to be egoistic or individualistic tend not to play an active role in community activities. Therefore, without controlling the unobserved heterogeneity, the estimation of the regression coefficient between the primary variable or interest variable and the various indicators of social participation will be potentially biased. Also, the Indonesian Family Life Surveys (IFLS) data type with panel structure has comprehensive
information on social activities and cash transfer programs in Indonesia. Several studies on the importance of social capital as a determinant of the economic development of society have done in many developing countries involving various estimation techniques.

Method

The model estimation used in this study is following the previous model that has done before (Bertrand et al, 2004; Cameron and Shah, 2011) with some modifications. This study uses a difference-in-differences (DID) approach to analyze the impact of governments’ cash transfer on participation in the social activities in Indonesia.

\[ s_{ijt} = \alpha_0 + \alpha_1 \text{Transfer}_{it} + t_t + \delta \text{Transfer}_{it} \times t_t + x_{it} + y_{jt} + u_{ijt} \quad (1) \]

where \( s_{ijt} \) is a variable that describes social capital \( i \) in community \( j \) on year \( t \). The social capital variable in this study refers to the previous study of household participation in rural community activities (Gertler, et al, 2006; Attanasio, et al, 2015). Household participation includes: participation in arisan activities (savings rotary), community meetings, cooperatives (all types of cooperatives and at all levels: homes, villages, sub-districts), youth group activities (karang taruna), civil patrol security (siskamling) activities, routine communal work, village improvement program and family welfare development (PKK). \( x \) is a vector of household characteristics, \( y \) is a vector of village characteristics. Transfer is Governments’ policy which is unconditional cash transfer (BLT). Meanwhile, \( t \) is the dummy variable of the time period in which \( 1 = 2007 \) and \( 0 = 2000 \), whereas \( u_{ijt} \) is error term.

Equation (1) concerns that unobserved variables are time-invariant which can affect social capital and implementation of cash transfer so that it can cause bias. For example, an incompetent administrative village head which delivers BLT assistance may influence his decision to determine who is eligible and not to receive cash assistance from the government. Also, differences in geographical factors between villages, less social preference of households tend to be inactive in community activities in villages and escape from the distribution of government cash transfer. Thus, fixed effects method applied for controlling the unobserved characteristics at the village level so that the bias problem can overcome. Therefore, through the fixed effects method at the village level then equation (1) becomes as follows:

\[ s_{ijt} = \alpha_0 + \alpha_1 \text{Transfer}_{it} + t_t + \delta \text{Transfer}_{it} \times t_t + x_{jt} + y_{jt} + \pi_j + u_{ijt} \quad (2) \]

The data used in this paper is the publication of the Indonesian Family Life Survey (IFLS) or the 3rd wave (2000) and the 4th IFLS (2007). The data is used to capture periods before and after the introduction of unconditional cash transfer programs (BLT) to community participation in social activities. In the 4th wave of IFLS (2007), specific questions are available about government programs related to cash assistance received by households through the fuel subsidy reduction compensation program, namely unconditional cash transfer (BLT).

Result and Discussion

Descriptive statistics in Table 1 shows that unconditional cash transfer received by households during the 2007 period with 15.2 percent. The head of household education is a
primary school graduate of 52.5 percent with an average number of members of 4-5 people, predominantly male (81.3 percent) with a married status of 81 percent and mostly has already worked (87.1 percent). Also, the age of household members dominated by productive age (15-64 years), which reaches 89 percent.

Table 1. Descriptive Statistics Some Characteristics Household and Village

| Variabel                                      | Mean   | Std. Dev. |
|-----------------------------------------------|--------|-----------|
| Unconditional Cash Transfer /BLT (yes = 1)     | 0.152  | 0.359     |
| Household head education                      |        |           |
| Not in school (yes = 1)                       | 0.142  | 0.349     |
| Primary (yes =1)                              | 0.525  | 0.499     |
| Junior secondary school (yes =1)              | 0.128  | 0.335     |
| Senior secondary school (yes =1)              | 0.141  | 0.348     |
| University (yes =1)                           | 0.054  | 0.226     |
| Household size                                | 4.200  | 1.929     |
| Household size square                         | 21.360 | 19.977    |
| Household head sex (Women =1)                 | 0.187  | 0.390     |
| Household head status (married =1)            | 0.810  | 0.392     |
| Household head work (no = 1)                  | 0.129  | 0.336     |
| Household member aged                         |        |           |
| Below 64 years old                            | 0.000  | 0.016     |
| 15 to 64 years old                            | 0.890  | 0.313     |
| Over 64 years old                             | 0.110  | 0.313     |
| Home ownership status (rent =1)               | 0.031  | 0.174     |
| Household own a television ( yes =1 )         | 0.657  | 0.475     |
| Household utilize electricity (yes =1)        | 0.926  | 0.261     |
| Household head own a toilet (yes =1)          | 0.667  | 0.471     |
| Water for drinking (pump = 1)                 | 0.595  | 0.491     |
| Material for Cooking (firewoods = 1)          | 0.448  | 0.497     |
| The size of the house (m2)                    | 4.163  | 0.666     |
| Household Income (ln)                         | 14.748 | 3.738     |
| Material used in the outer wall house          |        |           |
| Cement (yes = 1)                              | 0.663  | 0.473     |
| Bamboo (yes = 1)                              | 0.236  | 0.425     |
| Lumber (yes = 1)                              | 0.095  | 0.294     |
| Flooring type used in this house              |        |           |
| Ceramic (yes = 1)                             | 0.216  | 0.411     |
| Tiles (yes = 1)                               | 0.200  | 0.400     |
| Cement (yes = 1)                              | 0.331  | 0.471     |
| Lumber (yes = 1)                              | 0.125  | 0.331     |
| Bamboo (yes = 1)                              | 0.008  | 0.088     |
| Nearest post office (km)                      | 5.354  | 9.571     |
| District Capital Center (km)                  | 21.579 | 25.032    |
| Nearest public telephone (km)                 | 3.237  | 9.251     |
| Nearest bus stop, terminal or pier (km)       | 5.050  | 9.867     |
| Terminal for vehicles 3 wheels (km)           | 2.065  | 5.597     |

Source : IFLS3 and 4
Meanwhile, the main source of drinking water that still uses the well is quite high (59.5 percent), the main fuel for households for cooking which still uses firewood is still high (44.8 percent) and still less healthy inhabited homes according to the so-called healthy house boundaries. That is, the narrower the house then the health level of family members will be disrupted due to limited space air movement in the house. The category of healthy houses according to the World Health Organization is a house that has a floor area of at least 10 m² per capita (BPS, 2010), while generally, the occupied floor of the household is 4,163 square meters. Also, the type of wall and floor outside the house is the wall (66.3 percent) and cement (33.1 percent). Characteristics of the villages represented by access to the infrastructure or facilities in the village include distance to the nearest post office, distance to the capital of the district/city, distance to the nearest telephone facility, distance to the nearest station, distance to two-wheelbase transport. Based on the characteristics of the village shows that the distance between the village head office to various facilities and infrastructure is quite far away. The farthest distance is to the center of the regency or city's capital which reaches 22 km, while to the nearest two-wheelbase facility on average reaches 2 km.

Table 2 shows that the coefficient of education of head of household level of elementary to university have positive effect on participation in the social activities. This participation both in prison, civil protection security (siskamling), cooperative, youth organization, family welfare development (PKK) and citizen meeting with statistically significant at level 1 until 5 percent. Thus, it can be concluded that the educational level of the head of the household plays an important role in household involvement in various participation in the social activities. This is in line with previous research which states that schools are better than families in contributing to the dissemination of social capital (Aghion et al., 2010). Also, although individuals with education have higher investment costs in social activities, they also receive a higher rate of return on social capital. Therefore, highly educated individuals will invest more in social activities because net benefits will be higher (Jordan et al, 2005).

The number of household members negatively affects participation in arisan activities, whereas in youth activities show the opposite result. This indicates that the larger the number of household members, the many household members who contribute their income so that the involvement in the arisan is lower. Therefore, with the size of the household, it tends to participate in various social capital activities that have no economic motive, in this case, the youth activity. Also, the larger household members in a household would have a relatively small time in performing arisan activities, but instead to help each other informally. These findings are in line with previous studies that the number of household members negatively impacted various meetings, but played a key role in mutual assistance activities (Wolz et al, 2005).

Head of the household of female gender has positive effect to participation in social gathering and family welfare activities (PKK), while in civil rotary security (siskamling) activity, village repair, youth group, and community meeting show opposite result. Gender is the most important thing in determining the level of participation in activities, especially social gathering and improving women's empowerment through PKK activities. This is because female-headed households are more likely to need financial services for social
gathering and social networking created by women empowerment programs to maintain their level of consumption and socialization. These findings are in line with previous studies that women have a high probability of being members in arisan activities (Anderson and Baland, 2002; Varadharajan, 2004).

The head of married households has a positive influence on participation in the social gathering and family welfare activities (PKK), while in the youth activities show the opposite result. This indicates if the individual is married, especially women then more likely to participate in arisan activities due to the economic profit motive. A married woman has more of her resources to keep the household to join the arisan. Also, the magnitude contributes to arisan activities because it can utilize the income of her husband to help the household income. Also, married household heads tend to be more involved in social interactions, such as PKK activities because they have a considerable role in improving the social status of households. These findings are in line with studies in Kenya showing that married heads of households tend to participate actively in social activities, especially arisan (Anderson and Baland, 2002).

Unemployed heads of households have a negative effect on the activities of the working sanctuary and village improvement. This indicates that the head of household is not working or unemployed is associated with the increase of leisure time and a decrease in income. In this case, the unemployed person spends his time on other activities rather than participating or socializing in the community, such as spending more time at home. Also, the head of the unemployed household will lower his income so that his ability to set aside income is very small by participating in social activities, especially his involvement in arisan activities. These findings are in line with previous studies suggesting that unemployment tends to reduce the level of interaction and social participation (Lars and Suppa, 2014).

Household members of the age group, both productive (15-64 years) and unproductive (over 64 years) have a positive effect on participation in the social activities, especially in arisan, siskamling, cooperative, community service, village improvement and community meetings. In this case, productive age is more involved in social activities because at this age it is more productive to provide opportunities and potential to increase income. High revenues enable families to meet their needs and set aside some of their income to engage in social activities, especially social gatherings.

Meanwhile, active involvement in the activities siskamling, cooperatives, work devotion, repair villages and community meetings is to socialize with citizens. Meanwhile, over 65 years of age has been very experienced, and many know about the past, but sometimes constrained due to physical limitations to follow social capital activities so that involvement of social activities decreasingly. These findings are in line with previous studies showing that productive age tends to perform productive work that is positively associated with various social capital indicators of community involvement (Van Ingen and Van Eijck, 2009).

The status of rent home ownership has negatively affected participation in the fostering family welfare (PKK). This indicates that households with rent-house ownership tend to be not involved in family welfare development (PKK). In this case, the rented house is
short-term, and the trend does not stay long enough and to move around. Thus, household incentives to engage in social interaction, particularly in the formation of household welfare are very small. Meanwhile, television ownership positively affects participation in arisan activities, village improvements, PKK and community meetings. These findings indicate that television ownership plays an important role in increasing the involvement of households in social activities because it can provide useful information and lower the cost of transactions when meeting or engaging with other communities that are part of the positive effects that television has on social activities. This is in line with previous studies that television and information media have a positive influence on social capital (Hooghe and Oser, 2015).

The same findings indicate that households that already have their latrines or toilets have a positive effect on cooperative activities, village improvements and family welfare development (PKK). This result is in line with previous studies, where if a household builds its toilets and obtains sanitation access more easily and stops defecating other villagers benefit. If societies with higher levels of social capital can internalize these social benefits, they tend to be more interested and willing to work together to improve sanitation as they improve community health, especially in rural communities (Cameron and Olivia, 2010). Similarly, the main source of drinking water that is still using the well has a positive effect on social activities, especially cockroach activities and community meetings, whereas in the social gathering activities have a negative effect.

The floor area occupied by the household has a positive effect on the social gathering activities. This indicates that the more spacious the floor of the house inhabited by the household then the involvement in arisan activities getting bigger. The wider floor of the inhabited house indirectly reflects the higher level of welfare of the household so that it has the potential to set aside some of its income for savings through arisan activities. Meanwhile, the main fuel of the household for cooking that still uses firewood has a negative effect on the social gathering activities.

Household income has a positive effect on participation in the social activities, especially in arisan activities, work activities and youth cadets. In this case, high-income individuals are more likely to think of an insurance mechanism when there is an income shock, such as an increase in prices caused by an increase in fuel by saving some of their income through arisan activities. Also, to get a higher return on social activities if collective investment in the community, especially in arisan activities. These findings are in line with previous studies that discussed the relationship between individual and community social capital investments, whereby the higher investments made in social capital activities, the higher the rate of return that would be obtained (Glaeser, 2001).

Types of walls and floor outside the house walls, cement and wood have a positive effect on cooperative activities. Also, the type of outer floors occupied by households, especially those made of cement have a positive effect on participation in the social activities, especially in arisan and karang taruna activities. This indicates that households that have the type of wall and floor outside of the walled house, cement and floor of the largest house made of cement (generally an economically capable household) are more active in social activities.
The Determinant of Participation in The Social Activities

| Variable                                      | OLS FE | QLS FE | OLS FE | QLS FE | OLS FE | QLS FE | OLS FE | QLS FE | OLS FE | QLS FE |
|-----------------------------------------------|--------|--------|--------|--------|--------|--------|--------|--------|--------|--------|
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| University (yes = 1)                          | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Primary (yes = 1)                             | 0.057*** | 0.050*** | 0.059*** | 0.015 | 0.001 | 0.007** | 0.002 | 0.010*** | 0.007* | 0.023*** | 0.019** |
| Variabel | Arisan (Rotating Saving and Credit Association) | Siskamling | Cooperatives | Voluntary Labor | Program to Improve the Village | Youth Groups Activity | PKK (Women's Association Activities) | Community Meeting |
|----------|-----------------------------------------------|------------|--------------|----------------|-------------------------------|---------------------|-------------------------------------|-------------------|
|          | OLS 1 | OLS 2 | OLS 3 | OLS 4 | OLS 5 | OLS 6 | OLS 7 | OLS 8 | OLS 9 | OLS 10 | OLS 11 | OLS 12 | OLS 13 | OLS 14 | OLS 15 | OLS 16 |
| Household own a television (yes = 1) | 0.060*** | 0.040*** | -0.009 | -0.008* | 0.007*** | 0.004 | -0.003 | -0.006 | 0.022*** | 0.014* | 0.003 | 0.002 | 0.012*** | 0.012*** | 0.020*** | 0.013** |
| Household utilize electricity (yes = 1) | 0.031** | 0.016 | -0.003 | -0.001 | 0.002 | 0.010 | 0.029* | 0.006 | 0.044*** | 0.009 | -0.006 | -0.01 | -0.011* | -0.011 | 0.031*** | 0.018 |
| Household head own a toilet (yes = 1) | 0.020** | -0.002 | 0.000 | -0.005 | 0.012*** | 0.009** | 0.015* | 0.019** | -0.003 | 0.000 | 0.008** | 0.006* | 0.013** | 0.008 | 0.013** | 0.008 |
| Cooking (firewoods = 1) | -0.020** | -0.066*** | -0.012*** | -0.007 | -0.003 | -0.007 | 0.049*** | 0.015 | 0.058*** | 0.018* | 0.009** | 0.004 | 0.005 | -0.005 | 0.022*** | -0.001 |
| Water for drinking (pump = 1) | 0.041*** | -0.014 | 0.012*** | 0.002 | -0.006* | -0.007 | 0.000 | -0.004 | 0.036*** | 0.018 | -0.002 | 0.011** | -0.002 | -0.003 | 0.020** | 0.018** |
| The size of the house (m2) | 0.059*** | 0.020*** | -0.003 | -0.002 | 0.001 | -0.001 | -0.003 | 0.008 | 0.014*** | 0.004 | 0.000 | 0.001 | 0.008*** | 0.003 | 0.006 | 0.006 |
| Household Income (ln) | 0.003*** | 0.004*** | 0.000 | 0.000 | 0.001 | 0.001** | 0.002** | 0.003** | 0.000 | 0.000 | 0.000 | 0.001** | 0.001 | 0.000 | 0.001** | 0.002** |
| Material used in the outer wall house | [0.001] | [0.001] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.001] | [0.001] | [0.000] | [0.000] | [0.000] | [0.000] | [0.000] | [0.001] |
| Cement (yes = 1) | 0.064 | 0.008 | -0.036 | -0.012 | 0.024*** | 0.026*** | 0.014 | 0.025 | 0.075** | 0.004 | -0.002 | -0.024 | 0.013** | -0.003 | -0.016 | -0.053 |
| Bamboo (yes = 1) | 0.054 | 0.000 | -0.036 | -0.018 | 0.017*** | 0.013 | 0.055 | 0.030 | 0.092** | 0.008 | -0.009 | -0.022 | 0.005 | -0.007 | -0.018 | -0.048 |
| Lumber (yes = 1) | 0.092** | 0.011 | -0.031 | -0.006 | 0.019*** | 0.022** | 0.022 | 0.046 | 0.073** | 0.005 | -0.013 | -0.026 | 0.012** | -0.004 | -0.021 | -0.05 |
| Flooring type used in this house | 0.045 | [0.061] | [0.029] | [0.025] | [0.004] | [0.009] | [0.049] | [0.041] | [0.034] | [0.039] | [0.026] | [0.023] | [0.006] | [0.008] | [0.031] | [0.037] |
| Ceramic (yes = 1) | -0.003 | 0.038** | 0.000 | -0.005 | -0.002 | -0.006 | 0.041** | 0.000 | -0.005 | 0.005 | 0.006 | 0.008 | -0.005 | -0.001 | 0.000 | 0.000 | -0.004 |
| Tiles (yes = 1) | -0.005 | 0.026 | 0.000 | -0.003 | 0.002 | 0.000 | 0.025 | -0.001 | -0.005 | 0.001 | 0.006 | 0.010* | -0.002 | 0.000 | -0.002 | -0.009 | -0.004 |
### The Determinants of Participation in the Social Activities

#### Arisan (Rotating Saving and Credit Association)

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | -0.023 | 0.032** |
| Lumber (yes = 1) | -0.070*** | 0.016 |
| Bamboo (yes = 1) | -0.090*** | -0.001 |
| Nearest post office (km) | -0.001*** | -0.001 |
| District Capital Center (km) | -0.001*** | -0.001 |
| Nearest public telephone (km) | 0.000 | 0.000 |
| Nearest bus stop, terminal or pier (km) | 0.000 | 0.000 |
| Terminal for vehicles 3 wheels (km) | -0.001 | -0.001 |
| Year (2007 = 1) | -0.110*** | -0.096*** |
| Constant | -0.278*** | -0.062 |

#### Siskamling Cooperatives

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | -0.005 | -0.003 |
| Lumber (yes = 1) | 0.002 | 0.002 |
| Bamboo (yes = 1) | 0.011 | 0.012 |
| Nearest post office (km) | 0.000 | 0.000 |
| District Capital Center (km) | 0.000 | 0.000 |
| Nearest public telephone (km) | 0.000 | 0.000 |
| Nearest bus stop, terminal or pier (km) | 0.000 | 0.000 |
| Terminal for vehicles 3 wheels (km) | 0.000 | 0.000 |
| Year (2007 = 1) | -0.004 | -0.002 |
| Constant | 0.025 | 0.021 |

#### Voluntary Labor

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | 0.014 | -0.003 |
| Lumber (yes = 1) | -0.008 | -0.008 |
| Bamboo (yes = 1) | 0.011 | 0.007 |
| Nearest post office (km) | 0.000 | 0.000 |
| District Capital Center (km) | 0.000 | 0.000 |
| Nearest public telephone (km) | 0.000 | 0.000 |
| Nearest bus stop, terminal or pier (km) | 0.000 | 0.000 |
| Terminal for vehicles 3 wheels (km) | 0.000 | 0.000 |
| Year (2007 = 1) | 0.009** | 0.008** |
| Constant | 0.013 | 0.017 |

#### Program to Improve the Village

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | -0.011 | -0.007 |
| Lumber (yes = 1) | -0.051*** | 0.008 |
| Bamboo (yes = 1) | 0.007 | 0.012 |
| Nearest post office (km) | -0.001*** | -0.003 |
| District Capital Center (km) | 0.000 | 0.001 |
| Nearest public telephone (km) | 0.000 | 0.000 |
| Nearest bus stop, terminal or pier (km) | 0.000 | 0.000 |
| Terminal for vehicles 3 wheels (km) | 0.000 | 0.000 |
| Year (2007 = 1) | -0.061*** | -0.064*** |
| Constant | -0.011 | -0.017 |

#### Youth Groups Activity

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | 0.008 | -0.007 |
| Lumber (yes = 1) | 0.008 | -0.004 |
| Bamboo (yes = 1) | 0.008 | 0.012 |
| Nearest post office (km) | -0.009 | 0.004 |
| District Capital Center (km) | -0.009 | 0.004 |
| Nearest public telephone (km) | -0.009 | 0.004 |
| Nearest bus stop, terminal or pier (km) | -0.009 | 0.004 |
| Terminal for vehicles 3 wheels (km) | -0.009 | 0.004 |
| Year (2007 = 1) | -0.063*** | -0.060*** |
| Constant | -0.006 | -0.007 |

#### PKK (Women's Association Activities)

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | -0.016 | -0.003 |
| Lumber (yes = 1) | -0.050*** | 0.008 |
| Bamboo (yes = 1) | 0.007 | -0.011 |
| Nearest post office (km) | -0.003 | 0.009 |
| District Capital Center (km) | 0.000 | 0.004 |
| Nearest public telephone (km) | -0.003 | 0.009 |
| Nearest bus stop, terminal or pier (km) | -0.003 | 0.009 |
| Terminal for vehicles 3 wheels (km) | -0.003 | 0.009 |
| Year (2007 = 1) | -0.062 | -0.011 |
| Constant | -0.012 | -0.013 |

#### Community Meeting

| Variabel | OLS | FE |
|----------|-----|----|
| Cement (yes = 1) | -0.005 | -0.005 |
| Lumber (yes = 1) | -0.051*** | 0.008 |
| Bamboo (yes = 1) | 0.007 | -0.011 |
| Nearest post office (km) | -0.003 | 0.009 |
| District Capital Center (km) | 0.000 | 0.004 |
| Nearest public telephone (km) | -0.003 | 0.009 |
| Nearest bus stop, terminal or pier (km) | -0.003 | 0.009 |
| Terminal for vehicles 3 wheels (km) | -0.003 | 0.009 |
| Year (2007 = 1) | -0.062 | -0.011 |
| Constant | -0.012 | -0.013 |

Robust standard errors in brackets

*p<0.1, **p<0.05, ***p<0.01
Based on the characteristics of the villages, village access to infrastructure or facilities in rural areas, especially to the nearest post office, negatively affects participation in the social activities, especially on village improvement activities and community meetings, while in youth activities have a positive effect. This data indicates that the higher the distance of access from the village to the nearest post office facility, the involvement or participation of households towards various community activities will be low.

This condition indicates that the further access to the development of village infrastructure which becomes the catalyst of social activities will be lower, especially to social activities related to socialization, such as community meetings. The same thing about access to the capital city of districts/cities negatively affects the participation of activities siskamling, cooperatives, and youth cadets. Access to the nearest terminal or station negatively affects participation in the social activities, in particular participating in cooperative activities and negatively affecting PKK activities.

Furthermore, access to nearby telephone facilities positively affects social activities, in particular participating in cooperative activities and negatively affecting PKK activities. This situation illustrates that the further access to the nearest telephone facility, the involvement of households to play an active role in socialization activities through the PKK decreases while following the members of cooperatives in the village is increasing. Finally, the coefficient of access to the two-wheeled vehicle base has a positive effect on participation in the social activities, especially the active role in the village improvement and youth activities (Karang taruna).

Table 3 showed the OLS and fixed effect estimation results at the village level to determine the impact of the unconditional cash transfer program (BLT) on participation in the social activities in Indonesia without considering other variables. The OLS estimates show that the impact of the unconditional cash transfer program (BLT) received by households has a positive effect on participation in the social activities, but is not statistically significant.

Meanwhile, through fixed-effect estimation at the village level, the impact of unconditional cash transfer programs (BLT) has a positive effect on participation in the social activities of 0.056 and is statistically significant at 10 percent, especially in the participation of households in arisan activities. That is, on average if direct cash aid received by households increased by 1 percent, the participation of households in arisan activities will increase by 5.6 percent with the assumption of ceteris paribus.

There are similar findings in Table 4 that the impact of unconditional cash transfer received by households by taking into account other control variables show consistent results with previous estimates, which have a positive impact on social participation in arisan activities in Indonesia of 0.054 and statistically significant at a rate of 10 percent. The estimation results show that the approach with fixed effect at the village level yields different estimation with OLS. This shows that in community participation activities, especially arisan was more influenced by unobserved factors or unobserved heterogeneity. Unconditional cash transfer program (BLT) has a positive effect on the participation of arisan activities (rotating saving and credit association). This indicates that households receiving government assistance through direct cash transfer are more active in arisan activities and indirectly play a role in strengthening social capital.

One of the motivations of households to participate in arisan activities is to have access to credit and ability to maintain purchasing power or to do consumption smoothing in the
event of fuel price increments in Indonesia. Thus, social activity in the form of arisan can be said as a form of money transfer between individuals to strengthen social ties among members of the community. Also, arisan is one of the non-formal financial institutions that are utilized by households, both in urban and rural areas.

These findings are in line with previous findings that indicate households who participate actively in social capital activities, especially those with financial roles (e.g., rotating credit and savings associations) have some long-term benefits, such as access to credit and better ability to cope fluctuations in income by borrowing or accumulating assets (Grootaert, 1999). Cahyono (2010) found that the BLT policy resulted in unproductive farmers, reduce production, and increase consumption. The governance environment plays a key role in affecting the nature and forms of community participation and in shaping local institutions (Babajanian, 2008). The research argues against the ’cultural’ view of institutional change, which presumes that the main barriers to participation are posed by cultural factors.

Table 3. Impact of Unconditional Cash Transfer (BLT) in The Social Activities

| Variable                  | Arisan (Rotating Saving and Credit Association) | Siskamling | Cooperatives | Voluntary Labor | Program to Improve the Village | Youth Groups Activity | PKK (Women’s Association Activities) | Community Meeting |
|---------------------------|-----------------------------------------------|------------|--------------|----------------|-------------------------------|----------------------|--------------------------------------|--------------------|
|                           | OLS                                           | FE         | OLS          | FE             | OLS                           | FE                   | OLS                                  | FE                 |
|                           | (1)                                           | (2)        | (3)          | (4)            | (5)                           | (6)                  | (7)                                  | (8)                |
| Year 2007 x BLT           | 0.056                                         | 0.056*     | -0.008       | -0.008         | -0.005                        | -0.005               | -0.035                                | -0.035             |
|                           | [0.034]                                       | [0.028]    | [0.012]      | [0.016]        | [0.019]                       | [0.028]              | [0.034]                               | [0.034]            |
| Constant                  | 0.366***                                      | 0.316***   | 0.055***     | 0.062***       | 0.066***                      | 0.031***             | 0.238***                              | 0.237***           |
|                           | [0.025]                                       | [0.004]    | [0.012]      | [0.002]        | [0.013]                       | [0.022]              | [0.022]                               | [0.022]            |
| R²                        | 0.0087                                        | 0.0104     | 0.0321       | 0.0337         | 0.0304                        | 0.0001               | 0.0126                                | 0.0119             |
| FE Village Level Control  | No                                            | Yes        | No           | Yes            | No                            | Yes                  | No                                    | Yes                |
|                           | N                                            | 12436      | 12436        | 12436          | 12436                         | 12436                | 12436                                 | 12436              |

Robust standard errors in brackets
Additional controls : BLT (yes=1) and Year (2007=1) are included but not reported.
* p<0.1, ** p<0.05, *** p<0.01

Table 4. Impact of Unconditional Cash Transfer (BLT) in The Social Activities Full Model

| Variable                  | Arisan (Rotating Saving and Credit Association) | Siskamling | Cooperatives | Voluntary Labor | Program to Improve the Village | Youth Groups Activity | PKK (Women’s Association Activities) | Community Meeting |
|---------------------------|-----------------------------------------------|------------|--------------|----------------|-------------------------------|----------------------|--------------------------------------|--------------------|
|                           | OLS                                           | FE         | OLS          | FE             | OLS                           | FE                   | OLS                                  | FE                 |
|                           | (1)                                           | (2)        | (3)          | (4)            | (5)                           | (6)                  | (7)                                  | (8)                |
| Year 2007 x BLT           | 0.044                                         | 0.054*     | -0.007       | -0.007         | -0.005                        | -0.003               | -0.046                                | -0.036             |
|                           | [0.034]                                       | [0.028]    | [0.012]      | [0.016]        | [0.019]                       | [0.028]              | [0.034]                               | [0.034]            |
| Constant                  | 0.366***                                      | 0.316***   | 0.055***     | 0.062***       | 0.066***                      | 0.031***             | 0.238***                              | 0.237***           |
|                           | [0.025]                                       | [0.004]    | [0.012]      | [0.002]        | [0.013]                       | [0.022]              | [0.022]                               | [0.022]            |
| R²                        | 0.0087                                        | 0.0104     | 0.0321       | 0.0337         | 0.0304                        | 0.0001               | 0.0126                                | 0.0119             |
| FE Village Level Control  | No                                            | Yes        | No           | Yes            | No                            | Yes                  | No                                    | Yes                |
|                           | N                                            | 12436      | 12436        | 12436          | 12436                         | 12436                | 12436                                 | 12436              |

Robust standard errors in brackets
Additional controls : BLT (yes=1), Year (2007=1), household head education (primary (yes =1), junior secondary school (yes =1), senior secondary school (yes =1), university (yes =1), household size, household size square, household head sex (women =1), household head status (married =1), household head work (no = 1), household member aged (15 to 64 years old, over 64 years old), home ownership status (rent =1), household own a television ( yes = 1), household utilize electricity (yes =1), household head own a toilet (yes =1), cooking (firewoods = 1), water for drinking (pump = 1), the size of the house (m2), household income (ln), material used in the outer wall house (cement (yes =1), bamboo (yes = 1), lumber (yes = 1)), flooring type used in this house (cementic (yes = 1), tiles (yes = 1), cement (yes = 1), lumber (yes = 1), bamboo (yes = 1)), nearest post office (km), district capital center (km), nearest public telephone (km), nearest bus stop, terminal or pier (km), terminal for vehicles 3 wheels (km) are included but not reported.
* p<0.1, ** p<0.05, *** p<0.01
Conclusion

Based on the calculation of the estimated impact of cash transfer on participation in the social activities in Indonesia, it found that unconditional cash transfer (BLT) are more actively involved in social activities. This result indicates that social capital such as arisan activities (rotating saving and credit association) has a vital role in the success of government programs in providing direct cash assistance. The results of this research comprise important policy implications. Participation in the social activities owned by the community undoubtedly has an important element in the success of government programs. In this case, the existence of strong social ties through arisan (social activities) proved able to reduce the turmoil caused by the rise in the price of fuel oil.

Unconditional cash transfer (BLT) has a positive impact on social capital, but this impact has not spread to other aspects of social capital, namely siskamling, cooperatives, voluntary labor, programs to improve the village, youth activity groups, PKK (women’s association activities) and community meeting. Thus, it hoped that in the long term the provision of direct cash transfer does not deepen the occurrence of social divisions because individuals begin to be individualistic and egoistic. This may pose a risk to the weakening of existing social capital in the community as indicated by the lower level of community participation in formal and informal activities. Therefore, BLT beneficiary households are expected to always interact, be guided and nurtured, to improve community relations and build networks for use.

Assisting the poor is something that the government should do to alleviate poverty problems to improve the welfare of society, but the reality that occurs in the community of direct cash assistance is not an answer to the problem of poverty in Indonesia. This is not separated from the impact of not only the positive side but may also bring negative impacts so that improving the welfare of the community through direct cash assistance is considered not maximized in helping the community economy. The poverty alleviation is not only the task of government alone, but the community also has an important role in this. The community itself should also be able to process or utilize the assistance provided by the government in order to improve its welfare for a better life.

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