JURNAL AKUNTANSI BISNIS DAN EKONOMI
Volume 10. Nomor 02. 2024

e-ISSN
2684 – 6756

Analysis of Regional Disparities in Indonesia

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History of article: Received: 26 April 2024, Revision: 12 May 2024, Published: 31 Agustus 2024
DOI: 10.33197/jabe.vol10.iss02.2024.1954

ABSTRACT
This study aims to assess regional inequality in Eastern Indonesia and analyze the impact of investment and advancements in information and communication technology on this inequality using the Williamson index and panel data regression techniques. The findings indicate that most provinces in Eastern Indonesia experienced high levels of inequality from 2017 to 2021. Specifically, seven provinces remained in the same inequality category throughout this period: Gorontalo in the low category, North Sulawesi in the medium category, and Central Sulawesi, East Nusa Tenggara, West Nusa Tenggara, West Papua, and Papua in the high category. Meanwhile, six other provinces—Maluku, North Maluku, Bali, West Sulawesi, South Sulawesi, and Southeast Sulawesi—experienced category changes during this time. The analysis further reveals that investment is positively correlated with regional inequality and has a significant impact on it. These results suggest that while investment can drive economic growth, it may also exacerbate inequality, particularly in regions already facing significant disparities. This study highlights the need for policies that balance economic development with equitable distribution to reduce regional disparities in Eastern Indonesia.

Keywords: Eastern Region of Indonesia, Inequality, Investment, ICT

INTRODUCTION
The problem of inequality is not something that has happened recently, but has become a common thing that occurs in the development process in most countries, including Indonesia. Todaro & Smith (2020) say that reducing inequality is one of the goals of development, but on the other hand, inequality is a consequence of the development process. This is because the development process that occurs is uneven, causing some areas to experience rapid development and other areas to experience slow development. ILO in Sumirat (2019) regional disparity is a condition of differences in economic performance and community welfare between one region and another. Where this gap can threaten the stability of a country's socio-economic conditions, so various kinds of efforts are needed to reduce the level of this gap.

Until now, the gap between regions in Indonesia is still quite high, especially in Eastern Indonesia. Where Eastern Indonesia is considered an underdeveloped region, even though their natural resource potential is large. In 2021, Indonesia is ranked third for the gold mine with the largest production. The mine in question is the Grasberg mine located in Papua Province with a total production of 1.37 million ounces (Databoks, 2022). In addition, Bali and Nusa Tenggara Islands are designated as tourism gateways because there is great tourism potential there. Moreover, Ayudhia & Riyadi (2018)

said that one of the largest contributors to foreign exchange after Crude Palm Oil (CPO) and Coal is tourism sector, as well as Bali being the largest foreign exchange contributor to Indonesian tourism. These potentials should be well optimized, in order to improve the region's economy and ultimately reduce the level of inequality that occurs.

The measuring tool to see the level of inequality between regions that occurs in Eastern Indonesia is to use the Williamson Index method. Based on the calculation results, the order of provinces with the lowest to highest level of inequality in 2016 is Gorontalo, Maluku, North Maluku, Bali, West Sulawesi, North Sulawesi, Central Sulawesi, South Sulawesi, Southeast Sulawesi, NTT, NTB, West Papua, and Papua.

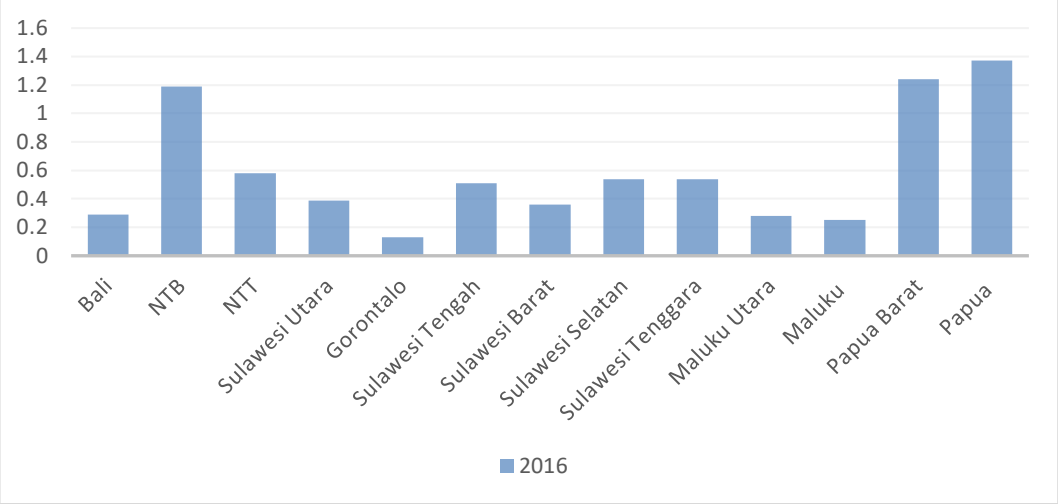

Figure 1. Graph of regional disparities in Eastern Indonesia
Source : Badan Pusat Statistik (processed), 2023

According to Sjafrizal (2018), in addition to differences in resources owned, gaps also occur due to differences in labor situations, movement of goods and services, and distribution of development funds. Where investment plays a very important role in the development process of a region, because it cannot be denied that the limited funds owned can hinder a region in carrying out all types of projects. Investment can also affect inequality, because the value of investment obtained varies. Therefore, regions with a fast development process tend to have a large investment value as well. In addition, the development of information and communication technology can also affect the level of inequality between regions, because the use of ICT can help the process of production, distribution, and consumption of goods and services, which in turn can accelerate the development of the region. Moreover, Kominfo (2020) considers ICT as an important infrastructure today.

Based on the background described, where the gap between these regions still continues to occur with various factors affecting it and the assumption that the provinces located in Eastern Indonesia are underdeveloped provinces. So this research will discuss the "Analysis of Regional Disparities in Eastern Indonesia" with the aim of knowing the level of gap that occurs in Eastern Indonesia, as well as knowing the effect of investment factors and ICT progress on the level of gap. With the hope that this research can be useful as a source of information for future researchers.

LITERATURE REVIEW

Economic Growth

a) Neo-Classical Theory

This neo-classical economic growth theory was modified for the regional context by Borts and Stein (1960), who said that in addition to being determined by the potential of the region concerned, regional economic growth is also influenced by the movement of labor and capital between regions.

Neo-classical theory emphasizes that capital accumulation (investment) is more necessary in improving the country's economy, both foreign and domestic investment, especially for developing countries that require more funds. The conclusion of this theory shows that regional economic growth is influenced by the addition of capital or investment, technological progress, and the addition of the quantity and quality of labor.

b) Growth Center Theory

This theory explains that the development process does not occur simultaneously and only occurs in certain areas at different speeds and intensities. Where economic activities tend to be concentrated in areas that have local advantages and areas that become centers of growth can encourage the spread effect or trickle down effect or backwash effect or polarization effect.

c) Cumulative Causative Theory

This theory explains the impact of a region's growth on other regions, namely the backwash effect and the spread effect. The backwash effect is a detrimental influence on underdeveloped regions from developed regions, while the spread effect is the opposite condition. That is, if the difference in economic development between regions causes the backwash effect to be greater than the spread effect, it can cumulatively worsen the level of inequality.

d) Trickle Down Effect/ Polarization Effect Theory

According to Ren et al., (2018) said that the polarization effect is an inhibiting factor for development in underdeveloped areas, while the trickle down effect is a supporting factor from developed areas that can influence development in underdeveloped areas. Therefore, when the polarization effect is greater than the spread, a society will emerge that has the characteristics of modern urban areas and underdeveloped rural areas. Hirschman also suggested forming more growth points to streamline the effect of development spread and minimize the polarization effect.

Regional Disparities

According to Lusardi & Mitchell (2014)says that inequality refers to the relative standard of living of the whole society. Where the gap occurs due to differences in *endowment factors* owned, so that the ability to increase economic growth and encourage the development process is different. According to the OECD, regional disparities are differences in intensity manifested through economic phenomena observed in a number of regions in one country (Sumirat, 2019). In the neo-classical hypothesis, it is said that at an early stage during the development process of a region, the level of disparity tends to be large (divergence) and will gradually decrease as the development process continues (convergence).

Frey & Osborne (2017) argues that there are several factors that can affect the level of inequality through the level of economic growth, namely the content of natural resources, demographic conditions, the movement of goods and services, the concentration of economic activities, and the distribution of development funds. The level of regional disparity that occurs can be seen by measuring using the Williamson index with GRDP per capita as its main component. The larger the gap in GRDP per capita value between regions, the higher the level of disparity. Regions with high GRDP per capita values tend to show the existence of growth centers in the region (Ramadhana, Azzahra Zauza Inniswa; Utomo, 2022).

Investment

According to Aktas et al., (2015) argues that investment is a commitment to a number of funds or assets today that aims to obtain future profits. In the Harrod-Domar theory of economic growth, investment is the main key in the process of economic growth, but on the other hand it can widen the level of inequality. According to Jhingan (2016) said that investment tends to be allocated more to developed regions than underdeveloped regions. The Harrod-Domard theory also assumes that investment and the rate of economic growth have a positive relationship. Where the value of investment in a region is low, the economic growth rate of the region is also low, and ultimately can cause the level of inequality to increase.

e-ISSN
2684 - 6756

Information and Communication Technology

Information and communication technology is a means and infrastructure consisting of hardware, software, systems and methods of use for the transmission, management, interpretation, storage, organization and use of data (Hasanah et al., 2023). Schumpeter's theory in Jhingan (2016) says that in the long run, continuous technological progress can increase overall output and output per capita. According Sepehrdoust & Ghorbanseresht (2019) ICT is needed to improve the country's economy and development, this is because ICT can make it easier for people to access the internet, reduce production costs, and increase market transparency. Thus, ICT can increase economic growth to the development of a region. However, the uneven development of ICT currently causes some regions to not be able to feel the benefits.

Based on the explanation of the background and literature review, the hypotheses used in this study are: (1) It is suspected that the average level of inequality between regions in Eastern Indonesia is > 0.5; and (2) It is suspected that investment and ICT progress have a significant influence on the level of regional inequality in Eastern Indonesia in 2017-2021.

RESEARCH METHODS

This research is a quantitative research using panel data. Where the samples in this study are Williamson index data, investment data (PMDN and PMA), IP-ICT data for 2017 - 2021 from each of the 13 provinces in Eastern Indonesia. The data analysis techniques used are:

1) Williamson Index to determine the level of inequality between regions.

$$IW = \frac{\sum(y_i - \bar{y})^2(f_i/n)}{\bar{y}}$$

Explanation :

Y_i = GDP per capita of the i-th region
$\bar{Y}$ = GRDP per capita one hierarchy level above Y_i
F_i = Population of the i-th region
n = Population one hierarchy level above F_i

2) Panel data regression analysis to determine the effect of investment and ICT on the level of inequality.

$$Y_{it} = \alpha + \beta_1 X_{1.1it} + \beta_2 X_{1.2it} + \beta_3 X_{2it} + \varepsilon_{it}$$

Explanation :

Y = Dependent variable
α = Intersept/constants
$\beta_1, \beta_2, \beta_3$ = Regression coefficient of independent variable
$X_{1.1}, X_{1.2}, X_2$ = Independent variable
ε = *Error term*
i = *Cross section* = 4 Islands
t = *Time series* = 5 Years

RESEARCH RESULTS AND DISCUSSION

a) Williamson Index

Based on the results of the Williamson index calculation that has been carried out, it is known that Gorontalo is the province with the lowest level of inequality in 2017-2021. While the province with the highest level of inequality in 2017 and 2018 is Papua, in 2019 is West Papua, as well as in 2020 and 2021 is Central Sulawesi province.

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Where there are only 7 provinces that remain in the same category from 2017 - 2021, namely Gorontalo in the low gap level category, North Sulawesi in the medium gap level category, as well as Central Sulawesi, West Southeast Nusat, East Nusa Tenggara, West Papua, and Papua in the high gap level category. Meanwhile, 6 other provinces experienced category changes, namely Maluku, North Maluku, Bali, West Sulawesi, South Sulawesi, and Southeast Sulawesi.

Table 1. Williamson Index in Eastern Indonesia

No	Province	Williamson Index				
		2017	2018	2019	2020	2021
1	Bali	0.29	0.29	0.28	0.35	0.33
2	West Nusa Tenggara	1.02	0.71	0.66	0.97	0.91
3	East Nusa Tenggara	0.58	0.58	0.57	0.53	0.52
4	North Sulawesi	0.40	0.40	0.40	0.39	0.39
5	Central Sulawesi	0.53	0.98	1.08	1.19	1.52
6	South Sulawesi	0.50	0.51	0.52	0.57	0.57
7	Southeast Sulawesi	0.58	0.58	0.41	0.45	0.44
8	Gorontalo	0.13	0.13	0.12	0.17	0.18
9	West Sulawesi	0.36	0.35	0.34	0.34	0.39
10	Maluku	0.24	0.23	0.24	0.37	0.38
11	North Maluku	0.27	0.26	0.26	0.36	0.73
12	West Papua	1.20	1.22	1.24	1.07	1.13
13	Papua	1.42	1.45	1.06	1.06	1.38

Source: Badan Pusat Statistik, 2023

b) Panel Data Regression Analysis

Based on the panel data regression estimation model testing that has been carried out, it is known that the fixed effect model (FEM) is the most appropriate model to use. The estimation results of this fixed effect model are :

Table 2. Fixed Effect Model Estimation

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-0.356332	0.327775	-1.087123	0.2967
PMDN	-0.007978	0.024668	-0.323419	0.7515
PMA	0.106851	0.033187	3.219650	0.0067
TIK	0.019228	0.013942	1.378141	0.1911
Bali & Nusa Tenggara	-0.019135			
Sulawesi	-0.525171			
Maluku	-0.171785			
Papua	0.716091			
F-statistic	80.21307			
Prob(F-statistic)	0.000000			

Source : Output Eviews 12, data processed (2023)

The partial test results (t-test) show that only the foreign investment variable (FDI) has a significant influence on the level of inequality. Where the probability value of FDI <0.05, while the probability value of domestic investment (PMDN) and information and communication technology > 0.05 so that the PMDN and ICT variables do not have a significant influence on the level of inequality. In addition, the results of the simultaneous test (f-test) show that the investment and ICT variables jointly affect the level of inequality. This can be seen from the probability value of the F-statistic <0.05.

Where the panel data regression equation model based on the selected *fixed effect model* (FEM) estimation results is :

$$Y_{it} = \alpha + \beta_1 X_{1.1it} + \beta_2 X_{1.2it} + \beta_3 X_{2it} + \varepsilon_{it}$$

$$Y_{it} = -0.356 - 0.008\ X_{1.1it} + 0.107\ X_{1.2it} + 0.019\ X_{2it} + \varepsilon_{it}$$

e-ISSN
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Explanation :

Y	= Regional Disparities
α	= Intersept/constant
$\beta_1, \beta_2, \beta_3$	= Regression coefficient of independent variable
$X_{1.1}$	= Domestic Investment (billion rupiah)
$X_{1.2}$	= Foreign Investment (million US$)
X_2	= Information and Communication Technology
ε	= *Error term*
i	= *Cross section* = 4 Islands in Eastern Indonesia
t	= *Time series* = 5 Years (2017 – 2021)

a) Regional Disparities in Eastern Indonesia

The results show that most provinces in Eastern Indonesia are in the category of high levels of inequality. Where these results are in line with research by Panggarti et al., (2022) and supported by Perroux's (1950) economic growth center theory in the book (Kuncoro, 2019) which explains that the development process does not occur simultaneously and only in certain areas with different speeds and intensities, moreover economic activities tend to be concentrated in areas that have local advantages and can provide benefits (spread effect or trickle down effect) or losses (backwash effect or polarization effect) to the surrounding areas.

In the Williamson index measurement tool, the main indicator is GRDP per capita, so the high and low gap that occurs depends on the size of the GRDP per capita gap between regions. In addition, provinces that remained in the same category because there were no districts/cities in the province that experienced a large increase/decrease in GRDP per capita value that did not significantly affect the gap that occurred. Meanwhile, provinces that experienced a change in category because the GRDP per capita value of several districts/cities in the province experienced a large enough increase/decrease to affect the level of inequality in the region. Where the increase/decrease in the value of GRDP per capita is influenced by a stagnant economic growth rate but the population has increased, the value of GRDP that increases higher than population growth, the high rate of GRDP in a sector, the increase in performance allowances in several Ministries/Institutions, to limited socio-economic activities due to the Covid-19 pandemic which can affect people's per capita income (RI, 2023).

The high level of inequality between regions is influenced by their natural and human resources. Based on the Regional Fiscal Study by the (RI, 2023), most regions in Eastern Indonesia have abundant natural resource potential. However, the processing is done less optimally, so it is still in the form of raw materials and has no added value, for example nickel, metal ore, minerals, oil and gas, and cocoa. In addition, there are also several sectors that are still not optimally developed, namely the agriculture, fisheries and tourism sectors.

Meanwhile, in terms of human resources, most regions in Eastern Indonesia from 2017-2021 experienced an increase in population, but the quality of their human resources is still inadequate, while workers with special competencies and expertise are needed. In addition, the occurrence of population movements between districts / cities and provinces also affects the gap that occurs (Badan Pusat Statistik, 2023; RI, 2023).

b) Effect of Investment on the Gap Level

The results showed that foreign investment (FDI) has a positive relationship and there is a significant influence on the level of inequality, this is indicated by the resulting constant value of 0.107 and a probability value of 0.0067. The results of this study are in line with research conducted by Nurfifah et al., (2022), research of Abbasi Taghidizaj & Pashazadeh (2021), and research Azarhoushang et al., (2019), but not in line with research by Pourfaraj et al., (2019).

e-ISSN
2684 – 6756

The results are also supported by the neo-classical economic growth theory in the regional context by Zheng & Walsh (2019) and the Harrod-Domard theory which emphasizes that capital accumulation (investment) is more necessary in improving the economy, because the development process of a region requires a lot of money. On the other hand, Mrydal argues that investment tends to be allocated more to developed regions than underdeveloped regions and can ultimately hamper development in underdeveloped regions. So that the *backwash effect* tends to be greater than the *spread effect*. The difference in the value of investment, which also affects the economic growth of a region, can ultimately trigger inequality between regions (Todaro & Smith, 2012).

There are several things that affect the difference in the value of investment obtained by each region, namely the establishment of Special Economic Zones (KEK), the ease of administration and technical documents from related agencies in providing recommendations, convenience to the business world and industry, a conducive investment climate, and there is great potential related to superior commodities in the region, for example tourism, mining and quarrying, energy and oil and gas, mining products, etc.. In addition, economic spending in some provinces in Eastern Indonesia tends to encourage economic performance through physical activities and only focus on urban areas, causing disparities between regions (NTB, 2022; Pemerintah Provinsi Bali, 2021; RI, 2023).

c) The Effect if Information and Communication Technology on the Gap Level

The results showed that information and communication technology did not have a significant effect on the level of inequality, this was indicated by the resulting constant value of 0.019 and a probability of 0.1911 which was in line with research by Kamilla et al., (2020), but not in line with research by Al-Mursyid (2020) and (Khan et al., 2020).

In accordance with the opinion of S. Ren et al., (2021), which says that urban areas tend to have good ICT development conditions than rural or peripheral areas. So that the absence of influence from ICT on the level of inequality is due to the lack of spread of ICT facilities and infrastructure, and in the end only a handful of people can benefit from ICT itself. In addition, it is also due to the lack of maximizing the use of ICT in carrying out productive activities in everyday life. Whereas the rapid development of technology today can facilitate economic activities, from the production process, distribution, to the consumption of goods and services. Where (Databoks, 2021) shows that >80% of the population aged 5 years and over access the internet for social media and entertainment. Meanwhile, productive activities such as online learning, buying and selling goods and services, and *work from home are* only <20%.

CONCLUSIONS AND SUGGESTIONS

Based on the research that has been conducted, it can be concluded that most provinces in Eastern Indonesia are in the high gap level category from 2017-2021. Where provinces that remain in the same category from 2017-2021, namely Gorontalo in the low gap level category, North Sulawesi in the medium gap level category, as well as Central Sulawesi, West Southeast Nusat, East Nusa Tenggara, West Papua, and Papua in the high gap level category. Meanwhile, six other provinces experienced category changes, namely Maluku, North Maluku, Bali, West Sulawesi, South Sulawesi, and Southeast Sulawesi. The investment and ICT factors jointly affect the level of inequality, while partially, only foreign investment (FDI) has a positive relationship and there is a significant influence on the level of inequality.

BIBLIOGRAPHY

Abbasi Taghidizaj, R., & Pashazadeh, A. (2021). Indentifying the Factors Affecting Regional Inequality in Iran. *Iranjournals.Nlai.Ir*, *11*(41).

Aktas, N., Croci, E., & Petmezas, D. (2015). Is working capital management value-enhancing? Evidence from firm performance and investments. *Journal of Corporate Finance*, *30*(1), 98–113. Scopus. https://doi.org/10.1016/j.jcorpfin.2014.12.008

Al-Mursyid, A. R. (2020). Pengaruh Pembangunan Teknologi Informasi dan Komunikasi Terhadap Pembangunan Kawasan Timur Indonesia. *Jurnal Ekonomi Pembangunan STIE Muhammadiyah Palopo*, *5*(2), 53–66. https://doi.org/10.35906/jep01.v5i2.372

Ayudhia, I., & Riyadi. (2018). Wadah Harmoni Kebijakan Pusat dan Daerah Dorong Pariwisata Melalui Medsos. *Departemen Komunikasi Bank Indonesia*, 1–32.

Azarhoushang, B., Wu, J. P., & Zaroki, S. (2019). Chinese Regional Inequality and Sectoral Foreign Direct Investment. *IPE Working Papers*, *119*.

Badan Pusat Statistik. (2023). *Statistik Migrasi Indonesia*.

Databoks. (2021). *Persentasi Penduduk Dalam Mengakses Internet Berdasarkan Tujuan*. https://databoks.katadata.co.id/datapublish/2021/11/24/bps-8899-anak-5-tahun-ke-atas-mengakses-internet-untuk-media-sosial

Databoks. (2022). *Tambang Emas Terbesar di Dunia*. https://databoks.katadata.co.id/datapublish/2022/05/23/10-tambang-emas-terbesar-di-dunia-salah-satunya-ada-di-indonesia

Frey, C. B., & Osborne, M. A. (2017). The future of employment: How susceptible are jobs to computerisation? *Technological Forecasting and Social Change*, *114*, 254–280. Scopus. https://doi.org/10.1016/j.techfore.2016.08.019

Hasanah, N., Prasetyo, A. S., Alfinuri, N., & Sahala, N. A. (2023). *Development of Information and Communication Technology (ICT): Does it Drive Economic Growth in ASEAN?*

Jhingan, M. J. (2016). *Ekonomi Pembangunan dan Perencanaan* (1st ed.). Rajawali Pers.

Kamilla, S., Sasana, H., & Sugiharti, Rr. R. (2020). Pengaruh Teknologi Informasi dan Komunikasi Terhadap Pertumbuhan Ekonomi di Indonesia. *Journal of Economic*, *3*, 619–631.

Khan, N., Ismail, S., Kazim, R., & Azam, T. (2020). *The Influence of Information Communication Technology Development on Income Inequality*. *January*, 10–18.

Kominfo. (2020). *Infrastuktur TIK Penting dan Dibutuhkan Masyarakat*. Kominfo.Go.Id. https://www.kominfo.go.id/content/detail/3415/kominfo-pengguna-internet-di-indonesia-63-juta-orang/0/berita_satker

Kuncoro, M. (2019). *Ekonomika Regional: Teori dan Aplikasi*. PT RajaGrafindo Persada.

Lusardi, A., & Mitchell, O. S. (2014). The economic importance of financial literacy: Theory and evidence. *Journal of Economic Literature*, *52*(1), 5–44. Scopus. https://doi.org/10.1257/jel.52.1.5

NTB, P. P. (2022). *Laporan Penyelenggaraan Pemerintah Daerah Provinsi NTB Tahun 2021*.

Nurfifah, R., Walewangko, E. N., & Masloman, I. (2022). Analisis Pengaruh Pertumbuhan Ekonomi dan Investasi terhadap Ketimpangan Kota-Kota di Provinsi Sulawesi Utara. *Jurnal Berkala Ilmu Efisiensi*, *22*(5), 25–36.

Panggarti, U., Zumaeroh, Z., Dwi Purnomo, S., Retnowati, D., & Adhitya, B. (2022). Studi komparatif ketimpangan antar pulau di Indonesia. *Forum Ekonomi*, *24*(2), 288–298. https://doi.org/10.30872/jfor.v24i2.10988

Pemerintah Provinsi Bali. (2021). *Laporan Kinerja Instansi Pemerintah Provinsi Bali Tahun 2021*.

Pourfaraj, A., Mehregan, N., Potanlar, S. K., & Eskandariata, M. R. (2019). Regional inequality in Iran and the impact of economic factors: A spatial econometric approach. *Iranian Economic Review*, *23*(2), 297–319. https://doi.org/10.22059/ier.2019.70279

Ramadhana, Azzahra Zauza Inniswa; Utomo, A. P. (2022). Ketimpangan Pendapatan dan Determinan PDRB Per Kapita Kab/Kota di Pulau Sulawesi Tahun 2017-2020 Pendekatan Geographically Weighted Panel Regression. *Seminar Nasional Official Statistics*, *2020*(Gambar 1), 823–832.

Ren, S., Hao, Y., Xu, L., Wu, H., & Ba, N. (2021). Digitalization and energy: How does internet development affect China's energy consumption? *Energy Economics*, *98*. Scopus. https://doi.org/10.1016/j.eneco.2021.105220

Ren, X., Chen, S., Lee, H., Mei, D., Engelhard, M. H., Burton, S. D., Zhao, W., Zheng, J., Li, Q., Ding, M. S., Schroeder, M., Alvarado, J., Xu, K., Meng, Y. S., Liu, J., Zhang, J.-G., & Xu, W. (2018). Localized High-Concentration Sulfone Electrolytes for High-

e-ISSN
2684 – 6756

Efficiency Lithium-Metal Batteries. *Chem*, *4*(8), 1877–1892. Scopus. https://doi.org/10.1016/j.chempr.2018.05.002

RI, K. K. (2023). *Kajian Fiskal Regional*.

Sepehrdoust, H., & Ghorbanseresht, M. (2019). Impact of information and communication technology and financial development on economic growth of OPEC developing economies. *Kasetsart Journal of Social Sciences*, *40*(3), 546–551. https://doi.org/10.1016/j.kjss.2018.01.008

Sjafrizal. (2018). *Analisis Ekonomi Regional dan Penerapannya di Indonesia*. PT RajaGrafindo Persada.

Sumirat, F. (2019). Analisis Inovasi Kebijakan Daerah dalam Rangka Pengurangan Kesenjangan Wilayah. *Bappenas Working Papers*, *2*(2), 270–293. https://doi.org/10.47266/bwp.v2i2.45

Todaro, M. P., & Smith, S. C. (2020). *Economic development* (Thirteenth edition, 1–1 Online-Ressource). Pearson; WorldCat. https://elibrary.pearson.de/book/99.150005/9781292291208

Zheng, W., & Walsh, P. P. (2019). Economic growth, urbanization and energy consumption—A provincial level analysis of China. *Energy Economics*, *80*, 153–162. Scopus. https://doi.org/10.1016/j.eneco.2019.01.004