The Impact Of Growth Of Consumption Expenditure On Indonesia's Economy In The Time Of Covid-19

Patta Tope

Faculty of Economics and Business
Tadulako University
Indonesia
patta.tope@gmail.com

Abstract— **As a result of COVID-19, Indonesia entered an economic recession. This is in line with the performance of economic growth which has contracted twice in a row. In the third quarter of 2020, Indonesia's economy grew -3.49 percent, continuing the economic rate in the second quarter of 2020 which was recorded at minus 5.32 percent. This study aims to determine the effect of household consumption expenditure and consumption expenditure of non-profit institutions serving households in each province on Indonesia's economic growth during the COVID-19 era. The method used is multiple regression using panel data in 34 provinces in Indonesia during the quarter-I, quarter-II and quarter-III of 2020. The results of this study indicate that household consumption expenditure and consumption expenditure of Non-profit Institutions serving households have a very strong positive effect on economic growth in 34 provinces in Indonesia, so that the two This variable must continue to be increased to overcome the economic crisis in the COVID-19 era.**

Keywords— *economic growth, consumption expenditure, COVID-19*

I. INTRODUCTION

The crisis due to the COVID-19 pandemic hit the Indonesian economy, causing an economic crisis. Restrictions on activities in various regions have put the Indonesian economy into recession. This is in line with the performance of economic growth which has contracted twice in a row. In the third quarter of 2020 the Indonesian economy grew -3.49 percent, continuing the economic rate in the second quarter of 2020 which was recorded at - 5.32 percent (BPS, 2020). Household consumption, as the main pillar of the economy, slowed down significantly, which in turn affected economic performance. The economic turmoil caused by the COVID-19 pandemic has hit household consumption or purchasing power which is a 60 percent support for the economy, falling quite deeply (Duffin, 2020).

Even though the household sector is the smallest and most important economic actor, considering all economic activities start there. Indonesian households are affected by two sides simultaneously, namely a contraction in income and limited space for consumption. Income contraction occurs due to layoffs, reduced salaries, and decreased operating profits (Astuti and Mahardhika, 2020). Meanwhile, the limited space for consumption is partly due to restrictions on community mobility through large-scale social restrictions (LSSR).

Based on constant prices in 2010, the Central Statistics Agency (BPS, 2020) noted that the growth in year-on-year (y-o-y) household consumption expenditure in the first quarter of 2020 was 2.83 percent, then contracted in quarter-I by -5.52 percent. The contraction of growth in household consumption expenditure continued in the third quarter of 2020 amounting to -4.04 percent. The decline in household consumption growth in the third quarter of 2020 was due to the decline in consumption growth from food and beverages, apart from restaurants by -0.69 percent, from clothing, footwear and care services by -4.27 percent, from transportation and communication by -11.56 percent, from restaurants and hotels by - 10.90 percent and from other consumptions of -2.04 percent.

Apart from household consumption, consumption expenditures for Non-Profit Institutions Serving Households (NPISH) have an important role in the Indonesian economy (Badan Pusat Statistika, 2020). NPISH is a non-profit institution that provides goods and services for free (or at non-market prices) to its members or households and is not controlled by the government (Tope, 2019). In previous years, this institution contributed quite a lot to the economic growth of every province in Indonesia.

Unfortunately, NPISH consumption expenditure has also been heavily influenced by the outbreak of COVID-19. As a result, NPISH consumption spending growth in the first quarter of 2020 contracted -4.38 percent. This condition continued in the second quarter with a growth of -7.14 percent. In the third quarter of 2020, NPISH spending growth still contracted by -1.47 percent (BPS, 2020). Therefore, it is very interesting to observe how the impact of growth in household consumption expenditure and NPISH consumption growth affected Indonesia's economic growth during the current COVID-19 period.

II. LITERATURE REVIEW

Economic growth

One of the oldest theories of economic growth that have existed since the 18th century is the classical theory. Adam Smith (Ashraf, Camerer and Loewenstein, 2005), a prominent figure who is often associated with this theory, has the opinion that the economy of the population in a country will be able to reach its highest point through the liberal system. The system consists of two main elements, namely population growth and output growth. However, the initial concept of this theory was challenged by other figures such as David Ricardo (Dorfman, 1989). He believes that population growth does not actually have a positive influence on national economic growth. On the contrary, it

will only increase the number of productive workforce so that it can have an impact on reducing workers' wages.

Robert Lucas and Paul Romer (Romer, 1990), Nobel Prize winners in economics, developed a theory that focuses on the cycle of human resources, which are the main capital to increase production and the national economy. A workforce who has broad insight, higher education, and professional training can accelerate industrial and technological development. As a result, national production activities could also be increased more rapidly (Tope et al., 2022).

Karl Bucher (Spittler, 2018) put forward his theory that national economic growth is influenced by the relationship between producers and consumers through the levels of closed households, cities, communities, to the world. Not much different from Bucher's theory, Werner Sombart also categorizes the role of society in economic growth, from the closed economy stage, the industrial growth stage, to the capitalist stage.

Consumption Theory

If translated into a macroeconomic explanation, consumption can be interpreted as a macroeconomic variable which is denoted by the letter "C" which stands for consumption. Consumption here is categorized into the classification of household consumers, namely spending for goods or services with the aim of meeting needs or making purchases based on the income that is owned or earned. John Maynard Keynes (Keynes, 2018) argues that the amount of household consumption depends on the income generated. The ratio between the amount of consumption and income is called by Keynes as Marginal Propensity to Consume (MPC). This MPC is used to measure that the greater the income you have, the higher the level of household consumption will be, and vice versa.

Franco Modigliani (Ando and Modigliani, 1963) put forward the Life Cycle Hypothesis theory which explains that the amount of consumption does not only depend on the amount of income, but also based on the amount of wealth owned, where this wealth can be generated through savings, investment, income provision, inheritance, and so on. James Dusenberry (Bentzel and Dusenberry, 1950) argues that the amount of consumption of a person and society depends on the highest amount of income that a person or society has ever had or achieved.

NPISH Consumption Expenditures

NPISH is part of the Non-Profit Institution (NPI) as a whole ("Households and non- profit institutions serving households (NPISH)", 2011). In accordance with their function, some NPIs serve households and some are non-households (Fianto, Gan and Hu, 2019). Meanwhile, what is meant by NPISH is an NPI that specifically serves households. NPISH (Amalia, 2019) is an institutional unit that carries out production, consumption and asset accumulation activities. Its existence is recognized by law or society, separate from other people or entities that own or control. In relation to the government, NPISH is a partner in overcoming various social problems such as law enforcement, consumer protection, poverty alleviation and environmental preservation. NPISH consumption expenditures are various expenditures by institutions for the procurement of goods and services, which in principle have a function in serving households.

NPISH consumption expenditure is classified as part of final consumption expenditure aimed at maintaining the sustainability of the institution's activities (Badan Pusat Statistika, 2020). A non-profit institution serving households is a legal entity, principally involved in service activities or providing services to households (non-market). All costs for the organization's activities come from donations or household donations . Therefore, almost all institutional activities are designed and controlled by households (Otoritas Jasa Keuangan, 2013). Generally, workers who are active in institutional activities are unpaid workers (volunteers).

III. Method

To analyze the effect and link between the growth in household consumption expenditure (C) and the growth in consumption expenditure of Non-Profit Institutions Serving Households (NPISH) on economic growth (EG) in 34 provinces in Indonesia during the COVID-19 period, multiple linear regression studies were used. In an effort to obtain the results of the analysis, the growth in consumption expenditure (C) and the growth in consumption expenditure of NPISH is expected to increase economic growth during an economic recession in Indonesia. This study will use data for the first quarter, second quarter and third quarter 2020 for 34 provinces with the following formulations:

$$Y = f(X1 + X2)$$
$$Y = \alpha + \beta 1\, X1 + \beta 2\, X2 + \mu i$$

Where:

Y	= Percentage of economic growth (EG)
X1	= Percentage of household consumption growth (C)
X2	= Consumption Percentage Growth for (NPISH)
β1 and β2	= Regression coefficient

The coefficient of each variable

α = Constant

μi = Residue

Hypothesis testing is done through statistical tests on multiple regression. To prove the hypothesis whether or not the influence of C and NPISH on EG is significant or strong, the t-test and F-test are carried out.

IV. Result and discussion

Economic growth

In the first quarter of 2020, negative economic growth occurred in two provinces, namely Bali Province -1.17 percent and DI Yogyakarta at -0.16 percent. In the second quarter of 2020, all provinces experienced negative growth,

except West Papua which grew 0.53 percent and Papua which grew 0.14 percent. Positive growth in Papua and West Papua Provinces in the second quarter of 2020 was contributed by an increase in copper and gold production in Papua. Meanwhile, in West Papua there is also an increase in the production of Liquefied Natural Gas (LNG). Meanwhile, in the third quarter of 2000, there were only 2 provinces that contributed to positive growth, namely North Maluku Province which grew 6.66 percent and Central Sulawesi which grew 2.82 percent

Household Consumption Growth

In the first quarter of 2020, the growth of household consumption expenditure in all provinces in Indonesia was still positive with an average growth of 4 percent. Meanwhile, in the second quarter of 2020, the growth of household consumption expenditure in almost all regions experienced a contraction, except for Aceh Province which still grew 0.51 percent. In the second quarter of 2020, the average growth of household consumption expenditure in 34 provinces in Indonesia was -4.78 percent. In the third quarter of 2020, the minus growth in household consumption expenditure continued in almost all provinces, except for West Papua province which grew 2.54 percent respectively, North Maluku which still grew 0.18 percent and Riau Islands which also grew positively 0.18 percent. The average growth in household consumption expenditure in the third quarter of 2020 was -3.11 percent.

The growth rate of Indonesia's household consumption expenditure in the first quarter of 2020 was 3.23 percent (y-o-y), while in the second quarter of 2020 it contracted by -5.29 percent and in the third quarter of 2020 household consumption contracted by -3.48 percent.

NPISH Consumption Expenditure Developments

In the first quarter of 2020, positive NPISH consumption expenditure growth only occurred in six provinces, namely Maluku with 7.66 percent growth, North Kalimantan with 1.16 percent growth, Central Kalimantan with 2.62 percent growth, West Kalimantan with 0.75 growth. percent, Banten with a growth of 3.14 percent and the Bangka Belitung Islands with a growth of 2.16 percent. In the second quarter of 2020, NPISH consumption expenditure growth in all provinces contracted, while in the third quarter of 2020 there were 7 provinces that recorded positive NPISH consumption expenditure growth, namely Maluku with 1.08 percent growth, Central Sulawesi with 1.85 growth. percent, East Nusa Tenggara with 1.68 percent growth, East Java with 2.96 percent growth, Jambi with 2.85 percent growth, Riau with 7.43 percent growth, and Aceh with 4.18 percent growth.

The growth rate of Indonesia's NPISH consumption expenditure in the first quarter of 2020 was -4.38 percent (y-o-y), while in the second quarter of 2020 it contracted by -7.14 percent and in the third quarter of 2020 the growth in NPISH consumption expenditure contracted by -1.47 percent.

V. DISCUSSION

The calculation results show that the t-statistic value of the X1 variable is 50.59 with a probability of 0.01. The t-statistic value obtained is greater than the t-table value and the probability of the t-statistic is smaller than 0.01. Then H-1 is accepted and significant, so it can be concluded that the growth in household consumption expenditure has a positive effect on economic growth in 34 provinces in Indonesia in the first, second and third quarter of 2020. Thus the independent variable is significant, and has a probability value of t-statistical smaller than the real level used (α = 1%). The value of the X2 variable is 0.057 with a probability of 0.0146. The t-statistic value obtained is greater than the t-table value and the probability of t-statistic is smaller than 0.05, and H-1 is accepted and significant, so it can be concluded that the increase in consumption expenditure growth for Non-profit Institutions serving Households (NPISH) has a positive effect on economic growth in 34 provinces throughout Indonesia.

In the quantitative analysis using the panel data method, the results of the F- test are also illustrated. In this study the probability value of F-stats 29.89 is smaller than the alpha (α) value of 1 percent, so it can be said that overall the independent variables growth of household consumption and consumption growth of non-profit institutions serving households in the model have a significant effect. From the estimation results obtained R^2 is 90.92, meaning that the regression equation model is able to explain the relationship between the dependent variable (economic growth) and the independent variable (growth in household consumption and growth in non-profit institutions serving households) by 90.92 percent. Meanwhile, the remaining 9.18 percent is explained by other variables not included in this model.

The Effect of Household Consumption on Economic Growth

Based on the results of the calculation, it can be seen that household consumption growth has a positive correlation to economic growth. Each 1 percent growth in household consumption expenditure will result in an increase in economic growth of 0.80 percent. The increase in household consumption expenditure during the COVID-19 period is expected to sustain economic growth during a recession. The positive economic growth in the first quarter of 2020 was 3.23 percent due to the positive growth in household consumption expenditure in the first quarter of 4.00 percent. However, in the second quarter, Indonesia's economic growth contracted by -5.29 percent as a result of contraction in the growth of household consumption expenditure by -4.78 percent. Negative economic growth continued in the third quarter of 2020 amounting to -3.48 percent due to the contraction of household consumption growth of -3.11 percent.

Encouraging household consumption will be carried out by the government in 2020, by allocating funds of Rp.203.9 trillion for Social Protection. The goal of Social Protection is to increase the purchasing power of low-income people while at the same time encouraging public consumption. Social protection is provided, among others, through Social Assistance, Direct Cash Assistance, Village Funds, electricity subsidies and the Family Hope Program (Kementerian Keuangan Republik Indonesia, 2020). The government also provides direct cash assistance and the Social Security Administration for Employment of Rp.600,000 for private employees who have a salary of Rp.5 million/month and below.

It is hoped that the Social Protection Scheme above will run well and be right on target. Although it is difficult to achieve it, it is expected that the deviation will not exceed 5%. Likewise, the time for distribution can be done immediately, given the urgent needs of the community and the approaching end of the fiscal year. The realization of the distribution is also expected to be above 95%. The distribution of Social Protection included in the type of Social Assistance Expenditures in the state revenue and expenditure budget is relatively easy. Disbursement procedures should be simplified without losing accountability.

The higher the growth in household consumption expenditure carried out during the COVID-19 period, the more new businesses will also emerge, such as Micro, Small and Medium Enterprises, medical devices, and housing which are several business sectors that are expected to grow during the pandemic. The number of businesses that have sprung up will open up more jobs, which will clearly support the growth of consumer purchasing power as well as household consumption.

The Influence of NPISH Consumption Expenditure Growth

Based on the results of the calculation of the regression analysis, the X2 value is 0.057, which means that each 1 percent increase in NPISH consumption expenditure will increase economic growth by 0.057 percent. Based on these results, the growth in NPISH consumption expenditure can support the national and regional economies. For this reason, NPISH consumption expenditure must be boosted so that it can contribute to the Indonesian economy, especially during the COVID-19 period. The holding of Regional Head Elections at the provincial and district-city levels will continue to be held in 2020 even though COVID- 19 has not yet subsided. The lively Regional Head General Election which is expected to increase NPISH consumption expenditure significantly so as to provide vitamins for the economy which has been sluggish due to the COVID-19 pandemic since last March, has no significant impact on economic growth because it was held in the middle of the COVID-19 pandemic. This also causes the X2 value (only 0.057) to have quite a small effect on economic growth during the pandemic.

The tradition of regional head general elections, such as the campaign to mobilize the masses to distribute t-shirts and basic necessities for regional head candidates for free, was greatly reduced at this celebration, even though there were 270 regional head elections with details of 9 provinces, 224 regencies and 37 cities (Marisa et al., 2020). The general election for regional heads this year which uses a lot of digital media to avoid the crowd so that it has a smaller direct influence on the community. The things mentioned above have made the average growth rate of Indonesia's NPISH consumption expenditure in the first quarter of 2020 to -4.38 percent (y-o-y), while in the second quarter of 2020 it contracted by - 7.14 percent. In the third quarter of 2020, NPISH consumption expenditure growth contracted by - 1.47 percent.

VI. Conclusion

First, in the second quarter of 2020 the Indonesian economy was recorded at -5.32 percent, and in the third quarter of 2020 the rate of economic growth in Indonesia was recorded at -3.49 percent. Thus, Indonesia finally officially experienced an economic recession because the performance of economic growth that had contracted for two consecutive quarters. This recession is the result of the corona virus pandemic that has hit almost all countries in the world including Indonesia.

Second, the growth in household consumption expenditure is significant at the level of 99 percent which affects economic growth in 34 provinces in Indonesia in the first quarter, second quarter and third quarter of 2020.

Third, the growth of consumption expenditure for non-profit institutions serving households is significant at the level of 95 percent affecting economic growth in 34 provinces in Indonesia in the first quarter, second quarter and third quarter of 2020.

Policy Implications

The process of economic recovery that can be carried out at this time is by relying on increasing household consumption expenditure and increasing consumption expenditure for Non-profit Institutions serving households until 2021. This process must be continued to lift our economy out of stagnation and in time it will running normally. With the right economic policies and a strong and more sustainable fiscal stimulus, it will bring the economy to a normal direction.

References

[1] Amalia, E. (2019) „Good governance for Zakat institutions in Indonesia: A confirmatory factor analysis", Pertanika Journal of Social Sciences and Humanities.

[2] Ando, A. and Modigliani, F. (1963) „The "Life Cycle" Hypothesis of Saving: Aggregate Implications and Tests", The American Economic Review.

[3] Ashraf, N., Camerer, C. F. and Loewenstein, G. (2005) „Adam Smith, behavioral economist", in Journal of Economic Perspectives. doi: 10.1257/089533005774357897.

[4] Astuti, P. B. and Mahardhika, A. S. (2020) „COVID-19: How does it impact to the Indonesian economy?", Jurnal Inovasi Ekonomi. doi: 10.22219/jiko.v5i3.11751.

[5] Badan Pusat Statistika (2020) „Statistik Indonesia 2020 Statistical Yearbook of Indonesia 2020", Statistical Yearbook of Indonesia.

[6] Bentzel, R. and Dusenberry, J. S. (1950) „KonsumtionsteoriIncome, Saving and the Theory of Consumer Behavior", Ekonomisk Tidskrift. doi: 10.2307/3437909.

[7] BPS (2020) „Berita Resmi Statistik", Bps.Go.Id.

[8] Dorfman, R. (1989) „Thomas Robert Malthus and David Ricardo", Journal of Economic Perspectives. doi: 10.1257/jep.3.3.153.

[9] Duffin, E. (2020) „Impact of the coronavirus pandemic on the global economy - Statistics & Facts", Statista.

[10] Fianto, B. A., Gan, C. and Hu, B. (2019) „Financing from Islamic microfinance institutions: evidence from Indonesia", Agricultural Finance Review. doi: 10.1108/AFR-10-2018- 0091.

[11] „Households and non-profit institutions serving households (NPISH)" (2011) United Kingdom National Accounts - The Blue Book. doi: 10.1057/ukna.2011.12.

[12] Kementerian Keuangan Republik Indonesia (2020) „Sri Mulyani to Reallocate Economic Recovery Budget", Kementrian Keuangan Republik Indonesia.

[13] Keynes, J. M. (2018) The general theory of employment, interest, and money, The General Theory of Employment, Interest, and Money. doi: 10.1007/978-3-319-70344-2.

[14] Marisa, H. et al. (2020) „The Regional Head Elections (Pilkada) 2020 During Covid-19 Pandemic: A Projection", Journal of Election and Leadership. doi: 10.31849/joels.v1i2.4424.

[15] Otoritas Jasa Keuangan (2013) „Developing Indonesian Financial Literacy Index", DEFINIT.Asia.

[16] Romer, P. M. (1990) „Human capital and growth: Theory and evidence", Carnegie-Rochester Confer. Series on Public Policy. doi: 10.1016/0167-2231(90)90028-J.

[17] Spittler, G. (2018) „Bücher, Karl (1847–1930)", in The International Encyclopedia of Anthropology.

[18] Tope, P. (2019) „ANALYSIS OF INCOME GROWTH AND EVALUATION OF ECONOMIC DEVELOPMENT IN CENTRAL SULAWESI, INDONESIA", Russian

[19] Journal of Agricultural and Socio-Economic Sciences. doi: 10.18551/rjoas.2019- 08.28.

[20] Tope, P. et al. (2022) „Social Economic Analysis of Disaster Recovery Index Sigi District CT", in SARL., T. A. P. by A. P. (ed.) Advances in Social Science, Education and Humanities Research, volume 674 2021 Tadulako"s International Conference on Social Sciences (TICoSS 2021). Palu: Atlantis Press, pp. 36–39. doi: https://doi.org/10.2991/assehr.k.220707.009.