

Important factors to influence the coverage of drinking water

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Abstract

This research is motivated by the phenomenon where the coverage of drinking water in Java in 2019-2020 is still below the standard set by the sustainable development goals. Out of Java's 226 districts/cities, only half have drinking water coverage above the average. This research aims to determine factors influencing drinking water coverage in districts/cities in Java. The data used in this study are secondary data obtained from the Central Statistics Agency and the Directorate General of Finance using a quantitative approach—the multiple linear regression model of this study. The method used in this study is multiple linear regression. The research findings indicate that infrastructure expenditure, the number of poor populations, and DAU significantly influence drinking water coverage, while DAK does not significantly influence drinking water coverage.

Keywords: Infrastructure Expenditure Function, Number of Poor People, DAU, DAK.

Abstra

Penelitian ini dilatarbelakangi oleh fenomena dimana cakupan air minum di Pulau Jawa tahun 2019-2020 masih di bawah standar yang ditetapkan oleh tujuan pembangunan berkelanjutan. Dari 226 kabupaten/kota di Jawa, hanya setengahnya yang memiliki cakupan air minum di atas rata-rata. Penelitian ini bertujuan untuk mengetahui faktor-faktor yang mempengaruhi cakupan air minum di kabupaten/kota di Pulau Jawa. Data yang digunakan dalam penelitian ini adalah data sekunder yang diperoleh dari Badan Pusat Statistik dan Direktorat Jenderal Keuangan dengan menggunakan pendekatan kuantitatif model regresi linier berganda dari penelitian ini. Metode yang digunakan dalam penelitian ini adalah regresi linier berganda. Hasil penelitian menunjukkan bahwa belanja infrastruktur, jumlah penduduk miskin, dan DAU berpengaruh signifikan terhadap cakupan air minum, sedangkan DAK tidak berpengaruh signifikan terhadap cakupan air minum.

Keywords: Fungsi Belanja Infrastruktur, Jumlah Penduduk Miskin, DAU, DAK.

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1. Introduction

The water score in Indonesia indicates that the distribution and accessibility of clean water to the population are still below average, especially in rural areas with low welfare and limited access. In 2020, Indonesia's Water Quality Index (IKA) score was 53.53, placing it in the fairly good category when compared to the score of 52.62 points from the previous year. This score increased by 0.91 points. Despite the increase, the

previous year's IKA value was still far from the target set in the National Medium-Term Development Plan (RPJMN) (Rizaty, 2021).

The government is obliged to provide clean water services for the welfare of the community as one of the efforts to fulfill the government's obligations to the community, as explained by Article 5 of the 2004 water resources law, which reads that everyone has the right to access water for their daily needs, at least for health and productivity (Undang-Undang Republik Indonesia Nomor 7 Tahun 2004 Tentang Sumber Daya Air, 2004). Central, provincial, and district/city governments jointly carry out government affairs related to basic services as concurrent and mandatory affairs (Undang-Undang Republik Indonesia Nomor 23 Tahun 2014 Tentang Pemerintah Daerah, 2014).

Development policies are formulated cooperatively with various stakeholders so that the benefits can be felt by all parties, and the National Medium-Term Development Plan (RPJMN) guarantees a sense of ownership. The Medium-Term Development Plan (RPJM) and sustainable development are closely related. The RPJM is a strategic planning tool that governments use to guide national, regional, and local development policies and initiatives over a specified period of time, often between 5 and 10 years. The goal of sustainable development is to meet the needs of the present without compromising the ability of future generations to meet their own needs. It is a method for planning, implementing, and assessing development (Rencana Pembangunan Jangka Menengah Nasional 2020-2024, 2020).

The Sustainable Development Goals (SDGs) are a series of goals that the Indonesian government really wants to achieve. The 2030 Agenda for Sustainable Development is a sustainable development agreement based on human rights, our challenges, and our fundamental duty, which is universal, integrated, and inclusive to ensure that no one is left behind. The main focus is accessibility to energy, food, and clean water, which are essential elements of life.

The central government provides equalization funds, which are funds sourced from the state budget (APBN) allocated to regions to support their needs in implementing decentralization, reducing disparities, and assisting regions in financing development (Baldric Siregar, 2015:31). The core elements can be achieved through the utilization of equalization funds and good infrastructure development.

The General Allocation Fund (DAU) is a component of equalization funds allocated to promote financial capacity equalization among regions to address regional needs in implementing decentralization (Ndraha & Uang, 2018). DAU is allocated to regions using a formula based on Basic Allocation and Fiscal Gap, with the proportion for provinces and districts/cities being 10% and 90% respectively, of the total General Allocation Fund nationwide. The implementation of the General Allocation Fund can be used to create clean water infrastructure and provide clean water services to the population, thereby contributing to the availability of drinking water. Improving institutional capacity and resource management can enhance the availability of drinking water in a region, which can be achieved through the General Allocation Fund.

The Special Allocation Fund (DAK) is a fund sourced from the state budget (APBN) allocated to specific regions with the aim of supporting the funding of special activities that are regional matters and in line with national priorities (Halim, 2014). Based on the purpose, the Special Allocation Fund is divided into three types: Regular Physical DAK, Assignment-based Physical DAK, and Affirmation-based Physical DAK. The specific needs being addressed are commitments or national priorities that cannot be evaluated using the general allocation formula. The implementation of the Special Allocation Fund in providing access to drinking water for disproportionately affected groups, such as the less privileged or those living in rural areas, has an impact on drinking water coverage. The institutional capacity and management of drinking water resources in specific locations can be enhanced through the utilization of the Special Allocation Fund, thus improving the availability of drinking water.

According to Article 65, Paragraph 1 of the Ministry of Finance Regulation No. 112/PMK.07/2017 on the management of transfers to regions and village funds, infrastructure refers to the technical, physical, system, hardware, and software facilities required to provide services to the community and support the structural network for the economic and social development of the community. Infrastructure expenditure refers to the direct expenses related to accelerating the development of public service and economic facilities to increase employment opportunities, reduce poverty, and improve inter-regional public services. Based on various criteria, including suitability, needs, and regional capacity, Government Regulation No. 58 of 2005 stipulates that regions have the authority to decide the allocation of resources for capital expenditure. The government hopes to utilize budgetary expenditure to fund the development of various vital infrastructures across the country, including those related to agriculture, water, education, health, and transportation. The implementation of water infrastructure development, such as clean water sources, distribution networks, and sanitation facilities, can improve public access to clean water. Infrastructure expenditure also has an impact on the availability of clean water, as investing in appropriate infrastructure can enhance the effectiveness and reliability of clean water systems, minimize water loss, and increase the system's resilience to hazards or disruptions.

Based on a variety of already concluded study findings and phenomena. The General Allocation Fund (DAU) and the Special Allocation Fund (DAK) had a negative effect on the program (E. A. Sembiring, 2019). Furthermore, the General Allocation Fund is concluded to have had a negative and insignificant impact on the growth of districts and cities in North Sumatra Province. The Special Allocation Fund has a negative and significant impact on the growth of districts and cities in North Sumatra Province. Regional Expenditure (BD) has a positive and significant impact on the growth of districts and cities in North Sumatra Province. Districts and cities in North Sumatra Province are simultaneously affected by DAU, DAK, DBH, and regional spending (Harahap et al., 2021). In addition, Local Own Revenue, General Allocation Funds, and Special Physical Allocation Funds have a significant impact on human

development (T. A. Sembiring, 2020). Finally, well-managed special allocation funds will increase the human development index (Maysaroh & Arif, 2022).

The number of poor people has a positive and insignificant effect (Jasasila, 2020). On the other hand, the poverty level has a negative and significant effect on the human development index (Zakaria, 2018). Furthermore, the number of poor people has a significant negative impact on the Human Development Index (Simbolon, 2021). In addition central government spending has a large impact on the human development index, regional government spending has a small impact (Sutono, 2022).

The inconsistencies in the research findings and the lack of studies discussing clean water coverage have prompted researchers to examine the variables affecting clean water coverage, namely Infrastructure Expenditure, Number of Poor People, General Allocation Fund, and Special Allocation Fund.

2. Literature Review

Public Sector Budgeting Theory

According to Arifin (2007), budgeting is a written plan for an organization that is quantitatively developed for a given period of time and typically stated in monetary units. When utilized for financial planning, fiscal policy, coordination, communication, political instruments, performance assessment, incentives, and the provision of public goods, budgeting functions as a management control tool (Mardiasmo, 2009).

The analysis of public budget management using neoclassical economic ideas is known as public budget theory. This theory stresses the rational distribution of public resources by taking into account market dynamics and marginal gains. According to neoclassical public budget theory, the public budget is an instrument for efficiently and effectively distributing public resources. As a mechanism for coordinating actions across the many levels of government, public sector budgeting is sometimes referred to as a political document since it embodies the pledges of the legislative and executive branches to use public monies. To determine social demands, public sector budgeting is created. Budgetary problems that affect development activities might result from inefficient use. The accomplishment of the objectives mentioned in the budget intended for growth will be hampered if funds are not completely utilized within the allotted timeframe. Value for money is an indicator of public sector performance, showing whether the allocated budget or funds generate specific value for society (Ministry of Finance of the Republic of Indonesia). Value for money is a performance measurement concept that serves as the foundation for budget management, as stated in "Law Number 23 of 2014 Article 1 Section 5." Economic, Efficient, and Effective are the indicators.

According to this view, in managing state finances, the government must pay attention to the interests of the community. The government must be able to manage resources effectively and offer public services that the community wants.

Drinking water coverage

The funds allocated by the government for the drinking water industry for the last five (5) years range from Rp. 3.5–6.5 trillion, with an average of 4.5 trillion every year. Until 2030, there will be around Rp. 45 trillion in available government money if this amount can be maintained year after year. Still far from the financial needs for 2030, namely Rp. 238 trillion, or even the development needs up to 2024 of Rp. 147 trillion (Bappenas, 2019).

Referring to the 1945 Constitution, Article 33, Paragraph 3, the government should ideally boost the drinking water industry development budget significantly to meet the real needs of the state. Drinking water coverage in 2018 shows that 87.75% of Indonesia's population has access to safe drinking water. However, only 6.8% of the population has secure access. In 2018, there was a gap of 80.95% where access had to be increased from good access to secure access. 93.2% of people don't have secure access overall. If this amount is converted into financing needs, it is anticipated that in 2030 it will show a larger figure of Rp. 238 trillion or even more, depending on the inflation rate. The government hopes that 30% of the funds can be distributed by the Regional Government (Bappenas, 2019).

Fulfillment of drinking water industry budget funds so far is still a serious problem for related organizations or parties. Sector development is greatly assisted by the existence of non-government funding sources. Revenue from these funds can be fulfilled by the activities of donors, NGOs, and community groups.

Infrastructure Expenditures Function

Infrastructure is the combination of technical facilities, physical facilities, system facilities, hardware facilities, and software facilities needed to provide services to the community and support structural networks so that the community's economic and social growth can run smoothly. The infrastructure spending in question is an expenditure that is directly related to accelerating the development of public service facilities and the economy in the context of increasing employment opportunities, reducing poverty, and reducing disparities in public services between regions. The effect of infrastructure spending on drinking water coverage is supported by macroeconomic theory. Macroeconomics is a branch of science that studies the main activities of the economy comprehensively or thoroughly to address various problems of economic growth in the form of unstable economic activity, inflation, unemployment rate, trade balance, and payments (Sadono Sukirno, 2000). Based on this theory macroeconomics focuses on the areas of aggregate spending, government policies, and determining the level of economic activity in a country. Based on research conducted by [4] stated that the function of infrastructure spending is not affecting the human development index. Research conducted by [27] and states that the function of infrastructure spending has an effect significant impact on the human development index

H₁: The infrastructure expenditure function has a significant impact on drinking water coverage.

The Number of Poor People

According to Nurwati (2008), poverty is a societal issue that still affects people's daily lives. For a very long time, poverty has been a fundamental issue that has grown to be one of a nation's top worries. When seen from the spending side, poverty is defined as the inability to afford to fulfill one's most basic dietary and non-dietary demands. According to Soegijanto Soegijoko (1997), poverty doesn't happen because impoverished people desire it; rather, it happens because they lack the capacity to prevent it. Low income, bad health, inadequate education, and unmet basic requirements may affect both individuals and entire regions. Based on research that has been conducted by (22), the results in the form of the number of poor people have an effect on the human development index. Research by (33) shows that the results in the form of the number of poor people have no effect on the Human Development Index.

H₂: The number of poor people has a significant effect on the coverage of drinking water.

General Allocation Fund

Law Number 23 of 2014, which is an improvement over Law Number 32 of 2004, stipulates that regional governments are given considerable powers to manage their own households with a little help from the central government in the form of general allocation money. The General Allocation Fund (DAU) is one of the balancing funds generated from APBN revenues offered with the aim of fairly distributing financial resources between regions so that regional needs can be met. The comparison between the weight of government issues, which are the authority of the province and district or city, is used to determine the percentage of DAU between provinces and districts or cities. Because percentages cannot be determined quantitatively, provinces, districts, or cities are selected by the government with a balance of between 10% and 90% (PMK No. 102/PMK.02/2018).

DAU calculations using recipes that take into account the needs and capabilities of the regions are used to apply the General Allocation Fund (Basic Allocation + Fiscal Gap). DAU is calculated using the fiscal gap figure introduced by the government in PMK No. 10/PMK 02/2018.

- a. Regions with a fiscal gap greater than zero receive DAU in the amount of the lower allocation plus the fiscal gap, as the rule reads in part.
- b. Regions that receive DAU at a lower allocation are regions where the fiscal gap value is equal to zero.
- c. Regions that have a negative fiscal gap value, but the negative value is smaller than the lower allocation, receive DAU in the amount of the lower allocation after the fiscal gap value is determined.
- d. Regions that have a negative fiscal gap value and the value is equal to or greater than the lower allocation do not receive DAU

General Allocation Funds are transferred from the center to the regions, the management and use of which are fully delegated to the government through the Regency or City APBD, the regions, for the purposes of administering regional government. Based on research that has been conducted by (5) and (19), the results

show that the general allocation fund has a significant effect on the human development index. Research by (20) resulted in the conclusion that general allocation funds had no effect on the human development index.

H₃: General allocation funds have a significant effect on drinking water coverage.

Special Allocation Fund

Money for special activities that are regional problems and in line with national goals is channeled to regions as part of the Special Allocation Fund sourced from APBN revenues. The Special Allocation Fund is one of the most important balancing funds for a region and contributes to funding projects or programs that benefit the surrounding environment to increase the effectiveness and efficiency of the use of public money. The availability of APBN greatly influences where DAK comes from. The government stipulates the legal basis for Treasury Number PER-7/PB/2020 concerning technical instructions for channeling special physical allocation funds to the Directorate General of Treasury to increase efficiency, effectiveness, and accountability.

In an effort to accelerate the provision of drinking water infrastructure, the government held a Workshop on Preparation for the Implementation of the Urban Water Hibah Program with the aim of achieving the Millennium Development Goals (MDGs) target of 100% access to adequate drinking water and increasing access to proper sanitation to 100%. Achieving the target of achieving access to 100% proper drinking water requires the synergy of various funding sources, both through regional grant schemes, regional loans, Physical DAK, Village Funds, and other funds. "Special Allocation Funds are funds originating from APBN revenues allocated to certain regions with the aim of helping fund special activities that are regional affairs and in accordance with national priorities (Law Number 34 of 2004). Special Allocation Funds are divided into 3 types, namely: Regular Physical DAK, Assigned Physical DAK, and confirmed physical DAK, and consist of 15 areas, namely: Education, health, and family planning; housing and settlements; agriculture; marine and fisheries; small and medium industry; tourism; roads; irrigation; drinking water; sanitation; markets; small-scale energy; environment and forestry; and transportation. The higher the Special Allocation Fund, the higher the level of capital expenditure for drinking water in an area.

Research conducted by (5) and (19) resulted in a conclusion in the form of special allocation funds affecting the human development index. The results of research by (20) are not in line with the results of research by (11), which concludes that special allocation funds do not affect the human development index.

H₄: Special allocation funds have a significant effect on drinking water coverage.

3. Research Method

Research Design

This study is quantitative and draws on secondary data. A quantitative approach is used to determine whether there is a correlation or the influence of independent variables (the dependent variable, drinking water coverage (Y), infrastructure function

expenditures (X1), the number of poor people (X2), general allocation funds (X3), and special allocation funds (X4). A formal model is what quantitative research is known as. The quantitative strategy was used for this study since the measurement makes use of numerical research variables and the data analysis is carried out using statistical techniques. The study's secondary data came from financial records. The sampling strategy employed in this study was purposive sampling using the researcher's predetermined criteria. The sampling method known as purposeful sampling has several limitations (Sugiyono, 2016: 58).

Population and Sample

Population is a generalized area consisting of subjects or objects that have certain characteristics and have the same opportunity to be selected as members of the sample (Sugiyono, 2005: 90). The population is not only animals, plants, and humans but all objects that have the same characteristics (Nurdin & Hartati, 2019: 91). The population in this study is all the objects that are the research targets, namely regencies, and cities in Java in 2019–2020.

According to Nurdin and Hartati (2019: 91), the sample represents a small portion of the characteristics of the population collected through techniques and is considered to be representative of the research population. Sampling is the method used in research to determine the sample. Purposive sampling, which is a sample approach that is carried out by choosing specifically according to the research, is the sampling strategy used in this study.

Table 1. Research Sample Selection Proses

No.	Criteria
1.	Regencies and cities in Java Province that publish in full Expenditures for Functions of Infrastructure, Poor Population, DAU, DAK, and Drinking water Coverage during the 2019-2020 period
2.	The year used is 2019–2020.
3.	A period of two (2) years is used on the grounds that the value of Expenditures for Infrastructure Functions, Poor Population, DAU, DAK, and Drinking water Coverage during the 2019–2020 period is certain.

Data Collection Technique

The data collection technique in this study is the documentation technique. The documentation technique is a way to find and collect data by collecting and analyzing written, graphic, and electronic documents (Sukmadinata, 2007: 221). This documentation technique is used to obtain data for research calculations. The documents used in this research are budget report data, the number of poor people, and the annual drinking water coverage of districts and cities in Java during the 2019-2020 period.

Data Analysis Methods

Multiple linear regression analysis is being used in this study to examine the first hypothesis. Regression analysis is used to assess the relative weight of the independent and dependent variables. In a study, simple linear regression is used when there is only one independent variable or dependent variable; multiple linear

regression is used when there are many independent variables or dependent variables (Juliandi, Irfan, and Manurung, 2014). To make predictions about the population mean or the average value of the dependent variable based on the known independent variable values, regression analysis tests the dependency of the dependent variable on one or more independent factors. The multiple linear regression model of this study is shown in the equation below:

$$Y = a + bx_1 + bx_2 + bx_3 + bx_4 + e$$

Note:

- a = Constant
- b = Coefficient of Multiple Regression
- X1 = Infrastructure Shopping
- X2 = Number of Poor People
- X3 = General Allocation Fund
- X4 = Special Allocation Fund
- e = Standard Error

4. Results and Discussion

4.1. Results

Estimation Results

Table 2. Estimation Results

Model	Coefficients	Std.Error	t	Sig.
(Constant)	99.613	.467	213.360	.000
ISF	0.0000006614	.000	4.851	.000
NPP	-.012	.003	-3.739	.000
GAF	-0.000003222	.000	-4.443	.000
SAF	-0.000005213	.000	-.985	.326

Source: Processed Secondary Data, 2023

The research regression model based on the determined regression formula is as follows:

$$Y = 99,613 + 0,0000006614ISF - 0,012NPP - 0,000003222GAF - 0,000005213SAF$$

Testing the hypothesis in this study using multiple linear regression analysis is used to determine the effect of independent variables, namely Infrastructure Expenditure Function, Number of Poor People, General Allocation Fund, and Special Allocation Fund. In this equation, the Infrastructure Expenditure Function variable has a positive coefficient value of 0.0000006614. This means that the higher the Infrastructure Spending Function, the higher the Drinking water Coverage. However, these results differ from the variables Number of Poor Population, General Allocation Funds, and Special Allocation Funds, which show negative coefficient values of -.012, -0.000003222, and -0.000005213. This means that the higher the number of poor people, the higher the General Allocation Fund and the Special Allocation Fund, and the lower the Drinking water Coverage.

Simultaneous Testing (Test F)

The F test reveals whether the model fits all the independent variables or not. F exam results are shown in Table 7. Because the significant value is less than 0.05, which is a significant value at 0.00b, then it can be concluded that there is a fit model for the independent variables, especially the function of infrastructure spending, the number of poor people, general allocation funds, and special allocation funds.

Coefficient of Determination (R²)

Table 9. The results of coefficient of determination

R	R Square	Adjusted R Square	Std. Error of Estimate
.580 ^a	.336	.323	2.16056

The capacity of each independent variable in the regression model to explain the dependent variable is measured using the coefficient of determination (R²). According to the results of the equation test, the adjusted R² value for the coefficient of determination is 32.3%. This indicates that the dependent variable, drinking water coverage, may be explained by the independent variable infrastructure expenditure function, a number of poor populations, general allocation funds, and special allocation funds, while 67.7% is impacted by additional factors outside the model.

T-test

The t-test is used to evaluate the extent to which each independent variable contributes to the explanation of the dependent variable. The hypothesis can be accepted if the significant value is less than 0.05, according to the established criterion. The outcomes shown in Table 7 are as follows:

- The t-test for the Infrastructure Expenditure Function variable yields a calculated t-value of 4,851 greater than the t-table value of 1,645 and a significant value of 0.000 less than 0.05, so it can be concluded that the first hypothesis states, "The Infrastructure Expenditure Function affects Drinking water Coverage in Regencies and Cities in Java in 2019-2020." H₁ **accepted**
- The t-test for the variable Number of Poor Population produces a calculated t-value of 3,739, which is greater than the calculated t-value of 1,645 and a significant value of 0.000, less than 0.05. The calculated t value is negative, which partially means that the number of poor people has a significant negative effect, so it can be concluded that the second hypothesis, "The number of poor people has an effect on drinking water coverage in districts and cities in Java in 2019-2020," H₂ accepted.
- The t-test for the General Allocation Fund variable produces a calculated t value of 4,443 greater than the calculated t value of 1,645 and a significant value of 0.000, less than 0.05. The calculated t value is negative, which partially has a significant negative effect on the General Allocation Fund, so it can be concluded that the third hypothesis, "General Allocation Funds Have an Effect on Drinking water Coverage in Districts and Cities in Java in 2019-2020," H₃ **accepted**.
- The t-test for the Special Allocation Fund variable produces a t-table value of .985, which is less than the t-table value of 1.645, and a significant value of 0.326, which is greater than 0.05. The calculated t value is negative; this partially has no effect

on the Special Allocation Fund, so it can be concluded "that" the first hypothesis states "Special Allocation Funds have an effect on Drinking water Coverage in "Districts/Cities in Java in 2019-2020" H₄ rejected

4.2 Discussion

The Effect of the Infrastructure Spending Function on Drinking water Coverage

Based on the statistical test results of the Infrastructure Expenditures Function, it produces a significant value of .000, which is less than the level of significance value of 0.05 or ($.000 < 0.05$), and the calculated t value of 4,851 is greater than the t table value of 1,645. This means that the Infrastructure Spending Function has a significant effect on the dependent variable, Drinking water Coverage in Regencies and Cities in Java in 2019–2020.

Government Regulation Number 23 of 2020 concerning the implementation of the 2020 State Revenue and Expenditure Regulations as the legal basis for implementing infrastructure spending in 2020. In this regulation, infrastructure spending is regulated in the form of capital expenditure, consisting of development expenditure, capital expenditure, and other capital expenditure. Overall, Government Regulation Number 23 of 2020 serves as a reference for the implementation of infrastructure spending in 2020. This regulation regulates the use of infrastructure funds, the management and supervision of infrastructure spending, and infrastructure planning and budgeting. This aims to increase effectiveness and efficiency in infrastructure development applications so as to deliver maximum benefits to residents and the economy. In the current period, the village government is not only focusing on physical development but also on community empowerment, so the Infrastructure Expenditure Function has a positive effect on Drinking water Coverage.

The results of this study are supported by Ulie Amrina (2022) with the research title "Analysis of the Influence of Electricity and Drinking water Infrastructure on the Quality of Life of People in Central Java Province for the 2012–2019 Period" and the conclusion that Electricity Infrastructure, Drinking water, GRDP, and Regional Government expenditures have a positive and significant effect on HDI in Central Java Province. Research by Tupadji, Sangadji, and Rumbouw (2022) with the title "The Influence of Government Expenditures in the Education, Health, and Infrastructure Sector on the Human Development Index in Maluku Province" and the results of research on government expenditure variables in the infrastructure sector have a positive and significant effect.

Effect of the Number of Poor Populations on Drinking water Coverage

Based on the findings of the statistical test, the number of poor people has a significant value of .000, which is less than the level of significance of 0.05, and the calculated t-value of 3,739 is greater than the t-table value of 1,645. arithmetic t value with a negative sign so that partially the Number of Poor Populations has a significant negative effect on the dependent variable District/City Drinking water Coverage in Java in 2019-2020.

The number of poor people in a country or region is an important indicator to measure the level of poverty in that area. Poor people are those who have insufficient income and assets to meet basic needs such as food, clothing, and shelter. Data on the number of poor people is often used as a basis for planning government policies and programs to reduce poverty. Based on data released by the Indonesian Central Statistics Agency (BPS) in September 2021, the number of poor people in Indonesia in March 2021 reached 27.55 million people, or approximately 9.84% of Indonesia's total population. This figure is a decrease compared to the previous year, where in September 2020, the number of poor people reached 29.12 million, or around 10.19% of Indonesia's total population. However, even though there has been a decline, this percentage is still relatively high and is a challenge for the government to reduce the poverty rate in Indonesia. The Indonesian government has set a target to reduce the poverty rate in Indonesia to 7% in 2024. The poorer people, the more people have to be served by the government, which causes the coverage to shrink. So, the number of poor people has a negative effect.

The results of this study are supported by previous research conducted by Hendrawan (2022) entitled "The Influence of the Minimum Wage, Number of Poor Population, and Unemployment Rate on the Human Development Index in Riau Province.". Research by Maulana, Pitoyo, and Alfana (2022) entitled "Analysis of the Effects of Poverty and Economic Conditions on the Human Development Index in Central Java Province in 2013–2017" concluded that poverty had a significant and significant effect on HDI in Central Java Province in 2013–2017.

Effect of the General Allocation Fund on Drinking water Coverage

Based on the results of the General Allocation Fund statistical test, it produces a significance value of .000, which is less than the level of significance of 0.05, and the t-count value of 4,443 is greater than the t-table, which is 1,645. The calculated t value is negative, which shows that the General Allocation Fund has a significant negative effect on Drinking water Coverage in regencies and cities in Java in 2019–2020.

General Allocation Funds (DAU) are funds provided by the central government to regional governments to finance routine expenses such as employee honoraria, operational expenses, and infrastructure maintenance. DAU is regulated in Minister of Home Affairs Regulation (Permendagri) No. 72 of 2020 concerning guidelines for the Distribution of General Allocation Funds for the 2020 fiscal year. The General Allocation Fund has a negative effect because, on average, it is used for civil servant salaries and benefits. The greater the General Allocation Fund, the smaller the Drinking water Coverage, with the tendency for more civil servants, so the service coverage is getting smaller.

The results of this study are in line with research conducted by Makik, Sjarlis, and Gusti (2022) with the research title "The Influence of Local Own Revenue, General Allocation Funds, and Village Funds on District Human Development Index in South Sulawesi Province," which states DAU has a negative effect and is significant to HDI. However, this research is not in line with Saswatata & Parju (2022), who state that the

General Allocation Fund has a positive and significant effect on the quality of Human Development. Research by Gulo, Fitrawaty, and Arwansyah (2023) with the title "Analysis of the Influence of Special Allocation Funds, General Allocation Funds, and Regional Original Income on the Human Development Index in North Sumatra" with the results of the research in the form of partially DAK, DAU, and PAD having a positive and significant impact on HDI in North Sumatra and simultaneously DAK, DAU, and PAD having a positive and significant effect on HDI in North Sumatra

Effect of Special Allocation Funds on Drinking water Coverage

Based on the statistical test results, the Special Allocation Fund has a significance value of .326, which is greater than the level of significance value of 0.05, and the calculated t value of .985 is smaller than the t table value of 1.645. The t value is negative; this is partially because the Special Allocation Fund has no effect on Drinking water Coverage in regions and cities in Java in 2019-2020.

In 2020, the Ministry of Home Affairs (Kemendagri) issued Minister of Home Affairs Regulation Number 82 of 2020 concerning Special Allocation Funds (DAK) for Regional Governments. This Permendagri contains regulations related to the allocation and use of DAK sourced from the APBN for development programs that are national and regional priorities. Several important matters regulated in Permendagri No. 82 of 2020 are as follows:

- a. The use of DAK must pay attention to the principles of national and regional policies and refer to the regional medium-term development plan (RPJMD) and the Regional Government Work Plan (RKPD).
- b. Distribution of DAK is carried out in stages and in a planned manner and must go through stages such as planning, application, monitoring, and reporting.
- c. Regional Governments are required to be accountable for the use of DAK and submit accountability reports on the use of DAK to authorized parties.
- d. DAK can be allocated to several development sectors such as education, health, infrastructure, and so on.
- e. DAK can be given to Regional Governments that meet certain requirements, such as having good financial performance and having development plans in accordance with national and regional priorities. Permendagri No. 82 of 2020 has the objective of increasing the effectiveness and efficiency of the use of special allocation funds and ensuring their use is in accordance with the desired objectives. This is necessary to enhance the quality of development in Indonesia, especially in areas that need support to increase the human growth index.

The results of this study are in line with research by Aprilia Tungga Dewi (2022) with the title "The Influence of Local Own Revenue, General Allocation Funds, Special Allocation Funds, Revenue Sharing Funds, and Economic Growth on the Human Development Index (Case Study in Regency/City Governments in Yogyakarta Province), with the results of research in the form of DAK not having a negative effect on the Human Development Index. However, these results contradict research conducted by Gulo, Fitrawaty, and Arwansyah 20223 with the title "Analysis of the Influence of

Special Allocation Funds, General Allocation Funds, and Regional Original Income on the Human Development Index in North Sumatra," with the results of the study showing that partial DAK, DAU, and PAD have a positive and significant effect on HDI in North Sumatra and simultaneously DAK, DAU, and PAD have a positive and significant effect on HDI in North Sumatra. Research by Muhammad Imam Nashar and Budi Mulyana (2022) with the research title "The Influence of Special Allocation Funds on the Human Development Index with Capital Expenditure as a Mediation Variable" results in DAK having a significant and positive effect on HDI.

Use either SI (MKS) or CGS as primary units. (SI units are strongly encouraged.) English units may be used as secondary units (in parentheses). This applies to papers in data storage. For example, write "15 Gb/cm² (100 Gb/in²)." An exception is when English units are used as identifiers in trade, such as "3½-in disk drive." Avoid combining SI and CGS units, such as current in amperes and magnetic field in oersteds. This often leads to confusion because equations do not balance dimensionally. If you must use mixed units, clearly state the units for each quantity in an equation.

The SI unit for magnetic field strength H is A/m. However, if you wish to use units of T, either refer to magnetic flux density B or magnetic field strength symbolized as $\mu_0 H$. Use the center dot to separate compound units, e.g., "A·m²."

5. Conclusion

The following conclusions may be drawn from the test results and discussion: 1) Infrastructure Expenditure Function variable, which indicates that the infrastructure spending function has an impact on Drinking water coverage. 2) Number of Poor Population, which indicates that the Number of Poor People has an impact on Drinking water coverage. 3) General Allocation Fund variable, which indicates that the General Allocation Fund has an impact on Drinking water coverage. 4) Special Allocation Fund variable, which indicates that the Special Allocation Fund has no impact on Drinking water coverage.

References

- Amrina, U. (2022). *Analisis Pengaruh Infrastruktur Listrik dan Air Bersih Terhadap Kualitas Hidup Masyarakat di Provinsi Jawa Tengah Periode Tahun 2012 - 2019* [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/handle/123456789/40505>
- Rencana pembangunan jangka menengah nasional 2020-2024, Pub. L. No. 18, National Mid-Term Development Plan 2020-2024 1 (2020). <https://www.bappenas.go.id/id/data-dan...dan.../rpjmn-2015-2019/>
- Dewi, A. T. (2022). *Pengaruh pendapatan asli daerah, dana alokasi umum, dana alokasi khusus, dana bagi hasil, dan pertumbuhan ekonomi terhadap indeks pembangunan manusia (studi kasus pada Pemerintah Kabupaten/Kota di Provinsi D.I Yogyakarta)* [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/bitstream/handle/123456789/39141/18313138.pdf?sequence=1&isAllowed=y>
- Gulo, H., Fitrawaty, F., & Arwansyah, A. (2023). Analisis pengaruh dana alokasi

- khusus, dana alokasi umum dan pendapatan asli daerah terhadap indeks pembangunan manusia di Sumatera Utara. *SOSIOHUMANIORA: Jurnal Ilmiah Ilmu Sosial Dan Humaniora*, 9(1), 59–73. <https://doi.org/10.30738/sosio.v9i1.13725>
- Harahap, P., Erlina, & Sirojuzilam. (2021). The effect of general allocation funds, special allocation funds, revenue sharing funds and regional expenditures on the development of districts/cities of north sumatra province. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 14179–14190. <https://doi.org/10.29103/jmpe.v5i1.8155>
- Hendrawan. (2022). *Pengaruh upah minimum, jumlah penduduk miskin dan tingkat pengangguran terhadap indeks pembangunan manusia di Provinsi Riau* [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/bitstream/handle/123456789/42850/18313371.pdf?sequence=1&isAllowed=y>
- Undang-undang Republik Indonesia nomor 7 tahun 2004 tentang sumber daya air, Pub. L. No. 7, Sekretaris Negara Republik Indonesia 1 (2004). <https://jdih.esdm.go.id/peraturan/UU-7-2004.pdf>
- Undang-undang Republik Indonesia nomor 23 tahun 2014 tentang pemerintah daerah, Pub. L. No. 23, 2 1 (2014). <https://eje.bioscientifica.com/view/journals/eje/171/6/727.xml>
- Jasasila, J. (2020). Pengaruh tingkat kemiskinan dan jumlah penduduk terhadap indeks pembangunan manusia (IPM) Kabupaten Batang hari 2011 -2019. *Eksis: Jurnal Ilmiah Ekonomi Dan Bisnis*, 11(1), 40. <https://doi.org/10.33087/eksis.v11i1.192>
- Malik, M., Sjarlis, S., & Gusti, D. H. (2022). Pengaruh pendapatan asli daerah, dana alokasi umum dan dana desa terhadap indeks pembangunan manusia Kabupaten di Provinsi Sulawesi Selatan. *Jurnal Magister Manajemen Nobel Indonesia*, 3(4), 661–675. <https://e-jurnal.nobel.ac.id/index.php/JMMNI/article/view/2756>
- Maulana, R., Pitoyo, A. J., & Alfana, M. A. F. (2022). Analisis pengaruh kemiskinan dan kondisi ekonomi terhadap indeks pembangunan manusia di Provinsi Jawa Tengah tahun 2013-2017. *Media Komunikasi Geografi*, 23(1), 12–24. <https://doi.org/10.23887/mkg.v23i1.39301>
- Maysaroh, R., & Arif, M. (2022). Analisis Peran Dana Alokasi Khusus (DAK) Fisik Dalam Meningkatkan Indeks Pembangunan Manusia (IPM) dan Pertumbuhan Ekonomi Provinsi Sumatera Utara. *El-Mujtama: Jurnal Pengabdian Masyarakat*, 2(3), 322–335. <https://doi.org/10.47467/elmujtama.v2i3.1426>
- Nashshar, M. I., & Mulyana, B. (2022a). Pengaruh dana alokasi khusus terhadap indeks pembangunan manusia dengan belanja modal sebagai variabel mediasi. *Indonesian Treasury Review: Jurnal Perbendaharaan, Keuangan Negara Dan Kebijakan Publik*, 7(3), 255–270. <https://doi.org/10.33105/ITREV.V7I3.474>
- Nashshar, M. I., & Mulyana, B. (2022b). Pengaruh dana alokasi khusus terhadap indeks pembangunan manusia dengan belanja modal sebagai variabel mediasi. *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 7(3), 255–270. <https://doi.org/10.33105/itrev.v7i3.474>
- Ndraha, A. B., & Uang, D. P. (2018). Strategi pengalokasian dana alokasi umum dalam

- urusan otonomi daerah di Kabupaten Nganjuk Provinsi Jawa Timur. *JEKP (Jurnal Ekonomi Dan Keuangan Publik)*, 5(2), 129–143. <http://ejournal.ipdn.ac.id/JEKP/article/view/418/246>
- Rizaty, M. A. (2021). *Skor indeks kualitas air Indonesia naik jadi 53,53 poin pada 2020*. Katadata Media Network. <https://databoks.katadata.co.id/datapublish/2021/06/29/skor-indeks-kualitas-air-indonesia-naik-jadi-5353-poin-pada-2020>
- Saswatata, S. S., & Parju, P. (2022). Pengaruh PAD, DAU, DAN DAK terhadap indeks pembangunan manusia di Kota Semarang. *Serat Acitya*, 11(1), 17. <https://doi.org/10.56444/sa.v11i1.2953>
- Sembiring, E. A. (2019). Pengaruh pendapatan asli daerah, dana alokasi umum dan dana alokasi khusus terhadap indeks pembangunan manusia di Kabupaten dan Kota Provinsi Sumatera Utara. *Accumulated Journal (Accounting and Management Research Edition Journal)*, 1(2), 160–170.
- Sembiring, T. A. (2020). Pengaruh pendapatan asli daerah (PAD), dana alokasi umum (DAU), dan dana alokasi khusus (DAK) fisik terhadap pembangunan manusia di Provinsi Sumatera Utara (Periode 2016 – 2018). *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 5(1), 77–91. <https://doi.org/10.33105/itrev.v5i1.167>
- Simbolon, T. R. (2021). *Analisis pengaruh kemandirian keuangan daerah, pendapatan perkapita dan jumlah penduduk miskin terhadap indeks pembangunan manusia di Indonesia* [Universitas Negeri Medan]. <http://digilib.unimed.ac.id/42362/>
- Sutono, I. A. (2022). Pengaruh belanja pemerintah terhadap indeks pembangunan manusia di Provinsi Riau. *Jurnal Manajemen Perbendaharaan*, 3(2), 150–168. <https://doi.org/10.33105/jmp.v3i2.463>
- Tupamahu, M. K., Sangadji, M., & Rumbouw, A. J. (2022). Pengaruh pengeluaran pemerintah di bidang pendidikan, kesehatan dan infrastruktur terhadap indeks pembangunan manusia di Provinsi Maluku. *Jurnal Ekonomi*, 1(1), 1–11. <https://ojs3.unpatti.ac.id/index.php/inflasi/article/view/7789/5111>
- Zakaria, R. (2018). *Pengaruh tingkat jumlah penduduk, pengangguran, keniskinan, pertumbuhan ekonomi dan belanja modal terhadap indeks pembangunan manusia di Provinsi Jawa Tengah tahun 2010-2016* [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/handle/123456789/5765>
- Dewi, A. T. (2022). Pengaruh pendapatan asli daerah, dana alokasi umum, dana alokasi khusus, dana bagi hasil, dan pertumbuhan ekonomi terhadap indeks pembangunan manusia (studi kasus pada Pemerintah Kabupaten/Kota di Provinsi D.I Yogyakarta) [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/bitstream/handle/123456789/39141/18313138.pdf?sequence=1&isAllowed=y>
- Chehafudin, M., Wibawa, S., & Wibowo, S. (2022). “Evaluasi Kebijakan Dana Desa untuk Penanggulangan Kemiskinan dan Peningkatan Infrastruktur Pelayanan Dasar Air Minum serta Sanitasi Kabupaten/Kota di Indonesia”. *JURNAL ILMU ADMINISTRASI NEGARA (ASIAN)*, 374-387.

- Ekpong, E. G. (2014). "Public Infrastructure Spending And Economic Growth In Nigeria: An Error Correction Mechanism (Ecm) Approach". *Journal of Social Economics Research*, 129-140.
- Formula Dana Alokasi Umum Tahun Anggaran 2022. Retrieved From Kementerian Keuangan: <https://djpk.kemenkeu.go.id/wp-content/uploads/2022/03/Formulasi-DAU-2022.pdf>
- Gulo, H., Fitriawaty, F., & Arwansyah, A. (2023). Analisis pengaruh dana alokasi khusus, dana alokasi umum dan pendapatan asli daerah terhadap indeks pembangunan manusia di Sumatera Utara. *SOSIOHUMANIORA: Jurnal Ilmiah Ilmu Sosial Dan Humaniora*, 9(1), 59–73. <https://doi.org/10.30738/sosio.v9i1.13725>
- Hamzah , MM, I. A. (2019, Januari 03). "Menyiapkan Air Bersih dan Air Baku Untuk Masyarakat". Retrieved from SIMANTU (Sistem Manajemem Pengetahuan): <https://simantu.pu.go.id/content/?id=290>
- Harahap, P., Erlina, & Sirojuzilam. (2021). The effect of general allocation funds, special allocation funds, revenue sharing funds and regional expenditures on the development of districts/cities of north sumatra province. *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 4(4), 14179–14190. <https://doi.org/10.29103/jmpe.v5i1.8155>
- Harahap, P., Erlina, & Sirojuzilam. (2021). "The Effect Of General Allocations Funds, Special Allocations Funds, Revenue Sharing Funds And Regional Expenditures On The Development Of Districts/Cities Of Nort Sumatra Province". *Budapest International Research and Critics Institute-Journal (BIRCI-Journal)*, 14179-14190.
- Harahap, R. U. (2011). "Pengaruh Dana Alokasi Umum, Dana Alokasi Khusus, Dan Dana Bagi Hasil Terhadap Indeks Pembangunan Manusia Pada Kab./Kota Provinsi Sumatera Utara". *Jurnal Riset Akuntansi Dan Bisnis*, 47-58.
- Heller, P. S. (1989). "Government Expenditure and Economic Growth: An Empirical Investigation". *IMF WORKING PAPER*, 01-23.
- Hendrawan. (2022). Pengaruh upah minimum, jumlah penduduk miskin dan tingkat pengangguran terhadap indeks pembangunan manusia di Provinsi Riau [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/bitstream/handle/123456789/42850/18313371.pdf?sequence=1&isAllowed=y>
- Holik, A. (2020). The Impact of General Allocation Fund, Special Allocation Fund, and Profit-Share Fund on Unemployment. *Jejak Vol 13 (1) (2020)*, 43-68.
- INFORMASI APBN 2022. Retrieved from Kementerian Keuangan : <https://media.kemenkeu.go.id/getmedia/0f9020ba-dce7-4116-8ea7-f1baf5986fa4/informasi-apbn-2022.pdf?ext=.pdf>
- Isramiwarti, R., Rasuli, M., & Taufik, T. (2017). Pengaruh Pendapatan Asli Daerah, Dana Alokasi Umum, Dana Bagi Hasil, Dan Jumlah Penduduk Terhadap Tingkat Kemiskinan Dengan Belanja Daerah Sebagai Variabel Intervening Pada Kabupaten/Kota Di Provinsi Riau Tahun 2011 S.D 2015. *Pekbis Jurnal*, Vol.9, No.3, November 2017, 195-213.
- Jasasila, J. (2020). Pengaruh tingkat kemiskinan dan jumlah penduduk terhadap indeks pembangunan manusia (IPM) Kabupaten Batang hari 2011 -2019. *Eksis:*

- Jurnal Ilmiah Ekonomi Dan Bisnis, 11(1), 40.
<https://doi.org/10.33087/eksis.v11i1.192>
- Maharani, A. D., Romli, H., & Meiriasari, V. (2021). The Effect of Local Taxes, General Allocation Funds, and Special Allocation Funds on Capital Expenditures of the Government of South Sumatra Province 2010 - 2019. *International Journal of Community Service & Engagement*, 60-71.
- Malik, M., Sjarlis, S., & Gusti, D. H. (2022). Pengaruh pendapatan asli daerah, dana alokasi umum dan dana desa terhadap indeks pembangunan manusia Kabupaten di Provinsi Sulawesi Selatan. *Jurnal Magister Manajemen Nobel Indonesia*, 3(4), 661–675. <https://e-jurnal.nobel.ac.id/index.php/JMMNI/article/view/2756>
- Maulana, R., Pitoyo, A. J., & Alfana, M. A. F. (2022). Analisis pengaruh kemiskinan dan kondisi ekonomi terhadap indeks pembangunan manusia di Provinsi Jawa Tengah tahun 2013-2017. *Media Komunikasi Geografi*, 23(1), 12–24. <https://doi.org/10.23887/mkg.v23i1.39301>
- Maysaroh, R., & Arif, M. (2022). Analisis Peran Dana Alokasi Khusus (DAK) Fisik Dalam Meningkatkan Indeks Pembangunan Manusia (IPM) dan Pertumbuhan Ekonomi Provinsi Sumatera Utara. *El-Mujtama: Jurnal Pengabdian Masyarakat*, 2(3), 322–335. <https://doi.org/10.47467/elmujtama.v2i3.1426>
- Manzoor, A. (2013). *Fiscal Decentralisation And Political Economy Of Poverty Reduction: Theory And Evidence From Pakistan*. Durham E-Theses.
- Maryati, S., Humaira, A. S., & Hudiary, K. R. (2017). Faktor-Faktor Yang Mempengaruhi Cakupan Pelayanan Air Bersih Kawasan Metropolitan Di Indonesia. *Prosiding Simposium II – UNIID 2017*, 248-153.
- Mirza, D. S. (2011). Pengaruh Kemiskinan, Pertumbuhan Ekonomi, Dan Belanja Modal Terhadap Ipm Jawa Tengah. *Jurnal Ekonomi dan Kebijakan*,
- Mulyadi, M., Lestari, T. R., Alawiyah, F., Wahyuni, D., Astri, H., Martiany, D., . . . Qodriyatun, S. N. (2015). *Pembangunan Berkelanjutan: Dimensi Sosial, Ekonomi, Dan Lingkungan*. Yogyakarta: Pusat Pengkajian, Pengolahan Data dan Informasi (P3DI) Sekretariat Jenderal DPR RI Gedung Nusantara I Lt. 2 Jl. Jenderal Gatot Subroto Jakarta Pusat 10270 Telp. (021) 5715409 Fax. (021) 5715245.
- Nashshar, M. I., & Mulyana, B. (2022). Pengaruh dana alokasi khusus terhadap indeks pembangunan manusia dengan belanja modal sebagai variabel mediasi. *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 7(3), 255–270. <https://doi.org/10.33105/itrev.v7i3.474>
- Ndraha, A. B., & Uang, D. P. (2018). Strategi pengalokasian dana alokasi umum dalam urusan otonomi daerah di Kabupaten Nganjuk Provinsi Jawa Timur. *JEKP (Jurnal Ekonomi Dan Keuangan Publik)*, 5(2), 129–143. <http://ejournal.ipdn.ac.id/JEKP/article/view/418/246>
- Palei, T. (2015). Assessing The Impact of Infrastructure on Economic Growth and Global Competitiveness. *Procedia Economics and Finance* 23 (2015), 168-175.
- Pradita, I. W., & Harsanto, S. (2021). *Statistik Air Bersih 2015-2020*. Indonesia: © Badan Pusat Statistik/BPS-Statistics Indonesia.
- Rencana pembangunan jangka menengah nasional 2020-2024, Pub. L. No. 18, National Mid-Term Development Plan 2020-2024 1 (2020). <https://www.bappenas.go.id/id/data-dan...dan.../rpjmn-2015-2019/>

- Rizaty, M. A. (2021). Skor indeks kualitas air Indonesia naik jadi 53,53 poin pada 2020. *Katadata Media Network*.
<https://databoks.katadata.co.id/datapublish/2021/06/29/skor-indeks-kualitas-air-indonesia-naik-jadi-5353-poin-pada-2020>
- Rudiyanto, Msc, D. (2020). *Pedoman Teknis Penyusunan Rencana Aksi Tujuan Pembangunan Berkelanjutan (Tpb)/Sustainable Development Goals (SDGs)*. Jakarta: Kedeputan Bidang Kemaritiman dan Sumber Daya Alam, Kementerian Perencanaan Pembangunan Nasional Badan Perencanaan Pembangunan Nasional.
- Saswatata, S. S., & Parju, P. (2022). Pengaruh PAD, DAU, DAN DAK terhadap indeks pembangunan manusia di Kota Semarang. *Serat Acitya*, 11(1), 17.
<https://doi.org/10.56444/sa.v11i1.2953>
- Sembiring, E. A. (2019). Pengaruh pendapatan asli daerah, dana alokasi umum dan dana alokasi khusus terhadap indeks pembangunan manusia di Kabupaten dan Kota Provinsi Sumatera Utara. *Accumulated Journal (Accounting and Management Research Edition Journal)*, 1(2), 160–170.
- Sembiring, T. A. (2020). Pengaruh pendapatan asli daerah (PAD), dana alokasi umum (DAU), dan dana alokasi khusus (DAK) fisik terhadap pembangunan manusia di Provinsi Sumatera Utara (Periode 2016 – 2018). *Indonesian Treasury Review Jurnal Perbendaharaan Keuangan Negara Dan Kebijakan Publik*, 5(1), 77–91.
<https://doi.org/10.33105/itrev.v5i1.167>
- Simbolon, T. R. (2021). Analisis pengaruh kemandirian keuangan daerah, pendapatan perkapita dan jumlah penduduk miskin terhadap indeks pembangunan manusia di Indonesia [Universitas Negeri Medan]. <http://digilib.unimed.ac.id/42362/>
- Sutono, I. A. (2022). Pengaruh belanja pemerintah terhadap indeks pembangunan manusia di Provinsi Riau. *Jurnal Manajemen Perbendaharaan*, 3(2), 150–168.
<https://doi.org/10.33105/jmp.v3i2.463>
- Setyaningtyas, R. (2022). Strategi Pengelolaan Sistem Penyediaan Air Minum yang Berkelanjutan di Pedesaan. *Jurnal Teknik Lingkungan Volume 28 Nomor 1*, April 2022, 24-41.
- Simbolan, T. R. (2022). Analysis Of The Influence Of Regional Financial Independence, Percapita Income And The Number Of Poor People On Human Percapita Income And The Number Of Poor People On Human. *QE Journal (Quantitative economics e Journal)*, 01-10.
- Statistik Keuangan Pemerintah Kabupaten/Kota 2019-2020. Retrieved from Badan Pusat Statistik:
<https://www.bps.go.id/publication/2021/04/08/8e4cd390e702366ad3cc6f92/statistik-ik-keuangan-pemerintah-kabupaten-kota-2019-2020-buku-1-sumatera-jawa-.html>
- Sudarsono, R. A., & Nurkholis. (2020). Pendanaan dalam Pencapaian Akses Universal Air Minum di Indonesia. *Jurnal Ekonomi dan Pembangunan Indonesia*, 01-19.
- Sulastri, E., & Efendi. (2021). Analisis Pengaruh PAD, DAU, DAK dan DBH terhadap indeks pembangunan manusia seluruh provinsi di Kalimantan tahun anggaran 2015-2019. *JRMB (Jurnal Riset Manajemen dan Bisnis)*, 85-96.
- Susana, T. (2003). Air Sebagai Sumber Kehidupan. *Oseana*, Volume XXVIII, Nomor 3, 17-25.

- Sutono, I. A. (2022). Pengaruh Belanja Pemerintah Terhadap Indeks Pembangunan Manusia Di Provinsi Riau. *Jurnal Manajemen Perbendaharaan – Volume 3, Nomor 2, 2022*, 150-168.
- Syamsuri TN, M. R., & Bandiyono, A. (2018). Pengaruh Belanja Pemerintah Daerah Berdasarkan Fungsi Terhadap Peningkatan Ipm Dan Pengentasan Kemiskinan (Studi Pada Kabupaten/Kota Di Provinsi Aceh). *Jurnal Info Artha Vol.2, No.1, (2018)*, 11-28.
- Tupamahu, M. K., Sangadji, M., & Rumbouw, A. J. (2022). Pengaruh pengeluaran pemerintah di bidang pendidikan, kesehatan dan infrastruktur terhadap indeks pembangunan manusia di Provinsi Maluku. *Jurnal Ekonomi*, 1(1), 1–11. <https://ojs3.unpatti.ac.id/index.php/inflasi/article/view/7789/5111>
- Undang-undang Republik Indonesia nomor 7 tahun 2004 tentang sumber daya air, Pub. L. No. 7, Sekretaris Negara Republik Indonesia 1 (2004). <https://jdih.esdm.go.id/peraturan/UU-7-2004.pdf>
- Undang-undang Republik Indonesia nomor 23 tahun 2014 tentang pemerintah daerah, Pub. L. No. 23, 2 1 (2014). <https://eje.bioscientifica.com/view/journals/eje/171/6/727.xml>
- Umiyati, E., Amril, & Zulfanetti. (2017). Pengaruh Belanja Modal, Pertumbuhan Ekonomi Dan Jumlah Penduduk Miskin Terhadap Indeks Pembangunan Manusia Di Kabupaten/Kota Provinsi Jambi. *Jurnal Sains Sosio Humaniora*, Vol. 1 No. 1 29-37.
- Wibowo, H., Mulya, I. T., & Mujiwardhani, A. (2019). Dampak Alokasi Dana Desa Bagi Pembangunan Daerah Dan Kesejahteraan Masyarakat. *Jurnal Anggaran dan Keuangan Negara Indonesia (AKURASI)*, 165-178.
- Zakaria, R. (2018). Pengaruh tingkat jumlah penduduk, pengangguran, keniskinan, pertumbuhan ekonomi dan belanja modal terhadap indeks pembangunan manusia di Provinsi Jawa Tengah tahun 2010-2016 [Universitas Islam Indonesia]. <https://dspace.uui.ac.id/handle/123456789/5765>