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"Entrepreneurship on Global Economics Development in the Era of Society 5.0"

**The Analysis of Human Development Index (HDI) on Java Island in 2015-2021****Reggy Vanisa Dewi<sup>1\*</sup>, Didit Purnomo<sup>1</sup>**<sup>1</sup>Universitas Muhammadiyah Surakarta

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**\*Email:** [b300190215@student.ums.ac.id](mailto:b300190215@student.ums.ac.id)**ABSTRACT**

Development is a physical reality as well as a mental (state of mind) of social, economic, and institutional processes to change living conditions for the better. Human development aims to expand the opportunities humans have in living a life that they value in achieving prosperity, the level of success of which can be seen through the human development index (HDI). This study aims to look at the effect of the workforce, poor population, regional original revenue, and regional expenditure on the human development index in Java. The data used in this study was panel data with time-series data for 2015-2021 and cross-section data for six provinces on Java island. The result of this study shows that workforce and regional expenditure have a positive and significant effect on the human development index in the Java island.

**Keywords:** human development index, workforce, poor population, regional original revenue, regional expenditure

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**INTRODUCTION**

Development is not only about increasing per capita income but also includes the multidimensional aspects of society. Development is not enough to only discuss per capita GDP growth but also about social problems, changes in attitudes and behavior of a society (Arisman, 2018). Development is a physical reality as well as a mental state (state of mind) of a society through a certain combination of social, economic and institutional processes to change living conditions in a better direction. In addition, the goal of development is to increase living standards not only by looking at income but also available job opportunities, good education, and encouraging sustainable economic growth so that the country can increase output (Todaro & Smith, 2011).

One of the key factors that affect how successful a development is the human resources. Human resource is an object as well as a subject in a development. Human resources as the object of development is the target of development for prosperity, while human resources as the subject of development plays a role as the actor of development which determines the level of success of a development. The development will work well if human resources have good quality. Human resources with a good quality will provide a multiplier effect on the development of a country (Tyas & Ikhsani, 2015). Moreover, according to Kuchinke (2010) "the main purpose of the existence of human resources is a human development". Through human resources, human development can be conducted, so it can be said that in order to maintain the quality of human resources, a country needs to conduct human development.

According to Elistia & Syahzuni (2018), human development is a development by humans and for humans with the aim of basic fulfillment in the process of community welfare. Basically, human development has the goal of expanding the opportunities that humans have in living a life they value so that it will open wider opportunities in other aspects of life to achieving prosperity. Eren et al. (2014) argue that human development is defined as a concept regards to the enlargement of human choices in life, these choices include the most important choices, namely the choice to live long and healthy, be educated and have access to support for a decent life. The level of success of the process of improving the welfare of society through human development can be seen through the human development index.

The human development index (HDI) can measure the quality of people's lives. "The human development index (HDI) is an index which measures the achievement of a country's socio-economic development, which combines achievements in the fields of education, health, and adjusted real per capita income" (Todaro & Smith, 2011).

Through the Human Development Report (HDR) in 1990, the United Nations Development Programme (UNDP) introduced for the first time HDI as an index that focused on three dimensions in human development: a long and healthy life, knowledge, and decent standard of living. Life expectancy at birth is used to measure the dimensions of longevity and healthy living, the average length of schooling and the expected school years is used to measure the dimensions of knowledge, and gross national product per capita is used to measure the dimensions of decent standard of living. The many factors included in it make these three dimensions have a broad meaning. (Human Development Report, 2020).

HDI in Indonesia during 2015-2021 was stated to have increased by an average of 0.76% each year. In 2021 Indonesia's HDI was recorded at 72.29. It increased by 0.49% compared to the previous year which was 71.94. The increase in HDI in 2021 will occur in all dimensions: longevity and healthy living, educations, and a decent standard of living. In

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2021 the Indonesia HDI ranking was in 114th position out of 191 countries and regions around the world. These results are inseparable from the effect of HDI developments in every province in Indonesia, especially the provinces on Java island since Java has become the domination of human and economic development activities in Indonesia (Badan Pusat Statistik, 2021).

**Table 1.** Human Development Index in 6 Province of Java 2015-2021 (%)

| Provinsi      | 2015  | 2016  | 2017  | 2018  | 2019  | 2020  | 2021  |
|---------------|-------|-------|-------|-------|-------|-------|-------|
| DKI Jakarta   | 78.99 | 79.60 | 80.06 | 80.47 | 80.76 | 80.77 | 81.11 |
| Jawa Barat    | 69.50 | 70.05 | 70.69 | 71.30 | 72.03 | 72.09 | 72.45 |
| Jawa Tengah   | 69.49 | 69.98 | 70.52 | 71.12 | 71.73 | 71.87 | 72.16 |
| DI Yogyakarta | 77.59 | 78.38 | 78.89 | 79.53 | 79.99 | 79.97 | 80.22 |
| Jawa Timur    | 68.95 | 69.74 | 70.27 | 70.77 | 71.50 | 71.71 | 72.14 |
| Banten        | 70.27 | 70.96 | 71.42 | 71.95 | 72.44 | 72.45 | 72.72 |

Sources: BPS (2021)

The human development index of Java island from 2015 to 2021 shows the condition had experienced a significant increase. Out of six provinces on the Java island, DKI Jakarta Province has the highest HDI score among five other provinces. It is because the center of various Indonesian economic, development, and government activities is in DKI Jakarta. Furthermore, in second place was followed by DI Yogyakarta Province, and in third position was Banten Province, fourth is Central Java Province, fifth is West Java Province, and East Java Province as the province with the lowest HDI score on Java island which was caused by the low average level of schooling as a result of the majority East Java residents who only have education up to junior high school level.

The quality of a workforce will affect the level of development in a region. It is because the high and low quality of labor affects the economy and impacts on the level of productivity produced. If a region has a high quality workforce, it will also produce high productivity and increase the value of the gross regional domestic product (GRDP). With a high GRDP, it will make infrastructure development in an area well achieved so that it will support the sustainability of people's welfare in the region (Sembiring & Faried, 2019).

According to Jamaliah & Elyta (2022), a low HDI level can be shown in the large population of poor individuals. According to the theory, high poverty is caused by a low HDI. Given that a high HDI represents the success of human development, it demonstrates that an increase in the HDI will result in a decrease in the number of poor people. Through human development, the quality of education and public health can improve so that it will encourage people to become more productive and prosperous.

Siregar (2022) stated that regional original revenue is useful for financing the development process in an area. Taxes are a source of income for the government that can be used to fund local spending. The ability of regional autonomy is further demonstrated by the significant contribution of regional original revenue to funding regional spending and meeting the requirements of the Regional Government during the development process. It shows that regional original revenue has an effect on HDI achievement in a region (Olatunji et al., 2009).

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The government makes regional expenditure to fund government initiatives to build a flourishing society. Regional expenditure issued by the Government plays a significant role in the achievement of welfare obtained by the community through the provision of social services, infrastructure and public infrastructure in all aspects of people's lives. It means that regional expenditure also finances human development in the process of achieving HDI (Sasongko & Wibowo, 2022).

Sari (2022), has undertaken research into the human development index, in that research it was concluded that the human development index in East Java Province was influenced by the percentage of the dependency ratio, the unemployment rate, the gini ratio, and regional spending. Simultaneously, the percentage ratio, unemployment rate, and regional spending significantly affect the human development index.

Previous researchers had researched the human development index. They used East Java Province as the object of the research location with the research title "Determinants of the Human Development Index in East Java Province". That study aims to analyze the effect of the percentage variable dependency ratio, unemployment rate, gini ratio, and regional spending on the human development index in East Java Province in 2015-2019. However, that research did not use the workforce, poor population, regional original revenue variables as research variables. This study used non-financial and financial variables and had a wider vulnerable space for research compared to previous studies, so the writer are interested in conducting this research.

### METHOD

In this study, secondary data from Statistic Indonesia data were used quantitatively to evaluate the elements that affect the human development index. The dependent variable for this study was the human development index, and the sample data used by the researchers were samples from 6 provinces on the Java island for the period of 2015–2021. Meanwhile, the independent variables used were the number of workers, the number of poor population, regional original revenue, and regional expenditure. The human development index variable is measured through several approaches as follows:

#### 1. Health Index

The equation which is used to calculate the health index is as follows:

$$I_{kesehatan} = \frac{AHH - AHH_{min}}{AHH_{maks} - AHH_{min}}$$

Note :

$I_{health}$  = Health Index

AHH = Life expectancy

$AHH_{min}$  = Lowest life expectancy

$AHH_{maks}$  = Highest life expectancy

#### 1. Education Index

There are three equations which are used to calculate the education index. The three equations are:

##### 1.1. The equation to calculate school length expectations

$$I_{HLS} = \frac{HLS - HLS_{min}}{HLS_{maks} - HLS_{min}}$$

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Note :

$I_{HLS}$  = School length expectations index

$HLS$  = School length expectations

$HLS_{min}$  = Lowest school length expectations

$HLS_{maks}$  = Highest school length expectations

1.2. The equation to calculate the average length of school

$$I_{RLS} = \frac{RLS - RLS_{min}}{RLS_{maks} - RLS_{min}}$$

Note :

$I_{RLS}$  = Average length of school index

$RLS$  = Average length of school

$RLS_{min}$  = Lowest average length of school index

$RLS_{maks}$  = Highest average length of school index

1.3. The equation for calculating the value of the education index

$$I_{pendidikan} = \frac{I_{HLS} - I_{RLS}}{2}$$

Note :

$I_{pendidikan}$  = Education index

$I_{HLS}$  = Results of the school length expectations equation

$I_{RLS}$  = The results of average length of school equation

### 2. Expenditure index

The equation which is used in calculating the dimensions of the expenditure index or decent standard of living by using indicators of purchasing power is as follows:

$$I_{pengeluaran} = \frac{\ln(pengeluaran) - \ln(pengeluaran_{min})}{\ln(pengeluaran_{maks}) - \ln(pengeluaran_{min})}$$

Keterangan:

$I_{pengeluaran}$  = Expenditure index

$\ln(pengeluaran)$  = Per capita expenditure

$\ln(pengeluaran_{min})$  = Lowest per capita expenditure

$\ln(pengeluaran_{maks})$  = Highest per capita expenditure

### 3. Human development index

The equation which is used in the calculation of the human development index is the geometric average of the results of the calculation of the health index, education index and expenditure index with the following formula:

$$IPM = \sqrt[3]{I_{kesehatan} \times I_{pendidikan} \times I_{pengeluaran} \times 100}$$

The results are grouped into four categories as Table 2.

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**Table 2.** Human Development Index classification

| Classification | HDI     |
|----------------|---------|
| Very High      | > 80    |
| High           | 70 – 80 |
| Medium         | 60 -70  |
| Low            | < 60    |

Sources: BPS (2018)

The independent variables used in this study are:

1. The number of workforce shows how many people conduct work activities that produce goods and services to meet their needs or for the community. The data is taken from the official website of Statistics Indonesia data.
2. The poor population shows the number of people who cannot meet basic needs from an economic point of view with an average per capita income and expenditure per month below the poverty line. The data is taken from the official website of Statistics Indonesia data.
3. Regional original revenue is Government revenue derived from regional taxes, levies, wealth management outcomes, and other legitimate regional original revenue sources. The data is taken from the official data portal website of the Directorate General of Fiscal Balance belonging to the Ministry of Finance.
4. Regional expenditure, all regional responsibilities that are recorded as a decrease in net worth during the relevant fiscal year. The data is taken from the official data portal website of the Directorate General of Fiscal Balance belonging to the Ministry of Finance.

The analytical tool used in this study was panel data regression. Panel data is a combination of time series data or data across time and cross-sectional data or data across space and individuals (Gujarati & Porter, 2012). The estimation stage of the panel data regression analysis includes parameter estimation of the econometric model by using the Pooled Least Square (PLS) approach, Fixed Effect Model (FEM), and Random Effect Model (REM) with the Chow test and Hausman test as the best-estimated model choices and the Lagrange Multiplier test if necessary; testing the goodness of fit on the selected estimated model; and testing the validity of the effect of independent variables on the selected estimated model, (1) is the econometric model (estimator) as follows:

$$IPM_{it} = \beta_0 + \beta_1 \log TK_{it} + \beta_2 \log PM_{it} + \beta_3 \log PAD_{it} + \beta_4 \log BD_{it} + \varepsilon_{it} \dots \dots \dots (1)$$

IPM = human development index (%); TK = number of workforce (people); PM = number of poor population (people); PAD = regional original revenue (billions of rupiah); BD = regional expenditure (billion rupiah)

## RESULT AND DISCUSSION

The estimation results of the econometric model by using the Pooled Least Square (PLS)/CEM approach, Fixed Effect Model (FEM), and Random Effect Model (REM), along with the results of the model selection tests are summarized in Table 3.

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**Table 3.** Estimation of Panel Data Regression Econometric Models – Cross section

| Variabel                                                                | Regression coefficients |           |           |
|-------------------------------------------------------------------------|-------------------------|-----------|-----------|
|                                                                         | CEM                     | FEM       | REM       |
| C                                                                       | 182,4656                | -154,6592 | 181,2566  |
| Log(TK)                                                                 | -18,60561               | 12,07495  | -18,25098 |
| Log(PM)                                                                 | 3,619831                | 0,313508  | 3,472936  |
| Log(PAD)                                                                | 0,585899                | 0,100590  | 0,577237  |
| Log(BD)                                                                 | 11,96808                | 2,785842  | 11,76035  |
| $R^2$                                                                   | 0,902567                | 0,991324  | 0.897619  |
| Adjusted. $R^2$                                                         | 0,892003                | 0,988883  | 0,886551  |
| F Statistic                                                             | 85,68667                | 406,2383  | 81,09864  |
| F Prob. Statistic                                                       | 0,000000                | 0.000000  | 0.000000  |
| Model Selection Test                                                    |                         |           |           |
| A.                                                                      |                         | Chow      |           |
| Cross- Section $F(5,23)= 65,469668$ ; Prob. $F(5,23) = 0,0000$          |                         |           |           |
| B.                                                                      |                         | Hausman   |           |
| Cross-Section random $\chi^2(4) = 319,945122$ ; Prob. $\chi^2 = 0,0000$ |                         |           |           |

The Chow test and Hausman test show that (FEM) is chosen as the best-estimated model, as seen from the probability or significance that the Chow test has a prob value of  $0.0000 < 0.05$  and the Hausman test has a prob value of  $0.0000 < 0.05$ . The complete estimation results from the FEM estimated model are shown in Table 4.

**Table 4.** Fixed Effect Model (FEM) Estimation Model

|                                                                                                                                                       |            |          |          |
|-------------------------------------------------------------------------------------------------------------------------------------------------------|------------|----------|----------|
| $IPM_{it} = -154,6592 + 12,07495 \text{LogTK}_{it} + 0,313508 \text{logPM}_{it} +$<br>$0,100590 \text{logPAD}_{it} +$<br>$2,785842 \text{logBD}_{it}$ |            |          |          |
|                                                                                                                                                       | (0,0000)*  | (0,7182) | (0,2755) |
|                                                                                                                                                       | (0,0015)** |          |          |
| $R^2 = 0,991324$ ; $DW = 1,764501$ ; $F = 406,2383$ ; Prob. $F = 0,00000$                                                                             |            |          |          |

**Sources:** BPS (2021), processed. **Note:** \*Significant at  $\alpha = 0,01$ ; \*\* Significant at  $\alpha = 0,05$ ; \*\*\* Significant at  $\alpha = 0,10$ ; The number in brackets is the probability of the t statistic.

It shows that FEM estimated model is exists with a probability or empirical statistical significance F of  $0.0000 (< 0.05)$ , with a coefficient of determination ( $R^2$ ) of 99.13%. Which means that the IPM variable is influenced by the TK, PM, PAD, and BD variables, the remaining 0.87% is influenced by other variables which are not included in the econometric model. Separately from other variables in the econometric model, there are two independent variables which have significant effects that are TK and BD variables.

TK variable has a regression coefficient value of 12.07495 with a linear-logarithmic relationship pattern. It means that if TK experiences an increase of 1 percent, the HDI will increase by  $12.07495/100 = 0.1207495$  percent. On the other hand, if TK experiences a decrease of 1 percent, the HDI will decrease by  $12.07495/100 = 0.1207495$  percent.

The BD variable has a regression coefficient value of 2.785842 with a linear-logarithmic relationship pattern. It means that if BD increases by 1 percent, the HDI will increase by



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$2.785842/100 = 0.02785842$  percent. On the other hand, if BD decreases by 1 percent, the HDI will decrease by  $2.785842/100 = 0.02785842$  percent.

**DISCUSSION****The Effect of Workforce on HDI**

The selected estimation model explains that the workforce variable has a significant and positively affect the HDI in Java island with a probability of  $0.0000 < 0.01$ . Therefore, it means that if there is an increase in the workforce, the HDI will also increase since the workforce has a crucial role in development, namely as a development actor. The large-scale workforce will have an impact on increasing productivity. In other words, a large workforce will support an ongoing development, so that development targets can be achieved properly and thus will be followed by the creation of community welfare which affects the increase in HDI. The results of this study are consistent with earlier studies done by (Islamiaty Izzah & Martha Hendarti, 2021), which explains that the workforce has a positive and significant effect on HDI. According to them, a high level of education will increase productivity and produce a quality workforce. Through a high quality workforce, the production results obtained will increase and the income received will increase as well as increase public consumption and create a prosperous society so that the HDI will increase high and have an impact on increasing employment.

**The Effect of Poor Population on HDI**

The selected estimation model explains that the Poor Population variable does not have a significant effect on HDI in Java, with a probability value of  $0.7182 > 0.10$ . The results of this study are inversely related to those of earlier research by Syofya (2018), which states that poverty has a significant effect on HDI in Indonesia. The results of this study are also inversely related to those of earlier research by Regina et al. (2020), which states that poverty has a positive and significant effect on the human development index in Indonesia.

**The Effect of Regional Original Revenue on HDI**

The selected estimation model explains that the regional original revenue variable has no significant effect on HDI in Java, with a probability value of  $0.2755 > 0.10$ . The results of this study are inversely related to those of earlier research by Mantra Suarjana & Suci Murni (2018), which states that regional original revenue has a positive and significant effect on District/City HDI in the Province of Bali. In addition, the results of this study are also inversely related to those of earlier research by Firmansyah et al. (2022), which states that regional original revenue has a positive and significant effect on the human development index in Papua Province.

**The Effect of Regional Expenditures on HDI**

The selected estimation model explains that the regional expenditure variable has a significant and positively affect the HDI in Java island with a probability of  $0.0015 < 0.05$ . It means that if regional expenditure increases, it will be followed by an increase in HDI. It shows that the size of regional expenditure will affect the HDI. Regional expenditure aims to raise the caliber of public infrastructure and amenities as well as directly support initiatives that can increase community and business actors' productivity. Regional expenditure issued by the Government is intended for basic services which should be received by the community such as proper education and health. Good regional expenditure allocation will create good infrastructure and public facilities so that it will increase regional productivity, people's



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income and HDI. The results of this study are consistent with earlier studies done by Muslim et al. (2019) which explains that regional expenditure has a significant effect on HDI and proved that human development will be determined by the amount of regional expenditure. In addition, the results of this study are also consistent with earlier studies done by Rahmawati & Nur Intan (2020), which explains that local government spending spent to facilitate the community will have an impact on HDI.

**IMPLICATIONS**

The results of this study show that the number of workforces owned by a region plays a role in increasing the HDI achieved by a region. A large number of workforce results in increased production results which will be followed by increased income and increased public consumption as well so that community productivity and HDI will be higher. A high HDI will provide wider effect on employment opportunities through increasing productivity in society.

Provision of adequate infrastructure and facilities through government spending can increase people's welfare. For example, regional expenditures which are issued by the Government in the fields of education and health greatly affect the level of social welfare. Through the education budget, people who receive an education can be more evenly distributed and get higher educational opportunities. With the health budget, people get the opportunity to have quality health and have the opportunity to have a longer life expectancy to conduct their daily lives in conducting productivity.

**CONCLUSION**

This study is a development from previous research conducted by Sari (2022), but the research object used is different. In previous research which had conducted by Sari used East Java Province and the percentage of dependency ratio, unemployment rate, gini ratio, and regional spending as research objects. Meanwhile, the writer used workforce, poor people, regional original revenue, and regional expenditures on the island of Java as differentiating research objects. This study aims to analyze the variables' effect on the workforce, the number of poor people, regional original revenue and regional expenditure on the human development index on the Java island. In addition, this study used non-financial and financial variables besides, it has a wider vulnerable space for research compared to previous studies so that writer are interested in conducting this research. Based on the results of the analysis in this study, it can be concluded that the Human Development Index in Indonesia increased by an average of 0.76% in 2015-2021 and it is inseparable from the influence of the HDI in every province in Indonesia; especially, provinces located in java island. During 2015-2021, the HDI for the island of Java experienced a significant increase.

The regression analysis results with panel data in this study show that the best-estimation model chosen is the Fixed Effect Model (FEM). The workforce and regional expenditure variables positively and significantly influence the HDI on the island of Java in 2015-2021.

Based on the presentation of the results above, the writer provides several suggestions to the Government in an effort to increase HDI in provinces on the island of Java. Some of these suggestions include first, the Provincial Government in an effort to increase the HDI can pay

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more attention to and better manage employment by making policies. The Government can also establish a workforce training program to improve human resources quality, which can increase workforce productivity and income. Second, the provincial Government can increase the education budget so that opportunities to get education are evenly distributed at all levels of society and the community can achieve the highest education. In addition, the Government can allocate the budget into the health sector so that people have health insurance; besides, they can continue to live with a long life and quality health needed in the development process that will increase human development achievements in the future.

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**REFERENCES**

- Arisman. (2018). Determinant of Human Development Index in ASEAN Countries. *Signifikan: Jurnal Ilmu Ekonomi*, 7 (1). <https://doi.org/http://dx.doi.org/10.15408/sjie.v7i1.6756>
- Badan Pusat Statistik. (2018). *IPM*. <https://sirusa.bps.go.id/sirusa/index.php/indikator/1873#:~:text=Rendah%3A IPM%3C 60,Sangat tinggi%3A IPM ≥ 80>
- Badan Pusat Statistik. (2021). Berita Resmi Statistik No. 8711Th. XXIV. *Badan Pusat Statistik*, 87.
- BPS. (2021). *Badan Pusat Statistik*. <https://www.bps.go.id/subject/26/indeks-pembangunan-manusia.html#subjekViewTab5>
- 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>
- Eren, M., Çelik, A. K., & Kubat, A. (2014). Determinants of the levels of development based on the human development index: A comparison of regression models for limited dependent variables. *Review of European Studies*, 6(1), 10–22. <https://doi.org/10.5539/res.v6n1p10>
- Firmansyah, F., Mukhtar, S., Dianta, K., & Sebayang, A. (2022). *THE EFFECT OF SPECIAL AUTONOMY FUNDS , REGIONAL ORIGINAL REVENUE AND LOCAL GOVERNMENT HDI VALUE ASEAN ( 2019 )*. 2(3), 601–609.
- Gujarati, D. N., & Porter, D. C. (2012). *Dasar-Dasar Ekonometrika Buku 2 Edisi 5* (R. C. Mangunsong (penerj.)). Salemba Empat.
- Human Development Report. (2020). *Human Development Index (HDI)*. [www.undp.org](http://www.undp.org). <https://hdr.undp.org/data-center/human-development-index#/indicies/HDI>
- Islamiatus Izzah, C., & Martha Hendarti, I. (2021). Analisis Pengaruh Tenaga Kerja, Tingkat

---

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---

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- Upah, Dan Pdrb Terhadap Indeks Pembangunan Manusia (Ipm) Di Provinsi Jawa Tengah. *OIKOS Jurnal Kajian Pendidikan Ekonomi dan Ilmu Ekonomi*, V, 99–106. <https://doi.org/10.23969/oikos.v5i2.3392>
- Jamaliah, J., & Elyta, E. (2022). The Effect of Human Development Index (HDI) on Poverty and Crime in West Kalimantan, Indonesia. *Khazanah Sosial*, 4(1), 119–130. <https://doi.org/10.15575/ks.v4i1.17159>
- Kuchinke, K. P. (2010). Human development as a central goal for human resource development. *Human Resource Development International*, 13(5), 575–585. <https://doi.org/10.1080/13678868.2010.520482>
- Mantra Suarjana, A. A. G., & Suci Murni, N. G. N. (2018). Effect of Local Original Revenue and Economic Growth to Human Development Index of Regencies/Cities in Bali Province. *Soshum: Jurnal Sosial dan Humaniora*, 8(3), 280–289. <https://doi.org/10.31940/soshum.v8i3.1144>
- Muslim, M., Handra, H., Sjafrizal, S., & ... (2019). Analysis of the impact of regional expenditure on human development: A study of Jambi Province, Indonesia. *Journal of Applied ...*, 742–748.
- Olatunji, O. C., Taiwo, O. A., & Adewoye, J. O. (2009). A review of revenue generation in Nigeria local government: A case study of Ekiti State. In *International Business Management* (Vol. 3, Nomor 3, hal. 54–60).
- Rahmawati, F., & Nur Intan, M. (2020). Government Spending, Gross Domestic Product, Human Development Index (Evidence from East Java Province). *KnE Social Sciences*, 2020, 774–786. <https://doi.org/10.18502/kss.v4i6.6641>
- Regina, Sinring, B., & Arifin. (2020). Analysis the Effects of Poverty, General Allocation Fund and Economic Growth To Human Development Index (Hdi) in Indonesia. *Jurnal Economic Resources*, 3(1), 1–12.
- Sari, P. B. K. (2022). Determinants of Human Development Index in East Java Province. *Efficient Determinants of Human Development Index in East Java Province*, 5(1), 1494–1504.
- Sasongko, H. E., & Wibowo, P. (2022). Government Spending and Regional Economic Growth: the Mediating Effect of Human Development Index. *Jurnal Ekonomi Bisnis dan Kewirausahaan*, 11(2), 230. <https://doi.org/10.26418/jebik.v11i2.52229>
- Sembiring, R., & Faried, A. I. (2019). Analysis of Regional Expenditure in Education, Health and Infrastructure Sector on Human Development Index and Labor Productivity in Medan City. *Ijiesr.Com*, 3(4), 29–34.
- Siregar, O. K. (2022). Regional Original Revenue, Regional Expenditure, Economic Growth and Human Development Index (City/Regency Government in North Sumatra Province). *Economics, Business and Management Science Journal*, 2(2), 65–72. <https://doi.org/10.34007/ebmsj.v2i2.252>
- Syofya, H. (2018). Effect of Poverty and Economic Growth on Indonesia Human Development Index. *Jurnal Ilmiah Universitas Batanghari Jambi*, 18(02), 47–53.
- Todaro, M. P., & Smith, S. C. (2011). *Pembangunan Ekonomi Edisi Kesebelas Jilid 1*. Erlangga.
- Tyas, A. A. W. P., & Ikhsani, K. T. W. (2015). Sumber Daya Alam & Sumber Daya Manusia untuk Pembangunan Ekonomi Indonesia. *Forum Ilmiah*, 12(1), 1–15.