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DID PUBLIC CASH TRANSFER CROWD OUT INTER-HOUSEHOLD TRANSFERS IN INDONESIA? EVIDENCE FROM "BANTUAN LANGSUNG TUNAI / BLT"

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ABSTRAK

In 2005 the Government of Indonesia introduced an unconditional cash transfer program called the 'Bantuan Langsung Tunai' (BLT), aimed at assisting poor people who were suffering from the removal of a fuel subsidy. There are concerns, however, that the introduction of a public transfer system can negatively affect inter-household transfers through the crowding-out effect, which exists when donor households reduce the amount of their transfers in line with public transfers received from the government. The poor may not therefore have received any meaningful impact from the public cash transfer, as they potentially receive fewer transfers from inter-household private donors. For the government to design a public transfer system, it is necessary to properly understand the dynamics of private transfer behaviour. Hence, this study evaluates whether a crowding-out effect of public transfers exists on inter-household transfers in Indonesia.

Using data from the Indonesia Family Life Survey (IFLS) and by applying Coarsened Exact Matching (CEM) and Difference-in-differences (DID) approaches, this study found that the likelihood to receive transfers from other family members (non-co-resident) reduces when the household receives BLT. However, there is no significant impact of BLT on transfers from parents and friends.

Pada tahun 2005, Pemerintah Indonesia memperkenalkan program pemberian uang tunai tanpa syarat, disebut "Bantuan Langsung Tunai (BLT), bertujuan untuk membantu rakyat miskin yang meenjadi korban atas pencabutan subsidi bahan bakar. Akan tetapi, ada beberapa pertimbangan bahwa pengenalan program bantuan public tersebut berdampak negative terhadap pemberian (transfer) antar rumah tangga melalui efek "crowding-out". Efek tersebut muncul ketika rumah tangga donor mengurangi jumlah pemberian kepada rumah tangga yang diketahuin pada saat bersamaan menerima BLT. Sehingga, rakyat miskin mungkin tidak menerima dampak yang berarti dari bantuan publik tersebut, karena bantuan dari rumah tangga lain yang biasa mereka terima menjadi lebih kecil. Oleh karena itu, tulisan ini mengevaluasi apakah ada "crowding-out" effect akibat bantuan public terhadap bantuan (transfer) antar rumah tangga di Indonesia.

Menggunakan data dari Indonesia Family Life Survey (IFLS) dan mengaplikasikan Coarsened Exact Matching (CEM) dan Differnce-in-differences (DID), dihasilkan bahwa kemungkinan rumah tangga menerima bantuan dari anggota keluarga lain (yang tidak serumah) berkurang ketika rumah tangga tersebut menerima BLT. Akan tetapi, tidak ada dampak yang signfikan terhadap bantuan (transfer) dari orangtua dan teman.

1. INTRODUCTION

Indonesia implemented its first cash transfer system in 2005, which was an unconditional cash transfer program, known as the Bantuan Langsung Tunai (BLT). This program was designed to assist the poor, who were facing a crisis caused by an increase of fuel prices. However, the effectiveness of this cash transfer has received attention and debate. For example, Hastuti et al. (2006) studied the impact of BLT on the poverty rate and found that this cash program would not decrease the poverty rate. Using a simple simulation model, Hastuti et al. (2006) found that the poverty rate reached 17.9 percent after the implementation of BLT, which was still higher than those in 2004 before the program was introduced. While the purpose of BLT was to dampen the effect of the increasing gas price on the poor households' welfare, this program has not helped much to decrease the poverty rate.

The direct effect of the price shocks on household welfare depends on incident of fuel consumption. Nevertheless, fuel consumptions have small shares on overall households expenditure. Poor households spend 65 to 75 per cent of their budget on food (World Bank 2012). Therefore, the effects of the price shocks of fuel on purchasing power may through indirect channels.

The increase in fuel prices will rise the cost of distribution goods and producing goods using substantial fuel-based input. As the results, the increase in fuel prices induces consumer price inflation. Based on SUSENAS data, over the 2005 to 2006, the CPI increased by 17,9%. Therefore, both poor and near-poor households would be significantly affected by domestic inflation (World Bank 2012).

Since decades, several studies try to examine the problem facing by BLT to meet the objective. For example, World Bank (2012) claimed that although BLT was the most well-targeted among any Indonesian social assistance initiative with national coverage, there was still big issues on the delivering process. There were some households who eligible to receive BLT but did not receive, and vice versa.

Another study by Hossain (2012) found that in the Papuan communities, where almost all residents receive BLT, the amounts compare to the cost of living were said to too small, and some people said it barely justified the cost and effort of collecting the payment. In place where the cost of living is lower than Papua, the amounts might be significant. The difference of the cost living might be the issues for this program in order to assist all the poor.

While in Indonesia, many studies found some issues from targeting and enforcement of this program which determines whether such cash transfer program meet its objectives, there are some study in other countries try to relate the cash transfers program on to the inter-households transfer. For example, Teruel and Davis (2000) found evidence that PROGRESA (cash transfer program in Mexico) is crowding out private transfers. In addition, Kang & Swada (2009) found that a crowding out relation between public cash transfers and private transfers was observed before crisis in Korea, but become a crowing in relation after the crisis.

Therefore, it may be interesting to examine the possibility that BLT may cause a reduction in private transfers through crowding-out inter-household transfers to members of beneficiary households from outside private donors. Contributors to households may be dissuaded from further transfers if they observe the recipient of government transfers. On the other hand, the donors who do not live nearby the households may continue supplying transfers regardless the receipt of government transfers.

Traditionally in Indonesia, where kinship ties remain active and strong, informal private transfers have acted as a social security safety net when facing economic crises. Furthermore, the World Bank (cited in Kang & Sawada 2009), reported that Indonesian households were able to manage their change in living standards precipitated by the crisis through asset sales, dissaving and private transfer. The World Bank argued that the receiving and giving of transfers became an informal social safety net for the poor facing the crisis.

The substitution of private inter-households transfers by BLT can be an indication of informal mechanism of exchange. As BLT is temporary support program, this disruption can be dangerous because such a long social security safety net was altered by the temporary support program. In addition, if such substitution is occurring, it will reduce the impact of BLT over total household income, thus weaken the objectives of the program.

Many studies of developing countries have found that between 20 – 90 percent of households receive and give transfers with other households. Park (2003) found that, in Indonesia, between 2 to 20 percent of total household's income was transferred. In addition, according to data from the Indonesian Family Life Survey (IFLS-3), 56 percent of households reported providing a financial transfer to a non-resident family household. These transfers represent 7 percent of the average monthly household expenditure for the net recipients of transfers (Park, 2003). (These numbers exclude inter-sibling and intra-household transfer.) Hence, inter-household transfer plays a significant role in people's maintenance of their living standards.

To design a public cash transfer system, an understanding of private transfer behavior is important. Both public and private transfers have

a similar objective, which is to help the poor. The benefit of public cash transfers is they become an additional income for households. However, before implementation of such a public system, it is necessary to evaluate whether donor households change or reduce their private transfers to poor households when there is a cash transfer from government. Such analysis is relevant to government stimulus programs in the wake of economic crises.

Several studies have discussed the topic of inter-household transfers in Indonesia. For example, Park (2003) studied the determinant and motive of these transfers, finding that recipient income does not affect the transfer value from child to parents, but was negatively correlated with the transfer from parents and siblings. The current study aims to fill the literature gap by evaluating whether the probability of receiving inter-household transfers was affected by the existence of a public transfer program in Indonesia.

Therefore, this paper analyses whether the presence of BLT as a public cash transfer system crowded out the frequency of inter-household transfers in Indonesia. The presence of such crowding-out effect can indicate the effectiveness of a public transfer program by the government.

This study is expected to contribute to the literature in terms of evaluating the existence of the crowding-out effect of cash transfer programs on inter-households transfers in Indonesia, specifically in relation to the government's BLT program. In terms of methodology, in this study we model the treatment assignment using Coarsened Exact Matching (CEM) and difference-in-differences (DID) to reduce the selection bias due to the use of non-randomized data.

This study is comprised of five sections. The first section introduces the general background of the topic and the debate surrounding it, the research gap and question, and the objective and methods of this paper. The second section presents theoretical frameworks and some background on the Direct Cash Assistance (*BLT*) program in Indonesia specifically. The third section discusses the data and the empirical strategy that will be used to test the hypothesis. The fourth section explains the results and the fifth presents the conclusion. Then, final section mentions the limitation of this study.

2. THEORETICAL FRAMEWORK

There is a growing literature regarding the existence of the crowding-out effect on the relationship between inter-household transfers and income recipients. For example, Cox, Hansen & Jimenez (2004), and Kazianga (2005) found that the pattern of private transfer changed when there was a change in household income recipients in the Philippines. Kazianga (2005) used threshold regression to analyse a low-income country, Burkina Faso, which has a tradition of 'gift-giving', but does not have a formal system of public transfer. Specifically, addressing endogeneity, he found the existence of an altruism motive at the intermediate level of income. Donor households tended to reduce the amount of transfers when the income of recipients increases. However, there was different result for the low-income level, where there was no crowding-out effect of public transfer on inter-household transfer.

Theoretically, the negative association between the income and the amount of transfers means that the addition of extra income (in the form of public transfers) will reduce the amount of inter-household transfers. However, most of studies did not directly evaluate public transfers in relation to the crowding out effect. It would therefore be interesting to use public cash transfers to evaluate the relationship between recipients' incomes and inter-household transfers.

Government intervention of the provision of public transfers to the poor is a popular policy around the world, not only in developing countries, but also in some middle-income countries, such as Brazil and Mexico. It is obvious that this programs design to transfer money to the poor, but it may involve a trade-off related to the targeting process. For this reason, policymakers who are thinking about potential interventions must consider anything that could pose a challenge for the program to achieve its objectives.

The implementation of a public transfer system as government policy, however, is expected to reduce the frequency of private transfers that form the informal social safety net for communities. This crowding out effect exists when donor households reduce their amount of transfers in accordance with public transfers received by the government. For example, the beneficiaries of a cash transfer may usually receive this transfer from their parents. After this household begins to receive a public cash transfer from the government, however, their parents may reduce or even completely stop providing their private transfers. Therefore, the net intended benefit of the public transfers may not fully meet the government's objectives.

Recently, many studies have adopted a new approach in analysis of the crowding-out effect. Instead of using the recipient's income, they evaluate the crowding-out effect of public transfer by directly applying the public transfer as an independent variable (Jung & Pirog, 2015; Kang & Sawada, 2009). These studies have found that the magnitude of private transfers reduces when the household receives public transfers. However, Kang (2004) argues that public transfers reduce neither the magnitude nor the likelihood of inter-household transfers. Using

probit and tobit analysis, he found that the probability of receiving a private transfer was not significantly correlated with household size in Nepal. Therefore, debate remains as to whether such a crowding-out effect exists in lower-income countries.

Several studies have discussed the topic of inter-household transfers in Indonesia. For example, Park (2003) studied the determinant and motive of these transfers, finding that recipient income does not affect the transfer value from child to parents, but was negatively correlated with the transfer from parents and siblings. The current study aims to fill the literature gap by evaluating whether the probability of receiving inter-household transfers was affected by the existence of a public transfer program in Indonesia.

2.1. Background of "Bantuan Langsung Tunai / BLT"

In Indonesia, the BLT cash transfers program was implemented in 2005, in the aftermath of the Government of Indonesia cutting fuel subsidies. Poor households benefitted as consumers both directly and indirectly through lower fuel prices, and so they faced hardship as a result of the subsidy cuts. Furthermore, domestic inflation in food prices caused by these fuel subsidy cuts would have significant impact for both poor and near-poor households (World Bank, 2012), related to the fact that spending on food is the largest share of expenditure for poor households (65 to 75 percent of their budget). As a result, inflation and tighter food supplies caused by the removal of the fuel subsidy were expected to cause a difficult situation for poor households.

To help the poor facing increasing fuel prices, in 2005 the Government of Indonesia introduced a direct cash transfer program. The government decided to use a portion of its subsidy savings to help vulnerable households in the transition to new fuel prices. The form of these cash transfers was an unconditional cash transfer called the "Bantuan Langsung Tunai (BLT)". From inception to implementation, BLT took less than 5 months to develop (World Bank, 2012), and it was a national program that covered all provinces in Indonesia. The basic objective of BLT was to assist the poor to meet their basic needs and maintain the level of welfare.

The national data collected by the Central Statistic Agency (Badan Pusat Statistik or BPS) used to differentiate the poor and near-poor households as the targets of this programs. Based on this data, the Government of Indonesia categorized the targeted households (Rumah Tangga Sasaran or RTS) by very poor, poor, and near-poor. Then using a proxy mean test for 14 indicators of poor households, BPS determine the list of beneficiaries. To be nominated as the beneficiaries, the households had to meet at least 9 of the 14 indicators defined by BPS (see Table 1). The beneficiaries then receive Rp100.000 per month, per households. The associated procedures and rules were regulated in Presidential Instruction number 3 in 2008 regarding the implementation of BLT for targeted households, and in BLT technical that were prepared and published by the Ministry of Social Affairs. Overall, this cash transfer program was simple, and its regulation were well-prepared.

3. RESEARCH METHODE

3.1. Data

In this study, most of the data comes from an ongoing longitudinal households survey in Indonesia, called the "Indonesian Family Life Survey (IFLS)". The first wave of this survey was conducted in 1993 (IFLS1), then in 1997 (IFLS2), 2000 (IFLS3), 2007 (IFLS4), and 2014 (IFLS5). Approximately 83 percent of the Indonesian population has been covered by this survey, and the sample comes from 13 of 33 provinces in Indonesia. As BLT was introduced in 2005, we use the IFLS3 and IFLS4 to study its effects, with IFLS3 (2000) as the pre-treatment wave and IFLS4 (2007) as the post-treatment wave.

The treatment group consists of all households reported in IFLS4 as recipients of BLT. Thus, the key variable of interest in this study is a dummy variable, denoted by BLT, which was equal to 1 if the households received BLT. In addition, the outcome variable is a binary variable which takes value of 1 if the households receive private transfers from non-co-resident households (parents, other family, and friends or neighbors).

The descriptive statistics for the full sample, according to whether or not the households received private transfers, is provided in Table 2. From the summary, we can see that the BLT recipients received less of the share of inter-household transfers (parents, other family, and friends or neighbors). It is also interesting to note that, in 2007, overall the share of households who received inter-household transfers was smaller than others who did not receive such transfers. Additionally, households who lived in urban areas were more likely to receive the private transfer, compared to those who lived in rural areas.

3.2. Estimation Strategy

Evaluating the impact of the policy is challenging as it is hard to find a counterfactual who received the treatments (i.e. received BLT). Thus, we use matching methods as an estimate approach to approximate the effect of BLT. To do so, we needed to find a control group with similar characteristics to a group of households that received the treatments (i.e. a group with similar characteristics but who did not receive BLT).

From the literature, we found examples of some poor households who met the criteria to receive the BLT (eligible) but did not receive it. For example, Cameron (2012) found that 34.9 percent of eligible households did not receive the BLT, while 20.6 percent

of non-eligible households received the payments. Moreover, the World Bank (2006) also stated that there is a possibility that not all eligible households received the BLT due to distribution problems and imperfect data collection mechanisms. These problems may have been caused by data collection methods that were partial (due to quota requirements) and distorted (due to nepotism).

It was important to ensure the sample to be analysed contained recipients and non-recipients of BLT with similar characteristics. We required the pre-processing of the samples such that the covariates of the treatment group (BLT recipients) and control group (non-recipients) were balanced. Once these covariates were balanced, it is possible to obtain a random sample, as BLT should, in principle, be independent.

In this study we implement Coarsened Exact Matching (CEM), first proposed by Lacus et al (2012), to match the treatment group to the non-treatment group. This method involves matching a treated with a non-treated group that share exactly the same covariate values, by coarsening the covariates. By coarsening the covariates, we will have a greater possibility to obtain observations with the exact value of the coarsened properties.

After having matched, we will estimate Equation (1) using logit analysis, with province dummies included in all regressions. For sensitivity checks, we also estimate by OLS analysis, with the errors clustered at province levels.

3.3. Estimation Equation

After we succeed in matching the group by CEM, then we regressed the following equation :

$$Y = \alpha + \beta_1 yrafter + \beta_2 yrafter \times BLT + \beta_3 \boldsymbol{X} + \varepsilon \quad (1)$$

$$Y \begin{cases} =1 \text{ if the household received the interhousehold transfer} \\ =0 \text{ otherwise} \end{cases}$$

$yrafter$ = dummy variable (1= the year after treatment has been introduced (2007), 0 = the year before treatment (2000); BLT = dummy variable (1 if the households receive BLT, 0 otherwise); $\boldsymbol{X}$ = control variable that would affect inter-household transfers, including characteristics of households, characteristics of the heads of households, and characteristics of the spouses of household heads (see appendix A. Table of Variables).

The altruistic preference model implies a negative correlation between the income of a recipient and the amount of a transfer (Park, 2003). To proxy the income, we use BLT dummy variable (addition income) as well as other income's proxy. However, due to the limited availability of income data, we proxy income using expenditure data. Taking the share of expenditure on food and education, a higher share of expenditure on foods indicates a lower income, and a higher share of expenditure on education indicates a higher income.

As some studies have indicated that private transfers are disproportionally targeted according to gender (e.g Cox et al., 2004; Gibson, 2006; Park, 2003), it is of interest to also include a dummy variable indicating whether the household is female-headed. We expect that female-headed households would receive a higher rate of transfers than male-headed households. Additionally, following Park (2003), we argue that the location the household lives would also affect the amount of inter-household transfer. Therefore, we include a dummy variable indicating whether the household lives in a rural or urban area as a control variable.

Finally, as with public transfers, private transfers are usually driven by the motivation to help the poor. To identify poor households, we use the characteristics of households: whether they had electricity and clean water, toilets, their source of drinking water, and whether they used firewood to cook. In addition, we use the characteristics of households heads: education level and occupation.

We then regress Equation (1) using logit analysis to evaluate the effect of the public transfer on the probability of the household receiving an inter-household transfer (the value of β_1). We expected that the probability of receiving an inter-household transfer decreases as the household receives a public transfer. Therefore, we expect that the public cash transfer do not effectively benefit the poor, and instead simply crowded out existing inter-household transfers.

4. RESULTS

4.1. Coarsened Exact Matching (CEM) results

From the previous section, we know that there are 14 assignment criteria used by the government to determine the recipients of BLT. The recipients of the BLT were the poorest households, as defined by the Central Statistics Agency (Badan Pusat Statistik/ BPS). All indicators were related to the household characteristics. Then, we match the treated and controlled households based on criteria of the poorest households. Due to limitations of the IFLS data, we only matched five criteria of the poorest households: electricity, source of drinking water, type of floors, type of walls, and whether or not households have a toilet.

By comparing the pre-matching and post-matching covariate balances, we argue that the CEM results provide a good match (see Table 3). The overall balance is improved from 0.2397 to 3.243e-14, while all the mean differences are near to zero in the post-match. From 20.181 samples, we have 15 unmatched samples (see Appendix A2). It is expected that we can use the

sample to estimate the impact of BLT by our regression.

4.2. Regression result

We estimated a regression for Equation 1 using both logit and OLS analysis for each type of inter-household transfers (transfer from parents, transfer from other family, and transfer from friends or neighbors). The results for both logit and OLS analysis are quite similar (see Appendix B1, B2, B3).

4.2.1 Parent transfers

Table 4 presents the marginal effects at means from estimating the model in Eq.1 with parent transfers as the dependent variable. Surprisingly, we found that BLT did not significantly affect the probability of households receiving transfers from parents. The parents did not adjust their transfers to their child when the child receive BLT from GOI. This finding supports the claim from Park (2003) that there also exists an "exchange motive" for why parents give money to their children. Instead of liquidity problems, parents may transfer to their children as a compensation for services provided by them. This implies that their children's income level may not be the main reason that parents transfer to them.

A few other findings are also worth discussing. For example, households living in urban areas are most likely to receive transfers from their parents. Even though the coefficient is small (less than 0,01), this finding is in line with studies by Martin and Dearden (as cited in Park 2003), which found that urban households receive more transfers, and these are positively correlated with income. On the other hand, in rural areas, households receive fewer transfers, and these transfers are negatively associated with household incomes. (Unfortunately, in their study the authors did not distinguish the source of transfers.)

Another interesting finding is the relationship between the education of spouse on the likelihood of parent transfers. From the regression, the possibility of receiving a transfer from parents increases as the education level of the household spouse improves, while different results were found for the education level of household heads. As we cannot distinguish the source of parent transfers (i.e. whether they are parents of the household head or parents of the spouse), the difference results may show the relationship between education level on the parents' transfers: there are some parents who were very proud of the education level of their children, while others might not be. However, both household head and spouse will be more likely to receive transfers from parents if they are unemployed. This result indicates that parents seek to help children facing liquidity constraints.

4.2.2 Friend transfers

The marginal effects of BLT on the likelihood of receiving transfers from friends are presented in Table 5. When we included only the household characteristics as the control variables, BLT significantly reduced the possibility for households to receive the transfers from friends or neighbors, by 2 percent. However, when we added the characteristics of households heads and spouses, there is no such significant relationship. This result may be because friends or neighbors were not well informed about whether the households had received the BLT. The friends may live on the different neighborhood with the BLT recipients, and they may not get full information of the income changes of BLT recipients. Therefore, the relationship between friend transfers and the BLT could not be explained well.

Another interesting finding is the possibility of receiving transfers from friends or neighbors reduced by almost 5 percent for female-headed households. This result contradicts some literature that found that female-headed households are more likely to receive transfers than male-headed households, such as Kang (2004). The lower likelihood for female-headed households to receive friend transfers may be influenced by the reason that the household is headed by a female. In Indonesia, there remains a cultural stigma against widowed and divorced women (Parker, 2016), with communities still believing that divorced women are detrimental for society, and they are therefore less willing to help such women. It may be that the sample of female-headed households used in this survey were mostly divorcees, which would account for the results showing a negative relationship between female-headed households and friend transfers.

On the other hand, the possibility to receive transfers from friends increased by almost 3 percent when the head of a household is unemployed. Unemployment is typically a significant issue for a community, with unemployed households requiring help to fulfill their basic needs. Friends may help their friends who do not work, without concern for their income changes.

4.2.3 Other family transfers

Table 6 presents the marginal effect of the probability of BLT recipients to receive transfers from other family members (non-co-residents). BLT reduces the likelihood of households to receive a transfer from other family by up to 5 percent. This relationship is significant, at 1 percent significance level. These findings support previous studies that argue that private transfers are altruistically motivated (Cox, Hansen and Jimenez, 2004; Kang, 2004; Lai, 2009). Lai (2009) found that, in Taiwan, $1 of public transfers displaces 30-50 cents of inter-household transfers. Moreover, Park (2003) found that recipients' incomes (permanent and transitory) are negatively correlated with transfers received from siblings.

In contrast to transfers from parents and friends or neighbors, transfers from other family members seem

to be significantly affected by the characteristics of households. The more dependents in a household, the more likely for that households to receive transfers from other family, by almost 8 percent. Surprisingly, while households in urban areas receive more transfers from parents, the location of households are not statistically significant to affect the transfers from other family members. This difference can be explained by other family members living spread across both urban and rural areas.

By including the education variable, it is apparent that the education level of household head and spouse is statistically significant in reducing the probability of receiving transfers. The higher the education level, the less likely it is for a household to receive transfers from other family members. Other family members may think that the more educated the household head and spouse, the wealthier the household, and therefore that more-educated households require less help than less-educated households.

As expected, households that have a higher share of education expenditure have a lower probability of receiving transfers from other family members. As described above, in this study we proxy income by expenditure share, with higher education expenditure indicating richer households that are less likely to need help from private transfers. On the other hand, households who spend more on food have a greater probability of receiving transfers from other family members. Again, we have posited that the higher a household's share of food expenditure, the poorer it is. It is more likely for such poor households to receive transfers from other family members (non-co-resident).

5. CONCLUSION

Using the Coarsened Exact Matching (CEM) method, this study has shown that the public transfer (BLT) reduced the possibility that a household received transfers from non-co-resident family members. We found that the likelihood for a household to receive transfers from other family reduces when the household receives public cash transfers (BLT). When the BLT program was implemented, people have a propensity to reduce or even to stop their transfers to poor households who receive BLT. Therefore, the income of the households who usually receive from private transfers will be the same after they receive BLT. Thus, it is still hard for them to face the inflation. Cash assistance programs designed to help the poor through times of economic hardship turned out to have less favorable effects, including reducing inter-household transfers.

The indication of a crowding-out effect may inhibit the effectiveness of cash transfer policies, as public cash transfers only serve to substitute the informal social safety net. A suggestion derived from these findings is for policymakers to consider the possibility of this crowding-out effect when targeting recipients for cash transfers. The government should give priority to poor households who do not have relatives to be recipients of these transfers. On the other hand, we found there was no significant effect of cash transfers on the transfers from parents and friends or neighbors.

6. LIMITATION

Altruism may therefore not be the motivation for parents and friends in providing transfers to households. However, this study limit the analysis only on the recipients. Therefore, in future studies, it might be interesting to include the wealth of the donor (i.e. parents and friends) to examine further the impact of cash transfers on private transfers.

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TABLE

Table 1 : 14 Variable Indicators for targeted households

No	Variables
1	The floor area of the residence is less than 8 square meters per person
2	The floor of the house is made of soil, bamboo or cheap wood
3	The walls of the house are made of bamboo, low-quality wood, or the walls without plaster
4	There is no toilet facility in the house
5	There is no electricity in the house
6	Source of drinking water from wells or unprotected springs, rivers or rainwater
7	The fuel for daily cooking is firewood, charcoal or kerosene
8	Eat milk, meat or chicken no more than once a week
9	Buy a pair of new clothes only once a year
10	Only eat one or two times a day
11	Notable to pay for the cost of treatments in health centers
12	Source of income of household heads is from farming with a land area of 0.5 acres or as a farm laborer, fisherman, construction worker, plantation worker or other jobs with an income of less than Rp600.000 per year
13	Educational attainment of household heads is no schooling or not completed primary school, or only completed primary school
14	Do not have savings or salable goods with a value of at least Rp500.000

Source : BPS (2005)

Table 2 : Descriptive summary

Variables	Full Sample	Parents Transfer			Friends Transfer			Other Family Transfer		
		Not Receive	Receive	diff	Not Receive	Receive	diff	Not Receive	Receive	diff
BLT	0.138	0.186	0.136	0.050***	0.149	0.134	0.015**	0.159	0.122	0.037***
	(0.345)	(0.390)	(0.343)		(0.356)	(0.340)		(0.365)	(0.328)	
yrafter	0.582	0.675	0.578	0.097***	0.591	0.579	0.012	0.574	0.589	-0.015*
	(0.493)	(0.469)	(0.494)		(0.492)	(0.494)		(0.495)	(0.492)	
No_electricity	0.065	0.035	0.066	-0.031***	0.072	0.062	0.010**	0.062	0.067	-0.004
	(0.246)	(0.185)	(0.249)		(0.258)	(0.241)		(0.242)	(0.249)	
water_pipe	0.913	0.912	0.913	-0.001	0.914	0.912	0.001	0.933	0.897	0.036***
	(0.282)	(0.284)	(0.282)		(0.281)	(0.283)		(0.251)	(0.304)	
no_toilet	0.299	0.294	0.299	-0.005	0.309	0.295	0.015*	0.312	0.289	0.023***
	(0.458)	(0.456)	(0.458)		(0.462)	(0.456)		(0.463)	(0.453)	
rent_house	0.078	0.048	0.08	-0.032***	0.077	0.079	-0.002	0.055	0.097	-0.043***
	(0.269)	(0.214)	(0.271)		(0.267)	(0.270)		(0.228)	(0.297)	
floor_bamboo	0.108	0.136	0.106	0.030**	0.116	0.104	0.011*	0.111	0.105	0.006
	(0.310)	(0.343)	(0.308)		(0.320)	(0.305)		(0.314)	(0.307)	
wall_bamboo	0.086	0.085	0.086	-0.001	0.095	0.082	0.014**	0.099	0.076	0.023***
	(0.280)	(0.279)	(0.280)		(0.294)	(0.274)		(0.298)	(0.264)	
urban	0.49	0.437	0.493	-0.056***	0.484	0.493	-0.008	0.476	0.501	-0.025***
	(0.500)	(0.496)	(0.500)		(0.500)	(0.500)		(0.499)	(0.500)	
dependent_ratio	0.662	0.825	0.653	0.172***	0.649	0.668	-0.019**	0.659	0.664	-0.005
	(0.473)	(0.381)	(0.476)		(0.477)	(0.471)		(0.474)	(0.472)	
exp_wfood	58.119	56.398	58.211	-1.813***	57.767	58.28	-0.513*	58.034	58.188	-0.155
	(16.491)	(15.444)	(16.540)		(16.651)	(16.415)		(16.246)	(16.685)	
exp_wmedical	1.997	2.449	1.973	0.476*	2.097	1.951	0.147	1.992	2.001	-0.009
	(5.013)	(5.809)	(4.966)		(5.275)	(4.888)		(4.855)	(5.137)	
exp_weducall	5.915	6.56	5.88	0.680*	5.757	5.987	-0.23	6.298	5.606	0.692***
	(10.982)	(10.131)	(11.025)		(10.545)	(11.176)		(10.230)	(11.543)	
HH_female	0.12	0.339	0.109	0.231***	0.131	0.115	0.016**	0.118	0.122	-0.003
	(0.325)	(0.474)	(0.311)		(0.337)	(0.320)		(0.323)	(0.327)	
HHage	47.266	48.395	47.206	1.189*	46.588	47.57	-0.982	48.539	46.267	2.272***
	(33.528)	(15.796)	(34.216)		(32.150)	(34.126)		(28.049)	(37.240)	
HH_unemployment	0.117	0.229	0.111	0.119***	0.111	0.12	-0.009	0.116	0.117	-0.001
	(0.321)	(0.421)	(0.314)		(0.314)	(0.325)		(0.321)	(0.322)	
spouse_unemployment	0.393	0.401	0.393	0.008	0.385	0.397	-0.013	0.378	0.406	-0.028***
	(0.489)	(0.490)	(0.488)		(0.487)	(0.489)		(0.485)	(0.491)	
Head_loweduc	0.407	0.442	0.405	0.037*	0.392	0.413	-0.021**	0.424	0.393	0.030***
	(0.491)	(0.497)	(0.491)		(0.488)	(0.492)		(0.494)	(0.489)	
spouse_loweduc	0.439	0.456	0.438	0.018	0.436	0.44	-0.004	0.462	0.42	0.042***
	(0.496)	(0.498)	(0.496)		(0.496)	(0.496)		(0.499)	(0.494)	
Head_mideduc	0.319	0.272	0.321	-0.050***	0.32	0.319	0.001	0.293	0.339	-0.046***
	(0.466)	(0.445)	(0.467)		(0.466)	(0.466)		(0.455)	(0.474)	
head_higheduc	0.079	0.062	0.08	-0.018*	0.078	0.08	-0.002	0.069	0.087	-0.017***
	(0.270)	(0.241)	(0.271)		(0.268)	(0.271)		(0.254)	(0.281)	
spouse_mideduc	0.326	0.239	0.331	-0.091***	0.317	0.33	-0.013	0.301	0.346	-0.045***
	(0.469)	(0.427)	(0.470)		(0.465)	(0.470)		(0.459)	(0.476)	
spouse_higeduc	0.062	0.041	0.064	-0.022***	0.065	0.061	0.004	0.057	0.067	-0.010**
	(0.242)	(0.199)	(0.244)		(0.247)	(0.240)		(0.232)	(0.250)	

Note: This table reports the summary at the mean level; Standard errors are reported in the parenthesis ;

**** p<0.01, **p<0.05, * p<0.1*

Table 3. Covariate Balance

	Pre-matching Imbalanced = 0.2397			Post-matching Imbalanced = 3.243e-14		
	No BLT	BLT	Mean diff	No BLT	BLT	Mean diff
No_electricity	0.061	0.089	0.028***	0.089	0.089	-0.000
water_source	0.906	0.953	0.047***	0.953	0.953	0.000
No_toilet	0.276	0.444	0.168***	0.444	0.444	-0.000
floor_type	0.094	0.194	0.101***	0.194	0.194	-0.000
wall_type	0.074	0.163	0.089***	0.163	0.163	-0.000

Note: This table reports the covariate imbalanced at the mean level, before and after CEM;
** p<0.1;** p<0.05; *** p<0.01*

Table 4: Marginal Effects: Results for Parents Transfers

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	-0.017***	-0.018***	-0.018***	-0.018***	-0.018***	-0.017***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
yrafter_BLT	-0.010**	-0.006	-0.003	-0.000	-0.000	-0.002
	(0.004)	(0.004)	(0.005)	(0.005)	(0.005)	(0.005)
No_electricity		0.020**	0.025***	0.027***	0.027***	0.026***
		(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
water_pipe		0.003	0.004	0.006	0.006	0.006
		(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
no_toilet		0.003	0.004	0.008**	0.007**	0.007*
		(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
rent_house		0.013*	0.017**	0.016**	0.015**	0.016**
		(0.007)	(0.007)	(0.007)	(0.007)	(0.008)
floor_bamboo		-0.000	0.001	0.003	0.003	0.002
		(0.005)	(0.006)	(0.005)	(0.005)	(0.005)
wall_bamboo		0.005	0.003	0.004	0.003	0.002
		(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
urban		0.008**	0.011***	0.007**	0.008**	0.008**
		(0.003)	(0.004)	(0.004)	(0.004)	(0.004)
dependent_ratio			0.047***	0.045***	0.047***	0.044***
			(0.006)	(0.007)	(0.007)	(0.007)
HH_female			-0.064***	-0.073***	-0.069***	-0.070***
			(0.004)	(0.004)	(0.004)	(0.004)
HHage			0.000*	0.000**	0.000***	0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				-0.016***	-0.016***	-0.014***
				(0.005)	(0.005)	(0.005)
Head_mideduc				-0.025***	-0.023***	-0.021***
				(0.007)	(0.007)	(0.007)
head_higheduc				-0.028***	-0.027***	-0.021**
				(0.009)	(0.009)	(0.010)
spouse_loweduc				0.027***	0.027***	0.028***
				(0.004)	(0.004)	(0.004)
spouse_mideduc				0.055***	0.055***	0.057***
				(0.005)	(0.005)	(0.005)
spouse_higheeduc				0.074***	0.073***	0.075***
				(0.010)	(0.010)	(0.010)
HH_unemployment					-0.013***	-0.012***
					(0.004)	(0.004)
spouse_unemployment					-0.008**	-0.007**
					(0.003)	(0.003)
exp_wfood						0.000**
						(0.000)
exp_wmedical						-0.000*
						(0.000)
exp_weducall						-0.000**
						(0.000)
province dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20,181	20,181	18,215	18,215	18,215	17,951
Pseudo R2	0.00547	0.0440	0.0993	0.120	0.122	0.125

Note : This table reports the marginal effects at the means after CEM. All results are derived from logit regression results. All regression are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis. ****p<0.01, **p<0.05, *p<0.1*

Table 5: Marginal Effects : Results for Friends Transfers

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	-0.005	-0.012	-0.008	-0.008	-0.008	-0.006
	(0.007)	(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
yrafter_BLT	-0.025**	-0.019*	-0.011	-0.012	-0.012	-0.015
	(0.010)	(0.010)	(0.011)	(0.011)	(0.011)	(0.011)
No_electricity		-0.036**	-0.036**	-0.036**	-0.035**	-0.037**
		(0.014)	(0.015)	(0.015)	(0.015)	(0.015)
water_pipe		-0.004	-0.007	-0.008	-0.008	-0.012
		(0.013)	(0.013)	(0.013)	(0.013)	(0.014)
no_toilet		-0.004	-0.001	-0.003	-0.002	-0.004
		(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
rent_house		-0.004	-0.003	-0.002	-0.001	-0.003
		(0.013)	(0.013)	(0.013)	(0.013)	(0.014)
floor_bamboo		-0.006	-0.002	-0.002	-0.002	-0.003
		(0.012)	(0.013)	(0.013)	(0.013)	(0.013)
wall_bamboo		-0.026**	-0.020	-0.020	-0.019	-0.021
		(0.013)	(0.013)	(0.013)	(0.013)	(0.014)
urban		0.009	0.005	0.006	0.004	0.006
		(0.007)	(0.008)	(0.008)	(0.008)	(0.008)
dependent_ratio			0.009	0.008	0.011	0.014
			(0.017)	(0.017)	(0.017)	(0.018)
HH_female			-0.037***	-0.039***	-0.048***	-0.047***
			(0.010)	(0.010)	(0.011)	(0.011)
HHage			0.000	0.000	0.000	0.001
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				0.010	0.011	0.014
				(0.012)	(0.012)	(0.013)
Head_mideduc				-0.013	-0.013	-0.007
				(0.014)	(0.014)	(0.015)
head_higheduc				-0.003	-0.001	0.006
				(0.019)	(0.019)	(0.020)
spouse_loweduc				0.006	0.007	0.007
				(0.011)	(0.011)	(0.011)
spouse_mideduc				0.019	0.021	0.021
				(0.013)	(0.013)	(0.013)
spouse_higheeduc				0.003	0.006	0.012
				(0.019)	(0.019)	(0.019)
HH_unemployment					0.029**	0.025**
					(0.012)	(0.012)
spouse_unemployment					0.008	0.009
					(0.007)	(0.007)
exp_wfood						0.001**
						(0.000)
exp_wmedical						-0.001*
						(0.001)
exp_weducall						0.000
						(0.000)
Province dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20,181	20,181	18,215	18,215	18,215	17,951
Pseudo R2	0.000360	0.00528	0.00581	0.00621	0.00658	0.00710

Note : This table reports the marginal effects at the means after CEM. All results are derived from logit regression results. All regresion are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis. *** *p<0.01, ** p<0.05, * p<0.1*

Table 6: Marginal Effects : Results for Other Family Transfers

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	0.038***	0.018**	0.013	0.010	0.011	0.012
	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
yrafter_BLT	-0.093***	-0.065***	-0.055***	-0.049***	-0.048***	-0.051***
	(0.011)	(0.011)	(0.012)	(0.012)	(0.012)	(0.012)
No_electricity		0.047***	0.046***	0.046***	0.047***	0.041***
		(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
water_pipe		-0.068***	-0.068***	-0.060***	-0.060***	-0.064***
		(0.014)	(0.014)	(0.014)	(0.014)	(0.015)
no_toilet		-0.011	-0.013	-0.008	-0.007	-0.012
		(0.008)	(0.008)	(0.009)	(0.009)	(0.009)
rent_house		0.098***	0.093***	0.090***	0.090***	0.084***
		(0.014)	(0.015)	(0.015)	(0.015)	(0.015)
floor_bamboo		0.031**	0.026**	0.026*	0.025*	0.021
		(0.013)	(0.013)	(0.013)	(0.013)	(0.013)
wall_bamboo		-0.030**	-0.015	-0.014	-0.014	-0.019
		(0.013)	(0.014)	(0.014)	(0.014)	(0.014)
urban		0.005	0.008	0.003	0.001	0.004
		(0.008)	(0.008)	(0.008)	(0.008)	(0.008)
dependent_ratio			0.093***	0.093***	0.090***	0.083***
			(0.017)	(0.017)	(0.017)	(0.017)
HH_female			0.023**	0.026**	0.026**	0.025**
			(0.011)	(0.011)	(0.012)	(0.012)
HHage			-0.000*	-0.000	-0.000	-0.000
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				0.005	0.005	0.006
				(0.013)	(0.013)	(0.013)
Head_mideduc				0.022	0.020	0.025*
				(0.015)	(0.015)	(0.015)
head_higheduc				0.048**	0.046**	0.054***
				(0.020)	(0.020)	(0.021)
spouse_loweduc				-0.047***	-0.049***	-0.045***
				(0.011)	(0.011)	(0.011)
spouse_mideduc				-0.027**	-0.030**	-0.026*
				(0.013)	(0.013)	(0.013)
spouse_higheeduc				-0.037*	-0.033	-0.023
				(0.020)	(0.020)	(0.021)
HH_unemployment					0.001	-0.000
					(0.012)	(0.012)
spouse_unemployment					0.024***	0.025***
					(0.008)	(0.008)
exp_wfood						0.001***
						(0.000)
exp_wmedical						-0.001
						(0.001)
exp_weducall						-0.001***
						(0.000)
province dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20,181	20,181	18,215	18,215	18,215	17,951
Pseudo R2	0.00292	0.0384	0.0411	0.0423	0.0427	0.0434

Note : This table reports the marginal effects at the means after CEM. All results are derived from logit regression results. All regresion are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis.
****p<0.01, **p<0.05, *p<0.1*

APPENDIX A : THE VARIABLES

Table A1 : The descriptive of the variables

No	Variables	Description
1	BLT	=1 if receive BLT; 0 if not receive
2	yrafter	=1 if 2007 (year after the implementation of BLT); 0 if 2000 (before the implementation of BLT)
3	No_electricity	=1 if there is no electricity; 0 otherwise
4	water_pipe	=1 if the source of water is pipe ; 0 otherwise
5	no_toilet	=1 if there is no toilet at home; 0 otherwise
6	rent_house	=1 if the household rents the home ; 0 if not rent
7	floor_bamboo	-1 if the floor type of home is bamboo,soil, or cheap wood; 0 otherwise
8	wall_bamboo	=1 if the wall type of home is bamboo, low quality wood; 0 otherwise
9	urban	=1 if living in urban area; 0 if rural area
10	dependent_ratio	the ratio of the dependent in the household compare to total members
11	exp_wfood	the share of food expenditure
12	exp_wmedical	the share of medical expenditure
13	exp_weducall	the share of education expenditure
14	HH_female	=1 if the head of household is female; 0 if male headed
15	HHage	age of the head of households
16	HH_unemployment	=1 if the head of household is unemployee; 0 otherwise
17	spouse_unemployment	=1 if the head's spouse of household is unemployee; 0 otherwise
18	Head_loweduc	=1 if the education of household's head is primary; 0 otherwise
19	spouse_loweduc	=1 if the education of the spouse is primary; 0 otherwise
20	Head_mideduc	=1 if the education of household's head is junior and senior high school; 0 otherwise
21	head_higheduc	=1 if the education of household's head is diploma and university; 0 otherwise
22	spouse_mideduc	=1 if the education of the spouse is junior and senior high school; 0 otherwise
23	spouse_higeduc	=1 if the education of the spouse is diploma and university; 0 otherwise

APPENDIX B : OLS RESULTS

Table B1: Results for Friends transfer (OLS Analysis)

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	0.003	-0.005	-0.003	-0.002	-0.002	-0.000
	(0.008)	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
yrafter_BLT	-0.028***	-0.024**	-0.014	-0.017	-0.017	-0.019
	(0.011)	(0.011)	(0.012)	(0.012)	(0.012)	(0.012)
No_electricity		-0.028*	-0.028*	-0.029*	-0.028*	-0.031**
		(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
water_pipe		-0.010	-0.008	-0.009	-0.009	-0.010
		(0.018)	(0.018)	(0.018)	(0.018)	(0.019)
no_toilet		-0.002	0.001	-0.001	-0.000	-0.003
		(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
rent_house		0.008	0.008	0.011	0.013	0.009
		(0.014)	(0.015)	(0.015)	(0.015)	(0.015)
floor_bamboo		0.006	0.007	0.005	0.006	0.005
		(0.013)	(0.014)	(0.014)	(0.014)	(0.014)
wall_bamboo		-0.023*	-0.020	-0.021	-0.020	-0.023
		(0.014)	(0.015)	(0.015)	(0.015)	(0.015)
urban		0.014	0.008	0.010	0.009	0.010
		(0.008)	(0.009)	(0.009)	(0.009)	(0.009)
dependent_ratio			0.015	0.020	0.023	0.022
			(0.018)	(0.019)	(0.019)	(0.019)
HH_female			-0.046***	-0.049***	-0.058***	-0.057***
			(0.012)	(0.013)	(0.013)	(0.013)
HHage			0.000**	0.000**	0.000*	0.000**
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				-0.001	0.000	0.001
				(0.014)	(0.014)	(0.014)
Head_mideduc				-0.025	-0.024	-0.022
				(0.016)	(0.016)	(0.016)
head_higheduc				-0.013	-0.011	-0.008
				(0.021)	(0.021)	(0.022)
spouse_loweduc				-0.001	0.001	0.000
				(0.012)	(0.012)	(0.012)
spouse_mideduc				0.006	0.008	0.007
				(0.014)	(0.014)	(0.014)
spouse_higheeduc				0.003	0.006	0.010
				(0.021)	(0.021)	(0.022)
HH_unemployment					0.029**	0.027**
					(0.013)	(0.013)
spouse_unemployment					0.003	0.004
					(0.008)	(0.008)
exp_wfood						0.001**
						(0.000)
exp_wmedical						-0.001
						(0.001)
exp_weducall						0.001
						(0.000)
Province Dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20166	20166	18200	18200	18200	17936
Adj-Rsquare	0.000279	0.00638	0.00685	0.00693	0.00718	0.00734

Note : This table reports the marginal effects at the means after CEM. All results are derived from OLS regression results. All regresion are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis.
**** p<0.01, ** p<0.05, * p<0.1*

Table B2: Results for Parents transfer (OLS analysis)

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	-0.016***	-0.017***	-0.019***	-0.019***	-0.019***	-0.018***
	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
yrafter_BLT	-0.011*	-0.007	-0.005	-0.003	-0.003	-0.005
	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)	(0.006)
No_electricity		0.015***	0.018***	0.021***	0.021***	0.019***
		(0.005)	(0.006)	(0.006)	(0.006)	(0.006)
water_pipe		0.007	0.006	0.009	0.009	0.008
		(0.011)	(0.011)	(0.010)	(0.010)	(0.010)
no_toilet		0.003	0.003	0.005	0.005	0.003
		(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
rent_house		0.014***	0.015***	0.013**	0.013**	0.011**
		(0.005)	(0.006)	(0.005)	(0.006)	(0.006)
floor_bamboo		0.001	0.002	0.004	0.004	0.003
		(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
wall_bamboo		0.005	0.004	0.004	0.004	0.003
		(0.007)	(0.007)	(0.007)	(0.007)	(0.007)
urban		0.009**	0.010**	0.008*	0.009**	0.010**
		(0.004)	(0.004)	(0.004)	(0.004)	(0.004)
dependent_ratio			0.038***	0.028***	0.028***	0.025***
			(0.006)	(0.007)	(0.007)	(0.007)
HH_female			-0.106***	-0.122***	-0.119***	-0.121***
			(0.009)	(0.010)	(0.010)	(0.010)
HHage			0.000***	0.000***	0.000***	0.000***
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				-0.030***	-0.030***	-0.029***
				(0.008)	(0.008)	(0.008)
Head_mideduc				-0.046***	-0.045***	-0.043***
				(0.009)	(0.009)	(0.009)
head_higheduc				-0.052***	-0.052***	-0.046***
				(0.012)	(0.012)	(0.012)
spouse_loweduc				0.038***	0.037***	0.039***
				(0.007)	(0.007)	(0.007)
spouse_mideduc				0.066***	0.066***	0.068***
				(0.009)	(0.009)	(0.009)
spouse_higheeduc				0.079***	0.077***	0.081***
				(0.012)	(0.012)	(0.012)
HH_unemployment					-0.012	-0.010
					(0.008)	(0.008)
spouse_unemployment					-0.009**	-0.008**
					(0.004)	(0.004)
exp_wfood						0.000***
						(0.000)
exp_wmedical						-0.001
						(0.000)
exp_weducall						-0.000**
						(0.000)
Province Dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20166	20166	18200	18200	18200	17936
Adj-Rsquare	0.00195	0.0162	0.0459	0.0534	0.0540	0.0559

Note : This table reports the marginal effects at the means after CEM. All results are derived from OLS regression results. All regresion are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis.
**** p<0.01, ** p<0.05, * p<0.1*

Table B3: Results for Other Family transfer (OLS analysis)

	(1)	(2)	(3)	(4)	(5)	(6)
yrafter	0.025***	0.010	0.004	0.001	0.002	0.004
	(0.009)	(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
yrafter_BLT	-0.079***	-0.064***	-0.053***	-0.049***	-0.048***	-0.050***
	(0.011)	(0.012)	(0.012)	(0.013)	(0.013)	(0.013)
No_electricity		0.042***	0.037**	0.037**	0.038**	0.032*
		(0.016)	(0.016)	(0.016)	(0.016)	(0.016)
water_pipe		-0.053**	-0.064***	-0.059***	-0.059***	-0.061***
		(0.024)	(0.020)	(0.020)	(0.020)	(0.020)
no_toilet		-0.006	-0.005	-0.002	-0.001	-0.005
		(0.009)	(0.009)	(0.009)	(0.009)	(0.009)
rent_house		0.104***	0.101***	0.099***	0.100***	0.095***
		(0.015)	(0.015)	(0.015)	(0.015)	(0.015)
floor_bamboo		0.018	0.015	0.014	0.014	0.010
		(0.014)	(0.014)	(0.015)	(0.015)	(0.015)
wall_bamboo		-0.024	-0.007	-0.006	-0.006	-0.011
		(0.015)	(0.016)	(0.016)	(0.016)	(0.016)
urban		0.004	0.006	0.004	0.001	0.004
		(0.009)	(0.009)	(0.009)	(0.009)	(0.010)
dependent_ratio			0.078***	0.083***	0.080***	0.076***
			(0.019)	(0.020)	(0.020)	(0.020)
HH_female			0.015	0.018	0.016	0.015
			(0.012)	(0.013)	(0.014)	(0.014)
HHage			-0.000	-0.000	-0.000	-0.000
			(0.000)	(0.000)	(0.000)	(0.000)
Head_loweduc				0.004	0.004	0.005
				(0.015)	(0.015)	(0.015)
Head_mideduc				0.014	0.012	0.016
				(0.017)	(0.017)	(0.017)
head_higheduc				0.043*	0.042*	0.051**
				(0.023)	(0.023)	(0.023)
spouse_loweduc				-0.042***	-0.043***	-0.040***
				(0.013)	(0.013)	(0.013)
spouse_mideduc				-0.028*	-0.029**	-0.025*
				(0.015)	(0.015)	(0.015)
spouse_higheeduc				-0.028	-0.024	-0.014
				(0.023)	(0.023)	(0.023)
HH_unemployment					0.008	0.008
					(0.013)	(0.014)
spouse_unemployment					0.023***	0.024***
					(0.009)	(0.009)
exp_wfood						0.001***
						(0.000)
exp_wmedical						-0.001
						(0.001)
exp_weducall						-0.001***
						(0.000)
Province Dummies	No	Yes	Yes	Yes	Yes	Yes
Observations	20166	20166	18200	18200	18200	17936
Adj-Rsquare	0.00248	0.0466	0.0496	0.0505	0.0509	0.0516

Note : This table reports the marginal effects at the means after CEM. All results are derived from OLS regression results. All regresion are control for province fixed effects. Standard errors are clustered at province level. Cluster robust standard errors are reported in the parenthesis.
**** p<0.01, ** p<0.05, * p<0.1*