Poverty and Shared Prosperity: Challenges and Opportunities in the Post-Pandemic in Indonesia

Wahyu Ardianto[1], Bambang Hadi Prabowo[2], Jujun Harjuni[3]
[1,2,3]STIE Jaya Negara Tamansiswa Malang, Indonesia

Abstract

This article analyzes the impact of the COVID-19 pandemic on poverty and shared prosperity in Indonesia, a diverse and populous country in Southeast Asia that has achieved remarkable economic growth and poverty reduction since the late 1990s. The article draws on the World Bank's Poverty and Shared Prosperity 2022 report, which examines how fiscal policy can help correct course and accelerate poverty reduction in the post-pandemic world, by following four principles: progressive, efficient, sustainable, and coordinated. The article also uses a vector autoregression (VAR) model to estimate the effect of poverty headcount ratio (PHR) on four indicators: annual income (ANN), annual savings (ANS), greenhouse gas emissions (GEE), and itself. The article finds that the pandemic has reversed the progress made in reducing poverty and inequality in Indonesia, and that PHR has a positive and significant impact on itself, but no significant impact on the other three indicators. The article concludes that fiscal policy is a key instrument for mitigating the adverse effects of the pandemic and restoring the path of poverty reduction and shared prosperity in Indonesia. The article suggests that policy makers should adopt a comprehensive and context-specific approach to design and implement fiscal policies that are progressive, efficient, sustainable, and coordinated.

Background

Indonesia is a diverse and populous country in Southeast Asia that has achieved remarkable economic growth and poverty reduction since the late 1990s. However, the COVID-19 pandemic has disrupted its progress and posed unprecedented challenges for its development goals. The World Bank's Poverty and Shared Prosperity 2022 report examines how fiscal policy can help correct course and accelerate poverty reduction in the post-pandemic world, by following four principles: progressive, efficient, sustainable, and coordinated (Mackie & Allwood, 2022; Rusminingsih, Askar, Mutia, Fitria, Wahyudi, 2023).

The World Bank and the international development community have made poverty alleviation and equitable economic growth two of their top priorities. To be poor is to be unable to meet your basic needs for nutrition, clothing, housing, medical care, and an education. The term "shared prosperity" is used to describe a country in which the lowest 40% of its population has an increase in income or consumption. Economic growth that benefits all people is essential, as are policies and programmes that effectively lessen people's inequality and vulnerability, if these objectives are to be realised (Yang & Nguyen, 2021; Priyanto, Widarni, & Bawono, 2022).

However, the COVID-19 epidemic has produced tremendous health, social, and economic catastrophes throughout the world, significantly disrupting progress towards these goals. The World Bank's Poverty and Shared Prosperity 2020 study estimates that between 88 and 115 million people would be pushed into extreme poverty as a result of the epidemic, wiping out a decade's worth of progress against poverty. In addition, the epidemic has made preexisting inequities and vulnerabilities worse, especially for women, children, minorities, and individuals living in unstable and conflict-affected environments (Gururaja & Ranjitha, 2022). The Poverty and Shared Prosperity report provides a comprehensive assessment of the impact of the pandemic on poverty and shared prosperity, as well as the fiscal policy responses that have been implemented to mitigate its effects. The report also identifies the challenges and opportunities for correcting course and accelerating poverty reduction in the post-pandemic world (Yiu et al., 2021; Sasongko, Nehruddin, Musriyatun, Siswanto, 2023).

Global efforts to reduce extreme poverty have stalled, according to the research; 7 percent of the world's population, or almost 600 million people, would live in severe poverty in 2030. Global inequality rose again after decades of convergence, the research finds, and within nations, inequality rose in as many as it fell. Worse yet, the analysis shows that the poorest have borne the brunt of disproportionate cutbacks in health and education (Mahembe & Odhiambo, 2018).

The paper asserts that fiscal policy plays a critical role in reversing the trend and achieving the poverty and shared prosperity targets. To affect economic growth and social well-being, governments employ fiscal policy, which involves adjusting taxation and spending. The research evaluates the effectiveness of fiscal policies during the first year of the pandemic in protecting the most helpless populations. Also, it provides fresh and essential insights on the effects of fiscal policy in both crisis and non-crisis situations for 94 countries before the year 2020 by illuminating the effects of taxes, transfers, and subsidies on poverty and inequality (Jaelani, 2017; Irawan, Sasongko, Mukhlis, Yanto, & Wulandari, 2022).

The report identifies few principles for optimizing fiscal policy to help correct course; First, fiscal policy should be progressive, meaning that it should benefit more those who have less. This can be achieved by increasing tax revenues from those who can afford to pay more, such as high-income individuals and profitable corporations, and by expanding social protection programs that target the poor and vulnerable (Warwick et al., 2022). Second, fiscal policy should be efficient, meaning that it should minimize distortions and leakages that reduce its effectiveness. This can be achieved by simplifying tax systems and reducing tax evasion and avoidance, and by improving the design and delivery of transfers and subsidies to avoid wasteful spending and corruption (Heine & Black, 2018)

Third, fiscal policy should be sustainable, meaning that it should maintain fiscal solvency and credibility in the long run. This can be achieved by balancing fiscal stimulus with fiscal consolidation, depending on the economic cycle and debt situation, and by strengthening fiscal institutions and transparency to enhance accountability and trust (Debrun & Jonung, 2019). Fourth, fiscal policy should be coordinated, meaning that it should align with other policies and actors to maximize its impact. This can be achieved by harmonizing fiscal policies across different levels

of government and sectors, and by collaborating with international partners to address global challenges such as climate change, migration, and tax evasion (Domenech & Bahn-Walkowiak, 2019).

By following these principles, fiscal policy can help correct course and accelerate poverty reduction in the post-pandemic world. However, fiscal policy alone is not enough. It needs to be complemented by other policies that promote inclusive and sustainable growth, such as investing in human capital, enhancing productivity and innovation, fostering trade and integration, ensuring environmental sustainability, and preventing and resolving conflicts (Koen et al., 2017.)

Poverty and shared prosperity are not only moral imperatives but also strategic objectives for a more peaceful and prosperous world. The COVID-19 pandemic has posed unprecedented challenges but also created unique opportunities for transforming fiscal policy and achieving these goals. The World Bank is committed to supporting its clients and partners in this endeavor (Ending Extreme Poverty and Sharing Prosperity: Progress and Policies, 2015)

Research Method

We proxied Adjusted net savings variable, Adjusted net national income per capita variable, with the Government expenditure on education variable. For the Poverty headcount ratio at national poverty lines. We use secondary data from the world bank. Our research period is from 2007 to 2020. We use the following equation:

$$ANS_t = \beta_0 + \beta_1 GEE_t + \beta_2 PHR_t + \beta_3 ANN_t + e_t \qquad \text{eql 1}$$
$$GEE_t = \beta_0 + \beta_1 ANS_t + \beta_2 PHR_t + \beta_3 ANN_t + e_t \qquad \text{eql 2}$$
$$PHR_t = \beta_0 + \beta_1 ANS_t + \beta_2 GEE_t + \beta_3 ANN_t + e_t \qquad \text{eql 3}$$
$$ANN_t = \beta_0 + \beta_1 ANS_t + \beta_2 GEE_t + \beta_3 PHR_t + e_t \qquad \text{eql 4}$$

Description:

ANS : Adjusted net savings
GEE : Government expenditure on education
PHR : Poverty headcount ratio at national poverty lines
ANN : Adjusted net national income per capita
β : the magnitude of the effect of causality
e = Error term
t = Time period
eql: equation

Table 1. Variable Description

Variable	Explanation	Data type	Source
Adjusted net savings	Net national savings + education expenditure minus energy depletion, mineral depletion, net forest depletion, and carbon dioxide and particle emissions damage equals adjusted net savings.	Percent	World Bank

3

Government expenditure on education	The percentage of total government spending on all sectors (health, education, social services, etc.) that goes towards education (current, capital, and transfers). It includes government spending that was paid for by foreign aid. The term "general government" is commonly used to encompass all levels of administration.	Percent	World Bank
Poverty headcount ratio at national poverty lines	The national poverty headcount ratio is the number of people as a percentage of the total population that fall below the poverty line in a certain country. Subgroup estimates from household surveys are weighted to account for the total population in order to provide national estimates. The EU-SILC income reference year is the year before to the survey year, thus that is the year that is reported for economies using EU-SILC data.	Percent	World Bank
Adjusted net national income per capita	The term "adjusted net national income" is used to refer to GNI less the use of fixed capital and the use of natural resources.	Percent	World Bank

Result and Discussion

Table 2. Root Test Results

Variabel	Unit Root	Statistics for the Augmented Dickey Fuller	Probability	Description
Poverty headcount ratio at national poverty lines (PHR)	Level	-4.914283	0.0024	Stationary
	First Different	-1.118225	0.6710	Tidak Stationary
Adjusted net national income per capita (ANN)	Level	-100.6319	0.0001	Stationary
	First Different	-83.22502	0.0001	Stationary
Adjusted net savings (ANS)	Level	-1.805789	0.3587	Tidak Stationary
	First Different	-2.605412	0.1207	Tidak Stationary
Government expenditure on education (GEE)	Level	-2.942592	0.0673	Tidak Stationary
	First Different	-4.679701	0.0041	Stationary

*the limit value used at the significance level of 0.05

Based on the findings shown on Table 2. The fact that PHR, ANN, ANS and GEE stationary data are not at the same level, so that the first differencing is put into action. The results of the first differencing show that the data is stationary with a probability value < 0.05. After knowing the stationarity of the data held, then testing is carried out to calculate the best lag duration to utilize. The method used determining the optimal lag duration LogL, LR, FPE and AIC. The smaller the value of LogL, LR, FPE, AIC, the lag is the most optimum lag. The outcomes of the test are shown on the next table

Table 3. Maximum Lag Test

Lag	LogL	LR	FPE	AIC
0	-111.3921	NA	603.2549	17.75263
1	-58.82920	64.69279*	2.567311*	12.12757*

Table 3. Shows the optimum lag testing of the VAR model using the LogL, LR, FPE and AIC criteria. Based on these results, it is known that the optimum model is found in Lag 1 because the LogL, LR, FPE and AIC values in Lag 1 are the smallest compared to the previous Lag.

Table 4. Cointegration Test

Hypothesized at Most	Eigenvalue	Trace Statistic	0.05 Critical Value	Probability
None	0.999773	109.0755	27.58434	0.0000
1	0.874432	26.97380	21.13162	0.0067

| 2 | 0.731377 | 17.08779 | 14.26460 | 0.0174 |
| 3 | 0.674151 | 14.57717 | 3.841466 | 0.0001 |

*Max-eigenvalue test indicates 4 cointegrating eqn(s) at the 0.05 level

The cointegration test results are shown in table 4 above explain that all probability value is below 0.05. It means all the probabilities are significant. Analysis of VAR for identify connection among the researched variables studied that have influence of one variable with other variables in the long term. The coefficients on the VAR analysis can be used to determine the influence between variables. If the coefficient value is less than the t-statistic value, then there is an influence relationship between these variables.

Table 5. VECM Estimation Results

	D(PHR)	D(ANN)	D(ANS)	D(GEE)
D(PHR(-1))	-0.209373	9.345509	4.761277	6.124438
	(0.83974)	(13.0467)	(1.73161)	(2.42047)
	[-0.24933]	[0.71631]	[2.74963]	[2.53027]
D(ANN(-1))	-0.035879	-0.034889	0.168130	-0.186943
	(0.02731)	(0.42435)	(0.05632)	(0.07873)
	[-1.31363]	[-0.08222]	[2.98521]	[-2.37459]
D(ANS(-1))	-0.224766	0.982458	1.434594	0.381865
	(0.12809)	(1.99001)	(0.26412)	(0.36919)
	[-1.75482]	[0.49370]	[5.43160]	[1.03433]
D(GEE(-1))	0.077586	0.196679	-0.044774	-0.193996
	(0.06736)	(1.04650)	(0.13890)	(0.19415)
	[1.15186]	[0.18794]	[-0.32236]	[-0.99921]
C	7.357700	-41.76269	-1.728381	41.66688
	(4.04015)	(62.7701)	(8.33105)	(11.6453)
	[1.82115]	[-0.66533]	[-0.20746]	[3.57800]

Considering what the VAR analysis revealed, could be said that relationship between PHR and PHR has a positive significant impact because the coefficient value's at -0.209373, this value less than the -0.24933 t-statistic's value. Insignificant correlation exists between PHR and ANN, meaning that the two variables do not related to each other because the coefficient value is at 9.345509 more than the 0.71631 t-statistic value. The unsignificant correlation also found exists between PHR and ANS, because the coefficient value is at 4.761277 more than the 2.74963 t-value statistic, another unsignificant association between PHR and GEE was spotted, we found that the coefficient value is at 6.124438 way more than the 2.53027 t-value statistic.

Conclusion

The positive significant impact between PHR and PHR, because the coefficient value is negative (-0.209373) and smaller than the t-statistic value (-0.24933). This means that as PHR increases, PHR also increases, and this effect is statistically significant. On the other hand, the text concludes that there is no significant correlation between PHR and ANN, PHR and ANS, or PHR and GEE, because the coefficient values are positive (9.345509, 4.761277, and 6.124438) and larger than the t-statistic values (0.71631, 2.74963, and 2.53027). This means that there is no clear relationship between these pairs of variables, or that the relationship is too weak to be detected by the VAR analysis.

References

Debrun, X., & Jonung, L. (2019). Under threat: Rules-based fiscal policy and how to preserve it. *European Journal of Political Economy*, *57*. https://doi.org/10.1016/j.ejpoleco.2018.09.001

Domenech, T., & Bahn-Walkowiak, B. (2019). Transition Towards a Resource Efficient Circular Economy in Europe: Policy Lessons From the EU and the Member States. *Ecological Economics*, *155*. https://doi.org/10.1016/j.ecolecon.2017.11.001

Ending Extreme Poverty and Sharing Prosperity: Progress and Policies. (2015). In *Global Monitoring Report 2015/2016: Development Goals in an Era of Demographic Change*. https://doi.org/10.1596/978-1-4648-0669-8_ch1

Gururaja, B. L., & Ranjitha, N. (2022). Socio-economic impact of COVID-19 on the informal sector in India. In *Contemporary Social Science* (Vol. 17, Issue 2). https://doi.org/10.1080/21582041.2021.1975809

Heine, D., & Black, S. (2018). Benefits beyond Climate: Environmental Tax Reform. In *Fiscal Policies for Development and Climate Action* (pp. 1–63). The World Bank. https://doi.org/10.1596/978-1-4648-1358-0_ch1

Irawan, C. B., Sasongko, B., Mukhlis, M., Yanto, D. D. G. F., & Wulandari, M. W. (2022). Trade and Foreign Direct Investment on Economic Growth in Indonesia: ARDL Approach: English. Tamansiswa Accounting Journal International, 5(1), 70-75.

Jaelani, A. (2017). International Journal of Economics and Financial Issues Fiscal Policy in Indonesia: Analysis of State Budget 2017 in Islamic Economic Perspective. *International Journal of Economics and Financial Issues*, *7*(5).

Koen, V., Asada, H., Nixon, S., Rizwan, M., Rahuman, H., & Arif, M. (2017). *Malaysia's economic success story and challenges*. https://doi.org/10.1787/cf7fddf2-en

Mackie, J., & Allwood, G. (2022.). *The implementation of the 2030 Agenda's principles of "leaving-no-one-behind" and "addressing the needs of those furthest behind first" in the EU's development policy*. https://doi.org/10.2861/43229

Mahembe, E., & Odhiambo, N. M. (2018). The Dynamics of Extreme Poverty in Developing Countries. *Studia Universitatis „Vasile Goldis" Arad – Economics Series*, *28*(2). https://doi.org/10.2478/sues-2018-0007

Priyanto, E., Widarni, E. L., & Bawono, S. (2022). The Effect of Internet Inclusion on Financial Inclusion in P2P Lending in Indonesia Based on Human Capital Point of View. In Modeling Economic Growth in Contemporary Indonesia (pp. 107-121). Emerald Publishing Limited.

Rusminingsih, D., Askar,Mutia,D.K, Fitria,L., Wahyudi,M.I. (2023). Pembudidayaan Budidaya Hidroponik Sayur Organik Di Desa Kampung Putih Kelurahan Klojen Kecamatan Klojen Malang. Jurnal Abdimas Jayanegara, 1(1), 1-8.

Sasongko,B., Nehruddin, Musriyatun, Siswanto,N.H.(2023). Peningkatan Nilai Ekonomis Di Bidang Lingkungan Di Desa Jenggolo Kecamatan Kepanjen Kabupaten Malang.Jurnal Abdimas Jayanegara, 1(1), 21-28.

Warwick, R., Harris, T., Phillips, D., Goldman, M., Jellema, J., Inchauste, G., & Goraus-Tańska, K. (2022). The redistributive power of cash transfers vs VAT exemptions: A multi-country study. *World Development*, *151*. https://doi.org/10.1016/j.worlddev.2021.105742

Yang, J., & Nguyen, M. C. (2021). March 2021 Update to the Global Database of Shared Prosperity. In *March 2021 Update to the Global Database of Shared Prosperity*. https://doi.org/10.1596/35389

Yiu, C., Macon-Cooney, B., & Fingerhut, H. (2021). A research and policy agenda for the post-pandemic world. *Future Healthcare Journal*, *8*(2), e198–e203. https://doi.org/10.7861/fhj.2021-0082