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The Effect of Household Consumption, Investment, and Capital Expenditure on Gross Regional Domestic Product in the Special Region of Yogyakarta Province

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A B S T R A C T

The Special Region of Yogyakarta possesses unique characteristics while its per capita income is relatively low compared to other provinces on Java, its happiness index is notably high, necessitating further study into the factors influencing its economic growth. This study aims to analyze the influence of household consumption, investment, and capital expenditure on GRDP in the Special Region of Yogyakarta Province. The method used is panel data regression by combining time series for the period 2015–2024 and cross-regional data from 5 districts/cities in the Special Region of Yogyakarta Province. The analysis assesses the partial and simultaneous influence of independent variables on the dependent variable. The findings show that household consumption and capital expenditure have a positive influence on GRDP, while investment does not show a significant effect. However, simultaneously, all three variables contribute to GRDP in the Special Region of Yogyakarta Province. Based on these findings, it is recommended that regional policies be focused on increasing people's purchasing power, improving the quality of investment that can create linkages with the local sector, and allocating more strategic capital expenditures on infrastructure development and public facilities to encourage sustainable economic growth in the Special Region of Yogyakarta Province.

KATA KUNCI
Produk Domestik Regional Bruto, Konsumsi Rumah Tangga, Investasi, Belanja Modal, Provinsi Daerah Istimewa Yogyakarta

A B S T R A K

Provinsi Daerah Istimewa Yogyakarta memiliki karakteristik unik, di mana tingkat pendapatan per kapita relatif rendah dibandingkan provinsi lain di Pulau Jawa, namun indeks kebahagiaan masyarakat justru tergolong tinggi, sehingga diperlukan kajian lebih lanjut terhadap faktor-faktor yang memengaruhi pertumbuhan ekonominya. Studi ini bertujuan menganalisis pengaruh konsumsi rumah tangga, investasi, dan belanja modal terhadap PDRB di Provinsi Daerah Istimewa Yogyakarta. Metode yang digunakan adalah regresi data panel dengan menggabungkan deret waktu periode 2015–2024 dan data lintas wilayah dari 5 kabupaten/kota di Provinsi Daerah Istimewa Yogyakarta. Analisis menilai pengaruh parsial dan simultan variabel independen terhadap variabel dependen. Hasil temuan menunjukkan bahwa konsumsi rumah tangga dan belanja modal memberikan pengaruh positif terhadap PDRB, sementara investasi tidak menunjukkan pengaruh berarti. Namun secara simultan, ketiga variabel tersebut berkontribusi terhadap PDRB di Provinsi Daerah Istimewa Yogyakarta. Berdasarkan temuan ini, disarankan agar kebijakan daerah difokuskan pada peningkatan daya beli masyarakat, peningkatan kualitas investasi yang mampu menciptakan keterkaitan dengan sektor lokal, serta pengalokasian belanja modal yang lebih strategis pada pembangunan infrastruktur dan fasilitas publik untuk mendorong pertumbuhan ekonomi yang berkelanjutan di Provinsi Daerah Istimewa Yogyakarta.

1. Introduction

National income represents the total earnings derived from all factors of production employed in the creation of goods and services within a country over the course of one year, which conceptually encompasses two primary measures, namely Gross National Product (GNP) and Gross Domestic Product (GDP). GNP reflects the aggregate net value added generated by all economic actors of a nation regardless of where their activities take place, whereas GDP measures the total value of final goods and services produced within domestic territorial boundaries over a given period. Sustained national development depends on the capacity to increase GDP in a planned and systematic manner, thereby alleviating poverty and narrowing income disparities across regions. At the sub-national level, the GDP concept is adapted into Gross Regional Domestic Product (GRDP), which measures the total value of goods and services produced within the boundaries of a province, district, or city during a specific period. GRDP

serves as a benchmark for regional development performance, as high values indicate robust economic growth, whereas stagnation or decline signals the need for policy intervention to address prevailing structural constraints [1].

The Special Region of Yogyakarta is one of the provinces on Java Island with unique economic characteristics, supported by three main pillars, namely higher education, cultural tourism, and a creative economy based on local wisdom. This uniqueness is reflected in the presence of dozens of prominent universities that attract hundreds of thousands of students from across Indonesia, the abundance of historical tourist destinations such as Prambanan Temple and the Yogyakarta Palace, as well as a creative economy ecosystem that produces high-value cultural products ranging from batik and traditional culinary specialties to performing arts. However, these potentials have not been fully reflected in the region's economic achievements. Data from the Indonesian Central Statistics Agency indicates that the Special Region of Yogyakarta recorded the lowest average GRDP per capita on the island of Java during the 2014-2021 period, at IDR 25,289 [2]. This condition indicates that there are still challenges in improving regional economic performance despite the Special Region of Yogyakarta possessing considerable development.

This phenomenon is particularly intriguing because the relatively low economic performance of the Special Region of Yogyakarta does not fully reflect the well-being of its population. According to the Happiness Index Survey conducted by Statistics Indonesia (BPS), the Special Region of Yogyakarta recorded the highest average happiness index on Java at 70.77 percent, 72.93 percent, and 71.70 percent during the years 2014, 2017, and 2021 [3]. This situation demonstrates that regional development in the Special Region of Yogyakarta possesses unique characteristics, wherein the population's subjective well-being does not always align with economic performance as measured by GRDP. Conversely, the province's low GRDP compared to other provinces in Java indicates a need to enhance regional economic capacity to support more sustainable development. Therefore, further study into the factors influencing GRDP in the Special Region of Yogyakarta is essential to provide a foundation for formulating more effective regional economic development policies.

The theoretical foundation of this study is based on Keynesian Aggregate Demand Theory, which states that the economic output of a region is determined by the total components of expenditure, formulated as Equation (1).

$$Y = C + I + G + (X - M) \quad (1)$$

Where C represents household consumption, I denote investment, G refers to government expenditure, and (X − M) represents net exports [4]. An increase in any of these components stimulates production expansion, employment absorption, and overall GRDP growth. Conversely, the underperformance of one component may create a domino effect that suppresses regional economic performance. Based on this theoretical framework, three main research variables are derived.

Household consumption, as the largest component of GRDP, operates through the mechanism of the Marginal Propensity to Consume (MPC) [5]. According to Keynes's consumption theory, an increase in disposable income encourages higher consumption, which subsequently generates a multiplier effect on regional output [6]. Investment functions as a catalyst for economic growth through two primary mechanisms. The Harrod-Domar Theory explains the positive relationship between investment allocation and the resulting output, as well as the accumulation of capital stock, which not only expands current production capacity but also increases effective demand and future output potential [7]. Meanwhile, capital expenditure refers to government spending aimed at acquiring or improving productive assets whose benefits extend beyond a single fiscal period. According to the Rostow-Musgrave Theory of Government Expenditure, capital expenditure during the early and intermediate stages of development serves as a crucial instrument for accelerating physical capital accumulation and promoting the structural transformation of regional economies toward a more modern and sustainable industrial structure [8].

Given the unique economic characteristics of the Special Region of Yogyakarta, which are supported by education, tourism, and creative economy sectors, yet exhibiting a relatively low GRDP per capita compared to other provinces in Java and a disconnect between economic performance and subjective well-being, a deeper analysis is required to identify the factors driving regional economic growth. Previous studies examining the effects of household consumption, investment, and capital expenditure on GRDP have generally focused on regions dominated by industrial or wholesale trade sectors; consequently, their findings do not fully capture the conditions of a service- and education-based region such as the Special Region of Yogyakarta. Furthermore, prior research has often treated these variables separately or has not employed a panel data approach capable of capturing heterogeneity across regencies and cities. Thus, a research gap remains regarding the limited number of studies that simultaneously analyze these variables within regions with such distinct economic characteristics. Addressing this gap, the novelty of this study lies in the application of a panel data regression approach at the regency/city level in the Special Region of Yogyakarta over the 2015–2024 period, enabling a more detailed examination of inter-regional dynamics within the province. This study not only provides empirical evidence on the determinants of GRDP in the region but also offers a contextual

perspective to support more targeted and sustainable regional economic development policies.

2. Research Method

2.1. Research Approach

This study adopts a quantitative approach grounded in positivism, focusing on numerical measurement and statistical analysis to generate generalizable findings [9]. It is a descriptive quantitative study that observes phenomena as they occur without manipulating variables, wherein numerical data are processed using statistical techniques to evaluate the relationships among household consumption, investment, and capital expenditure on the GRDP in the Special Region of Yogyakarta over the period 2015-2024.

2.2. Place and Time of Research

The study was conducted in the Special Region of Yogyakarta and covered five administrative areas, namely Kulon Progo Regency, Bantul Regency, Gunung Kidul Regency, Sleman Regency, and Yogyakarta City. The observation period spans ten years from 2015 to 2024, so the data design is panel data combining time series and cross-section, which allows analysis of temporal dynamics and interregional differences.

2.3. Variables and Variable Measurement

Operational definitions are used to ensure observability and consistency of measurement across regions and periods. The dependent variable is GRDP at 2010 constant prices to reflect real growth. The independent variables consist of household consumption, investment measured as the sum of foreign direct investment and domestic investment, and capital expenditure. All variables are expressed in billion rupiah. These data were obtained from the Central Bureau of Statistics and the Regional Budget Realization Portal.

2.4. Method of Collecting Data

This study employed documentation as the data collection technique. Documentation is a method of obtaining written information that contains explanations, insights, and ideas related to current phenomena relevant to the research issue [10]. The data were collected from various written sources, including journals, books, theses, and official publications such as those issued by the Statistics Indonesia (BPS) and the Regional Revenue and Expenditure Budget Realization Reports (APBD Realization Reports).

2.5. Data Analysis Methods

This study employs panel data regression analysis to examine the effects of household consumption, investment, and capital expenditure on the GRDP of the Special Region of Yogyakarta using EViews 12 software. The analysis begins with descriptive statistics to provide an overview of the data characteristics [9]. This is followed by the of the best estimation model through the Chow test to choose between the Common Effect Model (CEM) and Fixed Effect Model (FEM), the Hausman test to choose between the Fixed Effect Model (FEM) and Random Effect Model (REM), and the Lagrange Multiplier test to choose between the Common Effect Model (CEM) and Random Effect Model (REM) [11]. Prior to hypothesis testing, classical assumption tests are conducted comprising the normality test using Jarque-Bera, multicollinearity test through correlation coefficients among independent variables with a threshold of 0.85, heteroscedasticity test through absolute residual examination, and autocorrelation test [12]. Hypothesis testing includes the t-test to assess the partial effect of each independent variable, the F-test to assess the simultaneous effect of all variables on GRDP, and the Adjusted R^2 coefficient of determination to measure the model's ability to explain variation in the dependent variable [13].

3. Result and Discussion

3.1. Descriptive Statistical Analysis

Descriptive statistics on Table 1 show variation across regions and time. The mean GRDP value of 20,609.32 is higher than the standard deviation of 9,877.58, indicating that the series is relatively homogeneous with low variability. The recorded maximum is 41,559.54 and the minimum is 6,281.90. The mean household consumption of 11,680.30 is also higher than the standard deviation of 5,187.68. The recorded maximum is 22,218.48 and the minimum is 3,962.79. Meanwhile, the mean investment of 3,171.71 is lower than the standard deviation of 3,565.72, indicating that the series is relatively heterogeneous or highly variable. The recorded maximum is 13,024.56 and the minimum is 83.61. The mean capital expenditure of 295.91 is higher than the standard deviation of 84.76. The recorded maximum is 493.78 and the minimum is 142.77.

Table 1. Descriptive Statistical Analysis Results

	gdrp	household_consumption	investment	capital_expenditure
Mean	20609.32	11680.30	3171.71	295.91
Median	18997.32	12413.00	1183.44	282.02
Maximum	41559.54	22218.48	13024.56	493.78
Minimum	6281.90	3962.79	83.61	142.77
Std. Dev.	9877.58	5187.68	3565.72	84.76
Observations	50.00	50.00	50.00	50.00

3.2. Best Model Selection Test

3.2.1. Chow Test

Based on Chow Test result on Table 2, the Chi-square Cross-Section probability value is 0.0000 which is smaller than the significance level of 0.05. Therefore, H0 is rejected and Ha is accepted. This means that the best model for now is the Fixed Effect Model (FEM).

Table 2. Chow Test Results

Effect Test	Statistic	d.f.	Prob.
Cross-section F	129.652068	(4.42)	0.0000
Cross-section Chi-square	129.567639	4	0.0000

3.2.2. Hausman Test

Based on Chow Test result on Table 3, the cross-sectional random probability value is 0.0235 which is smaller than the significance level of 0.05. Therefore, H0 is rejected and Ha is accepted. This means that the best model for now is the Fixed Effects Model (FEM). Based on the Chow and Hausman tests, the best model obtained is the FEM. Therefore, the Lagrange Multiplier test is not necessary.

Table 3. Hausman Test Results

Test Summary	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	129.652068	3	0.0235

3.3. Classical Assumption Test

3.2.1. Normality Test

The Jarque-Bera probability value, which can be seen on Figure 1, is 0.502544 which is greater than the significance level of 0.05, so it can be concluded that the model passes the normality test.

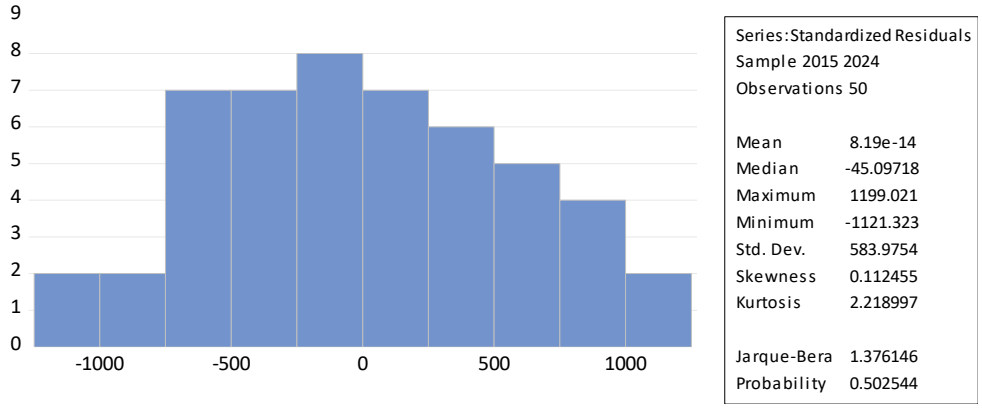

Figure 1. Normality Test Results

3.2.2. Multicollinearity Test

Based on Table 3, the correlation coefficient value of each independent variable is < 0.85 significance level, so it can be concluded that the model does not have a multicollinearity problem.

Table 3. Multicollinearity Test Results

	household_ consumption	investment	capital_ expenditure
household_ consumption	1	0.1687	0.4514
investment	0.1687	1	0.3212
capital_ expenditure	0.4514	0.3212	1

3.2.3. Heteroskedasticity Test

Based on Table 4, the probability value of all independent variables is greater than the significance level of 0.05, so it can be concluded that the model passes the heteroscedasticity test.

Table 4. Heteroskedasticity Test Results

Variable	Coefficient	Std. Error	t-Statistic	Prob.
c	389.934900	519.081400	0.751202	0.4567
household_ consumption	-0.011315	0.038833	-0.291370	0.7722
investment	0.017663	0.014273	-1.237527	0.2228
capital_ expenditure	0.944232	0.597501	1.580303	0.1215

3.2.4. Autocorrelation Test

Based on Table 5, the Durbin–Watson statistic is below the upper critical value (dU), indicating the presence of autocorrelation in the model. According to certain research, the autocorrelation problem can be addressed by transforming the data into first differences, using the following equation. To address the autocorrelation problem, the data were transformed using the first-difference method with the following Equation (2) [11].

Table 5. Autocorrelation Test Results

dL	dU	DW	4 - dU	4 - dL
1,4206	1,6739	0,5620	2,3261	2,5794
Positive Autocorrelation	Doubtful	No Autocorrelation Occurs	Doubtful	Negative Autocorrelation

$$d(y) = c + d(x1) + d(x2) + d(x3) + \ldots + d(xn) \quad (2)$$

The results obtained from the first-difference transformation are presented on Table 6.

Table 6. Autocorrelation Test Results Using the First Difference Method

dL	dU	DW	4 - dU	4 - dL
1,4206	1,6739	2,2696	2,3261	2,5794
Positive Autocorrelation	Doubtful	No Autocorrelation Occurs	Doubtful	Negative Autocorrelation

After the first difference method treatment, the Durbin Watson value was found to be between dU and 4-dU, so it was concluded that there was no autocorrelation problem in the model.

3.4. Panel Data Regression Equation

The panel data regression equation of this study is as on Equation (3). The constant value of 331.525 means that, in the absence of household consumption, investment, and capital expenditure, GRDP increases by 331.525 billion rupiah. The household consumption coefficient of 1.596 indicates that a one billion rupiah increase in consumption raises GRDP by 1.596 billion rupiah, holding other variables constant. The investment coefficient is not significant, so changes in investment do not affect GRDP. The capital expenditure coefficient of 1.445 indicates that a one billion rupiah increase in capital expenditure raises GRDP by 1.445 billion rupiah.

$$d(pdrb) = 331.525 + 1.596 * d(household\_consumption) - 0.018 * d(investment) + 1.445 * d(capital\_expenditure) \quad (3)$$

3.5. Hypothesis Testing

3.5.1. t-Test

Based on Table 7, the following are the estimated results of the t-test:

a. The test results for the household consumption variable yielded a calculated t-value of 9.398502, greater than the t-table value of 0.67986, and a significance value of 0.0000, less than 0.05. Therefore, H1 is accepted, indicating that household consumption has a positive effect on GRDP.

b. The test results for the investment variable yielded a calculated t-value of -1.012705, less than the t-table value of 0.67986, and a significance value of 0.3360, greater than 0.05. Therefore, H2 is rejected, indicating that the investment variable has no effect on GRDP.

c. The test results for the capital expenditure variable yielded a calculated t-value of 2.194279, greater than the t-table value of 0.67986, and a significance value of 0.0358, less than 0.05. Therefore, H3 is accepted, indicating that capital expenditure has a positive effect on GRDP.

Table 7. t-Test Results

Variable	Coefficient	Std.Error	t-Statistic	Prob.
c	331.525800	80.253930	4.130961	0.0002
d(household_consumption)	1.596136	0.169829	9.398502	0.0000
d(investment)	-0.018367	0.018137	-1.012705	0.3178
d(capital_expenditure)	1.445452	0.558737	2.194279	0.0346

3.5.2. F-Test

Based on Table 8, the calculated F value is 26.32926 which is greater than the F table of 2.807 and the significance value is 0.000000 which is less than 0.05, which means that the variables of household consumption, investment, and capital expenditure have a simultaneous influence on GRDP.

Table 8. F-Test Results and Determination Coefficient Test

R-squared	0.832810
Adjusted R-squared	0.801179
S.E. of regression	327.118700
Sum squared resid	3959246.000000
Log likelihood	-320.012500
F-statistic	26.329260
Prob(F-statistic)	0.000000

3.5.3. Determination Coefficient Test

The Adjusted R-squared value is 0.801179. This coefficient of determination indicates that household consumption, investment, and capital expenditure are able to explain the GRDP variable by 80.12%, while the remaining 19.88% is explained by other variables outside this study.

3.6. Discussion

3.6.1. The Effect of Household Consumption on GRDP

The study results indicate that household consumption has a positive effect on the GRDP of the Special Region of Yogyakarta because increases in income encourage consumer spending, which in turn raises demand for goods and services across various sectors. This finding is consistent with Keynes's Consumption Theory, which emphasizes that an increase in disposable income stimulates higher consumption through the Marginal Propensity to Consume (MPC) mechanism, thereby generating a multiplier effect that continuously expands regional output. This condition is further reinforced by the characteristics of DIY as a student city with high mobility and intensive educational activities. The expenditure structure of GRDP also highlights the dominant role of household consumption, which accounted for approximately 63% of GRDP in 2024. Consequently, any increase in purchasing power quickly affects demand and creates multiplier effects across various sectors, particularly trade, services, accommodation, transportation, construction, and manufacturing. These findings are consistent with previous research conducted in Solok Regency, which demonstrated a positive effect of household consumption on GRDP [14]. The study illustrates that annual increases in household expenditure contribute to greater demand for goods and services, thereby promoting GRDP growth. Likewise, a study conducted

in East Java Province found that increases in household consumption have a positive effect on GRDP growth [15].

3.6.2. The Effect of Investment on GRDP

The study results indicate that investment has no significant effect on the GRDP of the Special Region of Yogyakarta. This finding is inconsistent with the Harrod-Domar Growth Theory, which states that an increase in investment will expand capital stock, thereby encouraging the expansion of production capacity and overall output growth. This discrepancy can be explained by the dominance of household consumption, which contributes between 46% and 70% of GRDP, indicating that economic activity is driven more by domestic demand than by the expansion of productive capacity through investment. The low absorption of investment in productive sectors, along with the mismatch between investment allocation and the region's comparative advantages in the service and tourism sectors, helps explain why increases in investment do not necessarily correspond to increases in real output. This finding is consistent with previous studies conducted in the Special Region of Yogyakarta, which identified profit repatriation and sectoral mismatches as factors limiting the effectiveness of investment [16]. Similarly, a study conducted in East Kalimantan found that the insignificant effect of private investment on GRDP was attributable to sectoral allocation issues, implementation effectiveness, and structural constraints [17], [18].

3.6.3. The Effect of Capital Expenditure on GRDP

The study results indicate that capital expenditure has a positive effect on the GRDP of the Special Region of Yogyakarta. This finding is consistent with the Rostow-Musgrave Theory of Government Expenditure, which emphasizes that during the early and intermediate stages of development, capital expenditure on basic infrastructure serves as a crucial instrument for accelerating physical capital accumulation and promoting the structural transformation of regional economies. The benefits of infrastructure development, which extend beyond a single fiscal period, gradually enhance economic capacity and overall regional productivity. In Special Region of Yogyakarta Province, capital expenditure is primarily allocated to public facilities such as transportation infrastructure, educational facilities, and healthcare services that support the mobility of students and migrants, thereby strengthening the education, accommodation, and trade service sectors. Increased capital expenditure improves economic connectivity, creates employment opportunities, raises household income, and expands the regional tax base, all of which contribute directly to GRDP growth [19].

4. Conclusion

Based on panel data analysis for 2015–2024 across five regencies/city in the Special Region of Yogyakarta, it can be concluded that household consumption and capital expenditure have positive effects on GRDP while investment does not show a significant impact. Increased consumption stimulates demand for goods and services, thereby driving various sectors, particularly leading sectors such as trade, services, accommodation, transportation, construction, and manufacturing. Whereas capital expenditure strengthens infrastructure capacity and connectivity, accelerating local economic activity. These findings imply that policies prioritizing the enhancement of household purchasing power and strategic allocation of capital expenditure to infrastructure and public facilities have the potential to generate multiplier effects that accelerate GRDP growth. For policy application, regional government may channel investment into projects that enhance labor absorption and linkages with local sectors and design incentives to improve investment quality so that it is more absorbed by productive sectors. For further research, it is recommended to perform sectoral analysis and to employ additional methods or variables to examine the mechanisms by which investment affects GRDP in greater detail.

References

[1] Sari, W., Swastika, P., & Yunarti, Y. (2025). Pengaruh Belanja Pemerintah, Konsumsi Rumah Tangga, Indeks Pembangunan Manusia Dan Ekspor Terhadap Produk Domestik Regional Bruto Di Provinsi Lampung Pada Tahun 2014-2024. *Ekonomikawan: Jurnal Ilmu Ekonomi Dan Studi Pembangunan*, *25*(1), 22–36. https://doi.org/10.30596/ekonomikawan.v25i1.23544

[2] BPS Indonesia. (2026). Produk Domestik Regional Bruto Per Kapita, 2026. Retrieved from https://www.bps.go.id/id/statistics-table/2/Mjg4IzI=/-seri-2010--produk-domestik-regional-bruto-per-kapita--ribu-rupiah-.html

[3] BPS Indonesia. (2022). Indeks Kebahagiaan Menurut Provinsi. Retrieved from https://www.bps.go.id/id/statistics-table/2/NjAxIzI=/indeks-kebahagiaan-menurut-provinsi.html

[4] Ramli, M., Dangkeng, A., Sudirman, N., Nurfaisah, Rifqiansyah, Wijaya, H., & Munir, R. (2022). The Effect of Household Consumption and Government Expenditure on Economic Growth in South Sulawesi 2016-2020 Periode. *Invoice: Jurnal Ilmu Akuntansi*, *4*(1), 83–99. https://doi.org/10.26618/inv.v4i1.7284

[5] Waty, E., Fajar, M., Chatra, A., Jam;an, A., & Selfiana, S. (2023). *Buku Ajar Pengantar Ilmu Ekonomi*. PT Sonpedia Publishing Indonesia.

[6] Basmar, E., Yakup, A. P., Trimurti, C. P., Akmalia, S., Mapata, M., & Tarigan, H. (2024). *Pengantar Ilmu Ekonomi (Konsep, Teori, Dan Implementasi)*. CV Media Sains Indonesia

[7] Tahir, I. B., Harsiansyah, R., & Armansyah, A. (2022). *Ekonomi Makro*. CV. Azka Pustaka.

[8] Saibana, I., Noval, M., Aminah, S., Nafila, H., & Rosadi, M. (2024). Investasi, Inflasi dan Konsumsi: Pengaruhnya terhadap Pertumbuhan Ekonomi di Kalimantan Selatan. *Ecoplan*, *7*(1), 01–14. https://doi.org/10.20527/ecoplan.v7i1.687

[9] Sugiyono, S. (2023). *Metode Penelitian Kuantitatif, Kualitatif, dan R&D*. CV. Alfabeta

[10] Agustin, H. (2023). *Buku Referensi Metode Penelitian Ekonomi Dan Bisnis (Konsep dan Contoh Penelitian)*. Mega Press.

[11] Anwar, & Nursan, M. (2025). *Buku Ajar Analisis Regresi Data Panel Dengan Aplikasi Eviews*. Pustaka Bangsa.

[12] Agustina, E. S., Paharuddin, P., Dewi, D. S., Lidyah, R., & Ridwan, A. M. (2024). *Metodologi Penelitian Kuantitaif*. Pandu Gemilang Pustaka.

[13] Asari, A., Zulkarnaini, Z., Hartatik, H., Anam, A. C., Suparto, S., & Litamahuputty, J. V. (2023). *Pengantar Statistika*. PT Mafy Media Literasi Indonesia

[14] Puspitasari, D., & Utami, R. D. (2024). Analisis Sektor Unggulan Provinsi Jawa Timur (Shift Share and Location Quotient Analysis). *Jurnal Ekonomika45:Jurnal Ilmiah, Ekonomi Bisnis, Kewirausahaan*, *12*(1), 283–300. https://doi.org/10.30640/ekonomika45.v12i1.3562

[15] Afriyani, M., Wira, A., & Rozalinda, R. (2023). The Effect of Aggregate Expenditure on Gross Regional Domestic Product and Implications for Human Development Index in South Solok District. *Ijtihad: Syari'ah Faculty Journal House*, *39*(1), 13–21.

[16] Khairunnida, H., & Utomo, Y. P. (2024). Analisis Faktor-Faktor Yang Mempengaruhi PDRB Di Provinsi Daerah Istimewa Yogyakarta Periode 2010-2023. *Menara Ekonomi*, *X*(1), 31–40. https://doi.org/10.31869/me.v10i1.5716

[17] Messa, M. Y., Bariyah, N., & Kurniasih, E. P. (2023). Determining Factors of Economic Growth and Poverty in West Kalimantan. *Jurnal Ilmu Sosial Dan Humaniora*, *12*(3), 530–546. https://doi.org/10.23887/jish.v12i3.67197

[18] Linda, L., Mangun, N., Tuty, F. M., Lutfi, M., Thaha, K., Ichwan, M., & Suirlan, R. (2025). The Influence of Capital Expenditure, Domestic Investment, and Labor on GRDP in Sulawesi Island. *Jurnal Ilmu Ekonomi (JIE)*, *09*(02), 163–172. https://doi.org/10.22219/jie.v9i02.40631

[19] Nugroho, A. P., & Hidayat, A. N. (2024). Analisis Pengaruh Infrastruktur, Investasi Publik Dan Investasi Swasta Terhadap Pertumbuhan Ekonomi Di KalimantanTimur. *Jurnal Of Development Economic And Digitalization*, *3*(2), 112–128. https://doi.org/10.59664/jded.v3i2.9131