JURNAL
EKONOMI
KUANTITATIF
TERAPAN

MEASURING WELFARE EQUALITY: ESSENTIAL FACTORS SUPPORTING INCLUSIVE ECONOMIC GROWTH IN WEST NUSA TENGGARA

PROVINCE 2021-2025

ABSTRACT

Inclusive economic growth is a new paradigm in measuring the success of economic development in current era. The purpose of this study is to analyze and identify the essential factors that support inclusive economic growth in the regency / city of NTB Province for the next five years (2021-2025). This research uses the semi-averaging method in calculating data projections in 2024-2025. The data analysis technique used in this research is panel data regression. The findings of this study indicate that over the next five years (2021-2025) inclusive economic growth in NTB regency / city is predicted to be in the medium category. The findings of this study also show that a decrease in poverty levels, income inequality and unemployment rates are important factors that support inclusive economic growth in Regency / City in NTB Province in the next five years (2021-2025).

Introduction

The success of a region is closely related to the welfare of its people. The main objective of implementing regional economic development is to achieve community welfare through increased economic growth and income equality, which includes income equality between regions. This development goal should have been achieved already, but in reality until now the main problems of economic development in the regions such as poverty levels, income inequality and employment are still not really effectively resolved, so that it is still a crucial issue that hinders the process of achieving these economic development goals.

West Nusa Tenggara Province is one of the provinces in Indonesia located in the eastern archipelago, which consists of eight regencies and two cities. West Nusa Tenggara has geographical advantages and abundant natural resources that can be used as capital in increasing its economic growth. One indicator that is usually used as a measure of economic growth in a region would be the growth rate of PDRB ADHK 2010. High economic growth is expected to reduce the three main problems in

economic development, such as poverty, income inequality and labor absorption. The average economic growth of NTB Province, based on data released by the West Nusa Tenggara Statistics Center (BPS) during the last three years (2021-2023) was 3,67%. The highest economic growth was in 2022 at 6,95%, and this achievement was higher than the national average. In terms of regency/city, West Sumbawa Regency has the highest economic growth of 24.14% in 2022, this achievement increased significantly from the year before, which is 2021, with economic growth of -0,33%. This regency still dominates economic growth in NTB Province. Furthermore, the lowest economic growth in 2022 was in Bima City, which was 2,70%, an increase from the year before.

Economic growth that reflects the welfare of the community must be seen from the low level of poverty and income inequality and the absorption of labor as seen from the low level of unemployment in each regency / city. Based on the data presented in the graph below, seen from the poverty rate, North Lombok Regency ranks first with the highest average poverty rate over the last three years

(2021-2023), which is 26,26%. This was followed by East Lombok Regency at 15,38%. West Sumbawa Regency, with the highest economic growth, still has an average poverty rate of more than 10%, which is 13,17%. Meanwhile, Bima City, which has the lowest economic growth, in the last three years ranks second after Mataram City as the city with the lowest poverty rate, with an average of only 8.78%. Furthermore, in terms of income inequality, the regency/city with the highest income inequality from 2021-2023 is Mataram City with an average of 0.43, followed by Bima City with 0.42, while West Sumbawa ranks as the fifth highest with an average income inequality of 0.38. The Regency/City with the lowest income inequality is East Lombok with an average of 0.29 over the last three years, followed by North Lombok with 0.31. Based on labor absorption, the district with the lowest rate of unemployment is North Lombok Regency with an average of 1.18%, most of the labor force in North Lombok Regency is absorbed in the agricultural sector. Meanwhile, Mataram City has the highest rate of unemployment with an average of 5.33%, followed by West Sumbawa Regency at 4.54%.

DATA MASALAH PEMBANGUNAN EKONOMI KABUPATEN/KOTA PROVINSI NTB (2021-2023)
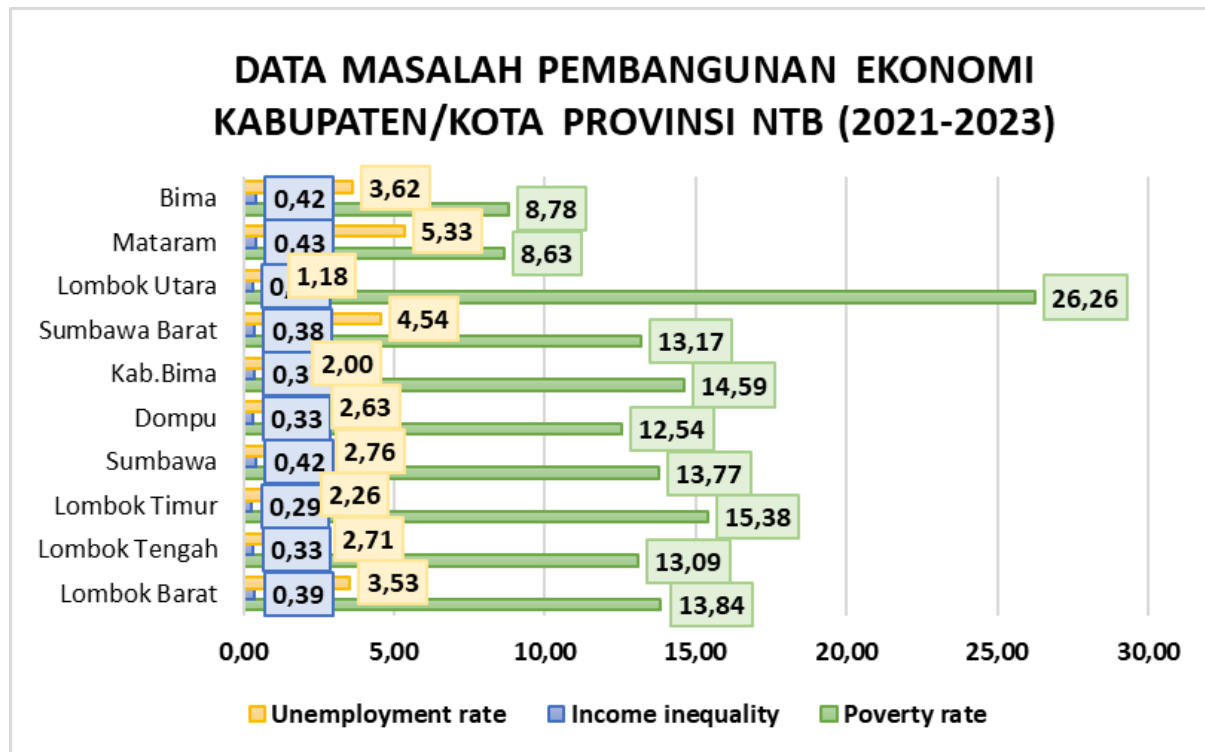
Source : Badan Pusat Statistik NTB, 2023

The gap between economic growth, poverty rate, income inequality, and labor absorption that has not been maximized in each regency / city illustrates that there is no income equality in the regency / city of NTB Province, even though it has a high economic growth. According to Pratiwi and Kurniasari (2023), economic growth is not enough to solve the three problems of economic development. This is because the calculation of economic growth is only based on PRDB without looking at the problem of poverty reduction, income inequality and unemployment rates that show an increase in labor absorption later. Because of that, it is important to change the economic development indicator perspective from economic growth that relies heavily on abundant natural resources and people's income to economic growth that includes the three main problems of economic development into the calculation, which consist of poverty, income inequality and unemployment rates as a proxy for absorbed labor. This makes the economic growth indicator more inclusive.

Inclusive economic growth is part of one of the Sustainable Development Goals (SDGs), which is to achieve inclusive and sustainable economic growth, productive and comprehensive employment opportunities and decent work for all. The World Economic Forum (WEF) defines inclusive economic growth as a form of improving economic

performance by expanding economic opportunities and prosperity, and providing broad opportunities for all levels of society. Inclusive economic growth does not only focus on the creation of new economic opportunities, but also focuses on economic growth that provides equal opportunities for all levels of society (Ali and Son, 2007). The main objective of inclusive economic growth is poverty in all forms, this is contained in the first point of sustainable development goals, in addition to poverty reduction, it also reduces inequality and unemployment rates by expanding employment, which is contained in the tenth and eighth points in the sustainable development goals (SDGs).

Research on inclusive economic growth has been conducted at domestic and international level. Ozughalu and Ogwumike (2015) stated that the reason why there has been no inclusive growth in Nigeria for several years is because poverty, inequality and unemployment are still very high in the country. Pratiwi and Kurniasasi (2023) concluded that most of the inclusive economic growth rates in Indonesia are in the middle class category. The factors that support inclusive economic growth in Indonesia from 2012-2020 in their research findings are Information and Communication Technology (ICT), Labor Force Participation Rate (TPAK), and Regional Original Income (PAD). Afriliana and Wahyudi (2022) from the results of their research show that inclusive growth in Indonesia still tends to be inconsistent. In his research, he suggested that the focus should be on equitable distribution of economic growth rather than just pursuing the highest economic growth, because high economic growth alone is not enough to solve economic development problems such as poverty, income inequality and unemployment.

Zhu et al., (2022) concluded that the negative impact of poverty and inequality on inclusive growth in Vietnam seems to be concentrated at high poverty levels. Purwanti and Rahmawati (2021) found that government spending on health and education was a significant supporting factor for inclusive economic growth in Indonesia in 2010-2019. Furthermore, the unemployment rate shows a negative influence on inclusive economic growth in Indonesia in that year. Amponsah et al., (2023), found that inequality has a negative impact on poverty and will further worsen inclusive growth.

To achieve a golden Indonesia in 2045, every region in Indonesia has a big role to play in achieving the national development plan. The vision of the golden Indonesia of 2045 includes 0% poverty and reduced inequality.

Therefore, inclusive economic growth is a very appropriate indicator in seeing and measuring current regional economic development. This research will examine inclusive economic growth in the regency / city of NTB Province for the next five years (2021-2025). To the author's knowledge, this research is the first in NTB Province to examine the essential factors that support inclusive economic growth in the regency / city of NTB Province over the next five years, so that this research can fill the literature gap related to inclusive growth. This study aims to analyze the essential factors that support economic growth to be more inclusive in NTB Province in the next five years. The use of research years from 2021-2025 is in line with the *Regional Development Plan* (RPD) of NTB Province for 2024-2026 in achieving development goals consisting of three main pillars, such as human development, environmental development and community welfare development. So that the main contribution of this research is a recommendation for policies for local governments that can be applied in realizing these development plans.

$$X' = \frac{x-min}{max-min}\ (max^* - min^*) + min^*$$

The components of the unemployment rate :

Research Methods

This research uses quantitative research methods. The type of data used in this research is secondary data, which is data published by the Central Statistics of Indonesia and West Nusa Tenggara Province. The calculation of research data projections for 2024 and 2025 was carried out using the semi average method. This method is one of the objective forecasting methods that produces projection data by calculating the formula of the trend line formed from previous data (Saryanti et al., 2021). Furthermore, in calculating the value of inclusive economic growth in each regency/city, this study adopted the calculation formulated by Ramos et al., (2013) using three components, namely the poverty rate, income inequality and employment rate. In this study, the author uses the unemployment rate to see the size of the absorbed labor force. The min-max normalization formula for the components of poverty rate, income inequality and unemployment rate (Pratiwi and Kurniasari, 2023) is :

The components of poverty rate and income inequality:

$$X'' = \frac{x-min}{max-min}\ (max^* - min^*) + min^* + max^*$$

So the formula for calculating inclusive economic growth is :

$$= \frac{X'Poverty\ rate + X'Income\ Inequality\ + X''Unemployment\ rate}{3}$$

Description :

X' : min-max normalized values of poverty and inequality

X'' : min-max normalized value of unemployment rate

min : minimum value in the research data group

max : maximum value in the research datagroup

min^* : the smallest desired value (min^* = 0)

max^* : the largest desired value (max^* = 1)

The achievement of inclusive economic growth values is classified as below (Ramos et al., 2013):

0 < PEI ≤ 0.2 : Very high inclusive rate

0.2 < PEI ≤ 0.4 : High inclusive level

0.4 < PEI ≤ 0.6 : Medium inclusive level

0.6 < PEI ≤ 0.8 : Low inclusive level

0.8 < PEI ≤ 1 : Very low inclusive level

This study will also identify the essential factors that can influence inclusive economic growth in the regency/city of NTB Province for the next five years, so that it can support inclusive economic growth in the regency/city. To determine the influence of each factor, this study uses panel data regression data analysis techniques.

Use of this panel data regression, because this study consists of cross-section (regency / city) and time-series (2021-2025) (Gujarati, 2011). In panel data regression, there are three estimation models, namely the Common Effect Model (CEM), Fixed Effect Model (FEM) and Random Effect Model (REM). Selection of the best estimation model to be analyzed will be carried out through three tests, namely the chow test, hausman test and lagrange multiplier test (if needed). The equation form of this panel data is :

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon$$

where Y is inclusive economic growth, then β_0 is a constant, β is the regression coefficient. Furthermore, X1 is the poverty rate, X2 is income

inequality and X3 is the unemployment rate. Then, ε is an error term, i is a cross section unit consisting of regency / city and t is a time series unit consisting of 2021-2025.

Results and Discussion

Panel data regression models shown in the table below:

Variabel	CEM	FEM	REM
Proverty Rate	0.003465	0.257271***	0.003465
Income Inequality	1.514914	5.109151***	1.514914***
Unemployment Rate	-0.044637	-0.161514***	-0.044637
F-statistik	2.181599	10.98605	2.181599
Probabilitas	0.102979	0.000000	0.102979
Adjusted R-Square	0.067462	0.709772	0.067462

Source: data processed by the author
*p < 0,1 **p < 0,05 ***p < 0,001

The estimation results on the fixed effect model (FEM) show that the poverty rate variable has a coefficient of 0.257271 with a significant positive effect on inclusive economic growth. The positive direction of the relationship indicates that increasing the poverty rate by one unit will increase inclusive economic growth by 0.257271 units in the regency/city of NTB Province over the next five years (2021-2025). Furthermore, the income inequality variable has a coefficient of 5.109151 which has a significant positive effect on inclusive economic growth in the regency/city of NTB Province in 2021-2025. The positive direction of the relationship also indicates that an increase in income inequality by one unit will increase inclusive economic growth by 5.109151 units in the regency/city of NTB Province over the next five years (2021-2025). The increase in the inclusive growth index value indicates that economic growth in the regency/city is not inclusive.

Almost all regencies / cities in NTB Province have average inclusive economic growth in the next five years in the middle category, this is in line with the findings of Pratiwi and Kurniasasi (2023) which concluded that most of the inclusive economic growth rates in Indonesia are in the middle category. There is only one regency, Bima, which is in the high category. In the current year,

which is 2024 and 2025, there are several regencies/cities that are predicted to have low and very low inclusive growth, including West Lombok, Sumbawa, Dompu, Mataram City and Bima City. So this should be a concern in efforts to reduce poverty and income equality to improve the well-being of the community.

In line with the sustainable development goals in the first and tenth points, the first point reveals ending poverty in all forms everywhere and the tenth point reveals reducing inequality. Therefore, improving people's welfare must be a top priority for inclusive development in the current and future. The findings of this study are supported by Ozughalu and Ogwumike (2015) that the low level of inclusive growth in Nigeria is due to high poverty and inequality. Zhu et al., (2022); Amponsah et al., (2023) also support the findings of this study, where increasing poverty and inequality have a negative impact on inclusive growth, this negative impact is concentrated in high poverty levels.

The next variable is the unemployment rate which has a coefficient of -0.161514 which has a significant negative effect on inclusive economic growth in the regency / city of NTB province in 2021-2025. The negative direction of the relationship shows that an increase in the unemployment rate by one unit will reduce inclusive economic growth by 0.161514 in the regency / city of NTB Province in 2021-2025. The decrease in the achievement of the inclusive growth index value indicates that economic growth in the regency/city is increasingly inclusive. This result is contrary to expectations that an increase in the unemployment rate should increase the value of inclusive economic growth, which makes economic growth less inclusive. Such conditions can occur, one of which is caused by shifts in labor absorption in certain sectors or employment due to changes in economic structure. Where one sector will experience an increase in labor absorption so that the open unemployment rate will decrease, but other sectors will experience a decrease in labor absorption so that the unemployment rate will increase. Therefore, when the open unemployment rate increases, inclusive growth can occur from increased labor absorption in certain

sectors even though labor absorption in other sectors decreases, causing the open unemployment rate to increase. However, conditions like this cannot be left alone, because they reflect unequal labor absorption so that inclusive growth will only occur temporarily. This finding is in line with Purwanti and Rahmawati (2021) who stated that the level of unemployment has a negative effect on inclusive economic growth in Indonesia.

CONCLUSION

This research study concludes that over the next five years, namely 2021-2025, inclusive economic growth in the districts/cities of NTB Province is predicted to be in the middle category, except for Bima Regency which is in the high category. The only districts/cities that are predicted to experience high inclusive economic growth now and in the future (2025) are Central Lombok and Bima. While others are in the medium to very low category. West Lombok Regency, Mataram City and Bima City are predicted to be in the worrying category this year and next year (2025), namely low to very low.

This research also concludes that reducing poverty rate, income inequality and unemployment levels are essential factors that support increasingly inclusive economic growth in the regencies /cities of NTB Province now and in the future.

In an effort to achieve the targets of the 2024-2026 regional development plan, one of which is equal distribution of community welfare, the findings from this research are highly recommended as a reference in formulating strong policies, especially those that favor poor groups in efforts to eradicate poverty and reduce disparities. Apart from that, policies related to increasing labor absorption by expanding employment opportunities in productive sectors. Ensuring that the policies that have been formulated are effective is an important task for local governments now and in the future so that economic growth in each district/city can become more inclusive.

References

Afriliana, S. N., & Wahyudi, S. T. (2022). Analisis Pertumbuhan Ekonomi Inklusif: Studi Komparasi Antar Provinsi Di Indonesia. *Journal of Development Economic and Social*

Studies, *1*(1). https://dx.doi.org/10.21776/jdess.2022.01.1.5

Ali, I., & Zhuang, J. (2007). *Inclusive growth toward a prosperous Asia: Policy implications* (No. 97). ERD working paper series. http://hdl.handle.net/10419/109299

Amponsah, M., Agbola, F. W., & Mahmood, A. (2023). The relationship between poverty, income inequality and inclusive growth in Sub-Saharan Africa. *Economic Modelling*, *126*, 106415. https://doi.org/10.1016/j.econmod.2023.106415

Gujarati, Damodar N dan Porter, Dawn C. (2011)."Dasar-Dasar Ekonometrika". Selemba Empat, Jakarta.

Ozughalu, U. M., & Ogwumike, F. O. (2015). Inclusive growth and poverty reduction in Nigeria. *Bullion*, *39*(4),2. https://dc.cbn.gov.ng/bullion/vol39/iss4/2

Pratiwi, K. D., & Kurniasari, D. (2023). Penerapan Model Panel: Determinan Tingkat Pertumbuhan Inklusif Indonesia. *Bappenas Working Papers*, *6*(1), 60-78. https://doi.org/10.47266/bwp.v6i1.163

Purwanti, S. D., & Rahmawati, F. (2021). Pengaruh Pengeluaran Pemerintah Dan Tingkat Pengangguran Terbuka (TPT) Terhadap Pertumbuhan Ekonomi Inklusif Indonesia. *Ecoplan*, *4*(1), 32-44. http://ecoplan.ulm.ac.id/index.php/iesp/article/view/231

Ramos, R. A., Ranieri, R., & Lammens, J. W. (2013). *Mapping inclusive growth*. IPC-IG. http://www.ipc-undp.org/

Saryanti, I. G. A. D., Hadi, R., & Kusuma, I. G. N. A. (2021). Purwarupa Aplikasi Peramalan Kebutuhan Persediaan Barang Dagang Berbasis Website dengan Semi Average Method. *JTIM: Jurnal Teknologi Informasi dan Multimedia*, *3*(2), 70-77. https://doi.org/10.35746/jtim.v3i2.157

Zhu, Y., Bashir, S., & Marie, M. (2022). Assessing the relationship between poverty and economic growth: does sustainable development goal can be achieved?. *Environmental Science and Pollution Research*, *29*(19), 27613-27623. https://doi.org/10.1007/s11356-021-18240-5