Cash social assistance Covid-19, welfare, and economic performance in Indonesia

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ABSTRACT


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The Cash Social Assistance Covid-19 (BST Covid-19) aims to help the community affected by the Covid-19 pandemic. However, the assistance index (the social assistance amount per household), which is relatively small and has a uniform magnitude, is "considered" not yet accommodating to the various economic burdens of the community, especially in urban areas. The BST-19
has also become vague in maintaining purchasing power. This study tries to analyze the BST Covid-19 impact on the household's welfare in urban and rural regions, and, at the same time, relate it to Indonesia's economic performance. This study uses a quantitative approach to the Computable General Equilibrium Model (CGE). Secondary data is needed to support the construction of the model. The data come from Central Bureau Statistics, the Ministry of Social Affairs, the Ministry of Finance, previous research results, etc. The study results show that the provision of Covid-19 BST positively impacts household welfare even though it has not been reflected at the macroeconomic level. Differentiation of the BST Covid-19 index considers the economic burden in which the household lives will potentially increase assistance benefits. The provision of BST Covid-19 combined with community empowerment programs or policies has proven to have better benefits than only being provided with social assistance.

INTRODUCTION

The Cash Social Assistance Covid-19 (BST Covid-19) is one of the government's assistances in cash given to community groups affected by Covid-19. These community groups are targeted for social assistance because their vulnerabilities are related to decreased purchasing power, increased poverty, and food insecurity until it spreads to worsen economic performance (Alderman & Yemtsov, 2014; Jimu & Msilimba, 2018). Therefore, the BST Covid-19 would become a temporary economic bearing to support the resilience of household groups affected by Covid-19. In 2021, the total number of households who received the BST Covid-19 reached 9.2 million beneficiary families (KPM) and reached out to a relatively wide range of community income deciles. It makes BST Covid-19 important and remarkable assistance, in addition to the momentum of the Covid-19 pandemic.

However, the provision of the BST Covid-19 still presents a discourse about its impact on household welfare and economic growth. The discussion dynamics arise because the concept of social assistance (bansos), including the BST Covid-19, will not directly eliminate poverty but allow the poor to manage their risk of income shocks and increase their capacity to support inclusive growth (Norton et al., 2001). The management of these risks is highly dependent on the abilities, conditions, and preferences of the poor themselves. On the other hand, allocating a state budget that is too large for social assistance can reduce the performance of the fiscal space for the development of another sector and is even suspected to be the antithesis of efforts to help the poor (Chronic Poverty Research Centre, 2011).

BST Covid-19 appears in tandem with increasing poverty during the Covid-19 pandemic. According to the Central Bureau of Statistics data, the poverty rate increased from 9.41 percent in 2019 (during the pre-Covid-19 pandemic) to 10.14 percent in 2021 (during the Covid-19 pandemic) (Badan Pusat Statistik, 2021a). The
Poor and those who work in the informal sector are the community groups most affected by the Covid-19 pandemic, which decreases their income (Badan Pusat Statistik, 2020a). To overcome this condition, the government has budgeted the BST Covid-19 at IDR600 thousand per KPM per month from April-June and then to IDR300 thousand per KPM per month from July-December 2020 (Karyono, 2021). Meanwhile, in 2021, the BST Covid-19 is IDR300 thousand per KPM per month from January-June (Fauzia, 2021). Throughout the provision of the BST Covid-19 for 2020-2021, there is no clear indication that the poverty rate has also decreased. The complexity of looking at poverty occurs because it involves influencing multi-factor. So, is the BST Covid-19 able to improve household welfare, considering that the duration of assistance is short, and the index (the social assistance amount per household), is not too large enough?

Although it is still challenging to find a standard for the social assistance index to follow the household needs, the same BST Covid-19 index per KPM per month in all regions hints at an injustice. That index has implications for the significant level of assistance benefits for KPM and their impact on the economic performance. Various initial clues related to poverty conditions in urban and rural areas. The poverty situation is different because the poor in urban areas have a higher burden of life than those in rural areas. The indications include (1) the open unemployment rate in urban areas has doubled compared to rural areas, namely 8.98 percent and 4.71 percent, respectively (Badan Pusat Statistik, 2021d); (2) informal workers in urban areas experience a lot of decline in income (Flourish, 2020), including micro, small and medium enterprises (MSMEs); and (3) the average level of expenditure in the urban area is higher than in rural areas, namely 60.92 percent and 39.08 percent, respectively (Badan Pusat Statistik, 2020b). As a result, during the Covid-19 epidemic, urban areas saw a tremendous increase in the poor compared to rural places. In September 2020, the urban poor reached 7.88 percent, a rise of 1.32 percent compared to poverty in rural areas, which only increased by 0.60 percent (Badan Pusat Statistik, 2021a).

Therefore, providing social assistance by ignoring differences in burden will raise questions and allegations about the BST Covid-19 to maintain purchasing power and even household welfare. Moreover, "rural" emerged as a potential new problem in the rural and agricultural sectors (Chigbu, 2015; Lubis et al., 2019). The complexity is increasingly unstoppable at a time when the BST Covid-19 budget will also reduce fiscal space to support other economic development programs.

Based on that background and problems, this research aims to analyze the impact of the BST Covid-19 on household welfare in urban and rural areas and the condition of the Indonesian economy. So far, not yet research has focused on (a) the impact of BST Covid-19 on household welfare comprehensively and (b) disaggregating households by urban and rural areas. For example, although the Smeru (2020) survey findings have shown differences in the impact of BST Covid-19 on urban and rural households, the analyzes has not shown complete economic
transmission at household and even national levels. Most of the other studies looked at the effectiveness of its distribution. The novelty of this research is not only the empirical disaggregation of households in more detail according to actual conditions but also associated with Indonesia's macroeconomic performance. Based on that, the research uses a comprehensive economic model that can simultaneously capture the behavior of economic actors. The Computable General Equilibrium (CGE) model is the most suitable to answer the research objectives, supported by various secondary data.

LITERATURE REVIEW

Although market-driven economic growth is likely to be the main driver of poverty reduction in most countries, markets cannot do it alone. Public policy plays a central role in providing the institutional foundations within which markets operate, in providing public goods, and in correcting market failures. In addition to laying the foundations for economic growth, policy can supplement the effects of growth on poverty reduction, and one of the instruments that governments can use to that end is direct redistribution of resources to poor households. Direct cash transfers have opportunity costs (in terms of forgone alternative public investments) or compete for funds with other worthwhile projects and may have some perverse incentive effects on recipients, but there is a growing body of evidence that in some cases transfers may be both equitable and efficient (Fiszbein et al., 2009).

One type of direct cash transfer is conditional cash transfer which makes payments to poor households on a specific condition. Das et al. (2016) summarized the conditional cash transfer concept into two main rationales, namely (a) efficiency by reconciling societal preferences with individual decisions and (b) redistributive that target transfers to the poor when there is asymmetric information (the identity of the poor is unknown). Why might conditional cash transfers not have their desired impact? That is for two reasons, namely (1) when designing and implementing very low participation in the program because the benefit of the transfer is less than the cost of the conditionality. It is either due to poor design (too little cash in the design of the program) or poor implementation (corruption, leakage) and (2) fungibility that individuals undermine the rationale of the program by changing their consumption or investment patterns for a close substitute of the conditioned-on good. That is why it appears to be a tradeoff, is there a tradeoff between the efficiency and the redistributive rationale? In sum, when there is a solid rationale to redistribute via conditional cash transfers can be justified under two broad sets of conditions: first, when private investment in human capital among the poor, is sub-optimal from a social point of view and second when conditions are necessary for political economy reasons (that is, redistribution is politically feasible only when conditioned on good behavior).

From an empirical viewpoint, Mookherjee & Napel (2021); Paqueo (2009)
believed that conditional cash transfer (and social assistance) could play an essential role in improving the welfare of the poor and vulnerable. On the other hand, Fiszbein et al. (2009) stated there are sceptical arguments also to consider, (1) cash transfers to the vast majority of the poor have lower returns than investments in public capital and are more challenging to target and deliver; and (2) cash transfers provide better incentives wrong. For example, they reduce incentives for households to work hard and invest in education and training for future profitable jobs.

The provision of the BST Covid-19, which is the same as other social assistance, still presents a long discussion about the positive and negative sides, at least on the empirical level. Some parties found that the BST Covid-19 had a positive impact on people's lives even though the index was relatively limited, especially to meet basic needs and support needs during the Covid-19 pandemic (Nafiah & Bharata, 2021; Pradani et al., 2021; Pramanik, 2020; Ruslan et al., 2022). Meanwhile, the other party explained that the BST Covid-19 did not significantly affect the household welfare level (Nasrullah & Annisa, 2021) and could cause conflicts between society and the local government related to its distribution (Nafiah & Bharata, 2021).

Several other studies provide explanations of valuable findings. For example, Cahyadi et al. (2018) although not specifically BST Covid-19, said that regular social assistance did not transformatively reduce poverty for those receiving current assistance but helped increase investment in their children's health and education which would ultimately reduce inter-generational poverty. Banerjee et al. (2017) with cases in several developing countries, including Indonesia, mentions that social assistance has not systematically proven to be a disincentive in worker supply. With the case in Cambodia, Levy (2013) states that cash social assistance has proven to be ineffective enough encouraging economic growth because it will distort local markets to stimulate inflation, especially in agricultural commodities, which ultimately worsens the poor condition. However, according to Hanlon et al. (2010) a small amount of money earned from social assistance can make a big difference and change poor lives. It has the potential to prevent future poverty (poverty traps) by facilitating economic growth and promoting human development. Added to Ressler (2008) with the case in Kenya, social assistance, however, will still have a role to increase the social networks and social capital who receive the social assistance.

Based on some of the literature review, the social assistance transmission can be divided into two parts; namely, it will (a) directly affect the community's welfare by increasing the income of the poor and (b) not directly impact economic development. According to Samson (2009), the impact of social assistance on economic growth is through several channels, namely risk, assets, human capital, equity, labor market, and macroeconomic variables.

This section not only reviews the research topic but also describes the theoretical framework of the general equilibrium method. In 1874-1877, the general
equilibrium theory was developed by Leon Walras, although the idea appeared long before that (Walker, 1983) microeconomic theory underlies the general equilibrium approach. The theory helps to understand the behavior of economic actors, which is then aggregated into levels of demand, supply, and prices in various markets or economies. Furthermore, according to Leon Walras, a general equilibrium condition will be achieved if the demand and supply of each market are balanced. This theory is known as the Walrasian general equilibrium, which is then confirmed through Walras's Law, where excess demand in one market will equal excess supply in other markets (Oktaviani, 2011). The general equilibrium approach is transformed into a Computable General Equilibrium Model (CGE), which contains many equations that reflect various variables from the model with certain assumptions and the database that supports it (Hartono, 2006). At the empirical level, the CGE Model has been widely used by many researchers and international institutions to elaborate social assistance programs, such as Barry (2013); Coady & Harris (2004); Cury et al. (2010); Hanson et al. (2002); Khan (2004); Kyophilavong (2011).

RESEARCH METHODS

Data Types and Sources

The type of data in this research is secondary data. It is used to (a) describe the existence of the BST Covid-19 and (b) analyze the impact of the BST Covid-19 on household welfare and Indonesia’s macroeconomic conditions. The primary data used to build the national CGE Model comes from Table I-O 2016, published by Central Bureau of Statistics (Badan Pusat Statistik, 2021c). Other secondary data are also needed to complete the analyzes, such as economic performance data sourced from Bank Indonesia and the social assistance budget from the Ministry of Social Affairs and the Ministry of Finance.

Analyzes Method

According to Das et al. (2004); Mookherjee & Napel (2021), welfare objectives of efficiency or redistribution have provided the foundations for the design of systems of social security, taxation, and welfare programs. The efficiency objective pertains to a market failure (or Pareto inefficiency) that a social assistant program is designed to correct, while redistributive goals are incorporated in utilitarian or Rawlsian notions of justice. A model that articulates the underlying economic fundamentals (tastes, technology, market structure, and information) and financing mechanisms required to evaluate an intervention's efficiency and distributional consequences is necessary to make a clear case for either of these justifications. Therefore, the general equilibrium model is appropriate compared to the partial equilibrium model.

The CGE Model is a general equilibrium concept that models the economic agents or actors involved in an economy and how they interact with each other. The
The CGE Model can see the impact of simultaneously giving the BST Covid-19 to various economic sectors, including disaggregating household welfare in rural and urban areas. The CGE Model can also accommodate how government programs or policies are transmitted more realistically than a partial model. The essential variables in this analyzes are household welfare in rural and urban areas, Gross Domestic Product (GDP), household consumption, investment, government spending, and trade.

The steps in applying CGE are to determine the CGE Model used in advance. This study uses the basic CGE Model developed by ITAPS-IPB, where the model comes from the Indorani Model and the adapted Wayang Model (Horridge, 2000; Wittwer, 1999). The CGE Model has used both Table I-O 2016 data and recursive dynamic concepts. This concept allows relaxing assumptions related to the labor market and investment so that the CGE Model used in this study can be called recursive dynamic CGE or RDCGE. The sectoral or aggregate employment level is adjusted to the dynamics of real wages in the labor equation. On the other hand, supply and demand can be variable or dynamic at the level of stock capital.

The second step is identifying the equation structure, which includes demand, supply, trade, macroeconomic performance, and market clearing. Oktaviani (2011) explains that all equation structures in the RDCGE Model include 18 blocks, namely (1) demands for labor; (2) demands for primary factors; (3) demands for intermediate inputs; (4) demands for composite primary factors and intermediate inputs; (5) commodity composites of industry outputs; (6) demands for investment goods; (7) household demands; (8) export and other final demands; (9) demands for margins; (10) purchaser’s prices; (11) market clearing conditions; (12) indirect taxes; (13) GDP from the income and expenditure sides; (14) trade balance and other aggregates; (15) rates of return, indexation; (16) investment-capital accumulation; (17) debt accumulation; and (18) regional expansion model. Each of these equation blocks consists of a variety of equations. The equation blocks work simultaneously based on their position as endogenous or exogenous variables. Meanwhile, the transmission and its magnitude depend on the elasticity parameters used. The elasticity parameters are Armington elasticity, labor substitution elasticity, primary input substitution elasticity, export demand elasticity, and expenditure elasticity. For the production function equation, the structural and behavioral properties are related to the input and output using the Constant Elasticity of Transformation (CET) and Constant Elasticity of Substitution (CES). At the same time, the general demand function equation uses CES. The magnitude of all those coefficients of elasticity is taken from previous studies.

The next step is constructing a closure to declare variables that act as exogenous and endogenous variables. The closure is essential to perform simulations according to the scenario. The last step is to do a simulation based on a predetermined shock variable. Furthermore, the data and simulation process use the General Equilibrium Modeling Package (GEMPack) software.
We disaggregated the household by urban and rural areas and occupation types to dig down the analyzes. Households are grouped into eight groups based on domicile and type of work/income. Urban 1 to Urban 3 are households located in urban areas, while Rural 1 to Rural 5 is households in rural areas. The household groups are as follows: (1) Urban 1 is a group of low-income non-agricultural households in urban areas, including low-income entrepreneurs, administration, mobile sellers, free workers in the transportation sector, individual services, and unskilled workers; (2) Urban 2 is a non-labor force household group (BAK) in urban areas, including BAK and unclear groups; (3) Urban 3 is a group of high-class non-agricultural households in urban areas, including upper-class independent entrepreneurs, non-agricultural entrepreneurs, managers, military, professionals, technicians, teachers, administrative workers, and top-class sellers; (4) Rural 1 is a household group of agricultural workers; (5) Rural 2 is a household group of agricultural entrepreneurs in rural areas; (6) Rural 3 is a group of low-class non-agricultural households in rural areas, including low-income entrepreneurs, administration, mobile sellers, free workers in the transportation sector, individual services, and unskilled workers; (7) Rural 4 consists of BAK households in rural areas, including BAK and unclear groups; (8) Rural 5 is a group of upper-class non-agricultural households in rural areas, including upper-class independent entrepreneurs, non-agricultural entrepreneurs, managers, military, professionals, technicians, teachers, administrative workers, and top-class sellers.

Policy Simulation Scenarios

The impact of the BST Covid-19 on household welfare and Indonesia's macroeconomy is further tested and proven by formulating four policy simulation scenarios. All simulations are conditioned in the Covid-19 pandemic, which adjusted the sectors' productivity during the pandemic. It is to present a more realistic simulation situation. The first simulation (Sim 01) provides the existing BST Covid-19 carried out by the government. This simulation clearly shows how the true impact of the BST Covid-19 is on household welfare and, at the same time, Indonesia's macroeconomy.

The second and third simulations (Sim 02 and Sim 03) contain the existing BST Covid-19 but with treatment increasing the index magnitude only for the urban. It is to accommodate that urban households have a heavier burden of life than rural households.

The fourth simulation (Sim 04) is a control simulation that aims to accommodate the conditions for the provision of BST Covid-19, followed by improving the skills or competencies (productivity) of rural households. The details of the policy simulation scenario are in Table 1.
**Table 1**

<table>
<thead>
<tr>
<th>Simulation</th>
<th>Description</th>
<th>Remark</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sim 01</td>
<td>The provision of the BST Covid-19 existing</td>
<td>BST Covid-19 is IDR300 thousand/month for Urban 1-4 and Rural 1-2</td>
</tr>
<tr>
<td>Sim 02</td>
<td>The provision of the BST Covid-19 is doubled for urban household</td>
<td>BST Covid-19 is IDR300 thousand/month for Urban 1-4 and IDR600 thousand/month for Rural 1-2</td>
</tr>
<tr>
<td>Sim 03</td>
<td>The provision of the BST Covid-19 is five times for urban household</td>
<td>BST Covid-19 is IDR300 thousand/month for Urban 1-4 and IDR1,500 thousand/month for Rural 1-2</td>
</tr>
<tr>
<td>Sim 04</td>
<td>The provision of the BST Covid-19 existing plus urban household empowerment</td>
<td>BST Covid-19 is IDR300 thousand/month for Urban 1-4 and Rural 1-2 plus improving productivity for Rural 1-2</td>
</tr>
</tbody>
</table>

**ANALYZE AND DISCUSSION**

**Development of BST Covid-19**

The BST Covid-19 started from April-December 2020 with a total budget of IDR32.4 trillion or 1.28 percent of total government spending was given to nine million KPM. In 2021, the BST Covid-19 provided ten million KPM with a budget from January-June IDR17.32 trillion. The increase in the number of KPM is mainly due to data updating by the Ministry of Social Affairs and local governments. The provision of the BST Covid-19 by the Ministry of Social Affairs is based on (a) the results of the Limited Cabinet Meeting on April 7, 2020, regarding the Effectiveness of the Implementation of Social Safety Nets and (b) Government Regulation in Lieu of Law (Perpu) No. 1 of 2020 concerning State Financial Policy and Financial System Stability for Handling the Corona Virus Disease 2019 (Covid-19) Pandemic and/or in Facing Threats that Endanger the National Economy and/or Financial System Stability. This Perpu was later ratified into Law No. 2 of 2020 (jdih.setkab.go.id., 2020).

During the Covid-19 pandemic, the Ministry of Social Affairs became one of the ministries whose performance was most highlighted. The budget ceiling accumulated at the Ministry of Social Affairs for the distribution of social assistance reached IDR101.40 trillion or 13.62 percent of the total budget for the National Economic Recovery (PEN) program in 2021. The allocation for BST Covid-19 reached IDR16.63 trillion or realized 96.01 percent. This figure is a decrease compared to 2020, which got IDR32.40 trillion or realized 97.55 percent (Kemensos, 2022). It happened because of the initial difference in the BST Covid-19 index.

If we compared the BST Covid-19 and other social assistance, the BST Covid-19 targets reached decile 5. The coverage is not only the 40 percent of the community with the lowest income level but also touches a few groups of people above it. The extent of this coverage is related to the economic condition of KPM, which is worse off due to the Covid-19 pandemic, and they are also not receiving other assistance, such as Non-Cash Food Assistance (BPNT) and the Family Hope Program (PKH). So,
the BST Covid-19 plays a role in complementing other social assistance, such as electricity subsidies and Pre-Worker Cards (regular social assistance). According to the Smeru (2020) report, among KPMs, it is possible to get more than one type of social assistance (complementarity assistance).

Source: Karyono (2021).
Note: *The data displayed is data available in early 2021. There could be adjustments in social assistance numbers (magnitude) until the end of 2021.

Figure 1 shows the social assistance provided by the government during the Covid-19 pandemic in 2021. The total budget allocation for the planned social safety net program reaches IDR150.28 trillion, of which the share of the BST Covid-19 budget is around 8 percent. The most considerable portion of social assistance was for regular social assistance, namely BPNT and PKH, which reached more than 50 percent.

The Impact of BST Covid-19 on Household Welfare

Table 2 presents the BST Covid-19 on household welfare in urban and rural areas. For all simulation scenarios, the BST Covid-19 positively impacts welfare households (income) in urban and rural areas. The highest impact was simulation 04, which combines BST Covid-19 with efforts to increase the household capacity or worker's productivity. The increase in household welfare here is not described further, affecting consumption patterns as purchasing power improves. According to Brugh et al. (2018), social assistance will enhance household welfare while increasing household food quantity and quality.
Table 2

The Impact of BST Covid-19 on Household Welfare in Urban and Rural Area

<table>
<thead>
<tr>
<th>No.</th>
<th>Household</th>
<th>Sim 01 (Δ%)</th>
<th>Sim 02 (Δ%)</th>
<th>Sim 03 (Δ%)</th>
<th>Sim 04 (Δ%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>Rural 1</td>
<td>2.417</td>
<td>2.417</td>
<td>2.417</td>
<td>2.455</td>
</tr>
<tr>
<td>2.</td>
<td>Rural 2</td>
<td>2.352</td>
<td>2.352</td>
<td>2.352</td>
<td>2.388</td>
</tr>
<tr>
<td>3.</td>
<td>Rural 3</td>
<td>2.346</td>
<td>2.346</td>
<td>2.346</td>
<td>2.382</td>
</tr>
<tr>
<td>5.</td>
<td>Rural 5</td>
<td>2.162</td>
<td>2.162</td>
<td>2.162</td>
<td>2.184</td>
</tr>
<tr>
<td>6.</td>
<td>Urban 1</td>
<td>2.247</td>
<td>2.249</td>
<td>2.253</td>
<td>2.309</td>
</tr>
<tr>
<td>7.</td>
<td>Urban 2</td>
<td>2.179</td>
<td>2.182</td>
<td>2.191</td>
<td>2.226</td>
</tr>
<tr>
<td>8.</td>
<td>Urban 3</td>
<td>1.874</td>
<td>1.874</td>
<td>1.874</td>
<td>1.908</td>
</tr>
</tbody>
</table>

Source: Data processed by researchers, 2022.
Note: Sim 01: The provision of the BST Covid-19 existing.
Sim 02: The provision of the BST Covid-19 is doubled for urban household.
Sim 03: The provision of the BST Covid-19 is five times for urban household.
Sim 04: The provision of the BST Covid-19 existing plus urban household empowerment.

Simulation 01 (sim 01) shows that households in rural areas have the highest benefit, especially farmers’ households (Rural 1). This finding confirms the initial assumption that the provision of BST Covid-19 with the same index tends to be biased toward improving household welfare in rural areas compared to urban areas.

Meanwhile, simulation 02 (sim 02) showed improved welfare for urban households when the index doubled. At least the average welfare gap for urban households is smaller than in sim 01. It means that sim 02 further confirms two things, namely (1) the alleged higher living burden of the urban household than rural household is validated and (2) indications that the BST Covid-19 index so far was determined without considering the level of expenditure both in urban and rural areas.

The increase in the BST Covid-19 index to IDR600 thousand per KPM for urban households will provide more expansive consumption space. Expenditure per month for urban households reached IDR1.39 million, with the share of spending on food amounting to 45.90 percent (Badan Pusat Statistik, 2021b). Therefore, doubling the BST Covid-19 index will equal the minimum expenditure for average food consumption (staple food), IDR637.13 thousand per month. This finding aligns with the recommendations of research results from Roziqin et al. (2021). However, it is not specific to BST Covid-19, which explains that the provision of social assistance should pay attention to the characteristics of the recipient so that it would be meaningful in dealing with crises.

The appropriate or even fair BST Covid-19 index is still being debated until now—the nature of social assistance, which is relatively difficult to measure. In several areas in Indonesia, such as in Tangerang-Banten and Tanah Laut-South Kalimantan, the BST Covid-19 index is considered by the households to be relatively "small" to support the daily needs (Muthiah, 2021; Nasrullah & Annisa, 2021). According to the Director of the Center of Economic and Law Studies (Cellos), the BST Covid-19 index did not reflect the crisis. So, the BST Covid-19 index is recommended at IDR1 million.
to IDR 1.5 million per KPM per month (Rosana, 2021). In this case, Castañeda (2010) stated that the provision of the amount of social assistance should consider two things; namely, (1) not be too high so as not to hinder people's efforts to find work or (2) not too low so that it does not affect the welfare. In some countries, the social assistance index generally reaches 12-20 percent of the average income of these low-income families.

The result of simulation 03 (sim 03) indicates an increasingly convergent level of welfare between the urban and rural. These results illustrate that the social assistance index, which tends to increase linearly, is positively related to the level of household welfare. Restrictions on the social assistance index increase usually come from the government's budget constraints. Unfortunately, in the CGE Model, these conditions are not elaborated further. Once again, a BST Covid-19 index that is too large can potentially stimulate unproductive conditions (laziness to find a job) for the people being helped.

The result of simulation 04 (sim 04) reveals that household welfare in urban conditions is better than simulations 01, 02, and 03. This phenomenon implies that social assistance is not the only way to improve household welfare, especially in urban areas. Combining social assistance with other programs or policies will give maximum results, such as providing entrepreneurship through business incubators, empowering MSMEs in urban areas through financing and capital, developing and expanding Job Training Centers (BLK), etc. According to TNP2K & Australian Government (2020), the government needs to formulate a policy or social assistance program for urban areas during the Covid-19 pandemic, one of which is cash-intensive activities (PKT).

Based on these results of simulations, it generally shows that BST Covid-19 can improve household welfare, both in urban and rural areas, by varying amounts. The BST Covid-19 enhances the welfare of poor households (Urban 1-2 and Rural 1-3) and households with higher incomes (Urban 3 and Rural 5). The welfare improvement is because of the increasing income of poor households in urban and rural areas. It will then escalate people's purchasing power to access consumption (demand side) of food/nutrition, health, education, social services, and more savings in the short and long term. The accumulation of these transmissions will increase household productivity (supply-side). Figure 2 presents the message theoretically by adopting from Arnold et al. (2011).
There are two important notes related to the BST Covid-19 on household welfare level, namely the issue of (1) the breadth of the scope of PKM and the existence of the middle-class group and (2) assumptions when conducting policy simulations. First, the breadth of the community income deciles covered by the BST Covid-19 has the aim of helping more people who are affected by Covid-19. The provision of social assistance is intended for the poor and the middle-class, who are vulnerable to being downgraded due to the pandemic (aspiring middle-class).

According to the World Bank (2019) report, the share of the middle-class group reached 52 million people or 20 percent of the total population, while the aspiring middle-class amounted to 115 million people or almost half of the total population of Indonesia. Although the middle-class share is only 20 percent, they support 43 percent of total household consumption in Indonesia. It makes the middle-class group play a crucial role in Indonesia's economy. Unfortunately, although the middle-class group has a better survival ability than the poorer group, the Covid-19 pandemic impacts the middle-class workforce, except in the construction sector. More than half of the middle-class group are early in their careers, so savings are limited. Therefore, when there is a prolonged crisis, it will increase vulnerability. On the other hand, the middle-
class group is excluded from the government's social protection program data (Rahman et al., 2020).

The second note assumes that the BST Covid-19 is distributed effectively and efficiently from the various simulations. There are still many obstacles and challenges in distributing social assistance; for example, miss-target recipients, not evenly distributed, the politicization of social assistance, and misuse of social assistance funds (Noerkaisar, 2021). Data that is not yet integrated and comprehensive and weak supervision tend to encourage corrupt behavior or rent seeking. The report from the Ministry of Social Affairs summarizes three things on how to distribute social assistance effectively, namely related to (1) social assistance data, (2) social assistance distribution system or process, and (3) social assistance coordination and socialization (Karyono, 2021). The three are described as follows: (1) Data. Improvements to the proposed stages have been implemented and integrated with the Next Generation Social Welfare Information System (SIKS-NG). The relatively fast data submission time limit causes data updates to be not optimal. This condition becomes more complex when there are problems (a) the village government does not update the data because of a lack of information for changing the KPM data, (b) the distribution of social assistance through Himbara is generally unknown to the KPM concerned or the RT/RW so that causing overlapping of data with other assistance, (c) data verification is carried out only to the extent of administrative and matching with PKH, BPNT, and village cash direct cash assistance data, either manual or system and (d) there are still KPM BST Covid-19 who receive assistance from the province, district/city and village cash direct cash assistance (BLT Dana Desa); (2) Distribution. BST Covid-19 distribute through PT. Pos Indonesia. Some problems that arise are (a) KPM cannot access the first phase of social assistance because of absence, (b) distribution through Himbara is unknown to the KPM concerned and the RT/RW, (c) duplicate data distributed through PT. Pos Indonesia and Himbara so that the BST Covid-19 is temporarily postponed until it is clear, (d) KPM already received the village cash direct cash assistance due to the delay in distributing the BST Covid-19, (e) the local government wanted data cleaning, so that PT. Pos Indonesia did not distribute it beforehand, and (f) the distribution problems experienced by PT. Pos Indonesia is the KPM's Population Identification Number (NIK) which is different from the NIK on the Indonesian Identity Card (KTP); KPM does not comply with the schedule, distribution information does not reach KPM, and there are citizen protests; (3) Coordination and socialization. Even though the social assistance budget has been allocated, the key to the program's success lies in communication, collaboration, and coordination between multi-stakeholders (Afriyanti et al., 2020; Barany et al., 2020; Fitria et al., 2021; Hirawan, 2020). Problems that arise in coordination and socialization, among others, (a) differences in coordination between local governments and social assistance distributors, where there are regions that coordinate well with PT. Pos Indonesia and Himbara, but some others don't, (b) all social services have received the program information, but there is no guarantee that it will reach the village level,
(c) the social services are not aware of the extension of the BST Covid-19 program, including changes in the index, and (d) limited time and funds hindering socialization. According to Cooper (2020), considering the varied impacts of cash transfers during program design and evaluation is vital to target cash transfer programs better and generate more accurate data on their effects.

**Impact of BST Covid-19 on Indonesia's Economic Performance**

Table 3 shows the impact of the BST Covid-19 on Indonesia’s performance economy. Knowing these impacts at the macro level is no less important than at the household level. The BST Covid-19 is one of the policies that will affect government spending. The government provides the expenditure of cash transfers to the community as a social safety net. The expansionary fiscal policy hopes to maintain purchasing power and, at the same time, maintain public health due to the impact of Covid-19. However, in the long term, the fiscal stimulus will also spread to the production side of the economy. The social assistance provided in cash allocation is relatively difficult to control and highly dependent on the conditions of each community. Not infrequently, the BST Covid-19 is used to increase people's business capital. Therefore, the return from the distribution of BST Covid-19 can improve economic performance, either through corrections in terms of consumption, investment, trade performance, or government spending.

<table>
<thead>
<tr>
<th>No.</th>
<th>Indicator</th>
<th>Basic Value (IDR Billion), 2010=100</th>
<th>Sim 01 (Δ%)</th>
<th>Sim 02 (Δ%)</th>
<th>Sim 03 (Δ%)</th>
<th>Sim 04 (Δ%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>GDP</td>
<td>10,722,442.70</td>
<td>-1.223</td>
<td>-1.223</td>
<td>-1.223</td>
<td>-1.239</td>
</tr>
<tr>
<td>2.</td>
<td>Consumption</td>
<td>5,780,218.14</td>
<td>-0.562</td>
<td>-0.562</td>
<td>-0.562</td>
<td>-0.573</td>
</tr>
<tr>
<td>3.</td>
<td>Inflation</td>
<td>-</td>
<td>1.089</td>
<td>1.089</td>
<td>1.089</td>
<td>1.127</td>
</tr>
<tr>
<td>4.</td>
<td>Gov. expenditure</td>
<td>872,558.31</td>
<td>-0.562</td>
<td>-0.562</td>
<td>-0.562</td>
<td>-0.573</td>
</tr>
<tr>
<td>5.</td>
<td>Investment</td>
<td>3,419,704.20</td>
<td>-0.450</td>
<td>-0.450</td>
<td>-0.450</td>
<td>-0.454</td>
</tr>
<tr>
<td>6.</td>
<td>Export</td>
<td>2,092,037.95</td>
<td>-1.887</td>
<td>-1.887</td>
<td>-1.887</td>
<td>-1.908</td>
</tr>
<tr>
<td>7.</td>
<td>Import</td>
<td>1,740,166.33</td>
<td>1.879</td>
<td>1.879</td>
<td>1.879</td>
<td>1.899</td>
</tr>
</tbody>
</table>

Source: Data processed by researchers, 2022.

Note:
- Sim 01: The provision of the BST Covid-19 existing.
- Sim 02: The provision of the BST Covid-19 is doubled for urban household.
- Sim 03: The provision of the BST Covid-19 is five times for urban household.
- Sim 04: The provision of the BST Covid-19 existing plus urban household empowerment.

Barrientos (2012) tries to explain the basic framework of social assistance transmission until it spreads to GDP. The social assistance will impact the beneficiary group and the non-beneficiary group. For the beneficiary group, the social transfer will open up barriers that limit the productivity of the beneficiary’s household. Social assistance will open opportunities to (1) eliminate credit constraints, (2) provide greater certainty and security in consumption and investment, and (3) facilitate increased allocation of household resources where social assistance can help overcome restrictions due to the imposition of costs. The resultant of all three will encourage increases in human capital, accumulation of physical and financial assets, local
Cash social assistance Covid-19, welfare, and (Hermawan, Widyarini)

Then the four outcomes will contribute to economic growth linearly, except for the labor supply. On the other hand, non-beneficiaries are visible on the taxation side (assuming that the source of social assistance financing only comes from taxes). Furthermore, taxation will be a disincentive to the supply of labor and savings, thereby affecting economic growth (Figure 3).

Based on the simulation results, the provision of BST Covid-19 negatively impacts the national economy's performance. Simulation 04 has the lowest economic impact compared to other simulations. This condition explains that the existing BST Covid-19 provision, even followed by various efforts to increase the skills or competencies of households or workers in urban areas, can still not encourage an increase in GDP in the short term. The transmission analyzes starts from the increase in government spending due to social transfers, where an expansionary fiscal policy is expected to directly improve household welfare by maintaining purchasing power. It is critical to maintaining momentum when Indonesia's GDP structure is dominated by aggregate demand. If the government concentrates on providing BST Covid-19 on this side, it will reduce the deepening decline in GDP. Nevertheless, the BST Covid-19 only helped briefly and temporarily for households because the soaring inflation, which was mostly driven from the supply-side, had eroded people's purchasing power. Therefore, welfare that increases at the household level in the short term becomes pseudo. Households cannot yet utilize BST Covid-19 for their activities with a long-term perspective, such as investment and trade. The CGE Model captured where exports and investment decreased.

<table>
<thead>
<tr>
<th>Beneficiaries</th>
<th>Outcome:</th>
</tr>
</thead>
<tbody>
<tr>
<td>Growth-mediating process:</td>
<td></td>
</tr>
<tr>
<td>1. Credit and liquidity constraints</td>
<td>1. Asset protection and accumulation (+)</td>
</tr>
<tr>
<td>2. Consumption and asset security</td>
<td>incl. human capital (+)</td>
</tr>
<tr>
<td>3. Household resource allocation</td>
<td>2. Labor supply (-/+)</td>
</tr>
<tr>
<td>3. Local economy effects</td>
<td>3. Local economy effects (+)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Non-beneficiaries</th>
<th>Expected direction of growth effects</th>
</tr>
</thead>
<tbody>
<tr>
<td>Taxation</td>
<td></td>
</tr>
<tr>
<td>1. Saving</td>
<td>( - )</td>
</tr>
<tr>
<td>2. Labor supply</td>
<td>( - )</td>
</tr>
</tbody>
</table>

Source: Barrientos (2012)

Figure 3
Transmission Social Assistance on Economic Growth

In addition to the positive sign macro indicators, two other macro indicators show an increase but need to be monitored: inflation and imports. The increase in these two variables cannot always be interpreted as a "bad" indication for an economy. For example, price increases in general that are still maintained (usually below 30 percent) are relatively tolerable by consumers and a positive signal for producers to produce.
Another variable is import, where imports are still needed at a particular stage to support the growth and development of domestic industries, including accelerating technology transfer.

As one of the most significant components of GDP, consumption still shows a negative impact in the four simulation results, respectively 0.56 percent, 0.56 percent, 0.56 percent, and 0.57 percent. This finding is in line with the conditions reported by Badan Pusat Statistik, (2020a). However, they differ in magnitude, where household consumption experienced the deepest contraction to -6.53 percent in the second quarter of 2020 at the start of the Covid-19 pandemic. After that, it began to show gradual improvement. Karyono (2021) said that the improvement in household consumption, especially for food, is supported by the distribution of social assistance, which has started to run to maintain purchasing power. Unfortunately, the BST Covid-19 is only temporary and situational, depending on the government budget. According to Sparrow et al. (2020), the Indonesian government currently focuses on handling short-term recovery conditions and does not yet have a medium and long-term strategy to deal with the Covid-19 pandemic. In fact, according to Yusuf (2021) prediction, intense interventions (such as an effective PSBB) will reduce economic growth in 2020 to 1.0 percent without a fiscal stimulus and 1.8 percent with a fiscal stimulus. However, in the long term (2019-2030), an intense intervention will result in much higher economic growth (5.1-5.2 percent) than the minimal intervention scenario (4.8 percent). Alternatively, the value of the economic loss from the strong intervention strategy is relatively much lower than that from the minimal intervention scenario.

CONCLUSION, LIMITATIONS, AND SUGGESTIONS

BST Covid-19 is essential for households experiencing economic pressures affected by the Covid-19 pandemic. The provision of BST Covid-19 positively impacts household welfare, both in urban and rural areas. Differentiation of the BST Covid-19 index that considers households’ economic burden can provide a better sense of justice while mitigating new challenges due to the "rural" phenomenon. In urban areas, doubling the BST Covid-19 index will give household welfare benefits closer to rural areas.

The positive impact of the BST Covid-19 at the household level was inconsistent when viewed at Indonesia's economic performance in the short term. There are indications that the BST Covid-19 index is not large enough, making the impact of social assistance seem short and temporary so that it evaporates when disaggregated at the macroeconomic level. This condition is exacerbated by limited fiscal space to help diversify aid or other programs. It also confirms that the BST Covid-19 is "one size does not fit all" to sweep the welfare issue during the Covid-19 pandemic.

In the future, it is still possible to have BST Covid-19 when the pandemic
becomes endemic or provide BST for similar cases. Policy recommendations for increasing the benefits of the BST Covid-19 include: (1) the difference in the magnitude of the BST Covid-19 index for urban and rural households. This condition requires integrated data between DTKS and population data (Dukcapil), (2) the provision of BST Covid-19 combined with more comprehensive and systematic community empowerment programs or policies, both improving skills or competencies of human resources, scaling up MSMEs level, etc., and (3) good public communication between the government and the community must be established. It includes whether or not the government will provide the BST Covid-19 in the future. Asymmetric information becomes a disincentive for households in determining their decisions, including the potential to spread to other issues.

Several inputs for the improvement of further research with the same nuance, namely (1) data and specifications on the RDCGE Model need to be calibrated so that the simulation results become more precise in describing the more precise BST Covid-19 program, (2) the simulation in this study assumes that the BST Covid-19 can be distributed effectively and efficiently, even though it is not, and (3) other micro approaches are needed, namely household analyzes with specific sectors (agricultural and non-agricultural). It will capture the dynamics of household behavior more clearly.

REFERENCES


transfers-proceedings-regional-workshop.


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