



## **ANALYSIS OF DETERMINANT OF THE HUMAN DEVELOPMENT INDEX IN THE PROVINCE OF EAST KALIMANTAN**

By

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### **ABSTRACT:**

Human development is a necessary long-term investment. The Human Development Index (HDI) is an indicator of how much development results can be accessed by society. East Kalimantan Province has great potential in the economy and geographical constraints between regions. The objective of this research is to identify the development of HDI achievements and determine the appropriate model to determine the factors that influence HDI in East Kalimantan Province. This research uses panel data from 10 districts/cities in East Kalimantan Province for the 2015-2022 period. The data analysis used is descriptive analysis and panel data regression analysis. The research results showed that East Kalimantan's HDI is in the high category with an average HDI of 76.12. The estimation model used is the Fixed Effect Model (FEM). Panel data regression analysis showed that simultaneously the variables poverty percentage, economic growth rate, and GDRP per capita have an effect on HDI, and partially the percentage of poverty and GDRP per capita have a significant effect on HDI. Reducing poverty and increasing income can be programmed as an effort to encourage the achievement of a higher and more equitable HDI between regions.

### **KEYWORDS:**

**Economic, GDRP, HDI, Investment, Poverty.**



## INTRODUCTION

Development is directed comprehensively at both the economy and people. Human resources as a subject in development need to receive attention to become quality and productive humans. Human factors are non-economic factors in economic growth. The Human Development Index (IPM/Human Development Index) is a measurement instrument to assess the level of total quality of human development. HDI is a social standard consisting of access to education, access to health, living conditions, and income. HDI is an indicator created so that people can assess a country's development performance, not just look at its economic growth. The basic dimensions of HDI consist of a long and healthy life, knowledge, and a decent standard of living.

Several previous studies show that many factors can influence the HDI that can be achieved by a region. Research (Hasibuan et al., 2020) using data at the national level with panel data regression analysis with the Fixed Effect Model (FEM) shows that the factors that have a negative and significant influence on HDI are inflation and unemployment, while poverty and economic growth do not significantly influence HDI in Indonesia. Other research shows that economic growth hurts the human development index on the island of Java with FEM and factors that have a positive effect on HDI are population and domestic investment (Salsabila & Hasmarini, 2023).

Human Development Index research in Sumbawa using regression analysis shows that economic growth and poverty have a positive and significant effect on HDI with a coefficient of determination of 95.9% (Pamungkas & Dewi, 2022). HDI is also positively and significantly influenced by Domestic Regional Product Income (GDRP) per Capita, Education, and Health, while poverty has a negative and significant effect on HDI (Rustam & Aisyah, 2022). Other research using simultaneous equation analysis with the two-stage least squares (2SLS) method shows that there is a strong and positive relationship between HDI and GRDP per capita (Ezkirianto & Alexandi, 2018).

East Kalimantan Province is one of the provinces of Eastern Indonesia (IBT) which is included in the high HDI achievement category along with North Sulawesi and Central Kalimantan. Regional governments as regional policy makers must formulate appropriate policies so that policy efficiency and effectiveness can be achieved. Human development in each region will of course adapt to its potential and resources, capabilities, and needs. Geographically, East Kalimantan has obstacles in terms of accessibility between regions, so there are districts with low achievements, but which have great potential in developing various fields. The regional expansion that occurred and the designation of East Kalimantan as the new National Capital is a challenge in itself in balancing and harmonizing development results so that they can be accessed by the community and HDI achievements can be maintained and improved.

This research aims to identify the HDI achievements of East Kalimantan and determine the appropriate panel data regression model with the factors influencing the HDI in East Kalimantan 2015-2022.

## RESEARCH METHOD

This research uses secondary data obtained from the Central Statistics Agency of East Kalimantan Province. Scope in 10 districts/cities in 2015-2022. The method used is a descriptive method and panel data regression analysis. Panel data regression processing uses Eviews 7 software. Three approaches are used to estimate the panel data regression model, namely: Common Effect Model (CEM), Fixed Effect Model (FEM), and Random Effect Model (REM) (Firdaus, 2011).

### 1. Common Effect Model (CEM)

This model combines cross-section data and time series data and is analyzed using the Ordinary Least Square (OLS) method. This approach does not pay attention to differences between individuals and differences over time because the intercept and slope are the same. The equation is written as follows:

$$Y_t = \beta_0 + \beta_1 X_{1t} + \beta_2 X_{2t} + \beta_3 X_{3t} + \varepsilon_t$$

Information :

- $Y_t$  = Cross-section dependent variable for the t-th period
- $\beta_0$  = Intercept
- $\beta_i$  = regression coefficient the i-th
- $X_{it}$  = Independent variable for cross-section for the t-th period
- $\varepsilon_t$  = error term cross-section for the t-th period

### 2. Fixed Effect Model (FEM)

This model has an intercept that may change for each individual and time, where each cross-section unit is fixed in the time series. There are differences in the characteristics of objects at each period. The equation used is as follows:

$$Y_{it} = \beta_{0i} + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon_{it}$$

Information :

- $Y_{it}$  = Dependent variable of the i-th cross section for the t-th period
- $\beta_{0i}$  = Intercept cross-section of the i-th
- $\beta_i$  = regression coefficient the i-th
- $X_{it}$  = Independent variable for the i-th cross section for the t-th period
- $\varepsilon_{it}$  = error term of the i-th cross section for the t-th period

### 3. Random Effect Model (REM)

This model assumes that there are differences in the characteristics of different objects at each period. The Random Effect model describes differences in characteristics through error values in each model :

$$Y_{it} = \beta_0 + \beta_1 X_{1it} + \beta_2 X_{2it} + \beta_3 X_{3it} + \varepsilon_{it}$$

Information :

- $Y_{it}$  = Dependent variable of the i-th cross section for the t-th period
- $\beta_{0i}$  = Intercept
- $\beta_i$  = regression coefficient the i-th
- $X_{it}$  = Independent variable for the i-th cross section for the t-th period
- $\varepsilon_{it}$  = error term of the i-th cross section for the t-th period

Tests carried out to obtain the best model using:

#### 1. Chow test

The Chow test is used to determine the best model between OLS and FEM. Hypothesis used:

H0: OLS model

H1: FE model

Decision Rules:

F-statistics > F-table = H0 is rejected, meaning that FEM is appropriate

F-statistics < F-table = H0 is accepted, meaning OLS is appropriate

**2. Hausman test**

If a decision is obtained from the Chow test that FEM is more suitable, then the Hausman test is used to see which is more suitable, FEM or REM. Hypothesis used:

H0: RE model

H1: FE model

Decision-making rules in the Hausman test are based on the Chi-Square statistical distribution. If the Hausman statistical value is greater than the critical value then H0 is rejected and the correct model is the Fixed Effects model, whereas conversely if the Hausman statistical value is smaller than the critical value then the correct model is the Random Effects model (Gujarati, 2004).

**RESULTS AND DISCUSSION**

**1. East Kalimantan Human Development Index (HDI) 2015-2022**

The condition of East Kalimantan's HDI achievement shows an increase from 74.17 in 2015 to 77.44 in 2022, including the high category. Expected Years of Schooling (HLS) 13.84 years, Average Years of Schooling (RLS) 9.92 years, Life Expectancy (UHH) 74.62, and adjusted per capita expenditure IDR 1,264,100.00. The district with the highest HDI achievement in 2022 is Samarinda City with an HDI of 81.43 with HLS of 15.10 years, RLS of 10.71 years, UHH of 74.56 years, and adjusted per capita expenditure of IDR 1,516,200.00. The district with the lowest HDI achievement in 2022 is Mahakam Ulu District with an HDI of 68.75 with HLS of 12.62 years, RLS of 8.36 years, UHH of 72.35 years, and adjusted per capita expenditure of IDR 821,500.00. East Kalimantan's HDI achievement is above the 2022 national HDI average of 73.77. The average HDI achievement for East Kalimantan for the 2015-2022 period is 0.68%. HDI achievements for the 2015-2022 period by district/city are presented in Table 1.

**Table 1. East Kalimantan Human Development Index (HDI) 2015-2022 by Regency/City**

Regency/City	Human Development Index (HDI)							
	2015	2016	2017	2018	2019	2020	2021	2022
Paser	70,30	71,00	71,16	71,61	72,29	72,04	72,93	73,44
Kutai Barat	69,34	69,99	70,18	70,69	71,63	71,19	72,07	72,92
Kutai Kartanegara	71,78	72,19	72,75	73,15	73,78	73,59	74,06	74,67
Kutai Timur	70,76	71,10	71,91	72,56	73,49	73,00	73,81	74,35
Berau	72,72	73,05	73,56	74,01	74,88	74,71	75,20	75,74
Penajam Paser Utara	69,26	69,96	70,59	71,13	71,64	71,41	72,01	72,55
Mahakam Ulu	64,89	65,51	66,09	66,67	67,58	67,09	67,95	68,75
Balikpapan	78,18	78,57	79,01	79,81	80,11	80,01	80,71	81,13
Samarinda	78,69	78,91	79,46	79,93	80,20	80,11	80,76	81,43
Bontang	78,78	78,92	79,47	79,86	80,09	80,02	80,59	80,94
Kalimantan Timur	74,17	74,59	75,12	75,83	76,61	76,24	76,88	77,44

Source Url: <https://kaltim.bps.go.id/indicator/26/83/1/-metode-baru-indeks-pembangunan-manusia-ipm.html>.

Access Time: February 21, 2024, 10:26 am

## 2. Determinants of the Human Development Index

This research utilizes panel data regression analysis with the dependent variable being HDI (%), and the independent variables consisting of X1 is the percentage of poor people (P0) in % units.

The percentage of poor people (P0) as variable X1 is thought to have a negative and significant effect on HDI. Based on the data, changes in the percentage of poverty are relatively small in the 2015-2022 period. Where in 2015 the poverty percentage was 6.23% and in 2022 it was 6.31%. Although there was a decrease from the previous year (2021) of 6.54%. However, this reduction still needs to continue, where in 2022 there will still be 5 (five) districts with a high percentage of poverty, namely Mahakam Ulu (11.55%), West Kutai (10.20%), Paser (9.43%), Kutai East (9.28%), and Kutai Kartanegara (7.96%). The average reduction in poverty in East Kalimantan per year for the 2015-2022 period is only 0.01%. The percentage of poor people in East Kalimantan for the 2015-2022 period is presented in Table 2.

**Table 2. Percentage of Poor Population (P0) of East Kalimantan 2015-2022 According to Regency/City**

Regency/City	Percentage of Poor Population (P0) by Regency/City (%)							
	2015	2016	2017	2018	2019	2020	2021	2022
Paser	8,76	8,68	9,28	9,03	8,95	9,23	9,73	9,43
Kutai Barat	8,33	8,65	8,72	9,15	9,09	9,29	10,24	10,20
Kutai Kartanegara	7,99	7,63	7,57	7,41	7,20	7,31	7,99	7,96
Kutai Timur	9,31	9,16	9,29	9,22	9,48	9,55	9,81	9,28
Berau	5,33	5,37	5,41	5,04	5,04	5,19	5,88	5,65
Penajam Paser Utara	7,92	7,49	7,63	7,40	7,18	7,36	7,61	7,25
Mahakam Ulu	10,50	10,65	11,29	11,62	11,25	11,44	11,90	11,55
Balikpapan	2,91	2,81	2,82	2,64	2,42	2,57	2,89	2,45
Samarinda	4,82	4,72	4,77	4,59	4,59	4,76	4,99	4,85
Bontang	5,06	5,18	5,16	4,67	4,22	4,38	4,62	4,54
Kalimantan Timur	6,23	6,11	6,19	6,03	5,94	6,10	6,54	6,31

Sumber: Survei Sosial Ekonomi Nasional, Badan Pusat Statistik

*Source Url:* <https://kaltim.bps.go.id/indicator/23/111/1/persentase-penduduk-miskin-p0-menurut-kabupaten-kota.html>. Access Time: February 21, 2024, 10:27 am

The rate of economic growth as variable X2 is thought to have a positive and significant effect on HDI. Economic growth is shown by the rate of population growth and product per capita, increased productivity, high rates of structural change, urbanization, and flows of goods, capital, and people. East Kalimantan's economic growth rate for the 2015-2022 period shows fluctuating developments, where the economic growth rate in 2015 was -1.50% and began to increase in 2019 by 4.70%, in 2020 it was again negative at -2.90% due to The COVID-19 pandemic will increase again in 2021 by 2.55% and in 2022 by 4.48%. The district with the highest economic growth rate in 2021-2022 is Penajam Paser Utara District (14.49%) and the lowest is Mahakam Ulu District (0.91%) and Paser District (1.09%). The average economic growth rate for the 2015-2022 period is 1.63%. East Kalimantan's Economic Growth Rate 2015-2022 can be seen in Table 3.

**Table 3. East Kalimantan Economic Growth Rate 2015-2022 According to Regency/City**

Regency/City	Economic Growth Rate (%)							
	2015	2016	2017	2018	2019	2020	2021	2022
Paser	-0,89	-4,98	1,17	3,69	3,99	-2,86	5,39	1,09
Kutai Barat	-1,50	-0,83	3,64	5,06	5,69	-2,87	4,19	4,77
Kutai Kartanegara	-7,17	-1,97	1,63	2,16	3,92	-4,21	2,68	3,71
Kutai Timur	1,43	-1,08	3,28	2,38	8,17	-3,08	-0,89	5,58
Berau	5,94	-1,70	3,01	2,07	5,63	-3,32	5,36	3,95
Penajam Paser Utara	0,14	-0,47	2,44	1,28	2,61	-2,34	-1,69	14,49
Mahakam Ulu	3,32	3,41	4,29	5,40	5,52	-0,22	1,27	0,91
Balikpapan	1,19	4,92	3,84	4,97	4,99	-0,91	4,56	4,94
Samarinda	0,04	0,56	3,85	4,96	5,00	-0,99	2,78	6,58
Bontang	4,36	-1,39	0,55	-4,08	-2,15	-2,74	1,60	2,46
Kalimantan Timur	-1,20	-0,38	3,13	2,64	4,70	-2,90	2,55	4,48

Sumber: Badan Pusat Statistik

**Source Url:** <https://kaltim.bps.go.id/indicator/157/95/2/-seri-2010-laju-pertumbuhan-pdrb-kabupaten-kota-atas-dasar-harga-konstan-2010.html>. Access Time: February 22, 2024, 8:41 am

GRDP per Capita as variable X3 is thought to have a positive and significant effect on HDI. GRDP per Capita is determined by GRDP based on business fields that contribute to the population in an area. East Kalimantan's GDP per capita achievement for the 2015-2022 period shows an increase from IDR 147.41 million in 2015 to IDR 238.70 million in 2022. The districts with the highest GDP per capita in 2022 are East Kutai District (Rp. 450.27 million) and The district with the lowest GRDP per capita is Penajam Paser Utara District (Rp. 72.05 million). The average increase in GDP per capita for the 2015-2022 period was IDR 13.04 million. GDP data per capita by district/city is presented in Table 4.

**Table 4. GRDP Per Capita of East Kalimantan 2015-2022 by Regency/City**

Regency/City	GDP Per Capita Based on Current Prices (Million IDR)							
	2015	2016	2017	2018	2019	2020	2021	2022
Paser	146,05	139,01	160,30	171,64	173,34	157,18	194,12	272,09
Kutai Barat	146,04	150,51	175,43	192,10	195,40	158,03	184,46	246,65
Kutai Kartanegara	177,14	173,97	198,41	210,47	212,76	204,50	241,84	325,67
Kutai Timur	292,20	285,34	346,12	353,74	367,11	268,80	304,16	450,27
Berau	143,99	143,44	161,63	166,27	173,83	143,67	170,34	232,68
Penajam Paser Utara	48,32	49,24	53,77	55,70	57,76	50,78	55,85	72,05
Mahakam Ulu	76,27	82,11	88,87	95,32	102,45	85,38	90,17	94,51
Balikpapan	120,78	128,12	137,92	151,30	165,69	151,31	160,20	180,96
Samarinda	62,52	63,56	69,29	74,08	79,95	80,36	85,60	99,82
Bontang	358,80	331,04	345,15	337,45	327,06	311,88	320,44	344,56
Kalimantan Timur	147,41	145,34	165,55	174,16	180,26	161,80	182,92	238,70

Sumber: Badan Pusat Statistik

**Source Url:** <https://kaltim.bps.go.id/indicator/157/262/1/-seri-2010-pdrb-perkapita-kabupaten-kota-atas-dasar-harga-berlaku.html>. Access Time: February 22, 2024, 8:42 am



The results of panel data processing with a cross section of 10 districts/cities and the 2015-2022 time series using Eviews 7 are shown in Table 5.

**Table 5. Comparison between CEM, FEM, and REM**

Model/Variabel	CEM		FEM		REM	
	Coefficient	Probability	Coefficient	Probability	Coefficient	Probability
Constanta	82.3503	0,0000	66.9743	0.0000	75.5071	0.0000
X1	-1.4673	0,0000	0.5194	0.0765	-0.7039	0.0002
X2	0.0546	0.3599	0.0108	0.7493	0.0187	0.5621
X3	0.0117	0,0000	0.0185	0.0000	0.0198	0.0000
R-squared	0.8304		0.9689		0.3691	

*Source:* Data processed with Eviews 7, 2024)

Table 5 shows that the highest coefficient of determination (R-square) of the three methods is FEM (0.9689), meaning that 96.89% of the variation in HDI can be explained by the variables percentage of poverty (X1), economic growth rate (X2), and GDP per capita. (X3), and the remaining 3.11% is explained by other factors outside the equation.

Before determining which model to use to explain the factors influencing East Kalimantan's HDI, a Chow test was carried out. The Chow Test results are presented in Table 6.

**Table 6. Chow Test Results**

Effect Test	Statistic	df	Probability
Cross-Section F	33,2202	(9,67)	0,0000
Cross-Section Chi-Square	135,8314	9	0,0000

*Source:* Data processed with Eviews 7, 2024)

Based on the Chow Test results, the P-value (Prob>F) is  $0.0000 < \alpha=0.05$ , so  $H_0$  is rejected, meaning the best choice is the FE model. Next, to determine whether it is FEM or REM, the Hausman Test is carried out. The Hausman Test results can be seen in Table 7.

**Table 7. Hausman Test Results**

Test Summary	Chi-sq.statistic	Chi.Sq.d.f	Probability
Cross-section random	33,7249	3	0,0000

*Source:* Data processed with Eviews 7, 2024)

Based on the Hausman Test results, the P-Value (Prob>Chi-square) is  $0.0000 < \alpha=0.05$ , so  $H_0$  is rejected, meaning the best choice is the FE model

**Table 8. Results of panel data regression analysis with FEM**

Variable	Coefficient	Std. Error	t-Statistic	Probability.
C	66.9743	1.9807	33.8130	0.0000
P0	0.5194	0.2878	1.8043	0.0757
LPE	0.0108	0.0337	0.3208	0.7493
PDRBKAP	0.0185	0.0037	4.9363	0.0000
	Effects Specification			
Cross-section fixed (dummy variables)				

R-squared	0.9689	Mean dependent var	74.0296
Adjusted R-squared	0.9633	S.D. dependent var	4.3643
S.E. of regression	0.8351	Akaike info criterion	2.6252
Sum squared resid	46.7298	Schwarz criterion	3.0123
Log-likelihood	-92.0093	Hannan-Quinn criteria.	2.7804
F-statistic	174.2104	Durbin-Watson stat	0.5296
Prob(F-statistic)	0.0000		

The equation obtained is as follows:

$$IPM = 66.9743 + 0.5194*P0 + 0.0108*LPE + 0.0185*PDRBKAP + [CX=F]$$

Based on the results of the F test, F-statistics (174.2104) > F table is obtained which shows that the percentage of poor people (X1), economic growth rate (X2), and GDP per capita (X3) simultaneously influence HDI. Meanwhile, the results of the partial t-test show that the factors that significantly influence HDI are the percentage of poor people (X1) which hurts HDI and GDP per capita (X3) has a positive effect on HDI. The rate of economic growth has a positive and insignificant effect on HDI.

The percentage of poor people (X1) shows the number of poor people who are below the poverty line, especially as seen from adjusted per capita expenditure. The higher the percentage of poor people, the lower the population's access to education and health, and the decreased purchasing power. These results strengthen the results of research that has been conducted (Pamungkas & Dewi, 2022). Improvements to poverty reduction assistance programs need to be more planned and targeted. Decent living standards contribute greatly to increasing HDI (Hanifah & Rachmawati, 2023). The agricultural sector can be encouraged to reduce the percentage of poverty because through this sector job opportunities are opened and provide increased income (Saripah Nurfilah, Mariyah & Mariyah, 2022).

A positive economic growth rate coefficient (X2) indicates that this result is in line with the theory of economic growth, where resource utilization and distribution on target and appropriate allocation will encourage employment opportunities and support human development. HDI is correlated with economic growth, where economic growth allows a high level of human development to be achieved and conversely an increase in the level of human development causes increased opportunities for economic growth (Elistia & Syahzuni, 2018). However, X2 has no real effect due to the gap in economic growth rates between districts/cities in East Kalimantan Province. This result is in contrast to research (Salsabila & Hasmarini, 2023) which shows that economic growth hurts HDI. Regional governments can strive for an even rate of economic growth by not only focusing on non-renewable resources but instead empowering all sectors/business fields so that there are no gaps. It can be seen from the data that districts/cities that focus their economy on the mining and quarrying sector have a higher rate of growth. Economic growth is higher than that of districts/cities that rely on renewable sectors such as the agriculture, forestry, and fisheries sectors or the trade and services sectors.

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An increasing GDP per capita (X3) shows that the increase in population in a region is followed by an increase in output from the development of economic sectors. East Kalimantan's GDP per capita is quite high. The role of the agricultural sector as a renewable business sector and the processing industry sector contributes to increasing regional output. High GDP per capita will encourage people's purchasing power to be higher and people's welfare will increase (Rustam & Aisyah, 2022); (Maulidya, 2021).

## CONCLUSION

East Kalimantan's HDI achievement for the 2015-2022 period is in the high category with an average HDI of 76.12 and an increase in HDI with an average of 0.68%. The appropriate panel data regression analysis to estimate the factors influencing East Kalimantan's IPPM is the Fixed Effect Model (FEM). Factors that influence HDI simultaneously are the percentage of poor people, the rate of economic growth, and GRDP per capita. Factors that partially influence HDI are the percentage of poor people and GRDP per capita.

## REFERENCE

- Elistia, E., & Syahzuni, B. A. (2018). The correlation of the Human Development Index (HDI) Towards Economic Growth (GDP per Capita) in 10 ASEAN Member Countries. *Jhss (Journal of Humanities and Social Studies)*, 2(2), 40–46. <https://doi.org/10.33751/jhss.v2i2.949>
- Ezkirianto, R., & Alexandi, M. F. (2018). Analysis of the Relationship Between the Human Development Index and GDP Per Capita in Indonesia. *Journal of Economics and Development Policy*, 2(1), 14–29. <https://doi.org/10.29244/jekp.2.1.2013.14-29>
- Firdaus, M. (2011). *Econometric Applications for Panel Data and Time Series*. IPB Press, Bogor.
- Gujarati, D. N. (2004). [Damodar\_N.\_Gujarati]\_Basic\_Econometrics(BookFi.org).pdf (Vol. 6, Issue 6, pp. 715–718).
- Hanifah, N., & Rachmawati, R. (2023). Confirmation Factor Analysis of the Indonesian Human Development Index 2019-2020. *Ocean Journal of Economics and Business*, 14(2), 304–317. <https://doi.org/10.33059/jseb.v14i2.7137>
- Hasibuan, S. L., Rujiman, & Sukardi. (2020). Analysis of the Determinants of the Human Development Index (HDI) in Indonesia. *Journal of Social Humanities Educational Research*, 5(2), 139–141.
- Maulidya, R. (2021). Analysis of the Effect of Economic Growth and Government Expenditures on the Human Development Index (Study of All Provinces in Indonesia 2015-2018). *Brawijaya University*, 1–26.
- Pamungkas, B. D., & Dewi, N. T. (2022). Analysis of Determinants That Influence the Human Development Index (Ipm) of Sumbawa Regency. *Journal of Economics & Business*, 10(3), 293–303. <https://doi.org/10.58406/jeb.v10i3.1040>
- Rustam, D., & Aisyah, S. (2022). Analysis of the Human Development Index in West Sumatra Districts and Cities Using Panel Data Analysis. *Pundi Journal*, 6(1), 197–208. <https://doi.org/10.31575/jp.v6i1.405>
- Salsabila, A., & Hasmarini, M. I. (2023). Determinants of the Human Development Index on the Island of Java: Panel Data Analysis for 2014-2021. *Journal of Economic Education (JUPE)*, 11(1), 58–65. <https://doi.org/10.26740/jupe.v11n1.p58-65>
- Saripah Nurfilah, Mariyah, S., & Mariyah, M. (2022). The Influence of the Human Development Index and GDP in the Agricultural Sector on Poverty in East Kalimantan. *Research Journal of Accounting and Business Management*, 6(1), 78. <https://doi.org/10.31293/rjabm.v6i1.6044>