Consumption patterns of social assistance (Bansos) recipients in the Bangka Belitung Islands Province

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Abstract.
Poverty is one of the main problems in economic development, and various efforts are made to improve and expand social assistance programs (Bansos). This study aims to analyze the consumption patterns of Bansos recipients in Bangka Belitung Province. The data used are secondary data from various related agencies and primary data sourced from surveys on Bansos recipient households. The scope of the research covers two districts with the highest and lowest number of beneficiary households in the Province of Bangka Belitung Islands. The analytical method used is linear regression analysis. The results showed that Bansos significantly affected public spending, especially food spending, cellphone credit, and business capital. On the other hand, the provision of Bansos does not significantly affect expenditures such as non-food consumption, education, health, cigarettes, and debt payment.

Keywords: Consumption pattern, Expenditure, Poverty, Social assistance (Bansos)

JEL Classification: I38, I31, H53

INTRODUCTION
Poverty is one of the main issues in the quality of economic development. Not only pursue high economic growth but the economy's success is also shown by the low percentage of poor people and even income distribution in society. Todaro (2006) states that poverty will increase more during the distribution of income not yet evenly. Bourguignon (2004) and Barrientos (2019) also explain that economic growth is balanced with equity income distribution, and poverty subtraction will be more effective.

Poverty is an application where there is a lack of ordinary things such as food, clothes, shelter, and drinking water (Binti, 2016). The main cause of poverty is a lack of income and assets to fulfill needs such as food, clothing, housing, level of health, and education that can be accepted (World Bank, 2004). Poverty is also related to limited jobs; poor people usually do not have jobs, and their education and health level are generally inadequate (Ferezagia, 2018). However, enhancing the capacity economy is not enough to benefit people (Remi & Tjiptoherijanto, 2002; Habibov & Fan, 2006).
Alleviation of poverty is one of the government's main programs to chase the development quality economy. The success of a poverty alleviation program depends on identifying targeted groups and areas, such as those who are poor and where they live (Remi & Tjiptoherijanto, 2002; Shahidi et al., 2019). Meeting Plenary on Alleviation Strategy, chaired by Vice President Ma'Ruf Amin (Antara News, 2020), proposes an effort to alleviate poverty by reducing the burden expenditure public with low income and increasing the income of poor people.

Sadono (2013) states that household consumption is the value of the household expenditure to purchase various needs. The household income received will be used to purchase food, pay for transportation services, pay for children's school fees, pay house rent, and buy a motor vehicle. Not all transactions made by households are categorized into consumption. Activities such as building/buying a house can be categorized as a form of investment (Fidianing & Winda, 2020).

Meanwhile, the needs of human life consist of several levels. The primary need is at the first level, where humans need clothing, food, and shelter. When these primary needs have been met, a human idea arises in mind to fulfill secondary needs in the form of the need for utility items such as shoes, education, and others. If possible (people are getting richer), a desire arises to meet the needs of the third level (tertiary need), which consists of the need for luxury goods, and the fourth level needs (quarterly need) which consist of goods that are not necessary and soon (Dubihlela et al., 2014).

The government has made various efforts to improve and expand social assistance programs (Bansos) to reduce the cost burden of the poor. Improvements are also encouraged to guarantee social through the healthy Indonesia program or National Health Insurance (Jaminan Kesehatan Nasional - JKN) and policy reform subsidy energy, including subsidy electricity and LPG subsidies. Various efforts to encourage increased income are also carried out through the empowerment of Micro, Small, and Medium Enterprises (MSMEs). The empowerment of MSMEs is expected to alleviate poverty and reduce unemployment (Sofah, 2020).

In 2020 data shows that 2.62 percent of Bangka Belitung Islands Province households have assistance and subsidies from the local government. 46.81 percent of households receive assistance by routine, and 39.33 of households receive assistance by no routine, as shown in Table 1.

Table 1. Distribution of households recipient of government assistance in the Bangka Belitung Islands Province 2020

<table>
<thead>
<tr>
<th>Regency</th>
<th>Have received assistance and subsidy from local government</th>
<th>Assistance by Routine</th>
<th>Assistance by no Routine</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bangka</td>
<td>2.69</td>
<td>40.30</td>
<td>48.48</td>
</tr>
<tr>
<td>Belitung</td>
<td>2.15</td>
<td>31.22</td>
<td>50.55</td>
</tr>
<tr>
<td>West Bangka</td>
<td>3.97</td>
<td>79.92</td>
<td>37.52</td>
</tr>
<tr>
<td>Central Bangka</td>
<td>5.46</td>
<td>27.07</td>
<td>28.70</td>
</tr>
<tr>
<td>South Bangka</td>
<td>1.30</td>
<td>40.60</td>
<td>27.95</td>
</tr>
<tr>
<td>East Belitung</td>
<td>1.29</td>
<td>35.80</td>
<td>66.67</td>
</tr>
<tr>
<td>Pangkal Pinang</td>
<td>1.20</td>
<td>78.28</td>
<td>29.43</td>
</tr>
<tr>
<td>Total (Province)</td>
<td>2.62</td>
<td>46.81</td>
<td>39.33</td>
</tr>
</tbody>
</table>

Source: Social Service of the Bangka Belitung Islands Province, 2020

Table 1 shows that Central Bangka Regency has the highest number of recipients,
with as much as 5.46 percent of receiver households. In contrast, Pangkalpinang City has the lowest receiver assistance and subsidy rate by 1.2 percent of whole receiver households in the Bangka Belitung Islands Province. Whereas if seen from the percentage of assistance recipients by routine, households in West Bangka Regency are the highest with 79.92 percent, and Central Bangka Regency the lowest with 27.07 percent. East Belitung Regency has a percentage highest of 6.67 percent for assistance by no routine receivers, and Central Bangka Regency has the lowest percentage of 27.95 percent.

This study explores the effectiveness of Bansos provided by the government by looking at the consumption patterns of the beneficiaries. The distribution of Bansos certainly aims to improve the welfare of the lower classes of society to reduce income disparity. The distribution of routine and non-routine assistance by the government should be explored further. The search will focus on effectiveness by looking at the consumption behavior patterns of the community towards assistance. The survey results will provide an overview of the allocation of consumption patterns for Central and Regional Government assistance recipients using quantitative methods.

**METHODS**

The coverage of the research area is Bangka Belitung Islands Province. This study uses primary data to get consumption on government assistance beneficiaries. The selection of respondents in this study will focus on people who have received assistance recorded in the 2020 Social Welfare Integrated Data (DTKS). Two hundred eight respondents are divided into 2 locations: in Bangka Regency and South Bangka Regency. Data collection techniques are surveys and interviews. A survey will be performed on every district with households decile the highest and the lowest.

The data were analyzed using partial regression analysis tools. The model is formulated to see the effect of Bansos distribution on the level of additional expenditure on food components, education, cigarette spending, and others. The empirical modeling of this research is formulated as follows:

- **FoodCons** = \( \beta_0 + \beta_1PKH + \epsilon_i \) .................................................. (1)
- **MedicalCons** = \( \beta_0 + \beta_1PKH + \epsilon_i \) .................................................. (2)
- **FoodCons** = \( \beta_0 + \beta_1BPNT + \epsilon_i \) .................................................. (3)
- **Tuition** = \( \beta_0 + \beta_1PIP + \epsilon_i \) .................................................. (4)
- **NonfoodCons** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (5)
- **Tuition** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (6)
- **HealthcareCons** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (7)
- **NonfoodCons** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (8)
- **SmokingCons** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (9)
- **PulseCons** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (10)
- **Capital** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (11)
- **Debt** = \( \beta_0 + \beta_1Bansos + \epsilon_i \) .................................................. (12)

**Description:**
- **FoodCons** = Food Consumption
- **MedicalCons** = Health expenditure
- **Tuition** = Education expenditure
- **NonfoodCons** = Non-food consumption
- **SmokingCons** = Cigarettes expenditure
- **PulseCons** = Phone credit
RESULTS AND DISCUSSION

Respondents have accepted various types of Bansos Programs in the research area. The types of assistance are (1) Health Insurance (HI); (2) Program Keluarga Harapan (Conditional Cash Transfer); (3) Kartu Indonesia Sehat – KIS (Healthy Indonesian Card); (4) Bantuan Pangan Non-Tunai – BPNT (Non-Cash Food Assistance); (5) Program Indonesia Pintar-PIP (Smart Indonesia Programme); (6) Bantuan Sosial Tunai – BST (Cash Social Assistance); (7) Kartu Prakerja (Pre-employment Card); (8) Kelompok Usaha Bersama – KUBE (Joint Business Group); (9) other assistance as temporary unconditional cash transfer (Bantuan Langsung Tunai – BLT), Micro, Small and Medium Enterprises (MSMEs), Kartu Keluarga Sejahtera – KKS (Prosperous Family Card), and Bantuan Stimulan Perumahan Swadaya – BSPS (Self-Help Housing Stimulant Assistance). Figure 1 shows the number of respondents by type of assistance received.

![Figure 1](image)

Source: Primary data (processed)

Based on Figure 1, it can be seen that the type of assistance received by respondents was the type of PKH assistance (as many as 84 respondents or 42.00 percent of the total respondents), followed by the type of assistance from BPNT (as many as 60 respondents or 30.00 percent of the total respondents). On the other hand, the least types of assistance were health insurance, KIS, and KUBE.

Figure 2 shows the consumption patterns of respondents who are sourced from Bansos receipts in Bangka Regency. Most Bansos are used for food, non-food, education costs, and debt payments. On the other hand, the consumption pattern of
assistance received for health costs, cigarette consumption, debt payments, and business capital is still low.

![Graph](source: Primary data (processed))

**Figure 2.** Consumption patterns based on welfare status in Bangka Regency.

Respondents with high welfare status (status 4 and 5) had higher food consumption patterns than respondents with low welfare status (status 1, 2, and 3). Consumption of non-food items and payment of school fees is dominated by respondents with welfare status 3. *Bansos* used for debt payments are dominated by respondents with welfare status 4.

The consumption pattern in Bangka Regency differs from that of respondents in South Bangka Regency, as shown in Figure 3.

![Graph](source: Primary data (processed))

**Figure 3.** Consumption patterns based on welfare status in South Bangka Regency
Based on Figure 3, it can be seen that Bansos revenues in South Bangka Regency are more dominantly used for food consumption, non-food consumption, education costs, health costs, and business capital. Expenditure allocation for this type of consumption is especially higher for respondents with welfare status 4.

**The effect of Bansos PKH on food consumption and health expenditure**

Based on Table 2, it can be seen that the Bansos PKH has no significant impact on food consumption. It indicates that the Bansos PKH for the community is not focused on increasing food expenditure by recipient households.

**Table 2. The effect of Bansos PKH on food consumption expenditure - model (1)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>681747.4</td>
<td>47649.42</td>
<td>14.30757</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>PKH</td>
<td>0.138781</td>
<td>0.094932</td>
<td>1.461895</td>
<td>0.1476</td>
<td>0.025401</td>
</tr>
</tbody>
</table>

*Source: Primary data (processed)*

The same pattern is also found in the context of the relationship of the Bansos PKH to health expenditures. Table 3 shows the insignificant effect of the PKH Bansos on health expenditures for beneficiary households.

**Table 3. The effect of Bansos PKH on health expenditure – model (2)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>718214.2</td>
<td>38298.60</td>
<td>18.75301</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>PKH</td>
<td>0.368577</td>
<td>0.441359</td>
<td>0.835096</td>
<td>0.4061</td>
<td>0.008433</td>
</tr>
</tbody>
</table>

*Source: Primary data (processed)*

This finding contradicts the findings of Pradani et al. (2021), which state that meeting the need for spending on health, especially during the Covid-19 period, will increase in line with the increase in income from Bansos that has been received. In the case of households in the Riau Archipelago Province, the PKH Bansos do not affect health spending more because people prefer to use BPJS (Healthy Indonesia Card) and other assistance for health costs.

**The effect of Bansos BPNT on food consumption expenditure**

Based on Table 4, it can be seen that the Bansos BPNT has no significant effect on food consumption. This indicates that the Bansos PKH for the community is not focused on increasing food expenditure by recipient households.

**Table 4. The effect of Bansos BPNT on food consumption expenditure – model (3)**

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>166049.3</td>
<td>8864.112</td>
<td>18.73276</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>BPNT</td>
<td>-0.033738</td>
<td>0.022458</td>
<td>-1.502310</td>
<td>0.1384</td>
<td>0.037455</td>
</tr>
</tbody>
</table>

*Source: Primary data (processed)*

This finding contradicts the findings of Pradani et al. (2021); Sarosa & Purwanti (2019), which show that additional income for the poor will be prioritized for family food expenditure.

**The effect of Bansos PIP on education expenditure**

Based on Table 5, it can be seen that the Bansos PIP has a positive and significant effect on education expenditures. This means that the Bansos PIP is felt to be very effective in assisting the community in meeting the cost of education. This finding is in line with the findings of Norman (2020), which shows that PKH Bansos is directly able
to increase public spending to finance their education.

**Table 5.** The effect of Bansos PIP on education expenditure – model (4)

<table>
<thead>
<tr>
<th>Variable</th>
<th>Coefficient</th>
<th>Std. Error</th>
<th>t-Statistics</th>
<th>Prob.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>60568.62</td>
<td>13206.75</td>
<td>4.59</td>
<td>0.0000</td>
<td></td>
</tr>
<tr>
<td>PIP</td>
<td>0.23038</td>
<td>.0510061</td>
<td>4.52</td>
<td>0.000</td>
<td>0.0901</td>
</tr>
</tbody>
</table>

*Source: Primary data (processed)*

**The effect of Bansos revenue (composite) on various types of expenditure**

This study also analyzes the effect of Bansos receipts (composite) on various expenditure types mapped into the research framework, as given in Table 6.

**Table 6.** The effect of Bansos revenue on various types of expenditure- model (5) – (12)

<table>
<thead>
<tr>
<th>Independent variable (Expenditure types)</th>
<th>Coefficient</th>
<th>Significance</th>
<th>Significance level</th>
</tr>
</thead>
<tbody>
<tr>
<td>FoodCons</td>
<td>0.0446515***</td>
<td>Significant</td>
<td>0.003</td>
</tr>
<tr>
<td>NonfoodCons</td>
<td>-0.0002933</td>
<td>No Significant</td>
<td>0.753</td>
</tr>
<tr>
<td>Tuition</td>
<td>0.0004325</td>
<td>No Significant</td>
<td>0.931</td>
</tr>
<tr>
<td>HealthcareCons</td>
<td>0.0015755</td>
<td>No Significant</td>
<td>0.657</td>
</tr>
<tr>
<td>SmokingCons</td>
<td>-0.0013457</td>
<td>No Significant</td>
<td>0.546</td>
</tr>
<tr>
<td>PulseCons</td>
<td>0.0055012***</td>
<td>Significant</td>
<td>0.043</td>
</tr>
<tr>
<td>Capital</td>
<td>0.0387345***</td>
<td>Significant</td>
<td>0.006</td>
</tr>
<tr>
<td>Debt</td>
<td>-0.003506</td>
<td>No Significant</td>
<td>0.922</td>
</tr>
</tbody>
</table>

*Note: Dependent variable = Bansos*  
*Source: Primary data (processed)*

Table 6 shows that the Bansos received by households only significantly affect three types of expenditure: food expenditure, cellphone credit, and business capital. On the other hand, Bansos does not affect household spending on non-food expenditures, education, health, cigarettes, and debt payments.

Concerning cigarette spending, this research is in line with Sarosa & Purwanti (2019) and Wang et al. (2018) that income does not significantly affect cigarette consumption. However, this research is not in line with the research of Afif & Sasana (2019), Surjono & Handayani (2013), and Young-Hoon (2012), who stated that income per capita significantly affects cigarette consumption. Efroymson et al. (2001) also stated that the increase in income is one of the factors causing the increase in tobacco consumption in Indonesia. Research by Dartanto et al. (2018) also found that the smoking behavior of Bansos recipients was one of the factors that reduced the effectiveness of the Bansos Program

**Public perception of the Bansos Program**

Bansos Programs of various types have strategic targets to improve the welfare of the poor. However, the implementation of the Bansos program still needs some improvements. The still ineffective implementation of the Bansos Program can be seen from the public perception as given in Figure 4.
Based on Figure 4, it can be seen that it shows that only 12.14 percent of respondents stated that the Bansos Program was right on target, and 83.09 percent of respondents stated that the Bansos Program had not been socialized properly. Only 27.18 percent of respondents agree that the Bansos Program is always distributed on time, and only 3.90 percent of respondents agree that the Bansos Program has easy requirements.

CONCLUSION AND RECOMMENDATION

Conclusion

A partial analysis of several types of Bansos (PKH, BPNT, and PIP) shows that only PIP Bansos affect the expenditure of recipient households by the target type of Bansos. Furthermore, based on the analysis of the effect of the composite Bansos value on various types of expenditure, it shows that the provision of Bansos has a significant effect on food expenditure, cellphone credit, and business investment.

The community considers that to be effective in its implementation, the Bansos Program still needs to be improved, especially related to aspects of target recipients, program socialization, the timing of Bansos grants, and ease of requirements.

Recommendation

Based on the research findings, it is recommended that the government should continuously verify and update the Poor Household Data (RTM) based on name per address. In addition, mentoring programs for Bansos recipient households can be continued by conducting annual monitoring and evaluation.

For further research, the researcher suggests conducting an in-depth study of the behavior of Bansos recipients, especially to get out of the poverty line and maximize the utility of their budget.

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