Cash Assistance Program and Consumption Pattern Among Indonesians

Inayati Nuraini Dwiputri, Muhammad Syam Kusufi, Ilyas Ilyas

ABSTRACT

Poverty and households’ economic fragility have been a concern among Indonesian, and the government has addressed this issue by granting a cash assistance program. There will be some effects related to the program. Therefore, this study identifies the effect of cash assistance program on consumption changes among Indonesian as the measurement for public welfare. This paper can be a reference to determine the nexus between transfers and attempting to improve public welfare. This study used Indonesian Family Life Survey (IFLS) as longitudinal data, and controlled the respondent’s characteristics and adopted the fixed effect at the village level as an estimation technique. The results reveal that, generally, there was a decline in food expenditure that is followed by changing consumption behavior among Indonesian, and the cash assistance program has contributed remarkably to this change. The finding also notes that the objectives of the cash assistance program have not been appropriately achieved as predicted.

Keywords: Cash Assistance, Households Vulnerability, Policy Instrument, Public Welfare

JEL Classification: H24, I38, O21

INTRODUCTION

The government promoted the cash assistance program to diminish poverty (Angeles et al. 2019, Habimana et al. 2001). It also can increase public consumption and enhance economic welfare (Martinez & Maia 2018, Renzaho et al. 2019, Ribas 2020). Another study (Aung et al., 2021) proved that poor households in Malawi who experience problems with access to energy allow them to have better sources of lighting after receiving the Unconditional Cash Transfer (UCT) program.

In Indonesia, the cash assistance program that has been implemented is well known as Bantuan Langsung Tunai (BLT) or UCT. UCT is a government program in the form of giving cash given to the poor to help them meet their daily needs. UCT implements Presidential Instruction No. 3 of 2008 regarding providing the direct cash assistance program for Targetted Households or Rumah Tangga Sasaran (RTS) in the context of compensating for the reduction of fuel subsidies (Selviana et al., 2016). The UCT-RTS program in its implementation must directly touch and provide direct benefits to the poor (with the RTS category), encourage shared social responsibility, and be able to foster public trust in the government, which must consistently pay attention to RTS.

The Indonesian government has again implemented direct cash assistance to people affected by the Covid pandemic to increase the demand side, which at that time was experiencing a significant decline. This study investigates the impact of UCT on consumption changes among Indonesian. The transfer program may alleviate poverty and decrease the probability of transmission of intergenerational
impoverishment (Rawlings & Rubio, 2005). Unconditional Cash Transfer (UCT) is beneficial for the development of rural children and increases the self-esteem of mothers in rural areas especially in Bangladesh (Hossain et al., 2022).

The economic crisis as an impact of the Covid-19 pandemic has raised government policies that provide public transfers to increase the demand side. This paper can be a reference to determine the impact of transfers on efforts to improve public welfare. A prior study by Rasyid (2013) remarked on the effects of UCT on a private transfer to other households that are considered poor. Additionally, Cameron and Shah (2012) indicated the presence of mistargeting of UCT program in Indonesia, transfers significantly correlated with a decline in social capital and an increase in crime.

This study identifies the nexus between the UCT program and household consumptions as a proxy of the level of welfare. The study also examines whether the primary purpose of the UCT program has been reached, i.e., maintaining public consumption. In addition, this study investigates the changing of consumption behavior among Indonesian after implementing the UCT program and determines whether the UCT program created a remarkable impact on the consumption behavior changes of society. For this matter, issuing of the UCT program in Indonesia is interesting to examine.

LITERATURE REVIEW

UCT is provided by the Indonesian Government in the form of cash given to the poor and vulnerable households in Indonesia. The UCT program is a government policy that aims at maintaining the level of consumption of the impoverished and vulnerable households due to economic distress. The economic distress led to a decreased purchasing power of poor households in needing their primary necessities. In particular, the purposes of the UCT program were helping the poor meet their basic needs, preventing a decline in the level of welfare of the poor due to the shrink of purchasing power, and enhancing common social responsibility. Mishra & Kar (2017) also found the less effective of UCT in India, and one of determinants is household social/structural capital. Golan et al (2017) found that in which poor targeting is the reason why BLT is less able to increase public consumption and reduce poverty.

Using qualitative analysis, Hossain et al. (2012) concluded that UCT had helped society in smoothing their consumption. While a prior study by Dwiputri (2017) found the positive effect of UCT, in which UCT can diminish the consumption of cigarettes. Cameron and Shah (2012) noted that a mistargeting of UCT program in Indonesia significantly incorporated with an enlarge in crime and a diminish in social capital due to the UCT program was not administered well. Cameron and Shah (2012) did not use a longitudinal data, therefore that study cannot catch well the changes of probability of a household being a victim of crime due to the observations in each year were different. Therefore, this study attempts to involve longitudinal data to catch the change of household consumption during a certain period.

Rasyid (2013) revealed a significantly negative effect of UCT, i.e., the reduction of private transfer. It is related to the habits of Indonesian that like to help
their poor close relatives and neighbors. Thus, the existence of the UCT program can reduce their transfer to poor relatives and neighbors. In addition to UCT, another transfer programs policy in Indonesia that has been identified is *Inpres Desa Tertinggal / IDT* that program effected the improve of man-child working hours (Yamauchi, 2005). Other research on the impact of provision transfer programs to the community by Soares et al. (2010) noted that the conditional transfer in Latin America has diminished inequality, alleviated poverty, and positively impacted education. Soares et al. (2010) found that there is no significantly negative effect on the labor force participation.

Using qualitative methods, Ressler (2008) stated that a transfer program in Kenya can enhance social participation of society. The program funds can help households engage in community events because they have ‘resources’ to participate in the community events. Considering the previous studies, this study attempts to identify the effect of the UCT program on the consumption of communities using longitudinal data and an appropriate methodology.

**METHODS**

This study involved the Indonesia Family Life Survey (IFLS) data, which consists of information about the social and economic condition among Indonesian. The study adopted panel data covering IFLS3 and IFLS4 by capturing the periods before and after implementing the UCT program in which UCT was implemented in 2005. Using this data, the study identifies the effect of UCT on the change of foods and non-food consumptions expenditure.

Variable of interest would represent as a dummy. Dummy 1 was households who received UCT funds. Dummy 0 was households that did not receive UCT funds. In eliminating bias, some household characteristics are represented as control variables. The difference of preference of each household as unobserved and time invariant characteristic of household. Therefore, to control the possibility of time-invariant unobserved factors at household was anticipated by fixed-effects at the household level, so that bias problem can be overcome. The research model using fixed-effects at the household level is as follows.\[ Y_{ijt} = \alpha_0 + \beta_1 UCT_{ijt} + \beta_2 X_{ijt} + \mu_i + v_{jt} \]

\( Y_{ijt} \) is the outcome (consumption) of household -i, village -j, and year -t. UCT represented by dummy variable. \( X_{ij} \) are household characteristics. Thus, the error term for household - i, village -j, year -t is represented by \( V_{jt} \) while \( \mu_i \) is fixed-effect at household level. Due to controlled by the household fixed-effect, error term can be assumed to be uncorrelated with the UCT variable.

Nevertheless, the bias that would be arisen was the provision of a program that was not random, whereas UCT was given to poor households, in which the criteria of poor households had set by Statistics Indonesia (BPS). Therefore, there would be potential bias due to non-random program placement that considered may influence outcome. The head of village chose the households that meet the criteria to receive BLT fund. It can cause the potential bias in the misallocation programs caused by unobserved factors such as error reporting of the condition of the household to the head of the village. It led to bias at
the village level because UCT was given directly to poor households by the head of the village.

If there was a potential bias that arises due to unobserved and time-invariant village characteristics that can affect the outcome, model 1) may be less representative. Therefore, to overcome this potential bias in the village level, may use fixed-effects at the village level to estimate the effect of UCT on food consumption expenditure of society. This method follows Dwiputri et al. (2022a), (2022b). By using fixed-effects at the village level, then model 1) becomes as follows.

\[ Y_{ijt} = \alpha_0 + \beta_1 UCT_{ijt} + \beta_2 X_{ijt} + \mu_j + \nu_{it} \]

\[ \mu_j \] is a fixed-effect at the village level. Due to controlled by the village fixed-effect it can be assumed that error term to be uncorrelated with UCT variable.

**RESULTS AND DISCUSSION**

The Indonesian government had set that the UCT fund given to poor households was Rp. 100,000 per month. Table 1 shows that some households did not have expenditure for certain foods. This indicates that the households involve the production of their garden, farm or assisted by other households (their neighbors or brothers) in needing certain foods.

However, it is more common for Indonesian households, where there are often several households that help others in providing their food (especially basic needs). Thus, it is

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean Year 2000</th>
<th>Min Year 2000</th>
<th>Max Year 2000</th>
<th>Mean Year 2007</th>
<th>Min Year 2007</th>
<th>Max Year 2007</th>
</tr>
</thead>
<tbody>
<tr>
<td>UCT received last year (IDR.)</td>
<td>-</td>
<td>-</td>
<td>-</td>
<td>659,000</td>
<td>0</td>
<td>1,800,000</td>
</tr>
<tr>
<td>Consumption (IDR, base year 2000)</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total Food</td>
<td>434,700</td>
<td>0</td>
<td>8,982,600</td>
<td>418,900</td>
<td>0</td>
<td>6,317,375</td>
</tr>
<tr>
<td>Side dishes (meat + fish)</td>
<td>82,781</td>
<td>0</td>
<td>3,282,500</td>
<td>70,600</td>
<td>0</td>
<td>1,997,350</td>
</tr>
<tr>
<td>Carbohydrates (rice, corn, etc.)</td>
<td>132,000</td>
<td>0</td>
<td>6,413,350</td>
<td>138,950</td>
<td>0</td>
<td>3,701,750</td>
</tr>
<tr>
<td>Buy food outside</td>
<td>16,750</td>
<td>0</td>
<td>2,166,700</td>
<td>18,450</td>
<td>0</td>
<td>1,220,375</td>
</tr>
<tr>
<td>Snack</td>
<td>26,500</td>
<td>0</td>
<td>1,861,600</td>
<td>29,100</td>
<td>0</td>
<td>1,362,750</td>
</tr>
<tr>
<td>Vegetables</td>
<td>46,500</td>
<td>0</td>
<td>1,786,200</td>
<td>36,000</td>
<td>0</td>
<td>856,300</td>
</tr>
<tr>
<td>N</td>
<td>8748</td>
<td></td>
<td></td>
<td>8750</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: calculation data
From Table 1, it is known that the average total expenditure per month on food consumption in 2000 was greater than in 2007. Thus, there were decreasing in food consumption in society. This implies that the aim of the UCT program, which maintains total public expenditure in particular food consumption, has not been achieved. It still requires further identify whether the UCT program has a significant effect on reducing total expenditure for food consumption among the community.

The changing of each category of food expenditure, as informed in Table 1, indicates the increase in household consumption expenditure from 2000 to 2007. In detail, carbohydrates increased approximately 5.25%; ‘eating out’ with an inclined of 9.93%; and snack raised by 9.81%. Meanwhile, the household consumption expenditure for vegetables was decreased by 14.78%, and side dishes diminished by 22.59%.

Unfortunately, consumption of side dishes and vegetables which known a good for health decreased. In addition, the reduction of side dishes and vegetable consumption is higher than the incline of other consumption such as snacks and ‘eating out’. This result shows that there is a change of the orientation of the society that previously tended to cook the food at home is buying food in outside so that the expenditure for side dishes and vegetables declines. Thus, the public should be given an understanding to be more selective in buying food and snacks. The government must encourage them to buy healthy and nutritious food to form a high-quality generation. Henceforth, this study aims to identify whether the UCT program has contributed to changing consumption of the community. The estimation of the impact of the UCT program in changing consumption patterns is shown in Table 2.

Table 2. The Effect of Total Food Consumption (ln_realconsumption 2000)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Total Food Consumption Expenditures</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed(1)</td>
</tr>
<tr>
<td>UCT</td>
<td>-0.043</td>
</tr>
<tr>
<td>Involving characteristic of household</td>
<td>Y</td>
</tr>
<tr>
<td>Involving characteristic of household-head</td>
<td>Y</td>
</tr>
</tbody>
</table>

R^2  0.09  0.14
No. of samples  17445  17445

Note: *: p<0.1, **: p<0.05, ***: p<0.01
Fixed(1): fixed effect at household level; Fixed(2): fixed effect at village level
Source: estimation result
Through the analysis of fixed effect at the household level, the UCT program negatively affects the expenditure of the community even this impact is not significant. By using fixed-effect analysis at the village level, the effect becomes significant. This indicates that UCT has a significant negative effect on the consumption of households which means that UCT funds were not enough in enhancing the welfare of households measured by consumption of food. As illustrated in Table 1, the amount of UCT funds received per household in the previous year of the period was Rp. 1800.000 for maximum with an average of Rp. 659.000 per household. Therefore, it makes sense when the UCT funds were not sufficient in fulfilling the consumption of households. To test the robustness, this study investigates the use of another dependent variable in identifying the effect of UCT on total consumption.

The analysis of the effects of the UCT program on the expenditure of each type of food is provided in

Table 3. Impact of the UCT Program on Total Consumption Expenditure (In_realconsumption 2000)

<table>
<thead>
<tr>
<th>Variables</th>
<th>Side Dish</th>
<th>Carbohydrate</th>
<th>Buy Food Outside</th>
<th>Snack</th>
<th>Vegetables</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Fixed$_{(1)}$</td>
<td>Fixed$_{(2)}$</td>
<td>Fixed$_{(1)}$</td>
<td>Fixed$_{(1)}$</td>
<td>Fixed$_{(1)}$</td>
</tr>
<tr>
<td>UCT</td>
<td>-0.24***</td>
<td>0.15</td>
<td>-0.01</td>
<td>0.55***</td>
<td>-0.34***</td>
</tr>
<tr>
<td>Involving characteristic of household</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
<tr>
<td>Involving characteristic of household-head</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
<td>Y</td>
</tr>
</tbody>
</table>

| R$^2$          | 0.05   | 0.06   | 0.03   | 0.02   | 0.05   | 0.03   | 0.05   |
| N             | 17,445 | 17,445 | 17,445 | 17,445 | 17,445 | 17,445 | 17,445 |

Note: *: p<0.1, **: p<0.05, ***: p<0.01

Fixed$_{(1)}$: fixed effect at household level; Fixed$_{(2)}$: fixed effect at village level
Table 3 shows the result of estimation of the rationale is that the consumption of carbohydrates is the impact of UCT using fixed-effect at household level (1) basic consumption need for people (particularly poor and village level (2). In general, the village fixed effect people) in Indonesia. Almost poor people in Indonesia estimation technique indicates that the UCT program preferred carbohydrates to side dishes/vegetables in has significant influence with the same direction of the supplying their foods. Meaning that the first food that influences using the household fixed effect estimation must be provided is a carbohydrate, the second is side technique. The estimation indicates that UCT has a significantly negative effect on household expenditure for consumption of side dishes, snacks, ‘eating out’, and consumption expenditure and the changing vegetables. Although the effects were relatively small; consumption behavior of Indonesian. In general, there the effect of UCT on reducing consumption expenditure were an increase in the expenditure of carbohydrate of side dishes is 0.28%, ‘eating out’ is 0.31%, snack is consumption, ‘eating out’, and snacks. This study 0.51%, and its effects on reducing consumption of proved that there was a decline in consumption vegetables is 0.49%.

The impact of UCT on carbohydrate Indonesian. In general, there was an increase in the consumption expenditure of households who received expenditure of carbohydrate consumption, ‘eating out’. UCT is significantly positive. The UCT program can Using regression of fixed-effect at the village raise approximately 0.55% carbohydrate consumption level as an estimation technique, the analysis showed expenditure of households who received UCT. Thus, that UCT has a significant effect with a small the impact of UCT on private consumption can be percentage of household consumption expenditure. positive and negative. The positive impact of UCT was More precisely, the UCT program has a significant the addition of carbohydrate consumption. While the negative effect on the consumption expenditure of side negative impact of UCT is the reduction of side dishes dishes, vegetables, snacks, and ‘eating out’. In and vegetable consumption. In addition, the impact of addition, UCT has a significant positive effect on UCT on expenditure to ‘buy food outside’ and snack carbohydrate consumption. Expanding consumption of were ambiguous depending on the type of food/snack carbohydrates and reducing consumption of purchased, whether healthy or unhealthy foods/snacks. vegetables, side dishes, as well as for the poor. However, in general, the effect of UCT on total generally, carbohydrate is the staple food to be private consumption is significantly negative to provided, while the second is a side dish and/or households who receive UCT. This means that the fund vegetable. Additionally, the price of side dishes in of UCT cannot fulfilling the foods consumption. Indonesia to be relatively higher and not affordable by However, the fund of UCT is solely to enlarge the the impoverished group. Therefore, on average, the consumption of carbohydrates. The fundamental recipients of the UCT program escalate expenditure of
Carbohydrate consumption but cut back expenditure on side dishes and vegetables. This study related to Mishra & Kar (2017) that found the less effective of UCT in India.

CONCLUSION

The UCT fund was provided to poor Indonesian households to compensate for the economic distress and enhance the purchasing power of society. The study indicated that UCT might reduce the total food consumption expenditure of households who received UCT, and it may also decrease the spending on side dishes, vegetables, snacks, and ‘buy food outside’. However, UCT may enlarge the carbohydrate consumption. This implicates that people tend to diminish the consumption of side dishes/vegetables but provide more to consume carbohydrates. The basic rationale is that the price of carbohydrates food is relatively lower than side dishes, and carbohydrate is a basic need of Indonesian in providing the meal. The study results note that the fund of UCT was not enough for poor households to maintain their consumptions. Thus, the impact of the UCT program does not fit the primary purpose of maintaining public consumption. In fact, the total public expenditure on food had decreased. When the government’s objective is to maintain the consumption of society by the UCT program, the fund of UCT should be given monthly and enhance the total of the fund.

REFERENCES


Kemiskinan (TNP2K).