

# Impact of Implementation of Direct Cash Transfer Program 2008/2009 on Household Consumption in Central Java Province

S Subanti<sup>1,2,5</sup>, A R Hakim<sup>2,4,6</sup>, and I M Hakim<sup>3</sup>

<sup>1</sup>*Department of Statistics Faculty of Mathematics and Natural Science, Universitas Sebelas Maret*

<sup>2</sup>*Institute for Research and Community Services, Universitas Sebelas Maret*

<sup>3</sup>*Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia*

<sup>4</sup>*Faculty of Economics and Business, Universitas Indonesia*

<sup>5</sup>*Research Group of Applied Statistics, Universitas Sebelas Maret*

<sup>6</sup>*Department of Economic Development, Universitas Ahmad Dahlan*

Corresponding author: sri\_subanti@yahoo.co.id

**Abstract.** This study aims to see the impact of direct cash transfer program for 2008/2009 on household consumption of food, nonfood, education, and health in Central Java Province. The study is expected to provide important findings for the improvement of a similar program in the future. This study findings that (1) the increasing in food and non-food consumption for direct cash transfer recipients than non direct cash transfer recipients; (2) the impact of households expenditure on education for direct cash transfer recipients is higher than non direct cash transfer recipients; (3) the impact of households expenditure on health for direct cash transfer recipients is lower than non direct cash transfer recipients. This study recommended that (1) implementation of direct cash transfer program 2008/2009 must be managed to be better because this program can defend household welfare. It shows from several indicators of well-being such as consumption spending, education, and health; (2) data targets for poor households (very poor, poor, nearly poor) must be updated.

## 1. Introduction

The increase in international crude oil prices pushed the government to raise fuel prices and reduced subsidies. As compensation for the rise in fuel prices, the government provides direct cash transfer program for poor households to maintain purchasing power. During the years 2005-2011, the government has raised fuel prices twice in 2005 and 2008. In 2005, the fuel was increased by 24 percent to 2,400 rupiahs per liter from the previous 1,810 rupiahs per liter. In October 2005, the government raised fuel prices by 87.5 percent to 4,500 rupiahs per liter. In May 2008, the government raised fuel prices by 25 percent to 6,000 rupiahs per liter [6,7,8,9].

Direct cash transfer program awarded to several reasons, namely the initial budget allocation of energy subsidies in the Budget (October 2007) is greater than the budget of the poverty reduction program. Based on data from the Government budget for the poor program only about Rp70, 6 trillion, or 7.5 billion U.S. dollars. While the budget for energy subsidies amounted to approximately Rp77, 2 billion (8.2 billion dollars). Where is the energy subsidy is 70 percent mostly enjoyed by high-income people? Therefore, if the policy of fuel price increases is not taken to be accommodated by the direct cash transfer program feared would happen in fiscal instability, the implementation of the Government's development program funds are ultimately political and security instability. Direct cash transfer program implemented in 2008-2009 to compensate for the rise in fuel prices is expected to



have an impact on the livelihoods of the poor. Households who are targeted poor households and almost destitute poverty based census conducted by known as Central Bureau of Statistics [6,7,8,9,10].

From background above, the purpose of this study is to estimate the impact of direct cash transfer program for 2008/2009 on household consumption on food, nonfood, education, and health in Central Java Province.

## 2. Data And Methodology

### 2.1. Data

The data used in this paper come from Susenas (National Economy Social Survey) in February 2008, and 2009 are utilized in the present evaluation. We can identify most households across all two survey rounds allowing for both a short- and medium-term evaluation of the program. Although implemented before the design of the Direct Cash Transfer (DCT) program, we used the February 2008 Susenas provides a good baseline for impact. The baseline survey contains 2,422 households, while the follow-up in February 2009 contains only 2,454 households. After matching on geographic and household identifiers, we have a balanced panel data for 2008 and 2009. It contains 2,422 households; 897 of which received BLT and 1,525 of which not received BLT.

### 2.2. Mean Difference Approach

The basic principle of this method is compared differences between the treatment and control groups before and after the start of the DCT program. It is measured by calculating the mean difference (MD) in these two groups. This calculation uses the following formula [1]:

$$MD = (\mu_{i,2009} - \mu_{i,2008})^{BLT} - (\mu_{i,2009} - \mu_{i,2008})^{NonBLT} \quad (1)$$

where,

- $\mu_{2009BLT}$  : the average value of consumption per month for DCT household in 2009
- $\mu_{2008BLT}$  : the average value of consumption per month for DCT household in 2008
- $\mu_{2009NonBLT}$  : the average value of consumption per month for Non DCT household in 2009
- $\mu_{2008NonBLT}$  : the average value of consumption per month for Non DCT household in 2008

## 3. Result And Discussions

We will show the households demographic profile in Central Java Province in Table 1. This table shows that the proportion of head of household if male (84.39%) is higher than female (15.61%). The marital status of respondents with married status represent 84.06%. It is greater than another status, represent 15.94%. Age groups were also relatively distributed, except for the head of household with age between 35 or below. Majority respondents have not attended junior high school. Majority head of household has finished primary school or less. Respondents have attended junior high school, represented by 10.32%, whereas an amount of 9.25% from a head of household have finished senior high school education. Only 2.64%, head of household have finished university education. From main job status, the majority of respondents work as entrepreneur represent 35.55% then followed by employee and self employee represented by 27.99% and 15.77%. Based on origin, majority head of household comes from rural with 65.11% and urban with 34.89%. Majority head of household has a monthly income below 1.5 million rupiahs. For the head of household with monthly income 1.51 – 2.25 and 2.25 – 3 million rupiah accounted for 2.19% and 1.20%. Only 0.58%, head of household have a monthly income between 3.01 million or above. Then, direct cash transfer recipient in 08/09 accounted for 37.04% compared with the not recipient (62.96%). This table shows that direct cash transfer recipient in 05/06 and 08/09 accounted for 33.86% compared with the not recipient (66.14%).

**Table 1.** Household Demographic Profile In Central Java Province

| Characteristics | Freq. | Percentage | Characteristics          | Freq. | Percentage |
|-----------------|-------|------------|--------------------------|-------|------------|
| Sex             |       |            | Head of Household Origin |       |            |
| Male            | 2044  | 84.39      | Urban                    | 845   | 34.89      |
| Female          | 378   | 15.61      | Rural                    | 1577  | 65.11      |

| Age                          |      |       | Education  |      |       |
|------------------------------|------|-------|--|------|-------|
| 14 – 24                      | 21   | 0.87  | Primary School or Less                                       | 1518 | 62.68 |
| 25 – 35                      | 314  | 12.96 | Junior High School   | 250  | 10.32 |
| 36 – 46                      | 716  | 29.56 | Senior High School   | 224  | 9.25  |
| 47 – 57                      | 664  | 27.42 | University   | 64   | 2.64  |
| >=58                         | 707  | 29.19 | Not Answered   | 366  | 15.11 |
| <b>Marital Status</b>        |      |       | <b>Status in Main Job</b>                                    |      |       |
| Other                        | 386  | 15.94 | Self Employee  | 382  | 15.77 |
| Married                      | 2036 | 84.06 | Entrepreneur   | 861  | 35.55 |
| <b>Monthly Income</b>        |      |       | Employee   | 678  | 27.99 |
| (in Rupiah) 1US\$ = Rp 13000 |      |       | Other  | 240  | 9.91  |
| <= 1,5 million               | 1144 | 48.31 | Not Answered   | 261  | 10.78 |
| 1,51 - 2,25 million          | 53   | 2.19  | <b>Direct Cash Transfer Recipient Year 08/09</b>             |      |       |
| 2,25 - 3 million             | 29   | 1.20  | Yes  | 897  | 37.04 |
| 3,01 - 4 million             | 4    | 0.17  | No   | 1525 | 62.96 |
| >4 million                   | 10   | 0.41  | <b>Direct Cash Transfer Recipient Year 05/06 &amp; 08/09</b> |      |       |
| Not Answered                 | 1156 | 47.73 | Yes  | 820  | 33.86 |
|                              |      |       | No   | 1602 | 66.14 |

**Table 2.** Summary Of Estimate Result

| Variable Dependent    | Impact          | Direction | Significance     |
|-----------------------|-----------------|-----------|------------------|
| Food Consumption      | 3,4 until 3,9   | Positive  | Significance     |
| Non Food Consumption  | 8,8 until 10,1  | Positive  | Significance     |
| Education Expenditure | 6,9 until 9,9   | Positive  | Not Significance |
| Health Expenditure    | 62,8 until 67,4 | Negative  | Significance     |

From Table 2, it was found that direct cash transfer 2008/2009 increase household consumption expenditure growth (food and non-food). Increasing of household consumption expenditure for direct cash transfer recipients are smaller than non-recipients of direct cash transfer. While the effects of direct cash transfer in 2008/2009 in the field of education have increased although not significantly. While the provision of direct cash transfer in 2008/2009, there was no increase in health expenditures for households receiving direct cash transfer. From this result, we can explain that the recent social assistance programs, direct cash transfer program, for example, it is administratively more efficient than other social assistance programs, like better child nutrition for example. Because this program incurred per unit value of the benefit for each household and this program also used for the consumption of the commodity subsidized by the government [3,4]. Moreover, the main purpose of the program is to provide compensation as a result of rising fuel prices are always followed by the increase in prices of other needs. Supposedly, the increase in the value of BLT funds was higher than the value of the price of staples such as rice [8].

The impact of the program on food consumption and non food consumption were positive and significance. This occurs because the beneficiary households prioritize the needs for food, especially staples, to be fulfilled in the long term [8]. Also, non-food expenses are sometimes allocated for other things such as cigarettes [5,6,7]. The impact of the program on health consumption was negative and significance. This program can indicate that it can improve member of household health care because frequency and duration of illness have found lower. Then, it can also indicate that improved nutrition and preventive health care have made a member of household more robust against illness [2,4]. The impact of the program on education was positive and not significance. It is indicated that the difference of priority for the allocation of funds. The order of priority may include the consumption of

food and non-food, pay off debt, buy clothes, and venture capital. Others priorities, the consumption of food and non-food, pay off debt, transportation, and school fees [7,8].

#### 4. Conclusion

According to the analysis and findings, this study was found that first, the increasing in food and non-food consumption for direct cash transfer recipients than non direct cash transfer recipients; (2) the impact of households expenditure on education for direct cash transfer recipients is higher than non direct cash transfer recipients; (3) the impact of households expenditure on health for direct cash transfer recipients is lower than non direct cash transfer recipients.

Recommendation from this study, (1) implementation of direct cash transfer program 2008/2009 must be better because this program can defend household welfare. It shows from several indicators of well-being such as consumption spending and education; (2) data targets for poor households (verypoor, poor, nearly poor) must be updated. Because targeting is very important to achieve cost effectiveness in the social assistance program, social protection program, and poverty reduction program; even though it is not easy is often suggested. Not only administrative costs, but also additional costs like disincentive costs, stigma costs, and political economy costs [10]. So, it must be possible that data targeted becomes more costly, but it is necessary and is a must, for the similar program in the future to be better again. Also, the presence of local initiative needs to be fostered, because it can improve the direct cash transfer program's management.

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