

Analysis of the Effect of Government Spending and Human Development Index on Economic Growth in Indonesia 2021 - 2022

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ABSTRACT

The purpose of this study was to determine the effect of government spending and Human Development Index on economic growth in Indonesia. This study uses panel data with Fixed Effect Model approach. In this research, the type and source of data used is secondary data from the Central Bureau of Statistics (BPS). The data used in this study is a combination of cross section data and time series data of 34 provinces in Indonesia from 2021-2022 (panel data). The variables used in this study are economic growth (Y) in Percent units, government spending (X1) in logarithmic rupiah units and Human Development Index (X2) in Percent units. The method used in this study is the method of analysis of panel data (pooled data) as a tool to process data using eviews 9. It was found that government spending and Human Development Index have a positive influence on economic growth.

INTRODUCTION

A country can be said to be successful by looking at the state of development from its economic growth rate. That way, every country always sets high economic growth targets in its planning and Regional Development Goals. High and sustainable economic growth plays a major role with the continuity of the country's economic development. An economy is said to undergo a change in its development if the level of economic activity is higher than that achieved in the previous period (Darma et al., 2021).

Since economic growth is the process of growing production capacity, which is reflected in a rise in national income, it is one of the most significant metrics in evaluating the success of an economy. When the gross regional product rises, it is claimed that economic growth is increasing. (Lumi et al., 2022).

The pursuit of faster economic growth is the common objective shared by all nations. A country's rate of growth is a key indicator of its economic health and a prerequisite for the development and prosperity of the state. A nation will face new economic and social issues, such extreme poverty, if its economic growth is not able to keep up. The gross domestic product (GDP) can be used to gauge economic growth (Fadilla et al., 2020).

The level of economic growth in Indonesia is not yet fully stable, so efforts are needed to support the rate of economic growth continues to be carried out in order to improve the ability of a country to achieve goals. Indonesia's economic growth as a developing country is prone to changes in the world economy that cause fluctuations. The measurement of economic growth can be through the national income of a country. Indonesia is classified as a developing country. Of course, the government always seeks various strategies to make the country more developed (Wahyunimgrum et al., 2022). GDP, or gross domestic product, is the metric used to quantify economic growth in Indonesia. GDP measurement according to BPS uses two ways, namely based on current prices and constant prices (Widiaty et al., 2020). Gross Domestic Product (GDP) is indispensable in comparing the level of welfare between times and between countries, which is more precise when viewed at the growth rate so that it realizes the level of the country's economic growth rate (Kustanto, 2020).



Figure 1. Indonesia's economic growth rate in the fourth quarter 2022

Economic growth in Indonesia in 2020 decreased, where in 2020 it was -2.07 percent. This causes the Indonesian economy in 2020 to experience a recession or drastic decline because economic development in Indonesia has a less stable movement (Yenni, 2022). The decline in the value of Indonesia's economic growth in 2020 caused the condition of the Indonesian economy to become less stable. However, in 2021, Indonesia's economic growth increased by 3.69 percent, with the largest growth occurring in the areas of social activities and health services, which increased by 10.46 percent. In contrast, the export component of goods and services saw the largest gain in expenditures, rising by 24.04 percent. A collection of provinces on the island of Java accounted for 57.89 percent of the Indonesian economy's spatial structure in 2021 and saw increase in its economic performance of 3.66 percent. In 2022, Indonesia's economy managed to grow 5.31 percent compared to the previous year. The domestic economy in 2022 managed to grow thanks to the high growth in the fourth quarter of 2022, which rose 5.01 percent. Java island as the main contributor to the national economy with a contribution of 56.48 percent followed by Sumatra island 22.04 percent and Kalimantan 9.23 percent.

Economic growth can be affected by government spending. The government is obliged to intervene in improving the economy in general. There must be one authority that controls and regulates the economy, namely the government so that it can control economic growth stably (Buana et al., 2019). Government investment and spending play a response to the creation of work opportunities, whilst government spending plays a part in creating new job possibilities. The significant amount of money spent by the government on providing investment and employment opportunities to every area of the city districts is the economic component required to address the issue. Spending by the government stimulates fiscal policy, which attempts to maintain economic stability by accelerating investment and creating job opportunities while achieving an equitable distribution of income (Jurais, 2022).

One such element influencing economic growth is the Human Development Index. A new breakthrough in measuring human development is the Human Development Index (HDI), which consists of three key components: the life expectancy index, the education index, and the decent living standards index. These components together provide an overview of human development, and if a community meets all three, it can be considered prosperous. (Fadila et al., 2020). The Human Development Index is one of the factors that affect economic growth and is often used in measuring regional economic performance (Setiawan et al., 2022). The existence of more precise and good human development will obtain a better quality of human resources starting from the feasibility of Life, Health and so on (Erdkhadifa, 2022).

There have been many empirical studies that have examined government spending and the Human Development Index can affect economic growth, including government spending has a significant positive effect on the economic growth of 10 provinces on the island of Sumatra (Safa, 2019). The government expenditure variable (X1) has a significant level of economic growth (Y2), meaning that when government spending will naturally increase

when economic growth increases, because government spending contributes to economic performance in South Sulawesi province (Herdial, 2022). Government spending has a significant effect on economic growth in the districts/cities of South Sulawesi province (Dian Prasasti, 2022). Government spending has a positive and significant impact on economic growth in South Sumatra districts/cities (Muhammad Iqbal Nugraha, 2021).

Increased government spending does not necessarily lead to increased economic growth and a decrease in the Human Development Index does not lead to economic growth on the island of Madura (Bani Fitria, 2020). In Ghana shows that government spending shows a significant positive relationship to economic growth (Kwasi. Priscilla, 2022). Testing the significance of Human Development Index variables has a positive and significant effect on the economic growth of districts/cities of East Java province for the period 2013-2022 (Annisa, 2023). The Human Development Index does not have a significant effect on economic growth in Banten province in 2019-2021 (Bagus et al., 2022). HDI has an insignificant influence on the PE variable in Banten province which is divided into 8 districts/cities in 2019-2021 (Bagas, 2022). The Human Development Index has a negative and significant effect on economic growth in East Kalimantan province (Agung, 2020). In West Kalimantan the Human Development Index has a significant influence on economic growth (Rindiyani, 2023). The results of previous studies show the effect of government spending and Human Development Index on economic growth has not occurred conclusus/ consensus, so further research is needed.

LITERATURE REVIEW

Economic Growth

Hashim stated that " economic growth can be interpreted as the process of changing the economic condition of a country continuously towards a better state during a certain period" (Ibrahim. Ali, 2016). While according to Rapanna and Zulfikry stated that "economic growth is a process by which the increase in income without associating it with the population growth rate, the population growth rate is generally often associated with economic development"(Patta et al., 2018).

Economic growth is a long-term process that raises per capita output and serves as a gauge for how well development is going. The process of raising the output of products and services in society's economic endeavors is associated with economic growth (Afandi et al., 2021). The degree to which economic activity will increase revenue over a specific time period is indicated by economic growth. If all real returns on the use of production elements in a given year exceed the real income of the community in the previous year, the economy is said to be growing (Istianto et al., 2021).

Government Spending

Government spending is the financing of local programs conducted by the government, which is one of the drivers of policies taken. Relations arising in a society should be one of the roles of government. If this government expenditure is greater, there will be an increase in per capita income, which will

have a positive impact on achieving growth, and vice versa (Fitria, Bani. 2020).

One of the fiscal policies used by the government to control the direction of the economy is spending, which determines the annual amounts of revenue and expenditure (Moridu et al., 2022). Government expenditure shows the expenditure that must be borne by the government to carry out the established policies for the acquisition of products and services (Nawair et al., 2021).

The Effect Of Government Spending On Economic Growth

Government spending can increase the development of economic activity. The greater the expenditure allocated in the productive sector, the financing in terms of increasing output will also increase, this is what can then make the economy (economic growth) become strong or encouraged (Fitiri, Bani. 2020). The goal of government spending is to stimulate fiscal policy by accelerating investment and creating jobs in order to preserve economic stability and achieve a fair distribution of income. Government investment and expenditure are a reaction to the creation of job possibilities, but the objective of government spending is to create more job chances (Juardi, 2022).

Human Development Index

The three main pillars of human development—life expectancy, knowledge, and living standards—are measured by the Human Development Index, a composite measure. The Human Development Index evaluates a region or nation's overall performance in terms of three fundamental aspects of human development: life expectancy, level of knowledge, and a respectable standard of living (Utami, Farathika. 2020).

According to the United Nations Development Programmer (UNDP), one method for calculating the success rate of human development is the Human Development Index. The Human Development Index is obtained from the comparative measurement of life expectancy, literacy seen from the last level of Education terminated and the ability of people's purchasing power for all countries around the world (Nasution, Rahmi. 2020). Human Development Index is used to measure the extent to which the success of human quality of life and) serves to measure the achievement of human development based on a number of basic components of quality of life. The Human Development Index is constructed through a basic three-dimensional approach. namely longevity and Healthy Living, Knowledge, and decent living standards (Ningrum et al., 2020).

Effect Of Human Development Index On Economic Growth

The Human Development Index is used to measure how big the impact of efforts to improve the ability of human capital. Human Development Index (HDI) is a measurement tool that can show the percentage of achievement in human development by considering three factors, namely survival, knowledge and purchasing power (Meidona et al., 2021). According to Sukirno, the Human Development Index plays a significant role in the process of contemporary economic growth since it leads to the optimal maximization of the forces of

production. High human development resulted in an increasing population so as to increase the level of consumption. This will make it easier to increase economic growth (Najiya et al., 2023).

METHODOLOGY

In this research, the type and source of data used is secondary data from the Central Bureau of Statistics (BPS). The data used in this study is a combination of cross section data and time series data of 34 provinces in Indonesia from 2021-2022 (panel data). The variables used in this study are economic growth (Y) in Percent units, government spending (X1) in logarithmic rupiah units and Human Development Index (X2) in Percent units. The method used in this study is the method of analysis of panel data (pooled data) as a tool to process data using Eviews 9.

In the panel model, the panel equation can be written as follows :

$$Y_{it} = \alpha + \beta_1 X_{1it} + \beta_2 X_{2it} + e_{it}$$

Where :

Y_{it} = Economic Growth (Percent)

$\ln X_{1it}$ = Government Spending (Natural Logarithm)

X_{2it} = Human Development Index (percent)

α = Intercept coefficient

IQI = coefficient of The Independent Variable

I = province of Indonesia

t = Year 2021 - 2022

e = Error Term.

RESEARCH RESULT

Model Selection Analysis

Table 1. The Chow Test

Effects Test	Statistic	d.f.	Prob.
Cross-section F	13.390006	(33,32)	0.0000
Cross-section Chi-square	183.273434	33	0.0000

Source: processed data Eviews9

Table 1's Chow test findings yielded a statistically significant probability of 0.0000 for crossing section F, less than the 0.05 level of sigfikansi that was employed. The fixed effect model is the most appropriate model to apply in order to reject H0 and accept Ha.

Table 2. The Hausman Test

Effects Test	Chi-Sq. Statistic	Chi-Sq. d.f.	Prob.
Cross-section random	31.093706	2	0.0000

Source: processed data Eviews9

The probability of cross selection F is obtained statistically to be 0.0000, which

is less than the used sigfikansi level of $\alpha = 0.05$, based on the hausman test results in Table 2. The fixed-effect model is the most appropriate model to apply in this study in order to reject H0 and accept Ha.

Hypothesis Test

Table 3. Fixed Effect Model

Variable	Coefficient	Std. Error	t-Statistic	Prob.
C	-444.8958	107.0448	-4.156163	0.0002
PP	9.046832	3.375961	2.679780	0.0115
IPM	2.545491	0.540687	4.707882	0.0000
R-squared	0.935121	Mean dependent var	4.979706	
Adjusted R-squared	0.864160	S.D. dependent var	3.720700	
S.E. of regression	1.371321	Akaike info criterion	3.774479	
Sum squared resid	60.17672	Schwarz criterion	4.949512	
Log likelihood	-92.33227	Hannan-Quinn criter.	4.240063	
F-statistic	13.17788	Durbin-Watson stat	3.885714	
Prob(F-statistic)	0.000000			

Source: processed data Eviews9

Based on Table 3, it can be seen that the value of adjusted R Square = 0.86 or 86%, which means that this model can explain 86% of the variation of the dependent variable. While the value of F count is 13.17788 and significance is 0.0000. With a significance level of 5% ($\alpha = 0.05$) then the significant value of $0.0000 < 0.05$. The F values of the table are obtained from $(\alpha; k-1; n-k) = (0,05; 2-1; 68-2) = (0,05; 1; 62)$ then obtained F table of 3.996 which means f count > F table ($13.177 > 3.996$), then there is at least one independent variable that affects the dependent variable. Partially government spending and Human Development Index have a positive effect on economic growth, this can be seen from the value of p-value is smaller than 5%.

DISCUSSION

Economic growth is positively and significantly impacted by variable government spending. This indicates that a 1% increase in government spending will result in an approximate 9.04% increase in economic growth. This shows that the government expenditure budget is used efficiently so that it can encourage economic growth in Indonesia. This is consistent with a study by Prasasti (2022), which found that government spending significantly and favorably influences economic growth in the province of South Sulawesi.

Indonesia's economic growth is positively and significantly impacted by the variable Human Development Index. Whereas economic growth will increase by roughly 2.54% for every 1% increase in the Human Development Index. This is consistent with research findings from Afiati (2023), which show that the province of Central Java's Human Development Index is positively correlated with economic growth.

CONCLUSIONS AND RECOMMENDATIONS

Government expenditure and the Human Development Index work together to influence Indonesia's economic expansion. In 2021–2022, government spending and the Human Development Index have a somewhat favorable effect on Indonesia's economic development.

ADVANCED RESEARCH

This study has several limitations. Firstly, it only looked at the short-term course. Secondly, it only looked at a small number of variables, but there are many more that effect poverty. Given the study's limitations, it is anticipated that the recommendations for additional research will be investigated by broadening the study's time frame and incorporating or adding other variables that may have an impact on Indonesia's economic growth.

REFERENCES

Affandi & Risma, Okta Rabiana. (2021). "Analisis Pertumbuhan Ekonomi Indonesia Tahun 1994-2020." *Jurnal Bisnis Dan Kajian Strategi Manajemen* 5 (1): 49–56.

Afiati Annisa (2023). "Pengaruh Inflasi, Indeks Pembangunan Manusia dan Tenaga Kerja terhadap Pertumbuhan Ekonomi Provinsi Jawa Timur tahun 2013-2022" <https://etheses.iainponorogo.ac.id/26002/>

Badan Pusat Statistika (2023) Ekonomi Indonesia Tahun 2022 Tumbuh 5,31 Persen. BPS Indonesia.

- Buana, Aria Langlang, Herlina Juni Risma Saragih, & Sovian Aritonang. (2019). "Pengaruh Pengeluaran Pemerintah, Investasi Pemerintah, Investasi Swasta Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi Di Pulau Jawa Tahun 2011-2015." *Jurnal Ekonomi Pertahanan* 4, (2): 1-20.
<https://jurnalprodi.idu.ac.id/index.php/EP/article/view/315/291>.
- Darma, Budi & Wulansari, Kasiyati Yunita. (2021). "Pengaruh Jumlah Penduduk Terhadap Pertumbuhan Ekonomi Kabupaten Batang Hari Tahun 2010-2020." *J-MAS (Jurnal Manajemen dan Sains)* 6 (2): 444-447.
- Erdkhadifa, Rendra. (2022). "Faktor-Faktor Yang Mempengaruhi Pertumbuhan Ekonomi Di Jawa Timur Dengan Pendekatan Spatial Regression." *IQTISHADUNA: Jurnal Ilmiah Ekonomi Kita* 11 (2): 122-140.
- Fadila, Radiatul & Marwan. (2020). "Pengaruh Indeks Pembangunan Manusia (IPM) Dan Pertumbuhan Ekonomi Terhadap Tingkat Kemiskinan Di Provinsi Sumatera Barat Periode Tahun 2013-2018." *Jurnal Ecogen* 3 (1): 120.
- Fitria, Bani. (2020). "Analisis Pengaruh Pengeluaran Pemerintah, Kemiskinan, Dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Di Pulau Madura." *Jurnal Fakultas Ekonomi dan Bisnis Universitas Brawijaya* 9 (1) : 1-10.
- Ibrahim, Ali Hasyim. (2016). *Ekonomi Makro Edisi Pertama*. Jakarta: Prenadamedia Group.
- Istianto, Taufiq. Kumenaung, Anderson G. & Lopian, Agnes L. Ch. P. (2021). "Analisis Pengaruh Belanja Daerah Dan Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Kabupaten Dan Kota Di Bolaang Mongondow Raya." *Jurnal Pembangunan Ekonomi dan Keuangan Daerah* 22

(3): 75–95.

Juardi. Jurais. (2022). “Pengaruh Pengeluaran Pemerintah Terhadap Kesempatan Kerja Melalui Investasi Dan Pertumbuhan Ekonomi.” *Jurnal Ekonomi dan Manajemen* 19, (4): 779–790.

Kustanto, Andi. (2020). “Pertumbuhan Ekonomi Regional Di Indonesia: Peran Infrastruktur, Modal Manusia Dan Keterbukaan Perdagangan.” *Pertumbuhan Ekonomi Regional Di Indonesia: Peran Infrastruktur, Modal Manusia Dan Keterbukaan Perdagangan* 25, (1) : 22–40.

Lumi, Angela Nirmala Maria. Kindangen, Paulus & Rorong, Ita Pingkan. (2022). “Pengaruh Pengeluaran Pemerintah, Pertumbuhan Ekonomi Dan Tingkat Kemiskinan Terhadap Indeks Pembangunan Manusia Di Provinsi Sulawesi Utara (Studi Pada 8 Kabupaten Di Sulawesi Utara).” *Jurnal Pembangunan Ekonomi dan Keuangan Daerah* 23 (2): 220–244.
<https://ejournal.unsrat.ac.id/index.php/jpekd/article/view/44909%0Ahttps://ejournal.unsrat.ac.id/index.php/jpekd/article/download/44909/39042>.

Meidona, Syofria, Prastama, Virell. & Amran, Elsa Fitri. (2022). “Analisis Pengaruh Investasi, Indeks Pembangunan Manusia Dan Tenaga Kerja Terhadap Pertumbuhan Ekonomi (Studi Pada Sumatera Barat Tahun 2010-2019).” *AL-ITTIFAQ: Jurnal Ekonomi Syariah* 1 (1): 1–17.

Moridu, Irwan. Mahardhani, Januar Ardhana. Maya, Umar.M Putra. Indriana, H Intan & Kraugusteeliana. (2022). “Analisis Peran Pengeluaran Pemerintah , Investasi Dan Pembiayaan Perbankan Terhadap Pertumbuhan Ekonomi Indonesia.” *Jurnal Kewarganegaraan* 6 (4): 7123–7132.

- Najiya & Hasri, Diah Anggeraini. (2023). "Pengaruh Jumlah Penduduk, Indeks Pembangunan Manusia, Upah Minimum Regional Dan Investasi Terhadap Pertumbuhan Ekonomi Provinsi Nusa Tenggara Barat." *EKOMA : Jurnal Ekonomi, Manajemen, Akuntansi* 3 (1): 150-157.
- Nasution, Rahmi Syafitri. (2020). "Analisis Pengaruh Indeks Pembangunan Manusia (IPM), Jumlah Tenaga Kerja Ekonomi Kreatif, Dan Upah Pekerja Ekonomi Kreatif Terhadap Pertumbuhan Ekonomi Kreatif Di Indonesia." *Jurnal Ilmiah Mahasiswa FEB*.
<https://garuda.kemdikbud.go.id/documents/detail/2198705>.
- Nawair, Ridwan & Suciawan, Ihsan. (2021). *Ekonomi Publik*. Yogyakarta: Pustaka Pelajar, 2021.
- Ningrum, Jahtu Widya. Khairunnisa, Aziza Hanifa & Huda, Nurul. (2020). "Pengaruh Kemiskinan, Tingkat Pengangguran, Pertumbuhan Ekonomi Dan Pengeluaran Pemerintah Terhadap Indeks Pembangunan Manusia (IPM)." *Jurnal Ilmiah Ekonomi Islam* 6 (2): 212-222.
- Patta, Rappana & Yana Fajriah. (2018). *Menembus Badai Ekonomi; Dalam Perspektif Kearifan Lokal*. Makassar: CV Sah Media.
- Prasati, Dian (2022). "Pengaruh Investasi, Tenaga Kerja Dan Pengeluaran Pemerintah Terhadap Pertumbuhan Ekonomi Di Kabupaten & Kota Sulawesi Selatan" *Jurnal Ilmu Ekonomi (JIE)* Vol. 6, No. 3, Agustus 2022, pp. 478~490.
- Setiawan, Rusdy. & Irawati HM. (2022). "Pengaruh Indeks Pembangunan Manusia Terhadap Pertumbuhan Ekonomi Di Kalimantan Utara Tahun 2017-2021." *Jurnal Ekonomi Pembangunan* 1 (1): 16-24.

Utami, Farathika Putri. (2020). "Pengaruh Indeks Pembangunan Manusia Dan Pengangguran Terhadap Pertumbuhan Ekonomi Di Provinsi Aceh." *Jurnal Ekonomi dan Pembangunan* 4, (2): 101-113.

Wahyuningrum, Setyawati, Putri. & Juliprijanto, Whinarko. (2022). "Pengaruh Pengeluaran Pemerintah Sektor Publik Terhadap Pertumbuhan Ekonomi Indonesia." *Transekonomika: Akuntansi, Bisnis Dan Keuangan* 2 (6): 189-204.