International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Building Access to Infrastructure Impact on the Inclusive Economic Development Index in Indonesia (2018–2022)

Annisa Mardhotila[1], Marselina[2] Heru Wahyudi[3], Prayudha Ananta[4]

[1,2,3,4] Faculty of Economics and Business, Universitas Lampung, Bandar Lampung, Indonesia

Corresponding author: annisamardhotila7@gmail.com

Abstract

The expansion of access and opportunity in Indonesia remains a major challenge in national development.This research aims to analyze the impact of development infrastructure on the Access and Opportunity Expansion Index (IPAK), one of the pillars of the Inclusive Economic Development Index (IPEI), in Indonesia during the period 2018–2022.The infrastructure studied includes road, electricity, air, and telecommunications infrastructure.This research uses secondary data from the Central Bureau of Statistics (BPS) processed using panel data regression with the FEM approach from 34 provinces.The research results show that the road and water infrastructure variables have a positive and significant impact on IPAK, while the electricity and telecommunications infrastructure variables have an insignificant impact on IPAK.This emphasizes the importance of equitable infrastructure development in promoting inclusive economic growth.These findings have significant implications for development policies, particularly in reducing regional disparities in Indonesia.

Keywords: Index of Access and Opportunity Expansion (IPAK), road, electricity, water, and telecommunications infrastructure

INTRODUCTION

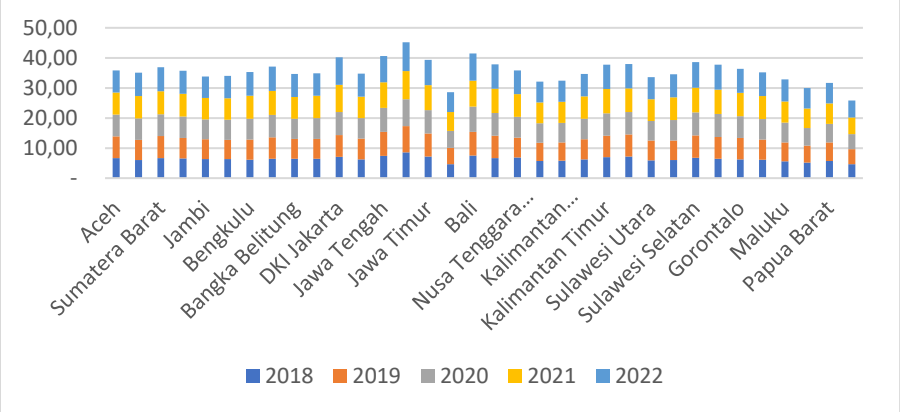
Indonesia's economic development in recent years has shown a stable growth trend around 5%.However, this growth has not been fully inclusive, marked by significant regional disparities in access to basic infrastructure.Inclusive economic development does not only emphasize GDP growth, but also the expansion of access and opportunities

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

for all layers of society.One important indicator in measuring inclusive economy is the Access and Opportunity Expansion Index (IPAK), part of the Inclusive Economic Development Index (IPEI) developed by Bappenas.Inclusive economic development can enhance sustainable economic growth and promote fair and equitable growth.This can help the government reduce poverty, promote fair opportunities, enhance social welfare, and improve capacity building (Seto et al., 2023).

Empirically, effective infrastructure development has a direct impact on the access expansion index.Access to better roads, for example, allows rural communities to sell their produce to the market more easily, reduces logistics costs, and increases their income (Todaro & Smith, 2020).To achieve this goal, the government needs to expand job opportunities, reduce inequality, broaden access to financial services, and develop stronger infrastructure, such as transportation, electricity, and internet connectivity, which are also very important (Yunani, A., & Maulida, 2017).



Sumber : Badan Pusat Statistik 2018-2022 (Data di Olah)

Figure 1. Access and Opportunity Expansion Index 2018-2022

In Figure 1, the development of the access and opportunity expansion index for each province in Indonesia from 2018 to 2022 is explained.It can be seen that the highest IPAK value was in 2021-2022 at 9.03%, with the overall average for provinces in Indonesia being 6.63%.DI Yogyakarta in 2018 was 8.53% and the following year recorded a significant increase in 2022 to 9.53%, with a higher IPAK compared to previous years.On the other hand, Papua experienced a relatively lower IPAK compared to other provinces in 2018, at 4.61%, with an overall average of 5.16%, classified as satisfactory

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

with an IPAK score of 5%. This may be due to limited infrastructure, restricted economic access, and geographical challenges in the eastern region of Indonesia.

One of the efforts made by the Indonesian government to improve IPAK evenly is by enhancing infrastructure development, one of which is the improvement of road infrastructure.Infrastructure is not only capable of serving the needs of economic activities but also able to stimulate new economic activities in that area. Infrastructure is not only capable of serving the needs of economic activities but also able to stimulate new economic activities in a given area.

LITERATURE REVIEW

Theory of Inclusive Economic Development

1. The Endogenous Growth Theory is an economic theory that focuses on optimizing the potential within a country (Juhro & Trisnanto, 2018).
2. The Harrod-Domar Growth Theory posits that economic growth is determined by two factors: the level of investment or savings in society and the capital-output ratio of society (Sadano Sukirno, 1976)
3. The Inclusive Economic Growth Theory according to Klasen (2017) is growth that can reduce income inequality between groups by involving active participation from all layers of society without discrimination, and ensuring that all sectors of the economy are involved.
4. The Inclusive Economic Development Index is a measurement tool used to assess the level of inclusivity in economic development in Indonesia to create broader access and fair opportunities for all (Bappenas, 2022).

Road Infrastructure

Referring to Government Regulation No. 22 of 2009 Article 1 number 12, a road is all road elements and supporting facilities used for public vehicles located below, above, or on the water surface, excluding railway tracks and gondolas.

Electrical Infrastructure

Electricity infrastructure consists of various elements that include power generation, electricity distribution, electricity transmission, and/or other electrical instruments that are useful in supporting economic development (Ulpah, 2019).

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Water Infrastructure

Water infrastructure refers to all facilities and infrastructure that support the provision of water in a region, including the supply of clean water, sanitation systems, and drainage. In relation to the provision of clean water, the main provider of clean water in Indonesia is the Regional Drinking Water Company (PDAM) (BPS, 2022).

Telecommunications Infrastructure

Telecommunication infrastructure is infrastructure that includes all types of telecommunication devices and their components, as well as telecommunication networks, consisting of fixed networks for public telecommunication and leased circuits, as well as mobile telecommunication such as terrestrial, cellular, and satellite mobile networks (BPS, 2022).

IMPLEMENTATION METHOD

Types of Data

This research applies a quantitative descriptive approach to analyze the influence of independent variables on dependent variables.The research data is secondary data obtained from BPS and Bappenas publications.The analysis technique is panel data covering 34 provinces in Indonesia from 2018 to 2022. Data analysis was conducted using *Eviews 12 software*.

Analysis Method

The research analysis method is the panel data regression method.The regression model is:

$$\text{IPAK}_{it} = \beta_0 + \beta_1 \text{JLN}_{it} + \beta_2 \text{LIS}_{it} + \beta_3 \text{AIR}_{it} + \beta_4 \text{TIK}_{it} + \varepsilon_{it}$$

Explanation:

IPAK : Access and Opportunity ExpansionIndex
JLN : Road Leght
LIS : Main source of lighting from PLN electricity
AIR : A source of safe drinking water for households
TIK : ICT Development Index
β_0 : Constant
$\beta_{1,2,3,4}$: Regression coefficient
i : ensitas ke-I (34 Provinces in Indonesia)

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

t : period ke-t (year)
ε : *Error term*

The data for this research is panel data used to analyze regional economic disparities in Indonesia.Before estimating the model, several tests need to be conducted to determine the appropriate model (Widarjono, 2005). The Chow test is conducted to decide between CEM or FEM. Hausman test to decide between FEM or REM. Breusch-Pagan LM test to choose between CEM or REM.

The classical assumption test is conducted to check whether the research data meets the classical assumptions so that the analysis results can be valid.This normality test is used to check whether the data is normally distributed, with methods to determine if the residuals are normally distributed being the Jarque-Bera Test method and graphical methods.The heteroscedasticity test is a regression model testing tool used to determine the inequality of variance of residuals from one observation to another.The multicollinearity test is conducted to analyze the correlation of independent variables; if the correlation coefficient value is < 0.85, it means there is no multicollinearity problem.The heteroskedasticity test examines whether the regression errors have a constant variance and are not correlated with each other across different observations.To detect the presence of autocorrelation or not, it can be done using the Durbin Watson (DW) test and the LM *(Lagrange Multiplier)* test.

Hypothesis testing to determine whether the research results are valid and the data used is accurate.The t-test is used to examine whether independent variables have a significant effect on the dependent variable individually.The F-test is used to determine whether the independent variables as a whole have a significant effect on the dependent variable.The (R^2) test is a measure of how well the independent variable can explain the dependent variable

RESULTS AND DISCUSSION

Table 1. Descriptive Statistical Test

	IPAK (Indeks)	JLN (km)	LIS (Percent %)	AIR (Percent %)	TIK (Percent%)
Mean	7.107059	16005.39	8589.624	8543.765	15.11788
Median	7.125000	13128.50	9633.000	8778.000	5.595000
Maximum	9.530000	42521.00	9999.000	9986.000	9.842000
Minimum	4.610000	4006.000	9700.000	5760.000	3.220000

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Std. Dev.	0.902346	9974.563	2589.073	9265.018	2.664246
Observations	170	170	170	170	170

Eviews 12

The results of the descriptive statistical test for the economic inequality variable show a mean value of 7.10 and a standard deviation of 0.90.The maximum value is 9.530, which occurred in the Special Region of Yogyakarta in 2022, while the minimum value is 4.61, found in Papua Province in 2018.The results of the descriptive statistical test for the road infrastructure variable show a mean value of 16,005.39 km and a standard deviation of 9,974.563 km.The maximum value is 42,521.00 km in East Java in 2021, while the minimum value is 4,006.000 km in DI Yogyakarta in 2018.The results of the descriptive statistical test for the electricity infrastructure variable show a mean value of 85.89% and a standard deviation of 99.0.The maximum value was 99.9% in DKI Jakarta in 2020, while the minimum value was 97% in Papua in 2018.

The results of the descriptive statistical test for the water infrastructure variable show a mean value of 85.43% and a standard deviation of 926.5018.The maximum value of 99.86% is in DKI Jakarta in 2021, while the minimum value of 57.60% is in Papua in 2018.The results of the descriptive statistical test for the telecommunications infrastructure variable show a mean value of 15.11% and a standard deviation of 11.99.The maximum value is 9.84%, found in DKI Jakarta in 2018, while the minimum value is 3.22% in Papua in 2021.

Classic Assumption Test

Normality Test

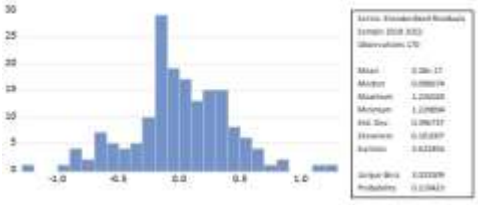


Figure 2. Results of the JB-test Normality Test

Output Eviews 12

Based on Figure 2, the normality test yielded a *JB probability* of 0.219423 > 0.05, meaning that statistically, the research data is normally distributed.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Heteroskedasticity Test

Table 2. Heteroskedasticity Test

Cross-section fixed (dummy variables)			
Root MSE	0.205487	R-square	0.342377
Mean dependent var	-26.44412	Adjusted R-squared	0.158043
S.D. dependent var	0.254143	S.E. of regression	0.233197
Akaike info criterion	0.120194	Sum squared resid	7.178256

Output Eviews 12

The calculated x^2 value is 3.589128. The value x^2 – the table of degrees of freedom (df) 5 is 7.814728. then fail to reject H0 or in other words, there is no heteroscedasticity problem in the regression model.

Multicollinearity Test

Table 3. Multicollinearity Test

	JLN	LIS	AIR	TIK
JLN	1.000000	-0.107955	0.048015	0.347235
LIS	-0.107955	1.000000	0.041036	0.074569
AIR	0.048015	0.041036	1.000000	0.347493
TIK	0.347235	0.074569	0.347493	1.000000

Output Eviews 12

It can be seen that there are no variables with a correlation value greater than 0.85.Therefore, it can be concluded that there is no multicollinearity in the regression model.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Autocorrelation Test

Table 4. Autocorrelation

Durbin-Watson stat	1.094339	Prob(F-statistic)	0.000000

Output Eviews 12

It can be explained that its DW is 1.094339.The DW value is between -2 and 2, which means there is no autocorrelation problem.

Selection of the Regression Model

Chow test

Tabel 5. Chow test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	10.767686	(33,132)	0.0000
Cross-section Chi-square	222.044998	33	0.0000

Output Eviews 12

Based on Table 5 of the Chow test, the probability obtained is 0.000 < 0.05 therefore H_0 is rejected, meaning FEM is more appropriate.

Hausman test

Tabel 6. Hausma test

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	31.167885	4	0.0000

Output Eviews 12

Based on Table 3, the Hausman test yielded a prob. of 0.000 < 0.05 therefore H_0 is rejected, meaning FEM is more appropriate.

Hypothesis Testing

Partial Test (t-test)

Tabel 7. t-test

Variable	t-Statistic	t-tabel	Prob.
JLN	3.320997		0.0012

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

		1.65414	
LIS	-0.896377	1.65414	0.3717
AIR	8.942693	1.65414	0.0000
TIK	-1.229923	1.65414	0.2209

Eviews 12

Based on Table 4 of the t-test, the road infrastructure variable (JLN) has a t-statistic value of 3.320997 > 1.65414 t-table and a probability of 0.0012 (< 0.05).Therefore, road infrastructure (JLN) has a positive and significant impact on IPAK in Indonesia.The variable of electrical infrastructure (LIS) has a t-value of -0.896377 > 1.65414 t-table and a probability of 0.3717 (< 0.05).Therefore, the electricity infrastructure (LIS) has a negative and insignificant effect on IPAK in Indonesia.The water infrastructure variable has a t-statistic value of 8.942693 > 1.65414 t-table and a prob. of 0.0000 (< 0.05).Therefore, it is concluded that water infrastructure has a positive and significant impact on IPAK in Indonesia.The telecommunications infrastructure (TIK) variable has a t-value of -1.229923, which is greater than the t-table value of 1.65414, and a probability of 0.2209 (< 0.05).Therefore, telecommunications infrastructure (TIK) has a negative and insignificant impact on IPAK in Indonesia.

Simultaneous Significance Test (F Test)

Table 8. F test

df (k-1 ; n-k)	F-Statistic	F-Table	Prob.
4;165	14.88742	2.43	0.000000

Eviews 12 (data diolah)

Based on Table 5 of the F-test, the calculated F-value is 14.88742 > 2.43 F-table and prob. 0.0000 (< 0.05).Simultaneously, the variables of road, electricity, water, and telecommunications infrastructure significantly influence the index of access and opportunity expansion in Indonesia.

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

International Journal of Economics, Business and Innovation Research
https://e-journal.citakonsultindo.or.id/index.php/IJEBIR
E-ISSN : 2964-0865
IJEBIR

Cofficient of Determination (R^2)

Table 9.Test R^2

R-squared	0.806688	Adjusted R-squared	0.752502

Eviews 12

Based on Table 6, the (R^2) test shows a value of 0.806688 or 80.66 percent, indicating the significant influence of road, electricity, water, and telecommunications infrastructure variables on the index of access and opportunity expansion in Indonesia, while the remaining 19.3312% is influenced by other factors outside the model.

Results of the Panel Data Regression Equation

Table 10. regression

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-9.385847	2.288790	-4.100790	0.0001
JLN	0.000440	0.000132	3.320997	0.0012
LIS	-0.000142	0.000158	-0.896377	0.3717
AIR	0.001130	0.000126	8.942693	0.0000
TIK	-0.004893	0.003978	-1.229923	0.2209
	Effects Specification			
Cross-section fixed (dummy variables)				
R-squared	0.806688	F-statistic		14.88742

Output Eviews 12

Based on Table 7 above, the panel data regression equation is:

$$\text{IPAK}_{it} = -9.385847 + 0.000440\ \text{JLN}_{it} - 0.000142\ \text{LIS}_{it} + 0.001130\ \text{AIR}_{it}$$
$$-0.004893\ \text{TIK}_{it} + \varepsilon_{it}$$

Based on the regression equation, if the constant is -9.385847, it means that if the infrastructure for roads, electricity, water, and telecommunications has a value of zero or remains constant, the index for the expansion of access and opportunity will have a value of -9.385847.The value of the road infrastructure (JLN) regression coefficient of 0.000440 indicates a positive and significant relationship between roads and IPAK; if there is an increase of 1 km in roads, IPAK will increase by 0.000440.The regression coefficient for

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

electricity (LIS) is -0.000142, which means there is a negative but insignificant relationship. This implies that if electricity increases by 1%, IPAK will decrease by -0.000142.The value of the water regression coefficient (AIR) of 0.001130 shows a positive and significant relationship, meaning that if water increases by 1%, IPAK will increase by 0.001130.The value of the telecommunications (TIK) regression coefficient -0.004893 means that if democracy increases by 1%, IPAK decreases by -0.004893.

DISCUSSION

The Impact of Road Infrastructure on the Access and Opportunity Expansion Index (IPAK)

Based on the regression results, Road Infrastructure (JLN) has a positive and significant value towards the index of access and opportunity expansion in Indonesia.The coefficient value of the road infrastructure variable is 0.000440, which means that if the road infrastructure is improved by 1 km, the access and opportunity expansion index will increase by 0.440 km, ceteris paribus.This research is consistent with the hypothesis and is supported by research from Mutia Fajri Sirega et al., (2022) who found that the more toll roads are built, the more job opportunities will open up for the local residents.This is because economic activities will spread in all directions, creating economic opportunities for everyone Rahmatika et al., (2024)

The Influence of Electrical Infrastructure on the Access and Opportunity Expansion Index

Based on the regression results, Electrical Infrastructure (LIS) has a negative and insignificant effect on the index of access and opportunity expansion in Indonesia.The results of this study do not align with the research hypothesis. However, this is in line with the research conducted by Harsono et al., (2024) shows that almost all types of infrastructure have an impact except for electricity (LIS), which also finds the possibility of delays over different periods before all economic benefits can be realized from the infrastructure.

The Impact of Water Infrastructure on the Access and Opportunity Expansion Index

Based on the regression results, the coefficient of Water Infrastructure (AIR) is positive and significant towards the index of access and opportunity expansion in Indonesia.The coefficient value of the water infrastructure variable is 0.001130 percent, meaning that if water infrastructure increases by 1 percent, the access and opportunity

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

expansion index will increase by 1.130 percent, ceteris paribus.This is also in line with the research. Harsono et al., (2024), Afriyana (2023) dan Abdullahi & Sieng (2023) infrastruktur air memiliki pengaruh positif dan signifikan terhadap indeks pembangunan ekonomi inklusif hubungan positif yang ditunjukkan oleh indeks pasokan air & sanitasi dan listrik tidaklah mengejutkan dan temuan ini sejalan dengan laporan Bank Dunia (2017). Berdasarkan data yang digunakan, di ketahui pula bahwa hanya terdapat 11 provinsi saja yang infrastruktur air di atas rata-rata infrastruktur air nasional berdasarkan data tahun 2018 sampai dengan 2022. Hal ini menjadi bukti bahwa masih banyak provinsi yang belum maksimal menggunakan anggaran daerahnya untuk infrastruktur air.

The Impact of Telecommunications Infrastructure on the Access and Opportunity Expansion Index

Based on the regression results, the coefficient of Telecommunications Infrastructure (TIK) is negative and not significant towards the index of access and opportunity expansion in Indonesia.This is due to the decrease in the number of customers, network limitations, and the low quality of telephone services being the main causes. Based on the data used, it is also known that only 6 provinces have telecommunications infrastructure above the national average telecommunications infrastructure based on data from 2018 to 2022.

CONCLUSION AND RECOMMENDATIONS

According to the research findings, it is concluded that road infrastructure has a significantly positive impact on the access and opportunity expansion index of 34 provinces in Indonesia from 2018 to 2022, indicating that the better the quality and accessibility of roads, the greater the opportunities for the community to access basic services and economic activities.Electricity infrastructure is not significant to the index of access and opportunity expansion in 34 provinces in Indonesia from 2018 to 2022, indicating that there are still many areas with unequal access and opportunities for the community.Water infrastructure has a positive and significant impact on the access and opportunity expansion index of 34 provinces in Indonesia from 2018 to 2022, indicating a significant influence on the index, signifying that the availability of adequate clean water plays an important role in enhancing basic services and economic activities.Telecommunication infrastructure is not significant to the access and opportunity expansion index of 34 provinces in Indonesia from 2018 to 2022, which may be caused

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

by disparities in internet access and the use of digital technology in various regions that are still uneven, especially in the eastern part.

Based on the research findings, there are several recommendations for strengthening investments in road and water infrastructure. The government needs to enhance the construction and maintenance of roads and clean water supply systems, especially in areas with low access and opportunity indices.Optimization of electricity and telecommunications infrastructure, although the research results show that electricity and telecommunications do not have a significant impact, further evaluation is needed regarding the factors that hinder their impact on community access and opportunities.Improving the quality of electricity services and equalizing internet access can be solutions to enhance their impact.Strengthening regional development policies requires collaboration between the central and regional governments in formulating more targeted infrastructure development policies based on local needs, thereby enhancing the impact of development on equitable access and economic opportunities.

REFERENCES

Abdullahi, A., & Sieng, L. W. (2023). The effect of infrastructure development on economic growth: The case of sub-Saharan Africa. Journal of Infrastructure, Policy and Development, 7(2), 1–16. https://doi.org/10.24294/jipd.v7i2.1994

Afriyana, L. (2023). Analisis Dampak Pembangunan Infrastruktur Terhadap Pertumbuhan Ekonomi Inklusif Pada Kabupaten/Kota Di Provinsi Nusa Tenggara Barat Tahun 2016-2021. Elastisitas - Jurnal Ekonomi Pembangunan, 5(1), 1–10. https://doi.org/10.29303/e-jep.v5i1.70

Harsono, I., Susanto, H., Rois, I., Fadliyanti, L., & Wiji, M. B. S. (2024). Kontribusi Infrastruktur Dalam Mendorong Pertumbuhan Ekonomi Inklusif Di Indonesia. Ganec

Juhro, S., & Trisnanto, B. (2018). Paradigma dan Model Pertumbuhan Ekonomi Endogen Indonesia. Publication-Bi, 1–40. http://publication-bi.org/repec/idn/wpaper/WP112018.pdf

Klasen, S. (2017). Measuring and monitoring inclusive growth in developing and advanced economies: Multiple definitions, open questions and some constructive proposals. Reframing Global Social Policy: Social Investment for Sustainable and Inclusive Growth, 12, 123–144. https://doi.org/10.56687/9781447332503-010

Mutia Fajri Sirega, Anisah Nasution, Futri Madinah, Zafira sabrina, & Maulida Ummi Zakia. (2022). Analisis Dampak Pembangunan Infrastruktur Terhadap

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.

Pertumbuhan Ekonomi Inklusif. Journal of Management and Creative Business, 1(1), 52–62. https://doi.org/10.30640/jmcbus.v1i1.483

Rahmatika, Z., Nugraha, P. T., Hasibuan, F. Y., Lestari, K., Pratiwi, L. P., Qat, Q. D., Rismawati, S., Ardana, T. V., Islam, U., Raden, N., Lampung, I., & Lampung, B. (2024). Peran akses jalan dalam meningkatkan daya saing umkm di daerah terpencil. 2(9).

Sadano Sukirno. (1976). Beberapa Aspek Dalam Persoalan Pembangunan Daerah.

Seto, A. A., Rohmah, I. Y. A., Irawan, N. C., Utomo, P., Putra, R. B., Tubarad, Y. P., Zulianto, M., Susanto, D., Metis, D., Musthopa, A., Zunaidi, A., & Miranda, M. (2023). Pertumbuhan Ekonomi Inklusif. May. https://www.researchgate.net/publication/373144125

Todaro, M. P., & Smith, S. C. (2020). Economic Development. Thirteenth Edition. In Pearson (Issue 13th Edition). https://www.mkm.ee/en/objectives-activities/economic-development

Ulpah, W. (2019). Analisis Pengaruh Infrastruktur Terhadap Pertumbuhan Ekonomi di Provinsi Sumatera Utara. In Tesis (pp. 1–126).

Undang-Undang Nomor 19 Tahun 2023 tentang APBN 2024. (2023). Undang-Undang Nomor 19 Tahun 2023 tentang APBN Tahun Anggaran 2024. https://anggaran.kemenkeu.go.id/api/Medias/3ec4f697-44b1-4106-9828-bc29b47612c4

Widarjono, A. (2005). Ekonometrika : Teori dan Aplikasi Untuk Ekonomi dan Bisnis. In Buku scan.

World Bank (2017). An analysis of issues shaping Africa's economic future. Africa's Pulse 15: 1–52

Yunani, A., & Maulida, S. (2017). Peluang dan Tantangan Pengembangan Usaha Mikro Kecil Menengah (UMKM) Dari Berbagai Aspek Ekonomi. Jurnal Ilmiah Manajemen Dan Bisnis, 2(1), 181–197. https://journal.undiknas.ac.id/index.php/manajemen/article/view/155

Copyright at authors some right reserved this work is licensed under a Creative Commons Attribution-ShareAlike 4.0 International License.