



---

## **ANALYSIS OF FACTORS INFLUENCING REGIONAL ECONOMIC GROWTH (CASE STUDY IN SOLO RAYA 2010-2018)**

**Faisal Yoga Utama\*, Dewi Ismoyowati**

Faculty of Economics and Business, Universitas Sebelas Maret, Indonesia

Corresponding author: yogautama11@gmail.com

---

### **ARTICLE INFO**

#### **Article history**

Received : 3 March 2023

Revised : 24 March 2023

Accepted : 27 March 2023

#### **Keywords**

Degree of Fiscal

Decentralization;

Capital Expenditure;

Human Development Index;

Regional Economic Growth;

Surakarta Ex-Residency

#### **JEL classification**

H77; H54; I31; R11

### **ABSTRACT**

This study aims to determine the effect of the degree of fiscal decentralization, capital expenditure, and human development index on regional economic growth. This research was conducted on all regencies/municipalities within the scope of the Ex-Karesidenan Surakarta in 2010-2017. The data source used in this research is secondary data taken from the Directorate General of Fiscal Balance website and the Central Bureau of Statistics which is then subjected to further data processing. The data analysis method used is multiple linear regression test using panel data. The results showed that the degree of fiscal decentralization, capital expenditure, and human development index each had a positive and significant effect on regional economic growth. In addition, the degree of fiscal decentralization, capital expenditure, and human development index simultaneously or together have a significant effect on regional economic growth.

This is an open-access article under the [CC-BY 4.0](https://creativecommons.org/licenses/by/4.0/) license.



---

## **1. INTRODUCTION**

According to the Central Bureau of Statistics (BPS) the growth of the regional economic of regencies and cities in the ex-Surakarta residency over a period of 8 years, starting from 2010-2017, was on average in a relatively good position because the regional economic growth rate was not below 5 % despite unstable growth from year to year as measured by Gross Domestic Regional Product at Constant Prices from each region with an average breakdown per year for Surakarta City of 5.72%, Sukoharjo District of 5.73%, Klaten Regency 5.66%, Karanganyar Regency 5.43%, Boyolali Regency 5.72%, Wonogiri Regency 5.08%, and Sragen Regency 6.11% (Badan Pusat Statistik Provinsi Jawa Tengah, 2022).

Based on this, relatively good regional economic growth can be used as a reference for other regions that have relatively low economic growth rates to increase their regional economic growth rate so that it will facilitate their efforts to create social welfare. The growth of the regional economy can be influenced by a number of factors, both financial and non-financial. The financial factor is a factor that has a close relationship with the regional economy because it concerns regional economic activity and regional financial management (Aginta & Someya, 2022; Ekpo & Chuku, 2017; Ma et al., 2021). Meanwhile, non-financial aspects are aspects that do not touch the regional economy in real terms but have an impact on the economy.

With regard to regional economic growth, with the existence of regional autonomy, local governments have the right to manage their respective administrations in various aspects, including the fiscal aspect, so that local governments can determine and implement fiscal policies that are in accordance with expected fiscal revenue targets in order to achieve better regional economic growth and development.

The implementation of regional autonomy in the economic context cannot be separated from regional financial management. There is an indicator to assess regional financial management, namely the degree of fiscal decentralization. With the existence of a measure of fiscal decentralization or the degree of fiscal decentralization the local government can find out how independent the region is in managing its fiscal-related regions so that the region can determine the right policies related to fiscal policies that can stimulate regional economic growth in its region.

According to the research conducted by Sumardjoko (2019), it was discovered that there is a clear and noteworthy correlation between the level of fiscal decentralization and economic growth in the archipelago regions of Indonesia. When fiscal decentralization is high, it enhances the capacity of the regional budget to generate higher-quality local expenditures. Conversely, Carion, & Silvestre's in Albehadili & Hai (2018) study on Spain revealed a contrasting outcome, indicating that a high degree of fiscal decentralization negatively impacts economic growth while simultaneously positively influencing the well-being of the population.

In a study conducted by Pradana & Sumarsono (2018) on regions in East Java, it was discovered that there was no notable and favorable impact on economic growth as a result of the level of fiscal decentralization. The determining factor for regional financial performance, rather than economic growth, is the degree of fiscal decentralization. Speaking in the same scope, namely the scope of regional financial management is inseparable from the components of regional spending. Alluding to regional spending, there is a regional expenditure component that is considered to play a role in influencing regional regional economic growth, namely capital expenditure. In their research, Pradana & Sumarsono (2018) conducted in East Java found that capital expenditure had a significant and positive effect on regional economic growth. According to him, capital expenditure issued by regional governments is an important factor in increasing regional economic growth. Contrarily, Wardhiah (2018) discovered that the impact of capital expenditure on regional economic growth in Aceh was not found to be statistically significant.

Regional economic growth is not solely determined by financial factors specific to a region, there are also non-financial factors that play a role in driving regional economic growth. One such factor that has the potential to impact regional economic growth is human development. Human development can be defined as the collective efforts made to enhance the overall quality of life for individuals within a particular area. The human development index (HDI) serves as a metric for measuring the level of human development achieved in a given region.

Appiah et al. (2019) found in their research that in 5 countries in Africa found that the human development index had a positive and significant effect on economic growth. From the research they conducted, they advised the governments of the 5 countries in Africa to focus more on human development. Meanwhile Kristina (2017) in her study conducted that in East Java, it was discovered that there is a noteworthy and adverse impact of the human development index on economic growth. This implies that when the human development index rises, there is a corresponding decline in economic growth, and conversely, when the index decreases, economic growth increases.

The existence of a research gap has piqued the curiosity of researchers, leading them to explore the impact of fiscal decentralization, capital spending, and the human development index on regional economic growth in greater detail, in this case in regencies and cities in the former Surakarta residency in 2010-2017.

## 2. RESEARCH METHODS

This research encompasses all the regencies and cities within the former Surakarta Residency area, comprising Sukoharjo Regency, Karanganyar Regency, Sragen Regency, Boyolali Regency, Wonogiri Regency, Klaten Regency, and Surakarta City. The total observation units in this study are the 7 regions with an observation period of 8 years from 2010-2017.

In this study, we have identified two types of variables: the independent variable and the dependent variable. The independent variables encompass the degree of fiscal decentralization (measured by the ratio of local revenue to total regional revenue), capital expenditure, and the human development index. On the other hand, the dependent variable that we are focusing on is the Gross Domestic Regional Product.

The model in this study is as follows:

$$\text{LOGGDRP}_{it} = a + b_1\text{DDF}_{it} + b_2\text{LOGCE}_{it} + b_3\text{HDI}_{it} + e_t$$

Where as:

- DDF = Degree of Fiscal Decentralization  
LOGCE = Capital Expenditure  
HDI = Human Development Index  
LOGDRP = Gross Domestic Regional Product

The hypothesis in this study is as follows:

- H<sub>1</sub> = The degree of fiscal decentralization has partially had a positive and significant effect on regional economic growth in regencies/cities in the former Surakarta residency in 2010-2017.  
H<sub>2</sub> = Capital Expenditure has partially had a positive and significant effect on regional economic growth in regencies/cities in the Former Surakarta Residency in 2010-2017.  
H<sub>3</sub> = The Human Development Index partially has a positive and significant effect on regional economic growth in regencies/cities in the former Surakarta residency in 2010-2017.  
H<sub>4</sub> = The degree of fiscal decentralization, capital spending, and the human development index simultaneously or jointly have a significant effect on regional economic growth in regencies/cities in the Former Surakarta Residency in 2010-2017.

## 3. RESULTS AND DISCUSSION

### 3.1. RESULTS

Table 1. Growth Rate of Gross Domestic Regional Product at 2010 Constant Prices for Districts/Cities in the Surakarta Residency in 2010-2017

Year	Surakarta	Sukoharjo	Klaten	Karanganyar	Boyolali	Wonogiri	Sragen
2011	6,42%	5,88%	6,29%	4,95%	6,34%	3,58%	6,55%
2012	5,59%	5,90%	5,71%	5,90%	5,33%	5,94%	6,12%
2013	6,25%	5,78%	5,96%	5,69%	5,83%	4,78%	6,70%
2014	5,28%	5,40%	5,84%	5,22%	5,42%	5,26%	5,59%
2015	5,44%	5,69%	5,30%	5,05%	5,96%	5,40%	6,05%
2016	5,35%	5,72%	5,17%	5,40%	5,33%	5,25%	5,77%
2017	5,70%	5,76%	5,33%	5,77%	5,80%	5,32%	5,97%
Mean	5,72%	5,73%	5,66%	5,43%	5,72%	5,08%	6,11%

Source: Processed data, 2022

Based on table 1, in terms of achieving the growth rate of Gross Domestic Regional Product, it can be seen that on average the highest growth rate of Gross Domestic Regional Product is owned by Sragen Regency with an average growth rate of Gross Domestic Regional Product of 6.11%. Meanwhile, Wonogiri Regency had the lowest growth rate of Gross Domestic Regional Product with an average growth rate of Gross Domestic Regional Product of 5.08%. It was concluded that for all regions in the former Surakarta residency in the 2010-2017 period, on average, there was a relatively fluctuating growth pattern with relatively good regional economic growth rates.

Table 2. The Degree of District/City Fiscal Decentralization in the Surakarta Residency in 2010-2017

Year	Surakarta	Sukoharjo	Klaten	Karanganyar	Boyolali	Wonogiri	Sragen
2011	32,53%	17,21%	2,36%	9,70%	-6,32%	-0,10	-4,23%
2012	6,26%	43,06%	5,81%	-4,76%	13,83%	12,91%	12,98%
2013	15,27%	4,29%	18,62%	24,36%	9,35%	0,35%	2,38%
2014	2,12%	19,31%	39,32%	12,77%	23,73%	41,98%	44,55%
2015	8,03%	4,38%	-5,55%	4,55%	-1,03%	1,10%	-8,39%
2016	5,12%	6,83%	13,41%	7,51%	8,98%	-0,13%	7,36%
2017	17,05%	20,23%	45,06%	35,69%	21,58%	34,07%	30,27%
Mean	12,34%	16,47%	17,01%	12,83%	10,02%	12,89%	12,13%

Source: Processed data, 2022

Based on table 2, in terms of the rate of degree of fiscal decentralization, on average the highest degree of fiscal decentralization growth was owned by Klaten Regency at 17.01% and the lowest degree of fiscal decentralization growth was owned by Boyolali Regency at 10.02%. It was concluded that for all regions in the former Surakarta residency in the 2010-2017 period, on average, it was seen that there was a relatively unstable growth pattern of the degree of fiscal decentralization in regencies and cities in the former Surakarta residency in 2010-2017. This happened because of the pattern of fiscal policies implemented by each region in the Former Surakarta Residency in the 2010-2017 period.

Table 3. Realization of District/City Capital Expenditures in the Surakarta Residency in 2010-2017

Year	Surakarta	Sukoharjo	Klaten	Karanganyar	Boyolali	Wonogiri	Sragen
2011	61,03%	56,38%	225,21%	-18%	38,30%	7,75%	-17,98%
2012	44,93%	140,57%	39,88%	42,37%	50,07%	66,92%	77,18%
2013	31,60 %	-10,28%	2,34%	20,95%	19,90%	3,36%	12,56%
2014	16,95%	-5,60%	43,70%	50,38%	21,97%	16,58%	89,16%
2015	-17,68%	34,35%	13,97%	8,22%	2,08%	39,35%	21,30%
2016	30,41%	23,19%	-27,87%	58,11%	20,55%	29,67%	0,39%
2017	52,69%	-23,40%	65,31%	-26,82%	12,36%	24,39%	-100%
Mean	31,42%	30,74%	51,79%	19,03%	23,61%	26,86%	11,80%

Source: Processed data, 2022

Based on table 3, in terms of the rate of capital expenditure realization, on average the highest capital expenditure growth was owned by Klaten Regency at 51.79% and the lowest capital expenditure growth and experiencing a decrease in growth rate was owned by Sragen Regency at 11.80%. It was concluded that for all regions in the former Surakarta residency in the 2010-2017 period, on average, it was seen that there was a relatively unstable pattern of growth in the realization of capital expenditures in regencies and cities in the former Surakarta residency in 2010-2017. This happened because the priorities of regional heads varied in each region in the 2010-2017 period in order to seek regional economic growth and regional development.

Table 4. District/City Human Development Index Rate in the Surakarta Residency in 2010-2017

Year	Surakarta	Sukoharjo	Klaten	Karanganyar	Boyolali	Wonogiri	Sragen
2011	0,71%	1,13%	0,57%	0,98%	0,55%	1,33%	0,66%
2012	0,56%	0,65%	0,77%	1,77%	0,54%	1,54%	1,16%
2013	0,57%	0,56%	0,99%	1,48%	0,43%	0,99%	1,51%
2014	0,57%	0,74%	1,06%	0,76%	0,76%	0,56%	0,81%
2015	1,01%	1,04%	0,85%	0,50%	1,99%	1,48%	0,82%

Year	Surakarta	Sukoharjo	Klaten	Karanganyar	Boyolali	Wonogiri	Sragen
2016	0,77%	0,71%	0,22%	0,86%	0,61%	0,69%	0,46%
2017	0,11%	0,67%	0,38%	0,43%	0,64%	0,63%	1,36%
Mean	0,62%	0,79%	0,69%	0,97%	0,79%	1,03%	0,97%

Source : Processed data, 2022

Based on table 4, in the period 2010-2011 Wonogiri Regency had the highest human development index growth rate with a growth rate of 1.33% while Boyolali District had the lowest human development index growth rate of 0.55%. It was concluded that for all regions in the former Surakarta residency in the 2010-2017 period, on average, it was seen that there was a relatively unstable growth pattern of the human development index in regencies and cities in the former Surakarta residency in 2010-2017. This is due to the lack of consistency in the government's efforts to increase the human development index through various quality and accessibility improvements in the economic, health and education sectors.

Table 5. T-Statistic Test Results (Partial Test)

Variable	Coefisien	Significance Level
C	11.94411	0.0000
DDF	0.009731	0.0000
LOGCE	0.031267	0.0049
HDI	0.054044	0.0000

Source: Processed data, 2022

The test results with the best estimation model in this study are fixed random effect (FEM) as shown in table 5. The table above shows that the probability value for the t-statistic of each independent variable shows a value below the 5% significance level (0.05), namely for the variable degree of fiscal decentralization (DDF) of 0.000, the variable capital expenditure (LOGCE) of 0.0049, and the human development index (HDI) of 0.000. This value means that the variable DDF, LOGCE, and HDI partially have a significant effect on the regional economic growth variable (LOGGDRP). The influence exerted by each independent variable on the dependent variable is positive, which means that if there is an increase in the value of the independent variable, the value of the dependent variable will also increase. These positive properties can be seen in the coefficient column. The independent variable DDF has a coefficient of 0.009731, which means that if the independent variable DDF increases by 1 unit, regional economic growth (LOGGDRP) increases by 0.009731 unit. The independent variable capital expenditure (LOGCE) has a coefficient of 0.031267, which means that if the independent variable LOGCE increases by 1 unit, regional economic growth (LOGGDRP) increases by 0.031267 units. The independent variable HDI has a coefficient of 0.054044, which means that if the independent variable HDI increases by 1 unit, regional economic growth (LOGGDRP) increases by 0.054044 units. based on this, H1, H2, and H3 are accepted, which means that partially the degree of fiscal decentralization, capital expenditure, and the human development index have a positive and significant effect on regional economic growth.

Meanwhile, based on the simultaneous test or f-statistic test, a significance value of 0.0000 < 0.005 was obtained, which means that the degree of fiscal decentralization, capital expenditure, and the human development index simultaneously or together have a significant effect on regional economic growth. On the basis of these results, H4 is accepted.

Another result obtained is the coefficient of determination (R-Squared) of 0.992770 or 99.27%, which means that the independent variables in the model are able to provide an explanation of 99,27% while the remaining 0.73% can be explained by using different variables outside the independent variables.

### 3.2. DISCUSSION

After conducting regression analysis and statistical tests, it is evident that the level of fiscal decentralization has a significant and positive impact on the economic growth of districts or cities within the former Surakarta residency from 2010 to 2017. This means that the hypothesis that partially or individually suspects DDF has a positive and significant effect on regional economic growth in regencies or cities in the former Surakarta residency in 2010-2017 is accepted. The consequences of this test are supported by using research carried out the use of related variables. Bodman and Ford in Albehadili & Hai (2018) found that DDF has a significant and positive effect on economic growth and human development. The same results were also obtained by other researchers using the same theme. Sumardjoko (2019) found that DDF has a significant and positive effect on economic growth in the archipelago areas of Indonesia. With a high DDF, it will increase the ability of the APBD to create better quality regional spending. Sakata and Akai in Albehadili & Hai (2018) discovered that regional autonomy is the principle key that contributes to the superb have an impact on of financial decentralization on economic increase. Regional autonomy is an indicator to determine the degree of fiscal decentralization of a region. The degree of fiscal decentralization is the ratio of total local revenue to general local income. Besides that, Ganaie et al. (2018) also found that there is a positive relationship between fiscal policy and economic growth if the expenditure component is the benchmark, conversely there is a negative relationship among fiscal policy and economic growth if the income component is the benchmark. The central government is considered to be more efficient in managing revenues while local governments are more efficient in managing expenditures.

Meanwhile Pradana & Sumarsono (2018) in their research on areas in East Java found that DDF had an insignificant and positive effect on economic growth. This is due to the fact the degree of fiscal decentralization is the figuring out aspect in local economic performance rather than financial increase. That is why the DDF does not significantly affect economic growth. In keeping with the consequences of research carried out by Pantas et al. (2019) in studies conducted on regions in North Sulawesi additionally determined that monetary decentralization had a high-quality impact however its impact on economic increase became no longer substantial in regions in North Sulawesi Province. On a different side, the research conducted by Carion and Silvestre in Albehadili & Hai (2018) discovered that inside the case of Spain, a excessive DDF had a negative and significant effect on economic growth and at the same time had a positive effect on people's welfare. Tarigan in Ganaie et al. (2018) in his research on 34 countries including China, India and Indonesia found that DDF had a negative and insignificant effect on economic growth. In line with the existing hypothesis, it could be concluded that partially or individually, DDF has a significant and positive effect on regional economic growth. The existence of research results with similar themes but different results is reasonable because the selection of different research locations with different patterns of government and political and economic conditions will produce different research results.

Primarily based at the consequences regression analysis and statistical tests, it can be concluded that partially or individually capital expenditure has a significant and positive effect on regional economic growth in districts or cities in the former Surakarta residency in 2010-2017. This means that the hypothesis that partially or individually suspects that capital expenditure has a positive and significant effect on regional economic growth in regencies or cities in the former Surakarta residency in 2010-2017 is accepted. The consequences of this check are supported by using research performed the use of associated variables. Pradana & Sumarsono (2018) In their research conducted in East Java found that capital expenditure had a significant and positive effect on regional economic growth. According to him, capital expenditure issued by regional governments is an important factor in increasing regional economic growth. In line with Alfi & Nuraini (2018), found that capital expenditure has a significant and positive effect on regional economic growth in regencies and cities in South Kalimantan Province.

This result is also supported by research conducted by Pantas et al. (2019) in which his research in North Sulawesi found that capital expenditure had a significant and positive effect on regional economic growth. The last previous research that supports this research was conducted by Susetyo et al. (2018) where in his research found that capital expenditure had a significant and positive effect on regional economic growth. They also emphasized that the government should place more emphasis on the allocation of capital expenditure, especially for public facilities, both in terms of quality and quantity so that it may stimulate nearby economic increase in the region. Meanwhile Wardhiah (2018) found that capital expenditure did not have a negative and significant effect on regional economic growth in Aceh. Which means the level of capital expenditure allocation has no large impact on nearby financial growth. On the other hand, Juniawan & Suryantini (2018) in their research in the Province of Bali found that capital expenditure did not have a positive and significant effect on regional economic growth in Bali. According to him, the allocation of capital expenditure determined by a region does now not determine regional monetary growth. Consistent with the existing hypothesis, it can be concluded that partially or individually, capital expenditure has a significant and positive effect on regional economic growth. The existence of research results with similar themes but different results is reasonable because the selection of different research locations with different patterns of government and political and economic conditions will produce different research results.

Based totally at the outcomes the regression analysis and statistical tests carried out, it can be concluded that partially or individually the human development index (HDI) has a significant and positive effect on regional economic growth in districts or cities in the former Surakarta residency in 2010-2017. This means that the hypothesis that partially or individually suspects that HDI has a significant and positive effect on regional economic growth in regencies or cities in the former Surakarta residency in 2010-2017 is accepted. The consequences of this check are supported with the aid of research performed the usage of related variables. Consistent with studies performed by Appiah et al. (2019) and Pradana & Sumarsono (2018), found that HDI has a positive and significant effect on economic growth. According to their research, in order to optimally manage natural resources so as to increase economic growth, high quality human beings are needed. Similar results were also shared by research conducted by Maqin & Sidharta (2017) which found that the HDI had an effect on economic growth. The growth in HDI is in line with the growth in people's purchasing power through people's per capita income which ultimately influences economic growth. The latest research that supports the results of this study is research conducted by Gustav in Maqin & Sidharta (2017) who found that there is a significant and positive relationship that is two-way through the provision of output which can then be used for human development. On the other hand, HDI also has a significant and positive effect on economic growth. They argue that sustainable human great development is a issue that helps monetary increase. Meanwhile, on a different side, Kristina (2017) in research conducted in East Java found that HDI has a negative and significant effect on economic growth. This means that if there is an increase in HDI, economic growth will decrease and vice versa. In line with the existing hypothesis, it can be concluded that partially or individually HDI has a significant and positive effect on regional economic growth. The existence of research results with similar themes but different results is reasonable because the selection of different research locations with different patterns of government and political and economic conditions will produce different research results.

Based on the statistical F regression test that has been carried out, it can be concluded that simultaneously or together the degree of fiscal decentralization, capital expenditure, and the human development index have an effect on regional economic growth in districts/cities in the former Surakarta residency in 2010-2017. This means that the hypothesis that simultaneously or jointly suspects that DDF, capital expenditure, and HDI have an effect on regional economic growth in regencies/cities in the former Surakarta residency in 2010-2017 is accepted.

#### 4. CONCLUSION

The following are the conclusions of this research: 1) The degree of fiscal decentralization (DDF) partially has a positive and significant effect on regional economic growth in Ex-Surakarta Residency in 2010-2017; 2) Capital expenditure partially has positive and significant effect on regional economic growth in Ex-Surakarta residency in 2010-2017; 3) The human development index (HDI) partially has a positive and significant effect on regional economic growth in Ex-Surakarta residency in 2010-2017; and 4) DDF, capital spending, and HDI simultaneously have a significant effect on regional economic growth in regencies or cities in Ex-Surakarta residency in 2010-2017.

The following are the suggestions of this research: 1) Regional governments need to continue to improve and optimize fiscal decentralization by strengthening the legal and institutional framework, as well as ensuring transparency and accountability in fund management; 2) Carry out careful planning and budgeting for capital expenditure projects by prioritizing projects that have the greatest economic impact; and 3) Increasing educational facilities and improving the quality of teachers, improve access and quality of health services by building more health facilities and improving the quality of medical personnel. Apart from that, community empowerment programs need to continue to be improved to improve the economic welfare of the community.

#### 5. REFERENCES

- Aginta, H., & Someya, M. (2022). Regional economic structure and heterogeneous effects of monetary policy: evidence from Indonesian provinces. *Journal of Economic Structures*, 11(1). <https://doi.org/10.1186/s40008-021-00260-6>
- Albehadili, A. F. S., & Hai, L. X. (2018). Impacts of Fiscal Decentralization and Economic Growth: A Meta-Analysis Approach. *International Journal of Management Science and Business Administration*, 4(5), 34–43. <https://doi.org/10.18775/ijmsba.1849-5664-5419.2014.45.1004>.
- Alfi, S. A. F., & Nuraini, I. (2018). Analisis Pengelolaan Keuangan Daerah terhadap Produk Domestik Regional Bruto (PDRB) di Kabupaten/Kota Provinsi Kalimantan Selatan. *Jurnal Ilmu Ekonomi (JIE)*, 2(3), 500–513.
- Appiah, M., Amoasi, R., & Frowne, D. I. (2019). Human Development and Its Effects on Economic Growth and Development. *International Research Journal of Business Studies*, 12(2), 101–109.
- Badan Pusat Statistik Provinsi Jawa Tengah. (2022). *PDRB Atas Dasar Harga Konstan Menurut Kabupaten/Kota di Provinsi Jawa Tengah (Juta Rupiah), 2019-2021*.
- Ekpo, A., & Chuku, C. (2017). *Regional Financial Integration and Economic Activity in Africa* (N° 291). <https://doi.org/https://www.afdb.org/en/documents/publications/working-paper-series/>
- Ganaie, A. A., Bhat, S. A., Kamaiah, B., & Khan, N. A. (2018). Fiscal Decentralization and Economic Growth: Evidence from Indian States. *South Asian Journal of Macroeconomics and Public Finance*, 7(1), 83–108. <https://doi.org/10.1177/2277978718760071>.
- Juniawan, M. A., & Suryantini, N. P. S. (2018). Pengaruh PAD, DAU dan DAK Terhadap Belanja Modal Kota dan Kabupaten Di Provinsi Bali. *E-Jurnal Manajemen Universitas Udayana*, 7(3).
- Kristina, A. Y. D. (2017). Pengaruh Pendapatan Asli Daerah, Indeks Pembangunan Manusia Dan Tenaga Kerja Terhadap Produk Domestik Regional Bruto (38 Kabupaten/Kota di Provinsi Jawa Timur Tahun 2011-2016). *Jurnal Ilmu Ekonomi*, 1(2), 176–188. <https://doi.org/10.22219/jie.v1i2.6143>



- Ma, Q., Jia, P., She, X., Haralambides, H., & Kuang, H. (2021). Port integration and regional economic development: Lessons from China. *Transport Policy*, 110, 430–439. <https://doi.org/10.1016/j.tranpol.2021.06.019>
- Maqin, R. A., & Sidharta, I. (2017). International Journal of Energy Economics and Policy The Relationship of Economic Growth with Human Development and Electricity Consumption in Indonesia. *International Journal of Energy Economics and Policy*, 7(3), 201–207. <https://doi.org/http://www.econjournals.com>
- Pantas, O. O., Kindangen, P., & Rotinsulu, T. O. (2019). Analisis Pengaruh Kinerja Keuangan Daerah Dan Belanja Modal Terhadap Pertumbuhan Ekonomi Dan Penurunan Kemiskinan Di Sulawesi Utara. *Jurnal Pembangunan Ekonomi Dan Keuangan Daerah*, 20(3), 36–47. <https://doi.org/10.35794/jpekd.32797.20.3.2019>
- Pradana, A. N., & Sumarsono, H. (2018). Human Development Index, Capital Expenditure, Fiscal Desentralization to Economic Growth and Income Inequality in East Java Indonesia. *Quantitative Economics Research*, 1(2), 108–118.
- Sumardjoko, I. (2019). Penguatan Kinerja Keuangan Daerah Wilayah Kepulauan dan Implikasinya terhadap Perubahan Fundamental Ekonomi Regional. *Jurnal Desentralisasi Fiskal, Ekonomi, Dan Keuangan Daerah*, 5(5), 1–23.
- Susetyo, D., Zunaidah, Z., Rohima, S., Valeriani, D., & Bashir, A. (2018). Impact of Capital Expenditure and Public Utility Customers to Economic Development of District-City in Sumatra-Indonesia. *International Journal of Economics and Financial Issues*, 8(1), 126–135.
- Wardhiah. (2018). Pengaruh Pendapatan Asli Daerah dan Belanja Modal terhadap Pertumbuhan Ekonomi di Provinsi Aceh. *Jurnal Visioner & Strategis Jurusan Manajemen*, 7(1), 61–70.