-RESEARCH ARTICLE-

ANALYSIS OF INCLUSIVE GROWTH IN INDONESIA: SUSTAINABLE DEVELOPMENT GOALS (SDGs) PERSPECTIVE

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─Abstract─

This study examines the inclusive growth not anticipated in Indonesia in light of the SDGs. This study uses the poverty rate, Gini ratio, TPT (Open Unemployment Rate), and government expenditures on education, health, social protection, and infrastructure

from 2003 to 2020 as its data sources. This topic must be investigated to accomplish the overall development objectives. The Autoregressive Distributed Lag (ARDL) regression method is applied to Klasen's Poverty-Equivalent Growth Rate (PEGR) concept to calculate the effect between government spending variables and the growth inclusiveness coefficient for each indicator. Throughout the research period, the results indicate that economic growth in Indonesia was not inclusive. In the short term, government spending on the health sector has a positive and significant effect on growth inclusiveness in reducing poverty and inequality. Government spending on the infrastructure and social protection sectors in both the short and long term has a positive and significant effect on growth inclusiveness in reducing poverty and inequality. Government spending on the infrastructure sector in the long term has a positive and significant effect on growth inclusiveness in reducing poverty and inequality. This study's findings will direct the government to increase the proportion of the budget allocated to government expenditures and closely monitor each budget allocation.

Keywords: Inclusive growth, SDGs, government spending, ARDL

JEL Classification: H51, H52, I32, O11

INTRODUCTION

In terms of gauging the character of a nation's economy, inclusive growth is an alternative metric. Regarding process and outcome, inclusive growth emphasizes community participation and the equitable distribution of benefits. According to Sholihah, Hutagaol, and Asmara (2018), growth is inclusive if it can reduce poverty, reduce income distribution inequality, and accommodate more labor. In pursuing sustainable development, all nations must give inclusive growth a prominent place on their agendas (Al-Qudah, Al-Okaily, & Alqudah, 2022). The primary objective is to ensure that individuals at the bottom of the social hierarchy, who have limited means to protect their interests, are not excluded from the economic benefits of progress. Indonesia, the world's largest archipelago, has made significant progress in fostering inclusive growth (Surya et al., 2021). In addition, the nation has taken measures to align its efforts with the Sustainable Development Goals (SDGs) outlined by the United Nations. The Sustainable Development Goals (SDGs) provide a comprehensive strategy for addressing economic, social, and environmental challenges, aiming to foster a more equitable and sustainable future for all people.

The Indonesian strategy for attaining inclusive economic growth heavily emphasizes education as a key component (Liang, De Jong, Schraven, & Wang, 2022). The government has implemented measures to enhance the accessibility and quality of educational opportunities in recognition of the value of education. The goals of enhancing the quality of education, expanding access to education, and reducing gender

disparities have prompted the implementation of modified curricula and teacher training programs (Szymkowiak, Melović, Dabić, Jeganathan, & Kundi, 2021). The programs mentioned above are designed to equip individuals, particularly youth, with the necessary knowledge and skills to contribute to the economic development of their country effectively.

Individual heath status is a crucial aspect of inclusive development. Significant improvements have been made in the accessibility of healthcare services and facilities in Indonesia (Fahlevi & Alharbi, 2021). The government has implemented healthcare programs, such as the National Health Insurance (JKN) program, to ensure all citizens can access affordable, high-quality medical care. In addition, efforts have been made to reduce maternal and neonatal mortality and improve access to primary healthcare services, particularly in remote regions.

Social security is essential to efforts to promote inclusiveness and reduce inequality. Social protection programs have been established in Indonesia to aid marginalized populations, including but not limited to people experiencing poverty, older people, and those with disabilities (Hagen-Zanker, 2012). The initiatives described above include conditional financial transfers and subsidies. These programs aim to reduce the disparity between the socioeconomically advantaged and disadvantaged populations by assisting individuals experiencing economic hardship and destitution.

The allocation of resources towards infrastructure development is essential to pursuing inclusive growth, as it generates numerous benefits for the economy and the population's well-being. Diverse infrastructure initiatives in Indonesia have received a significant allocation of funds (Arifin et al., 2020). The above initiatives include digital connectivity, energy systems, and transportation networks. Not only have the potential to increase economic output but also to facilitate inclusive development by reducing regional disparities, creating employment opportunities, and expanding access to essential services (Ge et al., 2022).

In the context of the Sustainable Development Goals (SDGs), Indonesia has made significant progress in attaining inclusive growth; however, there are still obstacles to be overcome (Sarkar, Okitasari, Ahsan, & Al-Amin, 2022). It is essential to maintain focus on issues such as the unequal distribution of income, regional disparities, and ecological sustainability and to take action to address these issues. To achieve a more comprehensive and long-lasting development for the Indonesian population, the government must maintain its commitment to the Sustainable Development Goals (SDGs) and strive for greater importance to education, healthcare, social welfare, and infrastructure (Lim, 2022).
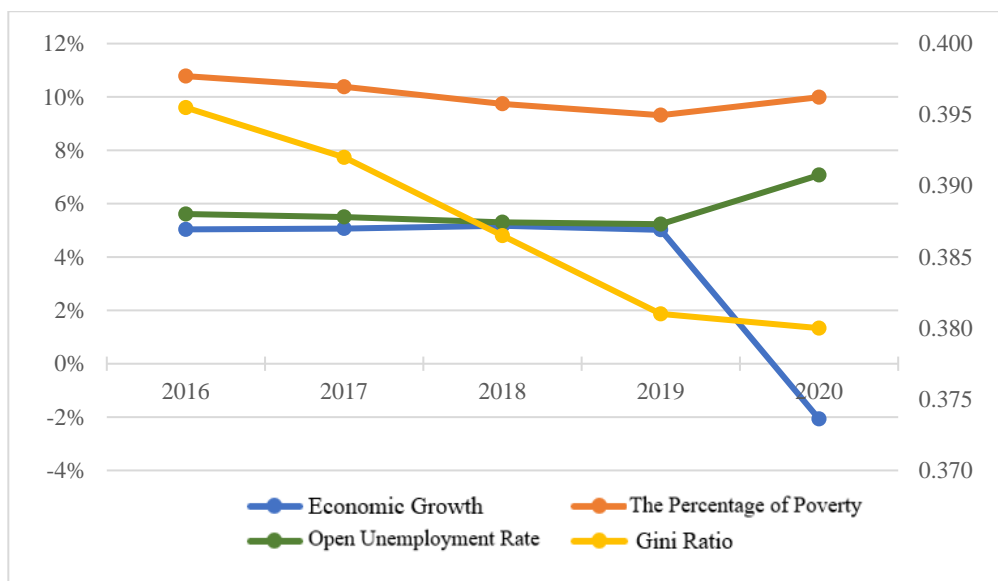
Figure 1. Development of economic growth (EG), Poverty, Unemployment, and Gini Ratio in Indonesia (2016-2020)
Source**:** Central Bureau of Statistics, 2021 (processed)

The fluctuation of inclusive growth indicators in Indonesia is depicted in Figure 1. The economic growth of Indonesia experienced a contraction of 7.1% during the period from 2016 to 2020. Furthermore, there was a decrease of 0.79% in the proportion of impoverished individuals during the time mentioned above. According to Richard (2003), it has been indicated that EG plays a significant role in mitigating poverty within low-income or developing nations. Nevertheless, this accomplishment does not appear to be attributed to a high level of economic growth (EG), but rather to the implementation of government initiatives that serve as a safety net to uphold the economic resilience of the community, particularly for disadvantaged and marginalized populations (Bappenas, 2017).

In contrast, Todaro (1992) argues that economic growth (EG) should not solely rely on the assessment of per capita income and its growth rate but should also consider income distribution within a nation's population. The Gini coefficient, a commonly used measure of income distribution, indicates that the level of inequality in Indonesia falls within the range of 0.3-0.4, placing it in the medium category. This implies that the present rate of economic expansion has not yielded substantial reductions in the extent of inequality. From 2016 to 2020, the Open Unemployment Rate (TPT) experienced a notable increase of 1.46%, corresponding to a total of 2.74 million individuals. This data provides additional evidence to support the claim that labor absorption in Indonesia is suboptimal. In the context being discussed, labor productivity is crucial for achieving long-term or sustainable economic growth. According to Alam and Samsir (2020),

sustainable development is guided by the fundamental principles of inclusion and participation. The principle mentioned above is intricately connected to the notion of inclusive growth. To secure the long-term viability of economic expansion, the Sustainable Development Goals (SDGs) outline specific benchmarks for growth indicators within a comprehensive global framework. The sustainable development agenda focuses on inclusive growth and employment indicators, as outlined in goal 8: "Promote inclusive and sustainable economic growth, productive employment, and decent work for all" (Central Bureau of Statistics, 2016). The issue of poverty is specifically targeted in goal 1, whereas the matter of income distribution is specifically addressed in goal 10.

The achievement of inclusive growth indicators in 2020 fell short of the targets outlined in the RPJMN document, an amalgamation of the Sustainable Development Goals (SDGs) agenda. According to Keynesian theory, increasing government spending (GS) can stimulate economic growth (EG) and enhance employment prospects, thereby exerting downward pressure on unemployment rates. The empirical study by Pratiwi and Ismal (2017) examined the impact of government spending (GS) on inclusive growth. Their findings revealed that in two Organization of Islamic Co-operation (OIC) countries, namely Malaysia and Qatar, GS in the health sector had a statistically significant positive effect on inclusive growth in the short and long term. Similarly, in Indonesia and Saudi Arabia, GS in the education sector had a statistically significant positive effect on inclusive growth in both the short and long term. The government implements budgetary expansion in the education, health, social protection, and infrastructure sectors to address the challenge of achieving inclusive growth. This study examines the inclusiveness of growth in Indonesia by analyzing the impact of government expenditure variables on sustainable, inclusive growth. The objective is to determine whether the evidence supports the notion that government expenditure plays a role in fostering inclusive growth in the country.

LITERATURE REVIEW

In contemporary times, there has been a notable increase in efforts to achieve inclusive economic growth by multinational corporations, national governments, and regional alliances (Dorobat & McCaffrey, 2023). Simply attaining elevated economic growth (EG) is inadequate in effectively tackling the myriad socio-economic challenges in developing nations. The phenomenon in question is influenced by various factors, including the increasing poverty levels, income inequality, and unemployment rates observed in the region. Schoneveld (2020) posits that inclusive growth encompasses the active participation of diverse social, economic, and income strata in the mechanisms of productivity and expansion. Ransom (2023) posits that the social opportunity function relies on the opportunities available to the general population and their equitable distribution.

Furthermore, it is argued that the function exhibits growth when such growth is characterized by inclusivity. The determination of the social opportunity function is contingent upon the distribution of opportunities that are accessible to the typical individual. Inclusive growth is a term used to describe the process of economic expansion that incorporates and addresses social concerns (Derunova, Kireeva, & Prushchak, 2019). The achievement of inclusive growth requires the establishment of both consistency and sustainability. The endorsement of economic expansion is supported by prominent international organizations such as the World Bank, United Nations Development Programme (UNDP), and Organisation for Economic Co-operation and Development (OECD).

Inclusive growth is driven by the accumulation of human capital, which is subject to the influence of multiple factors. The accumulation and utilization of human capital drive the expansion of an economy. The allocation of resources toward human capital, particularly in education and healthcare, is crucial for maintaining a thriving economy. A substantial body of historical research has consistently shown a positive association between education and economic prosperity (Derunova et al., 2019; Guru & Yadav, 2019). Gyimah-Brempong et al. (2006) conducted a study that employed a dynamic panel data estimator to examine the influence of higher education on economic growth (EG) in 34 African countries from 1960 to 2000. The authors demonstrate that education exerts a beneficial influence on economic growth across various sectors.

The study by Hamdan, Sarea, Khamis, and Anasweh (2020) revealed a positive correlation between higher education and the economic growth of Pakistan. Multiple studies have demonstrated that the influence of different levels of education on the growth of Gross Domestic Product (GDP) is inconsistent. The alleged economic implications of higher education are often overstated. Primary and secondary education are of utmost importance in equipping students with fundamental skills crucial for their academic endeavors in tertiary education. In a study conducted by Bhusal and Sapkota (2022), an Ordinary Least Squares (OLS) analysis was employed to investigate the influence of education on the economy of Nepal. The analysis findings revealed a positive correlation between education and Nepal's economy. The impact of higher education on development is significantly greater when compared to primary and secondary education, which exhibit comparatively lower levels of influence. The influence of tertiary education on economic growth (EG) surpasses that of elementary and secondary education due to its students' enhanced knowledge and skills. A high school diploma or General Education Development (GED) certificate cannot effectively augment economic productivity.

The enhancement of the education sector's economic growth (EG) has been attributed to the identification of research and development (R&D) as a significant catalyst. According to Pastor et al. (2018), the research and development activities carried out

by universities substantially impact the creation of technological capital, thus promoting economic growth in European countries. According to Karmaker, Hosan, Chapman, and Saha (2021), pursuing higher education leads to the augmentation of total factor productivity and the facilitation of factor accumulation. Based on the findings of Lövdén, Fratiglioni, Glymour, Lindenberger, and Tucker-Drob (2020), a positive association has been observed between EG and the mean duration of education individuals achieve. Rudenkin and Grushevskaya (2019) found a positive association between education and financial engagement. The scholarly publication authored by Wolfenden in 2015 examines the educational obstacles encountered in Africa, with a particular emphasis on the realm of higher education. The decline in population growth can be ascribed to the rise in the proportion of individuals with limited access to formal education.

According to Mackenzie and Raymond (2020), the experience of engaging in activities that hold personal significance plays a pivotal role in shaping an individual's overall well-being. A correlation has been observed between multiple factors related to well-being, such as health, financial status, and other variables. Individuals who face economic disadvantage, have limited access to formal education, and are unemployed are more likely to be at a heightened risk of encountering negative health outcomes and premature mortality. The factors contributing to the substantial disparity in health outcomes among different countries remain uncertain. The adverse effects of decreased physical well-being harm productivity, employment prospects, and human capital. Hence, disparities across multiple dimensions tend to worsen. Health disparities can persist throughout an individual's lifespan, as their later-life health and economic prospects can be shaped by their early-life circumstances (Settersten Jr et al., 2020). The importance of health in facilitating inclusive economic growth is derived from its central role in promoting holistic well-being and its interconnectedness with factors such as income, employment, and other relevant variables. The current study examines the correlation between socio-economic status and health outcomes. The paper highlights the constraints of the social policy/public finance approach in addressing development issues. As a result, the paper focuses primarily on health outcomes rather than examining the equitable access or fair distribution of financial resources for healthcare services. The precise limits of this approach remain uncertain.

The agreement that has been achieved among the involved parties will enhance the clarity regarding the implementation of social protection measures. Social policy and public finance disciplines provide valuable insights into a range of issues, enhancing our comprehension in these areas. The dissemination of knowledge and expertise from more economically advanced nations to less developed nations has the potential to contribute to the eradication of poverty and the improvement of economic opportunities (Estes, 2020). In seventeenth-century England, registration was considered an essential component of public assistance. The effectiveness of means testing and alternative

methods for identifying impoverished households was a subject of discourse during the "War on Poverty" campaign in the United States during the late 1960s and 1970s. Studying post-war welfare state social policy and program integration and development can provide valuable insights for emerging economies. In the interim, it is prudent to exercise prudence when introducing European methodologies and institutions into contexts within developing nations. This assertion finds support from Latin America.

The lack of social insurance coverage for individuals engaged in informal work during the early 1900s led to a constriction of social protection systems. The recent proliferation of social assistance programs in the region underscores the imperative to develop novel strategies for providing social protection to individuals who lack such support (Jawad, 2019). The pursuit of development compels the adoption of social policies that seek to maximize economic and social advancement. Improving social policies, ensuring their alignment with social and economic advancement, and recognizing the crucial importance of social assistance, especially in countries with constrained financial capabilities, poses a significant obstacle for developing economies (Fang et al., 2020).

Given the complexity of the matter under consideration, the implementation of a developmental approach has the potential to assist developing nations in the adjustment of their social policies. The present methodology can reveal the most effective strategies for harmonizing economic and social progress in developing nations. However, certain factors may hinder this collaboration. The complex and diverse development characteristics may challenge advancing social protection, resulting in negative outcomes. Social protection strategies that integrate diverse objectives and resources may encounter a swift deterioration in effectiveness. The effective implementation of social welfare initiatives can alleviate poverty. The phenomenon mentioned above may lead to a potential decrease in the accessibility of essential services and an upsurge in productivity within low-income communities (Streimikiene, Lekavičius, Baležentis, Kyriakopoulos, & Abrhám, 2020). However, the likelihood of government-sponsored social programs stimulating economic growth or bestowing power upon individuals is unlikely.

Social protection has been subject to various redefinitions by multilateral organizations, bilateral entities, and international non-governmental organizations (NGOs) in alignment with their respective development paradigms (Buzdugan, 2021). Nevertheless, these redefinitions have not consistently led to a comprehensive comprehension of the function and extent of social protection. The terminology utilized in social safety net programs reflects this phenomenon. According to Xavier Hall et al. (2023), although safety nets and smart interventions may seem impressive, they provide limited substantive contributions to social assistance. Nevertheless, they establish a clearly defined set of objectives and strategies. Within the development discourse realm,

there is a prevailing inclination to perceive policies and strategies that yield desirable outcomes as all-encompassing solutions. The discourse has provided evidence that the augmentation of social protection can contribute to the development process.

Nevertheless, it is crucial to recognize that development encompasses a broader range of factors beyond social protection. Social protection initiatives in low- and middle-income countries have prioritized social assistance to alleviate severe and enduring poverty. According to Cartier, Fichtenberg, and Gottlieb (2020), the advancement of social assistance is facilitated by implementing innovative program objectives and designs. Middle-income countries are successfully implementing and institutionalizing social assistance programs. These measures are indicative of substantial efforts toward environmental consciousness.

According to Tang et al. (2021), infrastructure influences various aspects such as connectivity, productivity, production capacity, and opportunities. According to Gössling and Higham (2021), improvements in transportation infrastructure play a crucial role in enabling businesses to access markets more easily and efficiently while reducing operational costs. The advancements in connectivity have resulted in significant cost and time savings in commercial operations. According to Lai and Widmar (2021), improvements in road infrastructure contribute to increased accessibility of desired educational institutions for students. These networks serve as a means of enhancing the accessibility of medical care for individuals who possess limited financial resources. Providing improved healthcare and education opportunities plays a crucial role in promoting societal inclusion, which contributes to stimulating economic growth. Elavarasan et al. (2020) argue that the availability of electricity is vital in facilitating the progress and advancement of businesses and industries. According to Mohsin, Kamran, Nawaz, Hussain, and Dahri (2021), electricity is significant in fostering educational advancements and driving economic growth. The application of electricity has been demonstrated to augment both individual and economic efficiency. Telecommunications services possess the capacity to reduce transaction costs and provide valuable information. Due to the widespread availability of mobile devices, a considerable portion of the population in Kenya has gained the ability to access banking services through Mpesa. The significance of productivity enhancement is underscored by Mishra's (2023) research, which highlights the pivotal role of optimal health conditions and the accessibility of uncontaminated water. According to Luderer et al. (2019), insufficient infrastructure adversely affects all individuals, although the latter situation is considered more unfavorable. The insufficient availability of secure water infrastructure in developing countries has led to a significant loss of lives within vulnerable populations. This issue disproportionately affects individuals of lower socio-economic status who face financial barriers in accessing healthcare services. Insufficient infrastructure presents a formidable obstacle for individuals of low socio-economic status in pursuing healthcare, education, and economic prospects. Yeleliere,

Nyamekye, Antwi-Agyei, and Boamah (2022) conducted a study that found that impoverished individuals face significant challenges in their work engagement and economic well-being due to the lack of consistent access to electricity. The study by Nielsen, Nicholas, Creutzig, Dietz, and Stern (2021) reveals that infrastructure investments disproportionately influence individuals from lower socio-economic strata. Socioeconomically disadvantaged individuals are now allowed to access and benefit from the infrastructure. Individuals with a higher socio-economic status demonstrate a greater capacity to promptly replace crucial infrastructure than individuals with a lower socio-economic status. In a power outage, a household with significant financial resources can acquire a generator.

Inclusive Growth Theory

The analysis conducted by Hausmann, Rodrik, and Velasco (2005) suggests that sluggish economic growth (EG) can be attributed to inadequate levels of investment. The HRV framework is relevant in situations characterized by low-income levels, sluggish growth, and limited investment (Ianchovichina & Lundström, 2009). Solow's seminal work in 1957 posited that long-term economic growth can be discerned by examining the standard aggregate production function, denoted as $Y = Ka(AL)1-a$. This function encompasses capital accumulation, labor growth, and technological advancements. The function assumes that when labor and capital inputs are analyzed independently, diminishing returns exist.

However, when analyzed collectively, Solow assumes the presence of constant returns to scale. According to the neo-liberal paradigm, poverty is attributed primarily to individual choices made by the individuals experiencing poverty. According to Suryanata (2020), expanding market forces to their maximum extent and further enhancing economic growth (EG) would lead to the natural eradication of poverty. In contrast, the social-democratic paradigm posits that poverty should not be regarded solely as an individual predicament, as articulated by Cheyne, O'Brien, and Belgrave in the work of Febrianti (2017). This paradigm posits that societal injustice and inequality are the root causes of poverty. In this particular context, inequality pertains to the social opportunity function. In this particular function, According to Ali and Son (2007) the function under consideration posits that inclusive growth is contingent upon two key factors, namely the average level of opportunities accessible to the populace and the equitable distribution of these opportunities among the population.

GS Theory

In 1964, Keynes argued that the government is crucial in ensuring economic stability and consistently striving toward achieving full employment. Economic fluctuations between different periods can have significant implications for employment and

unemployment. Hence, the government employs fiscal policy to regulate economic activity by implementing modifications in government spending and adjustments in taxation (Sukirno, 2000). Keynes posited that an augmentation in government spending leads to a rise in the overall income of a nation and a decrease in unemployment. The theory of General Theory of Employment, Interest, and Money, proposed by John Maynard Keynes, is founded upon the fundamental identity equation of national income, which states that the total output (Y) of an economy is equal to the sum of consumption (C), investment (I), government spending (G), and net exports (X-M). Through a comparative analysis of the value of government spending (G) in relation to private consumption (Y) and observing its fluctuations over time, one can discern the significant role of government spending in shaping the overall national income.

In contrast to the theory proposed by John Maynard Keynes, Adolf Wagner posited that it is the level of economic growth (Y) that influences government spending (G). The government's expenditure is anticipated to increase in tandem with the rise in the average income per person. This phenomenon can be ascribed to the progressive increase in government activities and expenditures over time. The specific situation referred to as the "law of over-increasing state activity" was originally introduced by Wagner. Five factors have been identified as contributing to an increase in GS. These factors encompass the necessity for enhanced security and defense measures, a rise in public revenue, urbanization due to economic expansion, the development of democratic institutions, and the accumulation of bureaucratic inefficiencies.

Rostow and Musgrave have established a correlation between the increase in government expenditure and the various stages of economic development. During the early phases of economic development, there is a heightened need to construct vital infrastructure, including hospitals, schools, and roads. This requirement leads to a larger share of the economy's expenditure being allocated towards such projects, with a substantial portion of this spending originating from government investment. In the subsequent phase of economic development, growing importance is attributed to the private sector, resulting in decreased government spending. At present, the allocation of government expenditure primarily favors social initiatives, such as public health services and elderly welfare, rather than physical infrastructure.

Sustainable Development

According to the United States Environmental Protection Agency (USEPA), sustainable development is a developmental approach that aims to enhance economic growth while simultaneously safeguarding the environment and improving social conditions for both present and future generations. Budimanta, as referenced by Zaini and Darmawanto (2015), posits that sustainable development encompasses a systematic and intentional approach to initiatives to enhance the

quality of life, socio-economic conditions, and environmental factors while ensuring equitable opportunities for future generations.

Previous Research

The primary aim of the study conducted by Alekhina and Ganelli (2021) was to ascertain the optimal approaches for ensuring a fair allocation of economic growth among the member nations of the Association of Southeast Asian Nations (ASEAN). To effectively measure inclusive growth, our research utilizes a composite measure that integrates both the equity index and the per capita income growth rate. The variable in question also encompasses an equity index. A comprehensive international study examined the factors influencing inclusive growth and its two underlying components. According to scholarly research, several factors have been identified as significant contributors: fiscal redistribution, female labor force participation, productivity growth, foreign direct investment (FDI), digitalization, and savings. The study conducted by Mutiiria, Ju, and Dumor (2020) examined infrastructure in sub-Saharan Africa and its correlation with inclusive economic growth. This study analyzed panel data encompassing a period spanning from 2003 to 2017, focusing on a sample of 31 countries in Africa, the Caribbean, and South America. The research findings demonstrate a positive association between the expansion of inclusive infrastructure and the advancement of economic growth. The discoveries above have proven highly advantageous for energy, transportation, and information and communication technology (ICT) infrastructures. Additionally, scholarly studies have demonstrated that individuals from a lower socio-economic stratum experience greater advantages from the infrastructure mentioned above enhancements than those from a higher socio-economic stratum. This underscores the significance of infrastructure in the equitable distribution of income.

In Indonesia, an examination of inclusive growth has been conducted, employing a distinct methodology grounded in the perspective of the Sustainable Development Goals (SDGs). The unique aspect of this situation lies in the context of Indonesia, a developing nation where all governmental sectors are intricately linked to the pursuit of developmental objectives. The question at hand pertains to the potential influence of GS (Gross Savings) on the concept of inclusive growth.

RESEARCH METHODS

This research employs a dataset spanning 18 years, consisting of secondary data in the form of time series data covering the period from 2013 to 2020. The data utilized for assessing the extent of inclusive growth, including indicators such as the poverty rate, Gini coefficient, Open Unemployment Rate (TPT), total labor force, per capita income, and Gross Domestic Product at Current Prices (ADHB), are sourced from the

publication of the Central Statistics Agency (BPS). In the meantime, the variables representing government expenditure in the education, health, social protection, and infrastructure sectors serve as proxies for the corresponding budget allocations within the State Budget (APBN). The data about government expenditure was sourced from the Ministry of Finance, specifically from the publication of the Financial Memorandum and the State Budget in Indonesia.

Measuring Inclusive Growth

The inclusive growth measurement method is based on the concept formulated by Klasen (2017). The inclusive growth formula is adopted based on the Poverty Equivalent Growth Rate (PEGR) concept. Thus, inclusive growth is measured by the formulation for the three indicators as follows:

1.   Inclusive growth in reducing poverty

$$IG_p = (E_{pg} / E_p) \; \hat{G}_g \tag{1}$$

Where:
IG_p : the coefficient of inclusive growth in reducing poverty
E_{pg} : elasticity of poverty to EG
E_p : elasticity of poverty concerning average income
$\hat{G}_g$: EG
IGp is denoted as the inclusiveness of growth in reducing poverty and is said to be inclusive if the value of $IG_p > \hat{G}_g$. The elasticity of poverty to average income (E_p) an be calculated with the following formula:

$$E_p = P_{12} / \Psi \tag{2}$$

where P_{12} is the change in the percentage of poor people in period 1 and period 2, Ψ is the change in the population's average income. Meanwhile, the elasticity of poverty to EG (E_{pg}) can be calculated as follows:
$E_{pg} = P_{12} / \hat{G}_g$
where $\hat{G}_g$ is the change in Gross Domestic Product (GDP).

2.   Inclusive growth in reducing inequality

$$IG_{in} = (E_{in.g} / E_{in}) \; \hat{G}_g \tag{3}$$

Where:
IG_{in} : the coefficient of inclusive growth in reducing inequality
$E_{in.g}$: elasticity of inequality to EG
E_{in} : elasticity of inequality concerning average income

IG_{in} is denoted as the inclusiveness of growth in reducing inequality and is said to be inclusive if the value of $IG_{in} > \hat{G}_g$. The elasticity of inequality concerning average income (E_{in}) can be calculated as follows:

$$E_{in} = In_{12} / \Psi \tag{4}$$

Meanwhile, the elasticity of inequality concerning EG ($E_{in.g}$) can be calculated as:

$$E_{in.g} = In_{12} / \hat{G}_g \tag{5}$$

where In_{12} is the change in inequality in period 1 and period 2.

3.   Inclusive growth in boosting employment

$$IG_{em} = (E_{em.g} / E_{em}) \, \hat{G}_g \tag{6}$$

Where:
IG_{em} : inclusive growth coefficient in employment
$E_{em.g}$: elasticity of employment to EG
E_{em} : elasticity of employment to the labor force
IG_{em} is denoted as the inclusiveness of growth in absorbing labor and is said to be inclusive if the value of $IG_{em} > \hat{G}_g$. The elasticity of labor absorption to the labor force (E_{em}) can be calculated as:

$$E_{em} = Em_{12} / AK^* \tag{7}$$

where Em_{12} is the change of labor absorption in period 1 and period 2, AK^* is the change of labor force. In addition, the elasticity of labor absorption to EG ($E_{em.g}$) can be calculated as follows:

$$E_{em.g} = Em_{12} / \hat{G}_g \tag{8}$$

Measuring the Effect of GS on Inclusive Growth

The Autoregressive Distributed Lag-Error Correction Model (ARDL-ECM) analysis method, proposed by Pesaran and Shin in 1997, is a technique used to estimate linear regression models to examine long-term relationships. This method involves conducting cointegration tests on time series variables and can be applied to variables that are either stationary at the level or differenced once. The ARDL approach offers several advantages. Firstly, it involves the adoption of a single equation, simplifying the modeling process. Secondly, it does not necessitate the pre-testing of variables as long as they can attain stationarity in the first differential or below. Lastly, it enables the simultaneous correction of residuals and endogenous variable issues. When establishing

the regression equation, estimating each variable will involve the incorporation of both long-term and short-term lags until the optimal model is identified. The Autoregressive Distributed Lag (ARDL) model used in this study is formulated to analyze the relationship between the three inclusive growth indicators.

1.   Reducing poverty

$$\Delta IGp_t = \alpha_0 + \sum_{i=1}^{p} \alpha_1 \Delta IGp_{t-i} + \sum_{i=1}^{p} \alpha_2 \Delta GE\_Edu_{t-i} + \sum_{i=1}^{p} \alpha_3 \Delta GE\_Hlt_{t-i} +$$
$$\sum_{i=1}^{p} \alpha_4 \Delta GE\_SP_{t-i} + \sum_{i=1}^{p} \alpha_5 \Delta GE\_Inf_{t-i} + \theta_1 IGp_{t-1} + \theta_2 GE\_Edu_{t-1} + \theta_3 GE\_Hlt_{t-1} +$$
$$\theta_4 GE\_SP_{t-1} + \theta_5 GE\_Inf_{t-1} + \varepsilon_t \tag{9}$$

2.   Reducing inequality

$$\Delta IGin_t = \beta_0 + \sum_{i=1}^{p} \beta_1 \Delta IGin_{t-i} + \sum_{i=1}^{p} \beta_2 \Delta GE\_Edu_{t-i} + \sum_{i=1}^{p} \beta_3 \Delta GE\_Hlt_{t-i} +$$
$$\sum_{i=1}^{p} \beta_4 \Delta GE\_SP_{t-i} + \sum_{i=1}^{p} \beta_5 \Delta GE\_Inf_{t-i} + \theta_1 IGin_{t-1} + \theta_2 GE\_Edu_{t-1} + \theta_3 GE\_Hlt_{t-1} +$$
$$\theta_4 GE\_SP_{t-1} + \theta_5 GE\_Inf_{t-1} + \varepsilon_t \tag{10}$$

3.   Labor absorption

$$\Delta IGem_t = \lambda_0 + \sum_{i=1}^{p} \lambda_1 \Delta IGem_{t-i} + \sum_{i=1}^{p} \lambda_2 \Delta GE\_Edu_{t-i} + \sum_{i=1}^{p} \lambda_3 \Delta GE\_Hlt_{t-i} +$$
$$\sum_{i=1}^{p} \lambda_4 \Delta GE\_SP_{t-i} + \sum_{i=1}^{p} \lambda_5 \Delta GE\_Inf_{t-i} + \theta_1 IGem_{t-1} + \theta_2 GE\_Edu_{t-1} + \theta_3 GE\_Hlt_{t-1} +$$
$$\theta_4 GE\_SP_{t-1} + \theta_5 GE\_Inf_{t-1} + \varepsilon_t \tag{11}$$

Where:
IGp   = inclusive growth coefficient for poverty
IGin   = inclusive growth coefficient for inequality
IGem   = inclusive growth coefficient for labor
GE_Edu   = government expenditure in the education sector
GE_Hlt   = health sector government expenditure
GE_SP= GS on social protection sector
GE_Inf= GS on infrastructure
Δ = *lag*
$\alpha_1 - \alpha_5$ = short-run dynamic relationship of inclusive growth to poverty
$\beta_1 - \beta_5$ = short-run dynamic relationship of inclusive growth to inequality
$\lambda_1 - \lambda_5$ = short-run dynamic relationship of inclusive growth to employment
$\theta_1 - \theta_5$ = long-term dynamic relationship
ε_t = *error term*

The sequential steps involved in data analysis using the Autoregressive Distributed Lag (ARDL) method in this study are outlined below: To conduct time series data regression, assessing the stationarity of all variables in the first stage is imperative. The stationarity test employed in this study utilizes the Augmented Dickey-Fuller (ADF)

Test methodology. The optimal lag length is also determined based on the Akaike Information Criteria (AIC) to ascertain the appropriate combination of variables in the Autoregressive Distributed Lag (ARDL) model. Furthermore, the existence of a long-term equilibrium between variables in the model is tested using the bound-testing method. Finally, as mentioned above, the ARDL model is estimated using the lag length selected through the AIC approach. To achieve proficiency as a reliable and unbiased estimator, it is imperative to administer a diagnostic test on the model, commonly known as BLUE (Best, Linear, Unbiased Estimator). Diagnostic tests, including non-autocorrelation, homoscedasticity, normality, and linearity, must be satisfied. In this study, we aim to assess the goodness of fit and parameter stability of the ARDL model in both the long and short run. We will employ the cumulative sum of recursive residuals (CUSUM) and the sum of squares of recursive residuals (CUSUMSQ) tests to achieve this. Additionally, we will conduct short-term and long-term analyses of the model.

Conceptual Framework

Figure 2. Conceptual Framework
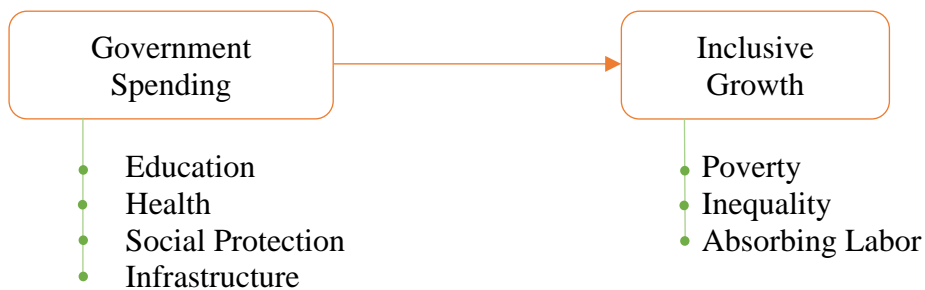
This study uses a conceptual framework to analyze the concept of inclusive growth as a means to attain the Sustainable Development Goals (SDGs) in Indonesia. The proxy employed on GS pertains to education, health, social protection, and infrastructure sectors. In the context of inclusive growth, reducing poverty, inequality, and unemployment through assessing the impact of GS is a pertinent concern.

RESEARCH RESULTS AND DISCUSSION

EG is said to be inclusive if growth in a country or region can reduce poverty, reduce inequality, and absorb labor. The following presents the inclusiveness of growth in each indicator: poverty, inequality, and employment in Indonesia.

Inclusiveness of EG in Reducing Poverty

This study aims to evaluate the extent to which growth contributes to poverty reduction by examining the inclusiveness coefficient of poverty (IGp). To classify EG as

inclusive, the coefficient of inclusiveness of EG on poverty (IGp) must exceed the value of EG (Ĝg). During the observation period spanning from 2003 to 2020, the coefficient measuring the inclusiveness of economic growth in relation to poverty in Indonesia tended to fluctuate. EG experienced a similar occurrence. In 18 years, it was observed that the coefficient of inclusiveness of Economic Growth (EG) in Indonesia surpassed the rate of EG on poverty reduction solely in 2018. This implies that in 2018, EG demonstrated inclusiveness in its efforts to alleviate poverty. Except for 2018, Indonesia has experienced a lack of inclusivity in reducing poverty.

Nevertheless, the coefficient representing the relationship between economic growth and poverty remains positive, except for 2020, where it exhibits a negative value. When the positive inclusiveness coefficient is smaller than the EG value, it suggests that poverty reduction continues as the EG value increases. In this particular scenario, the advantages of EG exhibit an uneven distribution among various strata of society, exclusively benefiting individuals who do not fall under the classification of impoverished.

Inclusiveness of EG in Reducing Inequality

The coefficient of growth inclusiveness on inequality (IGin) is a significant indicator of inclusive growth in reducing inequality, particularly when it surpasses the coefficient of economic growth (Ĝg). The coefficient representing the relationship between inclusive growth and inequality in Indonesia tends to fluctuate during the period spanning from 2003 to 2020, similar to the pattern observed in the indicator of economic growth (EG). In 2018, there was a notable emphasis on addressing inequality within the inclusive growth framework (EG). In contrast to previous years, the coefficient of inclusive growth consistently remained lower than EG, indicating a lack of inclusivity within the concept of EG. The EG's inclusiveness coefficient, while positive, is smaller than the EG's coefficient, suggesting the persistence of inequality in the distribution of EG's benefits. In the given circumstances, it can be observed that the advantages of EG are not uniformly allocated. 2003-2017 and 2019 exhibit a positive growth inclusiveness coefficient about inequality, albeit lower than the EG rate. The latter part of 2020 experienced a significant decline, reaching a negative value.

Inclusiveness of EG in Labor Absorption

When the coefficient of inclusiveness of growth towards employment, denoted as IGem, exceeds the value of EG (Ĝg), EG is considered inclusive. During the time frame spanning from 2003 to 2020, it was observed that a significant increase in the Economic Growth (EG) rate did not consistently correspond to a proportional increase in the growth inclusiveness coefficient. The data processing results from the Central Bureau of Statistics (BPS) indicate that the coefficient of growth inclusiveness is lower than that of economic growth (EG). This suggests that the current growth pattern is not inclusive regarding labor absorption. In

the year 2020, it can be observed that the growth inclusiveness coefficient exhibits a positive value, surpassing the negative value of the EG rate. This suggests that inclusive growth (EG) has demonstrated its capacity to absorb labor effectively in the specified year, indicating a positive correlation between EG and increased labor absorption.

ARDL-ECM Analysis Results

Based on the results of the unit root test using the Augmented Dickey-Fuller (ADF) method, as presented in Table 1, it can be observed that all variables, except for the dependent variable "inclusive growth for labor" (IGem), exhibit probabilities exceeding the 5% significance level. Consequently, the data can contain unit roots at this significance level. The unit root test results at the first differential level are also presented in the same table. The outcomes of the unit root test conducted at this level indicate that the p-values for all variables are below 5%. Consequently, it can be concluded that both the independent and dependent variables exhibit stationarity after the first differentiation, as there is an absence of a unit root.

Table 1. Unit Root Test

Variables	Level		First Differentiation	
	Prob.	Conclusion	Prob.	Conclusion
IGp	0,0708	not stationary	0,0144	stationary
IGin	0,0708	not stationary	0,0144	stationary
IGem	0,0016	stationary	0,0000	stationary
GE_EDU	0,1939	not stationary	0,0018	stationary
GE_HLT	0,9325	not stationary	0,0009	stationary
GE_INF	0,5101	not stationary	0,0084	stationary
GE_SP	0,3555	not stationary	0,0188	stationary

Source: Data processed (2021)

According to the bound-test cointegration test, the statistical F values for the IGp, IGin, and IGem models are 4.34, 4.34, and 8.94, respectively. These values exceed the lower bound value of 2.86 and the upper bound value of 4.01 at a significance level of 5 percent. Hence, the researchers concluded that utilizing a 5 percent significance level is appropriate for estimating the ARDL model, and it has been established that a long-term cointegration relationship exists among the variables. The autoregressive distributed lag (ARDL) model incorporates lagged terms of both the dependent variable and the independent variable at a specific point in time. The presence of lag, in this case, signifies that a variable's value during a given period is influenced by the values of multiple preceding periods, with a magnitude equivalent to the lag. The optimal model selection, determined through AIC selection, suggests that the ARDL (2,1,1,1,0) model is most suitable for IGp and IGn variables, while the ARDL (1,0,0,1,0) model is most

appropriate for the IGem variable. The R-Squared value of 0.98 for the IGp model indicates that approximately 98% of the variability in the dependent variable, specifically inclusive growth for poverty, can be accounted for by the independent variables included in the chosen ARDL model. This same interpretation applies to the inclusive growth model for inequality (IGin). In the context of labor, inclusive growth (IGem) exhibits an R-Squared value of 0.58, indicating that the independent variables considered in the model can account for approximately 58 percent of the variation in IGem. The remaining portion of the variation is attributable to other variables not incorporated into the model.

**Table 2. Diagnosis of Basic Econometric Assumptions**

Diagnosis Test	Probability		
	Model IGp	Model IGin	Model IGem
Normality Test	0,2226	0,2226	0,4832
Heteroskedasticity Test	0,6903	0,6903	0,0589
Serial Correlation Test	0,4113	0,4113	0,8298
Specification Error	0,1609	0,1609	0,6802

Source: Data processed (2021)

The data presented in Table 2: The Jarque Bera method was employed to diagnose a normality test on three models. The results indicated that all three models' probability values exceeded the 5 percent significance level. This suggests that the residuals in the models exhibit a normal distribution. The second assumption pertains to the heteroscedasticity test, which employs the Breusch-Pagan-Godfrey approach. In this test, the Chi-Square probability value exceeds each model's 5 percent significance level.

Consequently, it can be inferred that the regression model exhibits homoscedasticity. The application of the Breusch-Godfrey Serial Correlation LM Test method reveals that the Chi-Square Probability values of 0.4113 (for the IGp and IGin models) and 0.8298 (for the IGem model) suggest that, at a 95% confidence level, the null hypothesis cannot be rejected, thereby indicating the absence of autocorrelation. The Ramsey Reset Test method assessed the specification error, yielding an F-statistic probability value that exceeds the 5% significance level. This result indicates that the linear independent variable is unrelated to the dependent variable. The three IGp, IGin, and IGem models have been found to effectively address issues about the assumptions of normality, heteroscedasticity, autocorrelation, and specification in the proposed model, as indicated by the diagnosis test results. According to Tantowi (2021), it is possible to analyze models that have successfully circumvented issues related to econometric assumptions and draw conclusions based on the results obtained from regression analysis. Hence, this serves as the foundation for the analysis and conclusions presented in this study.

Figure 3. CUSUM and CUSUMQ Plot
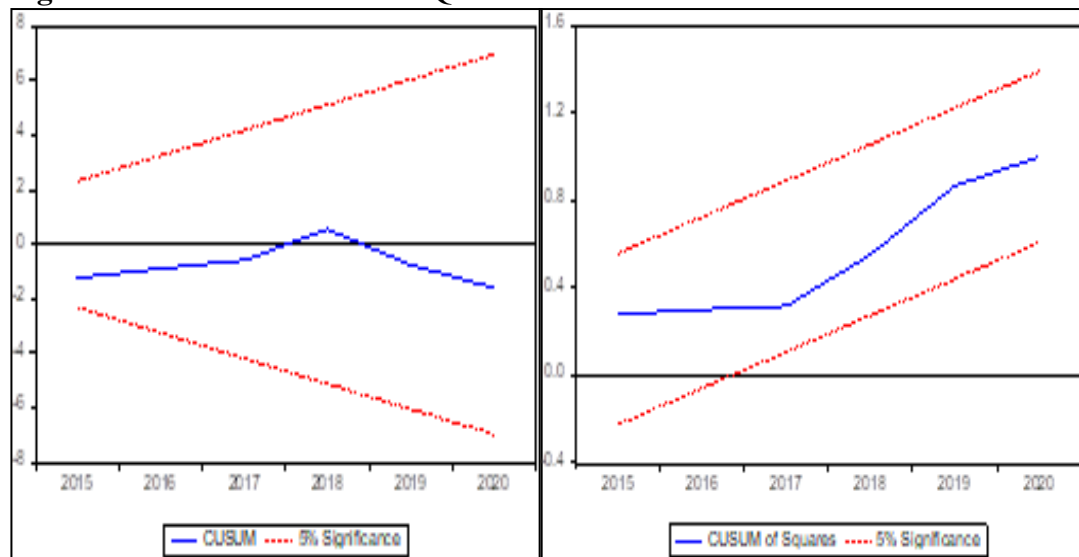
Source: Data processed (2021)

To assess the long-term stability of the ARDL model and its short-term adjustment, the CUSUM test and CUSUMQ test plots were employed. The findings from the stability test conducted on the inclusive growth model for poverty (IGp) are presented in Figure 3. The CUSUM plot, depicted in blue, falls within the boundaries of the 5% significance lines, represented in red. These significance lines serve as stability controls for the CUSUM value. Consequently, the results suggest that the ARDL model employed tends towards stability. The statement mentioned above holds for the CUSUMQ test. Furthermore, the IGin and IGem models have passed the model stability test based on the abovementioned criteria.

Table 3. *ARDL Error Correction* Short-Term Estimation Results

Independent Variable	Dependent Variable		
	Model IGp	Model IGin	Model IGem
D(IGp(-1))	-0.837913 (0,0100)*	-	-
D(IGin(-1))	-	-0.837913 (0,0100)*	-
D(GE_EDU)	0.000161 (0.6022)	0.000161 (0.6022)	-0.000096 (0.3116)
D(GE_HLT)	0.003587 (0.0271)*	0.003587 (0.0271)*	-0.000635 (0.2434)
D(GE_INF)	0.001353 (0.0006)*	0.001353 (0.0006)*	0.000024 (0.8155)
D(GE_SP)	0.000390 (0.0013)*	0.000390 (0.0013)*	-0.000002 (0.9665)
CointEq(-1)	-0.708391 (0.0038)	-0.708391 (0.0038)	-1.555358 (0.0000)*

Source: Dependent Variable (2021)
Notes: *significant at 5 percent real level

Table 3 displays the relevant data. The findings from the short-term estimation of the ARDL ECM model reveal that the error correction coefficient (CointEq) exhibits statistical significance at a 5% level, demonstrating a negative relationship. The short-term significance of this value lies in its ability to demonstrate the capacity of inclusive growth to adapt to variations in the government expenditure variables employed. Based on the estimation results, it is evident that a 1 trillion rupiah increase in government spending (GS) within the health sector leads to a corresponding 0.35-point increase in the coefficient of inclusive growth concerning poverty. The coefficient of GS in the infrastructure sector, which is 0.0013, indicates that a 1 trillion rupiah increase in GS within the infrastructure sector will result in a 0.13-point increase in the coefficient of growth inclusiveness on poverty. The coefficient about government expenditure in the social protection sector is 0.0003, indicating that a 1 trillion rupiah increase in government expenditure within this sector will result in a 0.03 point increase in the coefficient of inclusiveness of growth on poverty. The coefficient of growth inclusiveness on inequality exhibits similar effects and values in terms of significant variables and the percentage impact. In contrast, it is observed that the various government expenditure variables do not exhibit a statistically significant impact on the coefficient of inclusive growth in labor absorption.

Table 4. Long-Term *ARDL* Estimation

Independent Variable	Dependent Variable		
	Model IGp	Model IGin	Model IGem
GE_EDU	-0.001871 (0,0142)*	-0.001871 (0,0142)*	-0.000061 (0,3035)
GE_HLT	-0.002314 (0,0676)	-0.002314 (0,0676)	-0.000408 (0,2452)
GE_INF	0.001440 (0,0223)*	0.001440 (0,0223)*	0.000198 (0,0470)*
GE_SP	0.000551 (0,0194)*	0.000551 (0,0194)*	-0.000001 (0,9666)
C	0.201453 (0,0000)	0.201453 (0,0000)	0.022918 (0,0006)

Source: Data processed (2021)
Notes: *significant at 5 percent real level

In addition to conducting short-term estimation, the ARDL model necessitates including long-term analysis to examine the relationship between variables over an unspecified period. Based on the findings presented in Table 4, it is evident that the coefficient value of -0.0018 associated with government expenditure in the education sector indicates that a 1 trillion rupiah increase in such expenditure will result in a reduction of 0.18 points in the coefficient of growth inclusiveness on poverty. Furthermore, allocating an additional 1 trillion rupiah towards infrastructure investment will result in a corresponding increase of 0.14 points in the coefficient measuring the inclusiveness of economic growth concerning poverty reduction. A positive coefficient of GS in the social protection sector indicates that a 1 trillion rupiah increase in GS within this sector will result in a corresponding increase of 0.05 points in the coefficient measuring the inclusiveness of growth concerning poverty. The growth inclusiveness coefficient in

reducing inequality exhibits similar effects and value as the significant variables and shares a comparable percentage impact. Furthermore, it should be noted that the coefficient associated with government expenditure in the infrastructure sector is 0.00019. This implies that a 1 trillion rupiah increase in government expenditure specifically allocated to the infrastructure sector will result in a corresponding 0.02-point increase in the growth inclusiveness coefficient of labor absorption.

EG Inclusiveness

The analysis of observational data spanning from 2003 to 2020 reveals a consistent negative growth trend in EG, with an average decline of 0.4 percent. This decline is accompanied by a corresponding average increase of 0.003 points in the Gini ratio, indicating a rise in income inequality. Additionally, the data shows a decrease in poverty rates by an average of 0.44 percent and a decline in TPT by 0.15 percent. Based on an analysis of the average fluctuations observed in the four primary indicators of inclusive growth, it can be deduced that the current growth trajectory lacks inclusivity. This finding contradicts the HRV analysis put forth by Ianchovichina and Lundström (2009), which argues that existing economic growth should lead to a decrease in poverty and the creation of ample employment opportunities that generate productive jobs. The lack of equitable distribution of growth outcomes hinders the inclusivity of economic growth. This condition contradicts the underlying principle of the social opportunity curve, which posits that opportunities across economic, social, and environmental dimensions should be equitably distributed to promote equal access for individuals. In order to attain inclusive and sustainable growth, the SDGs agenda necessitates that Indonesia sustains an Economic Growth (EG) rate of no less than 7 percent annually.

Additionally, Indonesia is expected to eradicate extreme poverty by 2030, having already made significant progress by reducing extreme poverty to approximately 4 percent. Furthermore, Indonesia is urged to address income inequality, which is currently low. The prevalence of unemployment among individuals aged 15 to 24 suggests that a significant proportion stems from the youth demographic. Goal 8 of the Sustainable Development Goals (SDGs) agenda emphasizes the imperative to decrease the proportion of unemployed youth within the population.

The Impact of GS on Growth Inclusiveness in Reducing Poverty

The short-term impact of government expenditure in the education sector on inclusive growth and poverty reduction is found to be insignificant. According to Shen, Dhiya, and Kathya (2021), the impact of education expenditure in the short term is relatively limited due to the presence of various reform elements that necessitate a longer duration for their implementation. Hence, the current budgetary allocation has proven insufficient in expediting poverty alleviation within a limited timeframe. The long-term

association between the two variables exhibits a notable impact characterized by negative parameters, as evidenced by the findings of Purwanti and Rahmawati (2021). The obtained outcome deviates from Keynes' theoretical framework, which posits that government intervention in the form of government spending (GS) is necessary in the event of an economic shock, such as poverty. One of the contributing factors to the problem at hand is the inefficient allocation of the education budget. This assertion is supported by an analysis of the 2020 state budget data, which reveals that educational programs targeting impoverished individuals, such as the KIP and KIP Lecture initiatives, are significantly smaller than other budgetary allocations. The impact of government spending in the healthcare industry on the coefficient of inclusive growth, particularly regarding poverty reduction in the short term, is noteworthy. This empirical study's findings align with the research conducted by Wang, Hua, Tao, and Moldovan (2021). The JKN-KIS government program aims to offer protection and alleviate the financial strain experienced by individuals who are ill. Its primary objective is to mitigate the susceptibility of the community to poverty (Dartanto et al., 2017).

Nevertheless, it is important to note that the impact of government spending (GS) in the health sector on the growth inclusiveness coefficient, specifically in terms of poverty reduction, is not found to be statistically significant in the long term. A study by A'yun (2022) revealed a positive correlation between health expenditure as a percentage of GDP and economic growth (EG). The data indicates that despite a significant increase of Rp7.43 trillion in the health budget, there was no corresponding improvement in economic growth (EG) or poverty reduction. The inefficiency in budget allocation contributes to the limited accessibility of health services within the community, particularly among individuals of lower socio-economic status (Pratiwi & Ismal, 2017). According to the social-democratic paradigm, injustice and inequality are posited to manifest poverty ultimately. The impact of GS (gender-sensitive) interventions in the social protection domain on inclusive growth and poverty reduction is substantial, both in the short and long term. This finding aligns with the research conducted by Long and Pasaribu (2019). The redistribution of income through the fiscal system within the redistribution with growth paradigm framework is widely believed to enhance the well-being of individuals with lower socio-economic status. One variant of this policy is known as PKH. In the immediate term, the primary objective of this program is to alleviate the financial burden faced by Target Households (RTS). However, in the long run, its overarching goal is to disrupt the cycle of poverty across generations, enabling subsequent generations to escape the confines of poverty (Directorate General of Information and Public Communication, 2011). Likewise, the presence of government spending (GS) in the infrastructure industry exerts a substantial impact on the coefficient of growth inclusiveness, leading to a reduction in poverty rates over both the immediate and extended periods. On average, an annual increment of Rp24.45 trillion in the infrastructure budget is associated with maintaining economic growth (EG) at a rate of 5%.

Additionally, this increase in budget has been observed to result in a reduction of poverty by 0.4% annually. Moreover, The empirical study conducted by Traoré (2018) has provided evidence to support a significant relationship between government spending on infrastructure and promoting more inclusive economic growth in the Sub-Saharan Africa region. According to Solow's theory, the growth of a country is not solely dependent on human capital but also on the significant role played by physical capital. According to Keynesian theory, physical capital is typically manifested through establishing infrastructure, which can be sustained if a corresponding increase in the budget is allocated to this sector. Sufficient infrastructure will give the impoverished population opportunities and amenities to access productive sectors, enabling them to attain elevated levels of productivity.

The Impact of GS on Growth Inclusiveness in Reducing Inequality

The impact of government spending (GS) on education exhibits a negligible influence on the growth inclusiveness coefficient in the context of reducing inequality in the short term. However, it demonstrates a statistically significant effect in the long term, albeit with negative parameters. This observation aligns with empirical evidence indicating a substantial average rise of Rp28.96 trillion in the education budget, leading to a negative EG of -0.4% and an annual increase in inequality of 0.003 points. The social opportunity curve posits that to attain inclusive growth, the available opportunities must be distributed equitably among the populace. In Indonesia, the current allocation of the education budget for individuals from low-income backgrounds remains insufficient for the proportion of impoverished individuals within the school-age population. In the immediate timeframe, gender sensitivity (GS) within the health sector exerts a notable impact on the coefficient of growth inclusiveness, thereby contributing to reducing inequality. According to Dartanto et al. (2017), the JKN-KIS program in Indonesia can potentially enhance individuals' accessibility to healthcare services, particularly among the lower middle-income bracket.

Consequently, the implementation of the JKN-KIS program also plays a role in mitigating inequality within the country. Nevertheless, it can be argued that the impact of government spending (GS) in the healthcare industry on the coefficient of inclusive growth regarding reducing inequality is negligible from a broader perspective. In Indonesia, the allocation of funds for healthcare has successfully achieved the government's predetermined objective of allocating 5% of the overall state budget. Nevertheless, the efficacy of target selection plays a pivotal role in the program's overall effectiveness. The effectiveness of health programs targeting individuals of lower socio-economic status has been suboptimal, as evidenced by the continued utilization of these services by middle and upper-income brackets (Maisarah & Sari, 2020).

According to Maisarah and Sari (2020), many individuals from the middle and upper-income brackets derive pleasure from utilizing such amenities. According to Kristyanto and Kaluge (2018), there is a negative correlation between improving living standards for specific groups of individuals and the inclusiveness of growth. The impact of government spending in the social protection sector on the growth inclusiveness coefficient regarding reducing inequality is a noteworthy phenomenon observed in both the short and long term. This outcome aligns with the conclusions drawn by Long and Pasaribu (2019). According to the redistribution with growth paradigm, the welfare of individuals in lower socio-economic strata will experience an improvement if the allocation of resources is effectively distributed and if the resulting benefits are equitably shared among all societal groups. According to Supriyanto, Ramdhani, and Rahmadan (2014), implementing social protection policies, specifically through the PKH program, has proven to be effective in alleviating financial burdens and addressing the issues of poverty and inequality. These policies contribute to the enhancement of human resources by improving their overall quality. The impact of government spending (GS) on infrastructure has been determined to exert a substantial effect on fostering inclusive growth and diminishing inequality over both the immediate and extended periods. According to Keynesian theory, disparities in income among different groups of individuals can be regarded as a type of economic shock. Hence, the government must assume a role in guiding the economy through implementing fiscal policy measures regarding government spending. The availability of access to various public facilities, including roads, transportation, communication, and other infrastructure, is indicative of the growing budget allocated towards infrastructure development. According to Sholihah et al. (2018), achieving a more equitable distribution of development outcomes across the region will enable EG to ensure the fair allocation of benefits.

The Impact of GS on Growth Inclusiveness in Absorbing Labor

The impact of government expenditure in the education sector on the growth inclusiveness coefficient in labor absorption is negative and statistically insignificant in the short and long term. This discovery aligns with the research findings of Purwanti and Rahmawati (2021). In a theoretical sense, this finding does not provide support for Keynes' proposition that government intervention will effectively lead to the attainment of full employment within the economy. The agricultural sector in Indonesia is the primary employer of labor. The workforce in this sector continues to be predominantly comprised of individuals with primary school education or its equivalent, resulting in relatively lower educational expenses. Therefore, the impact of increased government spending (GS) within the education sector on the inclusiveness of economic growth (EG) in labor absorption is not substantial. The study revealed a statistically insignificant and negative correlation between government spending (GS) in the health sector and the coefficient of inclusive growth in labor absorption, both in the short and

long term. Althofia and Agustina (2015) also reported similar findings, indicating no statistically significant relationship between gender stereotypes and health outcomes or employment status in the West Java region. The upward trend observed in the health budget aligns with Wagner's theory of the law of expanding government involvement. However, it is important to note that this increased role does not necessarily generate a multiplier effect on the overall national output, particularly regarding unemployment rates. Insufficient performance and equitable accessibility to healthcare services lead to a decline in the quality of public health.

Consequently, unstable health conditions pose challenges in contributing to the economy and obtaining employment opportunities. The impact of government expenditure in the social protection sector on the coefficient of inclusive growth in labor absorption is statistically insignificant in the short and long term. The government has implemented a social protection program known as social security employment, which aims to safeguard workers. The primary focus of the employment social security program is typically directed toward individuals engaged in formal employment. In contrast, statistical data from the Indonesian Central Bureau of Statistics (BPS) indicates that the prevailing employment landscape in Indonesia is largely characterized by individuals working in the informal sector. This implies that the social security program does not assure the potential risks individuals in this industry encounter. Based on the findings of the Indonesian Institute of Sciences (LIPI), it is evident that the informal sector plays a crucial role in economic growth (EG). However, it is important to note that this sector lacks robust social security measures.

Consequently, the long-term impact of increased government spending (GS) on social infrastructure is found to have a substantial effect on the coefficient of inclusive growth, particularly in terms of labor absorption. The outcome mentioned above aligns with the discoveries made by Puspita, Militina, and Effendi (2020). There has been a notable increase in the capacity to employ labor. The outcome mentioned above aligns with the discoveries made by Puspita et al. (2020). During the designated period of observation, it was observed that a substantial augmentation in the allocation of funds for infrastructure, amounting to approximately Rp415 trillion, had a notable impact on the reduction of unemployment by an estimated 170 thousand individuals. This positive effect occurred alongside a growth rate that tended to stagnate, remaining at approximately 5 percent. In Solow's theory, the term "GS" about infrastructure is synonymous with physical capital, a significant component of long-term economic growth (EG). The Cash Labor Intensive (PKT) program is an infrastructure development initiative incorporating a labor-intensive approach, promoting employment opportunities. When allocating budget evenly among similar sectors, it enhances the potential for individuals to enter and participate in the labor market. If this circumstance occurs over an extended period, it is possible to attain the state of full employment as posited in Keynes' theory.

CONCLUSIONS AND SUGGESTIONS

Inclusive economic growth refers to the ability of a country or region to effectively address poverty reduction, inequality reduction, and labor absorption through its growth processes. The study employs Klasen's (2017) inclusive growth measure, specifically the Poverty-Equivalent Growth Rate (PEGR), to analyze the data from 2003 to 2020. The findings indicate that the coefficient of inclusiveness of EG against poverty (IGp) surpassed the EG rate (Ĝg) solely in 2018 within the context of Indonesia. Inclusive growth is synonymous with the abovementioned concept of reducing inequality. In 2020, the coefficient of inclusive growth in absorbing labor (IGem) was observed to surpass the economic growth rate (EG). Hence, it can be inferred that the extent of economic growth (EG) in Indonesia during 2003-2020 lacks inclusivity.

In the immediate timeframe, government spending (GS) in the health, infrastructure, and social protection sectors demonstrates a noteworthy and substantial impact on fostering inclusive economic growth, thereby mitigating poverty and inequality. Over an extended period, it can be observed that government spending (GS) in the education sector yields a noteworthy and adverse impact. Conversely, the infrastructure and social protection sectors exhibit a positive and substantial influence on the inclusivity of economic growth, thereby contributing to reducing poverty and inequality. Government spending on infrastructure exhibits a noteworthy and favorable influence on the inclusivity of economic growth by facilitating the absorption of labor. After acquiring empirical findings concerning the correlation between government spending (GS) and inclusive economic growth, the government in question must augment the allocation of funds towards GS, particularly in education, healthcare, social protection, and infrastructure. This should be done while ensuring the precision of the objectives set for each budgetary allocation. The government must exercise oversight over budget allocations by emphasizing data integration via the Integrated Database for each program. This approach ensures that the budget is effectively targeted and enhances public welfare.

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